>sp|A1VXP9.1|MIAA\_CAMJJ RecName: Full=tRNA dimethylallyltransferase; AltName: Full=Dimethylallyl diphosphate:tRNA dimethylallyltransferase; Short=DMAPP:tRNA dimethylallyltransferase; Short=DMATase; AltName: Full=Isopentenyl-diphosphate:tRNA isopentenyltransferase; Short=IPP transferase; Short=IPPT; Short=IPTase

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>sp|A1VYT7.1|QUEA\_CAMJJ RecName: Full=S-adenosylmethionine:tRNA ribosyltransferase-isomerase; AltName: Full=Queuosine biosynthesis protein QueA

MNKDLLLSSYDYTLANELIANYPANPKEDARLLVFDRKNKEIFHTTFKNLKDFLPDCAIFFNDTKVIKAR

IYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKARVVELLDDGLRKVQFFQNDKT

LDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSETMFENLRKKHKIYH

LTLHVGAGTFKGVECENIQEHKMHSEFFNIPQQACEIIDSKQAILGVGTTVTRTIEYYARTKTKSGFCDL

FLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYKLAIKEKYRFYSYGDAMLIL

>sp|A1VZI8.1|SYE1\_CAMJJ RecName: Full=Glutamate--tRNA ligase 1; AltName: Full=Glutamyl-tRNA synthetase 1; Short=GluRS 1

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>sp|A1W0S2.1|SYE2\_CAMJJ RecName: Full=Glutamate--tRNA ligase 2; AltName: Full=Glutamyl-tRNA synthetase 2; Short=GluRS 2

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFEDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPKFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNAHYIKTLPFEEINRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDQKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIDNFLKVRGK

>sp|A1W035.1|THIG\_CAMJJ RecName: Full=Thiazole synthase

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>sp|A1VYL8.1|SYA\_CAMJJ RecName: Full=Alanine--tRNA ligase; AltName: Full=Alanyl-tRNA synthetase; Short=AlaRS

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>sp|A1VYL9.1|Y535\_CAMJJ RecName: Full=Maf-like protein CJJ81176\_0535

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>sp|A1VYF1.1|GPMI\_CAMJJ RecName: Full=2,3-bisphosphoglycerate-independent phosphoglycerate mutase; Short=BPG-independent PGAM; Short=Phosphoglyceromutase; Short=iPGM

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIENKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVNPKSGLNFIKDLKEFCENLGVHFATLCGRFYAMDRDKRWDRVKECYECLLGKAYKVPNLLE

YLQKSYDENVTDEFIKAVQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKIFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLIPSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQAKGVSKIKDNMGLSNIAASVLKILDLEIPKEMNEA

LF

>sp|A1W062.1|FLIW\_CAMJJ RecName: Full=Flagellar assembly factor FliW

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>sp|A1VXH7.1|RL21\_CAMJJ RecName: Full=50S ribosomal protein L21

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>sp|A1W0F9.1|SYR\_CAMJJ RecName: Full=Arginine--tRNA ligase; AltName: Full=Arginyl-tRNA synthetase; Short=ArgRS

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>sp|A1W078.1|SYL\_CAMJJ RecName: Full=Leucine--tRNA ligase; AltName: Full=Leucyl-tRNA synthetase; Short=LeuRS

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEFFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVAQKKMPGYYVKITAYAEELLKDLEELKDK

WPNQVLTMQENWIGKSEGLEFSLNLDEESKQKTKESSLEVFTTRADTIYGVSYIALAPEHKIVQNLLSQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFILADYGSGAVMAVPAHDER

DFEFATKYNLAIKQVIQTQENLPYTQKSGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIVPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFILFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNVKKGELVELKQENLNKEEKYARLKVYEALKKSFEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFEISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>sp|A1VXW6.1|RL35\_CAMJJ RecName: Full=50S ribosomal protein L35

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>sp|A1VYC1.1|SYK\_CAMJJ RecName: Full=Lysine--tRNA ligase; AltName: Full=Lysyl-tRNA synthetase; Short=LysRS

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>sp|A1VYA9.1|SYS\_CAMJJ RecName: Full=Serine--tRNA ligase; AltName: Full=Seryl-tRNA synthetase; Short=SerRS; AltName: Full=Seryl-tRNA(Ser/Sec) synthetase

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>sp|A1VYG9.1|THIC\_CAMJJ RecName: Full=Phosphomethylpyrimidine synthase; AltName: Full=Hydroxymethylpyrimidine phosphate synthase; Short=HMP-P synthase; Short=HMP-phosphate synthase; Short=HMPP synthase; AltName: Full=Thiamine biosynthesis protein ThiC

MKTQMNYAKEGIFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQINA

KDFLDVVYHHAKSGVDFMTIHAGINSRAAHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGIQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVIDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLA

>sp|A1VZB3.1|SYH\_CAMJJ RecName: Full=Histidine--tRNA ligase; AltName: Full=Histidyl-tRNA synthetase; Short=HisRS

MINALKGMKDLLDKDAYCYEKVIKTCEEVAKNYGFTFINTPHLELCTLFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLKCMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGVGFAMGIERIIAILEQKEEKVQREGIYLCAMDEIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEAQNESLFYKNLAKKEEKMIKISDLKKVL

>sp|A1VZN1.1|SYFA\_CAMJJ RecName: Full=Phenylalanine--tRNA ligase alpha subunit; AltName: Full=Phenylalanyl-tRNA synthetase alpha subunit; Short=PheRS

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>sp|A1VZ00.1|SYDND\_CAMJJ RecName: Full=Aspartate--tRNA(Asp/Asn) ligase; AltName: Full=Aspartyl-tRNA synthetase; Short=AspRS; AltName: Full=Non-discriminating aspartyl-tRNA synthetase; Short=ND-AspRS

MRSHYNTDLGISHVGQSVKLCGWVNSYRDHGGVIFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVL

IAEGAIRPRGEGLVNPKLKTGEIEVVVSKLTIENESAVPPFTIADESVNEELRLKYRFLDLRNPKLYENF

ALRSKACIAARNSLANMGFLEVETPILTKATPEGARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDR

YFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEQKDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMEN

YGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIAKDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGA

QGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRCELEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLID

PNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMPKNIDETDLEEISSIAYDVVLNGVELGGGSIRIHKNDI

QQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPHGGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMT

DAPSPASNEAMRELGIKLRENIK

>sp|A1W163.1|RF2\_CAMJJ RecName: Full=Peptide chain release factor 2; Short=RF-2

MDNYEFSELLKTLKNKVGNIASIIKPENIQTRLKEIEELENSPSFWSDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDANELFDLANSENDTETLEALFNDASKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANTGEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>sp|A1VXT5.1|SYT\_CAMJJ RecName: Full=Threonine--tRNA ligase; AltName: Full=Threonyl-tRNA synthetase; Short=ThrRS

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFRVESKIGEEDLVKIEKKMKELAEAKIEISKYEITKSEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHAPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLTIIEEAKKRDHR

KLGTELKLFTFDDEIGGGLPIWLSNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKIYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEIATKALKEALNEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTVQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVVKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVHF

>sp|A1W0P8.1|RECR\_CAMJJ RecName: Full=Recombination protein RecR

MVKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERNKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQIILKLNISELIFALTHSIN

SDATIFFIEDKFKGLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>sp|A1VY48.1|PLSX\_CAMJJ RecName: Full=Phosphate acyltransferase; AltName: Full=Acyl-ACP phosphotransacylase; AltName: Full=Acyl-[acyl-carrier-protein]--phosphate acyltransferase; AltName: Full=Phosphate-acyl-ACP acyltransferase

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEASEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>sp|A1VYR0.1|EFP\_CAMJJ RecName: Full=Elongation factor P; Short=EF-P

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>sp|A1W0M1.1|PDXJ\_CAMJJ RecName: Full=Pyridoxine 5'-phosphate synthase; Short=PNP synthase

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>sp|A1W0M2.1|PDXA\_CAMJJ RecName: Full=4-hydroxythreonine-4-phosphate dehydrogenase; AltName: Full=4-(phosphohydroxy)-L-threonine dehydrogenase

MKKLAISIGDINSIGLEILVRSHEELSKICTPFYFIHESLLNKALKLLNLKLFNAKIVAFKDDKDYEFNF

IKKENSLEIYSFCLPLGFKVDENFEIQAGEIDAKSGLYGFLSFKAASYFVYEKHAHALLTLPIHKKAWED

AGLKYKGHTDALRDFFKKNAIMMLGCKELFVGLFSEHIPLAKVSKKITFKNLSIFLKDFYKETHFKKMGL

LGFNPHAGDYGVIGGEEEKIMEKAIAFVNAFLHSKKDEKFFKKALKDENLQKELLLNFKGKGVYLPYPLV

ADTAFTKAGLKNCNRLVAMYHDLALAPLKALYFDKSINVSLNLPIIRVSVDHGTAFDKAYKNAKINTKSY

FEAAKFAINLNSKA

>sp|A1VXU8.1|ARGB\_CAMJJ RecName: Full=Acetylglutamate kinase; AltName: Full=N-acetyl-L-glutamate 5-phosphotransferase; AltName: Full=NAG kinase; Short=NAGK

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>sp|A1VZ59.1|SYGA\_CAMJJ RecName: Full=Glycine--tRNA ligase alpha subunit; AltName: Full=Glycyl-tRNA synthetase alpha subunit; Short=GlyRS

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>sp|A1VZF0.1|SYC\_CAMJJ RecName: Full=Cysteine--tRNA ligase; AltName: Full=Cysteinyl-tRNA synthetase; Short=CysRS

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKPRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>sp|A1W084.1|SSTT\_CAMJJ RecName: Full=Serine/threonine transporter SstT; AltName: Full=Na(+)/serine-threonine symporter

MFSKIIQSYAKGNLIVQICIGIVLGILIGISSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGAKIKNIIILYIVGTFLASACAVLANFFFPVKLVLDGVQTATNSSPTHMSEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGIALKHCSNEAKQVFIDINEGVLKIVKFIVKLAPFGIFGLVANSVAQTGAQGL

LSYVKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAACGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>sp|A1VXQ0.1|MNTP\_CAMJJ RecName: Full=Putative manganese efflux pump MntP

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>sp|A1VYQ2.1|SYP\_CAMJJ RecName: Full=Proline--tRNA ligase; AltName: Full=Prolyl-tRNA synthetase; Short=ProRS

MMRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEV

NLSFITPASLWQESGRYNVFGKELLRFKDRKKNEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKF

RDEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKE

FMVLAKNGEDDILICENCDYAANVEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKINAFYTI

KAVVKKAIYENESKLVVFFIRGSDDLQEIKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYI

DFELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQK

YSKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEANHDEKGCIWNKTLAPFVLEIIVSNLKDEKALE

FANKLYEDLTNLGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIELIQREDLVKELIKTDEL

MEILKKKVL

>sp|A1VYV7.1|ALF\_CAMJJ RecName: Full=Fructose-bisphosphate aldolase; Short=FBP aldolase; Short=FBPA; AltName: Full=Fructose-1,6-bisphosphate aldolase

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>sp|A1W0U9.1|HIS51\_CAMJJ RecName: Full=Imidazole glycerol phosphate synthase subunit HisH 1; AltName: Full=IGP synthase glutamine amidotransferase subunit 1; AltName: Full=IGP synthase subunit HisH 1; AltName: Full=ImGP synthase subunit HisH 1; Short=IGPS subunit HisH 1

MIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALKEQVL

VQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQGINNK

SDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>sp|Q3I354.1|LUXS\_CAMJJ RecName: Full=S-ribosylhomocysteine lyase; AltName: Full=AI-2 synthesis protein; AltName: Full=Autoinducer-2 production protein LuxS

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>sp|A1W0R9.1|MQNA\_CAMJJ RecName: Full=Chorismate dehydratase; AltName: Full=Menaquinone biosynthetic enzyme MqnA

MIFGKIDYINLLPLHIYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNTSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYAKTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>sp|A1VXI7.1|ATPD\_CAMJJ RecName: Full=ATP synthase subunit delta; AltName: Full=ATP synthase F(1) sector subunit delta; AltName: Full=F-type ATPase subunit delta; Short=F-ATPase subunit delta

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>sp|A1W1T3.1|BIOB\_CAMJJ RecName: Full=Biotin synthase

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>sp|A1VY95.1|Y398\_CAMJJ RecName: Full=UPF0234 protein CJJ81176\_0398

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>sp|A1W0J3.1|RNY\_CAMJJ RecName: Full=Ribonuclease Y; Short=RNase Y

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKFDDLSKKEQKLQQEEEKLKEDKEYLCKSQKHIQNLQSDVDKLKNKYQEKLDDVLKI

LEHSTGLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGETIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCKRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRVIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAVEYAK

>sp|A1W1J2.1|IF1\_CAMJJ RecName: Full=Translation initiation factor IF-1

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>sp|A1VXJ0.1|ATPB\_CAMJJ RecName: Full=ATP synthase subunit beta; AltName: Full=ATP synthase F1 sector subunit beta; AltName: Full=F-ATPase subunit beta

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>sp|A1VZE6.1|DDL\_CAMJJ RecName: Full=D-alanine--D-alanine ligase; AltName: Full=D-Ala-D-Ala ligase; AltName: Full=D-alanylalanine synthetase

MKFAILFGGNSYEHEISIVSAVVLKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIK

QGGFFSKGFLKENKLECECVINLIHGRDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMVRKGQNSKEKLSFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCMINDEFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEIYLNEINPNPGSLANYLFKDFSTTLNALADQISLEKMIKISYNFLHSINGQKGKL

>sp|A1VYU1.1|RPPH\_CAMJJ RecName: Full=RNA pyrophosphohydrolase; AltName: Full=(Di)nucleoside polyphosphate hydrolase

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>sp|A1W0X7.1|PPK1\_CAMJJ RecName: Full=Polyphosphate kinase; AltName: Full=ATP-polyphosphate phosphotransferase; AltName: Full=Polyphosphoric acid kinase

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLERYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKICDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKTFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKVLEMIRIETSKKNEGVIVAKMNSLVDSDIIQALYEASMEGVQIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKIIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>sp|A1VZ20.1|ERA\_CAMJJ RecName: Full=GTPase Era

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>sp|A1W165.1|TRUD\_CAMJJ RecName: Full=tRNA pseudouridine synthase D; AltName: Full=tRNA pseudouridine(13) synthase; AltName: Full=tRNA pseudouridylate synthase D; AltName: Full=tRNA-uridine isomerase D

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>sp|A1W089.1|TRUB\_CAMJJ RecName: Full=tRNA pseudouridine synthase B; AltName: Full=tRNA pseudouridine(55) synthase; Short=Psi55 synthase; AltName: Full=tRNA pseudouridylate synthase; AltName: Full=tRNA-uridine isomerase

MNKIFAAFKPRGLSSNAFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYTKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKEIKNIKEFDLANLQQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YIDLKPNFIKELNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>sp|A1W1Q6.1|NHAA1\_CAMJJ RecName: Full=Na(+)/H(+) antiporter NhaA 1; AltName: Full=Sodium/proton antiporter NhaA 1

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>sp|A1W1Q7.1|NHAA2\_CAMJJ RecName: Full=Na(+)/H(+) antiporter NhaA 2; AltName: Full=Sodium/proton antiporter NhaA 2

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>sp|A1W0N8.1|PNP\_CAMJJ RecName: Full=Polyribonucleotide nucleotidyltransferase; AltName: Full=Polynucleotide phosphorylase; Short=PNPase

MQYSIEINKNTEIFDIDKVAKQAAGAVLMRQGKSIVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPG

GYVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPM

KAPVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQT

TSQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKEA

INQMAKSERASELNKIAKEILNLEITKDWSEESVLNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISI

ETNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPG

RRELGHGNLAKRALYPSVDENYPYIIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLI

FEDNKHAVLTDIMGLEDHDGDMDFKVAGSKDGVTALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEE

AAKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAK

DYIINITSSQKGTKKGSKDKDISGFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKSKHLNLSENQS

LKVKISEIKNGKISVDLCE

>sp|A1VYG1.1|ACCA\_CAMJJ RecName: Full=Acetyl-coenzyme A carboxylase carboxyl transferase subunit alpha; Short=ACCase subunit alpha; Short=Acetyl-CoA carboxylase carboxyltransferase subunit alpha

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYALDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKVMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>sp|A1VZC8.1|NAPA\_CAMJJ RecName: Full=Periplasmic nitrate reductase; Flags: Precursor

MNRRDFIKNTAIASAASVAGLSVPSSMLGAQEDWKWDKAVCRFCGTGCGIMIARKDGKIVATKGDPAAPV

NRGLNCIKGYFNAKIMYGEDRLVMPLLRMNEKGEFDKKGKFQQVSWQRAFDEMEKQFKKAYNELGVTGIG

IFGSGQYTIQEGYAALKLAKAGFRTNNIDPNARHCMASAVVGFMQTFGVDEPSGCYDDIELTDTIITWGA

NMAEMHPILWSRVSDRKLSNLDKVKVVNLSTFSNRTSNIADIEIIFKPNTDLAIWNYIAREIVYNHPEAM

DMKFIKDHCVFATGYADIGYGMRNNPNHPKFKESEKDTVEKENVITLDDEEAASLSYLGVKAGDKFEMKH

QGVADKNWEISFEEFKKGLAPYTLEYTAKVAKGDDNESLEDFKKKLQELANLYIEKNRKVVSFWTMGFNQ

HTRGSWVNEQAYMVHFLLGKQAKPGSGAFSLTGQPSACGTAREVGTFSHRLPADMVVANPKHREISEKIW

KVPAKTINPKPGSPYLNIMRDLEDGKIKFAWVQVNNPWQNTANANHWIAAAREMDNFIVVSDCYPGISAK

VADLILPSAMIYEKWGAYGNAERRTQHWKQQVLPVGAAMSDTWQILEFAKRFKLKEVWKEQKVDNKLTLP

SVLEEAKAMGYSEDDTLFDVLFANKEAKSFNPNDAIAKGFDNTDVKGDERKIQGSDGKEFTGYGFFVQKY

LWEEYRKFGLGHGHDLADFDTYHKVRGLRWPVVNGKETQWRFNTKFDYYAKKAAPNSDFAFYGDFNKMLT

NGDLIAPKDEKEHSIKNKAKIFFRPFMKAPERPSKEYPFWLATGRVLEHWHSGTMTMRVPELYRAVPEAL

CYMSEKDGEKLGLNQGDLVWVESRRGKVKARVDMRGRNKPPVGLVYVPWFDENVYINKVTLDATCPLSKQ

TDFKKCAVKIYKA

>sp|A1W1W9.1|LEUD\_CAMJJ RecName: Full=3-isopropylmalate dehydratase small subunit; AltName: Full=Alpha-IPM isomerase; Short=IPMI; AltName: Full=Isopropylmalate isomerase

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>sp|A1W1V8.1|RL23\_CAMJJ RecName: Full=50S ribosomal protein L23

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>sp|A1W1V9.1|RL4\_CAMJJ RecName: Full=50S ribosomal protein L4

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>sp|A1VZ65.1|RS16\_CAMJJ RecName: Full=30S ribosomal protein S16

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>sp|A1W0K3.1|CH10\_CAMJJ RecName: Full=10 kDa chaperonin; AltName: Full=GroES protein; AltName: Full=Protein Cpn10

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>sp|A1VX91.1|ILVD\_CAMJJ RecName: Full=Dihydroxy-acid dehydratase; Short=DAD

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGVDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMVVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGEAVCFNSQDEAIKGI

IKGKVKKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSVGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEEEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>sp|A1VYZ2.1|ILVC\_CAMJJ RecName: Full=Ketol-acid reductoisomerase (NADP(+)); Short=KARI; AltName: Full=Acetohydroxy-acid isomeroreductase; Short=AHIR; AltName: Full=Alpha-keto-beta-hydroxylacyl reductoisomerase; AltName: Full=Ketol-acid reductoisomerase type 1; AltName: Full=Ketol-acid reductoisomerase type I

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>sp|A1W1E0.1|Y1526\_CAMJJ RecName: Full=UPF0271 protein CJJ81176\_1526

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>sp|A1VZU4.1|PUR9\_CAMJJ RecName: Full=Bifunctional purine biosynthesis protein PurH; Includes: RecName: Full=Phosphoribosylaminoimidazolecarboxamide formyltransferase; AltName: Full=AICAR transformylase; Includes: RecName: Full=IMP cyclohydrolase; AltName: Full=ATIC; AltName: Full=IMP synthase; AltName: Full=Inosinicase

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>sp|A1VXS1.1|TIG\_CAMJJ RecName: Full=Trigger factor; Short=TF; AltName: Full=PPIase

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>sp|A1W0F6.1|Y1187\_CAMJJ RecName: Full=Probable transcriptional regulatory protein CJJ81176\_1187

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>sp|A1VZH1.1|TRUA\_CAMJJ RecName: Full=tRNA pseudouridine synthase A; AltName: Full=tRNA pseudouridine(38-40) synthase; AltName: Full=tRNA pseudouridylate synthase I; AltName: Full=tRNA-uridine isomerase I

MMKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFV

NLEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANE

LLGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMS

EKELKEQIEAKKQYNHFLAPPNGLYLSRICY

>sp|A1VZ67.1|RIMM\_CAMJJ RecName: Full=Ribosome maturation factor RimM

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELINLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVIDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>sp|A1VXL9.1|IF2\_CAMJJ RecName: Full=Translation initiation factor IF-2

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPEIAAAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENIKEQEKLNESEKKEPKKEEKLKQEVKKEELKIEKENAKEEEKQEIIDAHKPQSLASATLAKRRGL

VIVKKKKDEEEIQVKKEEVKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFL

DEHDFGDISLDDEDEVVLPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPSKKIEK

KEVEEVGSVAISKEIRVYEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEA

DEFDYVKDYEEETDEKDLVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRK

ITFIDTPGHEAFTAMRARGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDM

VKTQLAEMEIMPVEWGGSYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRG

AAATIIVQNGTLTVGSTVVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKE

AREYANKRHEYNRQKELSKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVN

IIHSGVGGITQSDIELASASENSIVLGFNIRPTGEVKERSKDKGVEIKTYNVIYNLLDDVKALLGGMMSP

IISEEQLGQAEIRQVINVPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKG

YECGVGIEGCDDMRVGDYIESYKEVEEQASL

>sp|A1VZG5.1|GLMU\_CAMJJ RecName: Full=Bifunctional protein GlmU; Includes: RecName: Full=UDP-N-acetylglucosamine pyrophosphorylase; AltName: Full=N-acetylglucosamine-1-phosphate uridyltransferase; Includes: RecName: Full=Glucosamine-1-phosphate N-acetyltransferase

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>sp|A1W0G6.1|RS2\_CAMJJ RecName: Full=30S ribosomal protein S2

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>sp|A1VX88.1|RNH2\_CAMJJ RecName: Full=Ribonuclease HII; Short=RNase HII

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKQLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDALGLSTCLKKGLKLIKKHFKTENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDRVMNFLAKDFPCYEFEKNKAYGTKAHKEFIAKFGICKLHRKSFKLL

>sp|A1VY30.1|RL25\_CAMJJ RecName: Full=50S ribosomal protein L25; AltName: Full=General stress protein CTC

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>sp|A1W018.1|LEPA\_CAMJJ RecName: Full=Elongation factor 4; Short=EF-4; AltName: Full=Ribosomal back-translocase LepA

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>sp|A1VYI6.1|EFTU\_CAMJJ RecName: Full=Elongation factor Tu; Short=EF-Tu

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>sp|A1W1U9.1|RL24\_CAMJJ RecName: Full=50S ribosomal protein L24

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>sp|A1VZ01.1|NADK\_CAMJJ RecName: Full=NAD kinase; AltName: Full=ATP-dependent NAD kinase

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>sp|A1W0G5.1|EFTS\_CAMJJ RecName: Full=Elongation factor Ts; Short=EF-Ts

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQSNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSTEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKAQGKPEKIWDNII

PGKINSFIADNSQLDSKLTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>sp|A1W023.1|ATE\_CAMJJ RecName: Full=Putative arginyl-tRNA--protein transferase; Short=Arginyltransferase; Short=R-transferase

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>sp|A1VXW7.1|RL20\_CAMJJ RecName: Full=50S ribosomal protein L20

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>sp|A1VXW3.1|HEMTB\_CAMJJ RecName: Full=Bacteriohemerythrin

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>sp|A1W0I1.1|GATB\_CAMJJ RecName: Full=Aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit B; Short=Asp/Glu-ADT subunit B

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>sp|A1VZ41.1|ISPG\_CAMJJ RecName: Full=4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase (flavodoxin); AltName: Full=1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate synthase

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>sp|A1VYA2.1|NUSB\_CAMJJ RecName: Full=Transcription antitermination protein NusB; AltName: Full=Antitermination factor NusB

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTDTPSAIVINEAIELAKELANDNSPKFINGVLDALIKAKK

>sp|A1VXI1.1|FMT\_CAMJJ RecName: Full=Methionyl-tRNA formyltransferase

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNARMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>sp|A1W170.1|FLGI\_CAMJJ RecName: Full=Flagellar P-ring protein; AltName: Full=Basal body P-ring protein; Flags: Precursor

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>sp|A1VZ42.1|FLGH\_CAMJJ RecName: Full=Flagellar L-ring protein; AltName: Full=Basal body L-ring protein; Flags: Precursor

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>sp|A1VXS0.1|CLPP\_CAMJJ RecName: Full=ATP-dependent Clp protease proteolytic subunit; AltName: Full=Endopeptidase Clp

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>sp|A1VYJ8.1|EFG\_CAMJJ RecName: Full=Elongation factor G; Short=EF-G

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVPNIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKTVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFDHYDEVPKNVADEIIKKRNG

>sp|A1W0I0.1|GPDA\_CAMJJ RecName: Full=Glycerol-3-phosphate dehydrogenase [NAD(P)+]; AltName: Full=NAD(P)H-dependent glycerol-3-phosphate dehydrogenase

MRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGLS

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>sp|A1W1U8.1|RL5\_CAMJJ RecName: Full=50S ribosomal protein L5

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>sp|A1VZ69.1|RL19\_CAMJJ RecName: Full=50S ribosomal protein L19

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>sp|A1W0K4.1|CH60\_CAMJJ RecName: Full=60 kDa chaperonin; AltName: Full=GroEL protein; AltName: Full=Protein Cpn60

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>sp|A1W123.1|ACPS\_CAMJJ RecName: Full=Holo-[acyl-carrier-protein] synthase; Short=Holo-ACP synthase; AltName: Full=4'-phosphopantetheinyl transferase AcpS

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDEKNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>sp|A1W1V7.1|RL2\_CAMJJ RecName: Full=50S ribosomal protein L2

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>sp|A1W0W0.1|TSAD\_CAMJJ RecName: Full=tRNA N6-adenosine threonylcarbamoyltransferase; AltName: Full=N6-L-threonylcarbamoyladenine synthase; Short=t(6)A synthase; AltName: Full=t(6)A37 threonylcarbamoyladenosine biosynthesis protein TsaD; AltName: Full=tRNA threonylcarbamoyladenosine biosynthesis protein TsaD

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>sp|A1VYJ4.1|RPOB\_CAMJJ RecName: Full=DNA-directed RNA polymerase subunit beta; Short=RNAP subunit beta; AltName: Full=RNA polymerase subunit beta; AltName: Full=Transcriptase subunit beta

MCDMLDNKLGNRLRVDFSNISKQIEIPNLLQLQKKSFDYFLNLDNGESGIEKVFKSIFPIHDPQNRLSLE

YVSSEIGKPKYTIRECMERGLTYSVNLKMKIRLTLHEKDEKTGEKVGVKDIKEQEIYIREIPLMTDRVSF

IINGVERVVVNQLHRSPGVIFKEEESSTVANKLVYTAQIIPDRGSWLYFEYDAKDVLYVRINKRRKVPVT

MLFRALGYKKQDIIKLFYPIQTIHVKKDKFLTEFNPNDFMDRIEYDIKDEKGKIVHQAGKRLTKKKAEQL

IKDGLKWIEYPVEILLNRYLANPIIDKESGEVLFDSLTLLDESKLAKIKEQKSFDIANDLANGVDAAIIN

SFAQDGETLKLLKQSENIDDENDLAAIRIYKVMRPGEPVVKDAAKAFVNDLFFNPERYDLTKVGRMKMNH

KLGLEVPEYVTVLTNEDIIKTAKYLIKVKNGKGHIDDRDHLGNRRIRSIGELLANELHLGLAKMQKAIRD

KFTSLNADLDKVMPYDLINPKMITTTIIEFFTGGQLSQFMDQTNPLSEVTHKRRLSALGEGGLVKERAGF

EVRDVHATHYGRICPVETPEGQNIGLINTLSTYAKVNELGFVEAPYRKVVNGKVTNEVVYLTATQEEGLF

IAPASTKVDAKGNIVEEFVEARQDGETILARREEVQLIDLCSGMVVGVAASLIPFLEHDDANRALMGSNM

QRQAVPLLTASAPIVGTGMEQIIARDAWEAVKAKRGGVVEKVDNKSIFILGEDDKGPFIDHYTMEKNLRT

NQNTNYIQHPIVKKGDIVKAGQIIADGPSMDQGELAIGKNALIAFMPWNGYNYEDAIVVSERIIREDTFT

SVHIYEKEIEARELKDGIEEITKDIPNVKEEDVAHLDESGIAKIGTHIKPGMILVGKVSPKGEVKPTPEE

RLLRAIFGEKAGHVVNKSLYATASLEGVVVDVKIFTKKGYEKDDRAIKSYDKEKMALEKEHHDRLLMMDR

EEMLRVCALLSKAPLNSDQKIGDKNYKKGQTADISELEKINRFTLTTLIKAYSKEIQKEYDDLKNHFQNE

KKKLKAEHDEKLEILEKDDILPSGVIKLVKVYIATKRKLKVGDKMAGRHGNKGIVSTIVPEVDMPYLPNG

KSVDIALNPLGVPSRMNIGQILESHLGLIGLRLGDQIQEIFDRRQKDFLKELRAKMLEICSIPRLASEKE

FIKSLSDEELLNYARDWSKGVKFATPVFEGVNIEEFSKLFEMAKIDMDGKTELYDGRTGEKIAERVHVGC

MYMLKLHHLVDEKVHARSTGPYSLVTQQPVGGKALFGGQRFGEMEVWALEAYGAAHTLREMLTIKSDDVE

GRFSAYKALTKGENVPATGIPETFFVLTNELKSLALDVEIFDKDEDNE

>sp|A1VXZ8.1|LPXA\_CAMJJ RecName: Full=Acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase; Short=UDP-N-acetylglucosamine acyltransferase

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>sp|A1VXZ7.1|FABZ\_CAMJJ RecName: Full=3-hydroxyacyl-[acyl-carrier-protein] dehydratase FabZ; AltName: Full=(3R)-hydroxymyristoyl-[acyl-carrier-protein] dehydratase; Short=(3R)-hydroxymyristoyl-ACP dehydrase; AltName: Full=Beta-hydroxyacyl-ACP dehydratase

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>sp|A1VXI8.1|ATPA\_CAMJJ RecName: Full=ATP synthase subunit alpha; AltName: Full=ATP synthase F1 sector subunit alpha; AltName: Full=F-ATPase subunit alpha

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>sp|A1W1V4.1|RS3\_CAMJJ RecName: Full=30S ribosomal protein S3

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>sp|A1VXK4.1|YBEY\_CAMJJ RecName: Full=Endoribonuclease YbeY

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>sp|A1VXG4.1|CDTA\_CAMJJ RecName: Full=Cytolethal distending toxin subunit A; Short=CDT A; Flags: Precursor

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKDNFDQQWFLTTPPFTAKPLYRQGEVR

>sp|A1VZK8.2|DSBI\_CAMJJ RecName: Full=Putative protein-disulfide oxidoreductase DsbI

MSCIKMKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGM

IALINPTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPS

WFLPIGECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFI

VLFAMFIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>sp|A1W1S4.1|ENO\_CAMJJ RecName: Full=Enolase; AltName: Full=2-phospho-D-glycerate hydro-lyase; AltName: Full=2-phosphoglycerate dehydratase

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>sp|Q29W39.1|PAND\_CAMJJ RecName: Full=Aspartate 1-decarboxylase; AltName: Full=Aspartate alpha-decarboxylase; Contains: RecName: Full=Aspartate 1-decarboxylase beta chain; Contains: RecName: Full=Aspartate 1-decarboxylase alpha chain; Flags: Precursor

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>sp|Q5QKR7.1|PSEC\_CAMJJ RecName: Full=UDP-4-amino-4,6-dideoxy-N-acetyl-beta-L-altrosamine transaminase; AltName: Full=Pseudaminic acid biosynthesis protein C

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>sp|A1W0U7.1|PSEH\_CAMJJ RecName: Full=Acetyltransferase PseH; AltName: Full=Pseudaminic acid biosynthesis protein H

MIKLKNFTELNSQEIELIFKWRNHPDINQFMKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAKPNLKGVGQILMNEIIKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDK

DFYHICLKQSDCKALPS

>sp|A1W0U6.1|PSEG\_CAMJJ RecName: Full=UDP-2,4-diacetamido-2,4,6-trideoxy-beta-L-altropyranose hydrolase; AltName: Full=Pseudaminic acid biosynthesis protein G

MKVLFRSDSSSQIGFGHIKRDLVLAKQYSDVSFACLPLEGSLIDEIPYPVYELDSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNPNLKKLQKFAKLHNNI

RLFIDHENIAKLMNESNKLIISASSLVNEALLLKANFKAICYVKNQESTATWLAKKGYEVEYKY

>sp|A1VXH9.1|OBG\_CAMJJ RecName: Full=GTPase Obg; AltName: Full=GTP-binding protein Obg

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKNFNN

LGSVLY

>sp|A1W116.1|PGK\_CAMJJ RecName: Full=Phosphoglycerate kinase

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>sp|A1W1X2.1|LEU1\_CAMJJ RecName: Full=2-isopropylmalate synthase; AltName: Full=Alpha-IPM synthase; AltName: Full=Alpha-isopropylmalate synthase

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>sp|A1W162.1|RIMO\_CAMJJ RecName: Full=Ribosomal protein S12 methylthiotransferase RimO; Short=S12 MTTase; Short=S12 methylthiotransferase; AltName: Full=Ribosomal protein S12 (aspartate-C(3))-methylthiotransferase; AltName: Full=Ribosome maturation factor RimO

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>sp|A1W038.1|DAPE\_CAMJJ RecName: Full=Succinyl-diaminopimelate desuccinylase; Short=SDAP desuccinylase; AltName: Full=N-succinyl-LL-2,6-diaminoheptanedioate amidohydrolase

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>sp|A1W1H7.1|NUOB\_CAMJJ RecName: Full=NADH-quinone oxidoreductase subunit B; AltName: Full=NADH dehydrogenase I subunit B; AltName: Full=NDH-1 subunit B

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>sp|A1VY81.1|LSPA\_CAMJJ RecName: Full=Lipoprotein signal peptidase; AltName: Full=Prolipoprotein signal peptidase; AltName: Full=Signal peptidase II; Short=SPase II

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>sp|A1W0I8.1|ATP6\_CAMJJ RecName: Full=ATP synthase subunit a; AltName: Full=ATP synthase F0 sector subunit a; AltName: Full=F-ATPase subunit 6

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>sp|A1W0Q3.1|MNMC\_CAMJJ RecName: Full=tRNA 5-methylaminomethyl-2-thiouridine biosynthesis bifunctional protein MnmC; Short=tRNA mnm(5)s(2)U biosynthesis bifunctional protein; Includes: RecName: Full=tRNA (mnm(5)s(2)U34)-methyltransferase; Includes: RecName: Full=FAD-dependent cmnm(5)s(2)U34 oxidoreductase

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIIAESGFGIGLNFFLTLKRFLQ

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLGFYEEFKELLEQFLKFYPKAKEGIYRFYFEDCFLDLVF

EDIAVLKELDFKADIWYLDGFSPNKNSQMFDGNLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKPKVNLGEFSELSFIEASRFYRQILDLKFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLNTPFPLSSKAYICPVKDDLQVIGASYDRLDTSLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEVFYKEEYKALLWTKNKEQKLAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLIRKLKKGL

>sp|A1W0P5.1|DNAJ\_CAMJJ RecName: Full=Chaperone protein DnaJ

MEISYYELLEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGEGFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCSDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNGTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

ESIKVPTIRGEATLNLPKGAKDGQRFVLEKEGVKDVHSSRMGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKITNWFKS

>sp|A1W0N0.1|UVRC\_CAMJJ RecName: Full=UvrABC system protein C; Short=Protein UvrC; AltName: Full=Excinuclease ABC subunit C

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>sp|A1W043.1|MURC\_CAMJJ RecName: Full=UDP-N-acetylmuramate--L-alanine ligase; AltName: Full=UDP-N-acetylmuramoyl-L-alanine synthetase

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIETI

RTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLATN

LKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>sp|A1W1N8.1|RNH\_CAMJJ RecName: Full=Ribonuclease H; Short=RNase H

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>sp|A1VZM9.2|AROA\_CAMJJ RecName: Full=3-phosphoshikimate 1-carboxyvinyltransferase; AltName: Full=5-enolpyruvylshikimate-3-phosphate synthase; Short=EPSP synthase; Short=EPSPS

MKIYKLQTPVNAILENIAADKSISHRFAIFSLLTQEENKAQNYLLAQDTLNTLEIIKNLGAKIEQKDSCV

KIIPPKEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKYLNNRPMRRISKPLTQIGARIYGRNE

ANLAPLCIEGQKLKAFNFKSEISSAQVKTAMILSAFRADNVCTFSEISLSRNHSENMLKAMKAPIRVSND

DLSLEINPLKKPLKAQNIIIPNDPSSAFYFVLAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMT

ITQNDFETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSSLINAKELRVKESDRIAVMVE

NLKLCGVEARELDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILS

NLGARIDY

>sp|A1VZT4.1|SECA\_CAMJJ RecName: Full=Protein translocase subunit SecA

MFLNTLKAVFGTKNDREVKKYFKRVTQINALEGKYQNLSDDELKAEFAKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVILSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKVEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPAKPEGDFVVDEKNRNILITEAGI

AKAEKLFGVENLYSLDNAILAHQLDQALKAHNLFEKDVHYVLRNNEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLVKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDVRAKISQNIAEYSANVMNDYILDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNAWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQEEVQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>sp|A1VYZ5.1|YQGF\_CAMJJ RecName: Full=Putative pre-16S rRNA nuclease

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>sp|A1VYZ7.1|MSRA\_CAMJJ RecName: Full=Peptide methionine sulfoxide reductase MsrA; Short=Protein-methionine-S-oxide reductase; AltName: Full=Peptide-methionine (S)-S-oxide reductase; Short=Peptide Met(O) reductase

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>sp|A1W1K1.1|HIS7\_CAMJJ RecName: Full=Histidine biosynthesis bifunctional protein HisB; Includes: RecName: Full=Histidinol-phosphatase; Includes: RecName: Full=Imidazoleglycerol-phosphate dehydratase; Short=IGPD

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>sp|A1W1U7.1|RS14Z\_CAMJJ RecName: Full=30S ribosomal protein S14 type Z

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>sp|A1W1X0.1|LEUC\_CAMJJ RecName: Full=3-isopropylmalate dehydratase large subunit; AltName: Full=Alpha-IPM isomerase; Short=IPMI; AltName: Full=Isopropylmalate isomerase

MAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>sp|A1VXM1.1|RIMP\_CAMJJ RecName: Full=Ribosome maturation factor RimP

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>sp|A1VXK9.1|RLMH\_CAMJJ RecName: Full=Ribosomal RNA large subunit methyltransferase H; AltName: Full=23S rRNA (pseudouridine1915-N3)-methyltransferase; AltName: Full=23S rRNA m3Psi1915 methyltransferase; AltName: Full=rRNA (pseudouridine-N3-)-methyltransferase RlmH

MQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>sp|A1VZY2.1|OTC\_CAMJJ RecName: Full=Ornithine carbamoyltransferase; Short=OTCase

MKHFLTLRDFSKEEILSLVNHASELKKEPKKLLQDKTLAMIFEKNSTRTRMAFELAITELGGKALFLSSN

DLQLSRGEPVKDTARVIGAMVDFVMMRVNKHETLLEFARYSKAPVINALSELYHPTQVLGDLLTIKEWNK

MQNGIAKVAFIGDSNNMCNSWLIAAAILGFEFSIAIPKNYKISPEIWEFAMKQALISGAKISLSHDKFEA

LKDKDVVITDTWVSMGEENEKERKIKEFEGFMIDEKAMSVANKDAILLHCLPAYRGYEVSEEIFEKHADV

IFEEARNRLYVVKALLCFLDNQRGRE

>sp|A1VYF9.1|ACP\_CAMJJ RecName: Full=Acyl carrier protein; Short=ACP

MATFDDVKAVVVEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>sp|A1W1V3.1|RL16\_CAMJJ RecName: Full=50S ribosomal protein L16

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>sp|A1VZU6.1|PURL\_CAMJJ RecName: Full=Phosphoribosylformylglycinamidine synthase subunit PurL; Short=FGAM synthase; AltName: Full=Formylglycinamide ribonucleotide amidotransferase subunit II; Short=FGAR amidotransferase II; Short=FGAR-AT II; AltName: Full=Glutamine amidotransferase PurL; AltName: Full=Phosphoribosylformylglycinamidine synthase subunit II

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>sp|A1W1X7.1|METAA\_CAMJJ RecName: Full=Homoserine O-acetyltransferase; Short=HAT; AltName: Full=Homoserine transacetylase; Short=HTA

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>sp|A1W1Y1.1|RUVC\_CAMJJ RecName: Full=Crossover junction endodeoxyribonuclease RuvC; AltName: Full=Holliday junction nuclease RuvC; AltName: Full=Holliday junction resolvase RuvC

MNLKILGIDPGSRNCGYAIMEANKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDI

FFAYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPL

DITDAIAVALTHAANLRVRV

>sp|A1VY51.1|NDK\_CAMJJ RecName: Full=Nucleoside diphosphate kinase; Short=NDK; Short=NDP kinase; AltName: Full=Nucleoside-2-P kinase

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>sp|A1VXL5.1|LPXC\_CAMJJ RecName: Full=UDP-3-O-acyl-N-acetylglucosamine deacetylase; Short=UDP-3-O-acyl-GlcNAc deacetylase; AltName: Full=UDP-3-O-[R-3-hydroxymyristoyl]-N-acetylglucosamine deacetylase

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>sp|A1W0X9.1|RUVB\_CAMJJ RecName: Full=Holliday junction ATP-dependent DNA helicase RuvB

MDRIVEIEKYSFDETYETSLRPSNFDGYIGQESIKKNLNVFIAAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMSANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASAKSYSALKLNYEKTLFEE

>sp|A1VZ68.1|TRMD\_CAMJJ RecName: Full=tRNA (guanine-N(1)-)-methyltransferase; AltName: Full=M1G-methyltransferase; AltName: Full=tRNA [GM37] methyltransferase

MKFSFVSLFPNLMEFYFQDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLMQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLLEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>sp|A1W1W1.1|RS10\_CAMJJ RecName: Full=30S ribosomal protein S10

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>sp|A1VXV6.1|RRF\_CAMJJ RecName: Full=Ribosome-recycling factor; Short=RRF; AltName: Full=Ribosome-releasing factor

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKVNIHILDHITVDYYGTQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDTYTTKIDESVKSKESELLKV

>sp|A1VZE7.1|RUVA\_CAMJJ RecName: Full=Holliday junction ATP-dependent DNA helicase RuvA

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDVNSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTKTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLG

>sp|A1VYJ0.1|RL11\_CAMJJ RecName: Full=50S ribosomal protein L11

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>sp|A1VYM4.1|PUR7\_CAMJJ RecName: Full=Phosphoribosylaminoimidazole-succinocarboxamide synthase; AltName: Full=SAICAR synthetase

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>sp|A1W0Q8.1|RPOZ\_CAMJJ RecName: Full=DNA-directed RNA polymerase subunit omega; Short=RNAP omega subunit; AltName: Full=RNA polymerase omega subunit; AltName: Full=Transcriptase subunit omega

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>sp|A1W1V2.1|RL29\_CAMJJ RecName: Full=50S ribosomal protein L29

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>sp|A1W068.1|THIE\_CAMJJ RecName: Full=Thiamine-phosphate synthase; Short=TP synthase; Short=TPS; AltName: Full=Thiamine-phosphate pyrophosphorylase; Short=TMP pyrophosphorylase; Short=TMP-PPase

MKNKLDLSLYLVASQGNKSEECFLNTLENAIKGGVSIIQLREKELNAREFYKLGLKVQKLCKAYKIPFLI

NDRVDIALALDADGVHLGQEDLEVKLARKLLGDEKIIGLSLKKLEQLEFIQGANYLGCGAIKATPTKESS

LLSLELLSQICDKSPIGVVAIGGVDKAVLDELKGINLSGVAVVRAIMDAKDAFLAAKELKRKIYENLPLK

>sp|A1VZZ8.1|TGT\_CAMJJ RecName: Full=Queuine tRNA-ribosyltransferase; AltName: Full=Guanine insertion enzyme; AltName: Full=tRNA-guanine transglycosylase

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>sp|A1VY69.1|TRPB\_CAMJJ RecName: Full=Tryptophan synthase beta chain

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVVNLSGRGDKDMQMIRDYKKGVIYG

>sp|A1VYJ7.1|RS7\_CAMJJ RecName: Full=30S ribosomal protein S7

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>sp|A1W057.1|RS6\_CAMJJ RecName: Full=30S ribosomal protein S6

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>sp|A1VYG6.1|RL28\_CAMJJ RecName: Full=50S ribosomal protein L28

MARVCQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTRKMRIAASTLRTLKKQNSK

>sp|A1VYA3.1|RISB\_CAMJJ RecName: Full=6,7-dimethyl-8-ribityllumazine synthase; Short=DMRL synthase; Short=LS; Short=Lumazine synthase

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>sp|A1W0S0.1|UPP\_CAMJJ RecName: Full=Uracil phosphoribosyltransferase; AltName: Full=UMP pyrophosphorylase; AltName: Full=UPRTase

MKNIHCINHPLIEHKLGILRAKETKPFQFRMLIDEISSFLLFEASKDFSLKEIEISTPIQKTTVKKLDEK

IMICPILRAALGMLESVFKMIPDASVGFLGFVRNEETLKADFYFQKLPKDAKKRTAIVIDPMFATGGTAI

EACNFLKSQGVKKIKFISILAAPQGLKKFSQMHDDVEVFVACIDEGLNEKGYIIPGLGDAGDRVFNTL

>sp|A1VYA6.1|DER\_CAMJJ RecName: Full=GTPase Der; AltName: Full=GTP-binding protein EngA

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>sp|A1W1L3.1|RS20\_CAMJJ RecName: Full=30S ribosomal protein S20

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>sp|A1VZ23.1|RL9\_CAMJJ RecName: Full=50S ribosomal protein L9

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>sp|A1VYN0.1|HTPG\_CAMJJ RecName: Full=Chaperone protein HtpG; AltName: Full=Heat shock protein HtpG; AltName: Full=High temperature protein G

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKDDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEIDDANKEEQGTSITLYLKDDEFANAYKIESIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKPDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNESFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>sp|A1W0H2.1|MNMG\_CAMJJ RecName: Full=tRNA uridine 5-carboxymethylaminomethyl modification enzyme MnmG; AltName: Full=Glucose-inhibited division protein A

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>sp|A1VZK1.1|MURA\_CAMJJ RecName: Full=UDP-N-acetylglucosamine 1-carboxyvinyltransferase; AltName: Full=Enoylpyruvate transferase; AltName: Full=UDP-N-acetylglucosamine enolpyruvyl transferase; Short=EPT

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>sp|A1VXS5.1|DAPB\_CAMJJ RecName: Full=4-hydroxy-tetrahydrodipicolinate reductase; Short=HTPA reductase

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>sp|A1VXI9.1|ATPG\_CAMJJ RecName: Full=ATP synthase gamma chain; AltName: Full=ATP synthase F1 sector gamma subunit; AltName: Full=F-ATPase gamma subunit

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>sp|A1VXJ1.1|ATPE\_CAMJJ RecName: Full=ATP synthase epsilon chain; AltName: Full=ATP synthase F1 sector epsilon subunit; AltName: Full=F-ATPase epsilon subunit

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>sp|A1W092.1|SSRP\_CAMJJ RecName: Full=SsrA-binding protein; AltName: Full=Small protein B

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKNEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>sp|A1VYJ3.1|RL7\_CAMJJ RecName: Full=50S ribosomal protein L7/L12

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAAPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>sp|A1VZB4.1|KTHY\_CAMJJ RecName: Full=Thymidylate kinase; AltName: Full=dTMP kinase

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>sp|A1W059.1|RS18\_CAMJJ RecName: Full=30S ribosomal protein S18

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>sp|A1W1V5.1|RL22\_CAMJJ RecName: Full=50S ribosomal protein L22

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKRFRPRARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKK

ATAKKES

>sp|A1VXL7.1|KHSE\_CAMJJ RecName: Full=Homoserine kinase; Short=HK; Short=HSK

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>sp|A1VXF1.1|AROQ\_CAMJJ RecName: Full=3-dehydroquinate dehydratase; Short=3-dehydroquinase; AltName: Full=Type II DHQase

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKSLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>sp|A1W0W6.1|MOBA\_CAMJJ RecName: Full=Molybdenum cofactor guanylyltransferase; Short=MoCo guanylyltransferase; AltName: Full=GTP:molybdopterin guanylyltransferase; AltName: Full=Mo-MPT guanylyltransferase; AltName: Full=Molybdopterin guanylyltransferase; AltName: Full=Molybdopterin-guanine dinucleotide synthase; Short=MGD synthase

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>sp|A1W1U5.1|RL6\_CAMJJ RecName: Full=50S ribosomal protein L6

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>sp|A1W0W2.1|DXR\_CAMJJ RecName: Full=1-deoxy-D-xylulose 5-phosphate reductoisomerase; Short=DXP reductoisomerase; AltName: Full=1-deoxyxylulose-5-phosphate reductoisomerase; AltName: Full=2-C-methyl-D-erythritol 4-phosphate synthase

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>sp|A1W1N6.1|AROC\_CAMJJ RecName: Full=Chorismate synthase; Short=CS; AltName: Full=5-enolpyruvylshikimate-3-phosphate phospholyase

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>sp|A1VXX6.1|MOAC\_CAMJJ RecName: Full=Cyclic pyranopterin monophosphate synthase; AltName: Full=Molybdenum cofactor biosynthesis protein C

MKLSHLDEKNHPKMVDVGDKNITSRIATASGMIYMSQEAFDVIKNNTAKKGPVLQTAIIAAIMGAKKTSE

IIPMCHPLMLSKVETDIMEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRS

>sp|A1W048.1|GATA\_CAMJJ RecName: Full=Glutamyl-tRNA(Gln) amidotransferase subunit A; Short=Glu-ADT subunit A

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>sp|A1VZR4.1|ARLY\_CAMJJ RecName: Full=Argininosuccinate lyase; Short=ASAL; AltName: Full=Arginosuccinase

MKNEMWSGRFSSASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIIKGLEQVKSE

IEQGKFVFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEYAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELADFLPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFALDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGIFDSVKTAKDSLIILNAMLKE

IQINKENMLNACKKGHMLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPVFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILEGFIQNL

>sp|A1VXP5.1|MOAA\_CAMJJ RecName: Full=GTP 3',8-cyclase; AltName: Full=Molybdenum cofactor biosynthesis protein A

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>sp|A1VZM8.1|ISPH\_CAMJJ RecName: Full=4-hydroxy-3-methylbut-2-enyl diphosphate reductase; Short=HMBPP reductase

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIQALSNEKKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEVVIFGDENHPEVKGVKSYVSTKAYVVLDK

KELQNIKLPNKIAVVSQTTKKPEHFMEIVNFLILKTKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIKNFKIN

>sp|A1VYQ1.1|HEM1\_CAMJJ RecName: Full=Glutamyl-tRNA reductase; Short=GluTR

MYYCISFTHKNTDIALREKLSFSNEAKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNNFCGVHLSRAV

HSAFKCAAKVRNETQISKNSISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLVEELSYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHTPTVNLKHLQGKMQSDTVINAMRYVFDLQNNLEGLNQYK

CEFDMENNDEIY

>sp|A1W091.1|ISPE\_CAMJJ RecName: Full=4-diphosphocytidyl-2-C-methyl-D-erythritol kinase; Short=CMK; AltName: Full=4-(cytidine-5'-diphospho)-2-C-methyl-D-erythritol kinase

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>sp|A1VZB5.1|COAD\_CAMJJ RecName: Full=Phosphopantetheine adenylyltransferase; AltName: Full=Dephospho-CoA pyrophosphorylase; AltName: Full=Pantetheine-phosphate adenylyltransferase; Short=PPAT

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>sp|A1VXU6.1|ARGC\_CAMJJ RecName: Full=N-acetyl-gamma-glutamyl-phosphate reductase; Short=AGPR; AltName: Full=N-acetyl-glutamate semialdehyde dehydrogenase; Short=NAGSA dehydrogenase

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>sp|A1W1J8.1|RL17\_CAMJJ RecName: Full=50S ribosomal protein L17

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>sp|A1W0Q9.1|PYRH\_CAMJJ RecName: Full=Uridylate kinase; Short=UK; AltName: Full=Uridine monophosphate kinase; Short=UMP kinase; Short=UMPK

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALESSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>sp|A1VYU6.1|DNLJ\_CAMJJ RecName: Full=DNA ligase; AltName: Full=Polydeoxyribonucleotide synthase [NAD(+)]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>sp|A1VYV0.1|CMOA\_CAMJJ RecName: Full=Carboxy-S-adenosyl-L-methionine synthase; Short=Cx-SAM synthase

MKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>sp|A1VX79.1|DNAA\_CAMJJ RecName: Full=Chromosomal replication initiator protein DnaA

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

ASLKAKIEELKNKILVKSQS

>sp|A1VXG9.1|UNG\_CAMJJ RecName: Full=Uracil-DNA glycosylase; Short=UDG

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>sp|A1VY10.1|GREA\_CAMJJ RecName: Full=Transcription elongation factor GreA; AltName: Full=Transcript cleavage factor GreA

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>sp|A1VZU7.1|MNME\_CAMJJ RecName: Full=tRNA modification GTPase MnmE

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>sp|A1W0Z5.1|SELA\_CAMJJ RecName: Full=L-seryl-tRNA(Sec) selenium transferase; AltName: Full=Selenocysteine synthase; Short=Sec synthase; AltName: Full=Selenocysteinyl-tRNA(Sec) synthase

MNKFRTFPQINTLIEDESLKSYPFYIKAFFCKKVVAKLKENFFQDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELAKEKELLSYYDLGSGWCENLNEKLIKNEPKIRKLVQECDILSFSG

DKLFGSVQAGIILGKKELIEKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

KKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILTINQMENL

>sp|A1VY14.1|SURE\_CAMJJ RecName: Full=5'-nucleotidase SurE; AltName: Full=Nucleoside 5'-monophosphate phosphohydrolase

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKIIQNIFDKGFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAA

ANLDFEDEKNSDIALLKKGYATITPIMLDLTAYERMKKVKKWLKANDE

>sp|A1W1V0.1|RL14\_CAMJJ RecName: Full=50S ribosomal protein L14

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>sp|A1VY31.1|PTH\_CAMJJ RecName: Full=Peptidyl-tRNA hydrolase; Short=PTH

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>sp|A1VXT6.1|IF3\_CAMJJ RecName: Full=Translation initiation factor IF-3

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>sp|A1VYB8.1|GATC\_CAMJJ RecName: Full=Aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit C; Short=Asp/Glu-ADT subunit C

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFVVPKIIE

>sp|A1VYJ5.1|RPOC\_CAMJJ RecName: Full=DNA-directed RNA polymerase subunit beta'; Short=RNAP subunit beta'; AltName: Full=RNA polymerase subunit beta'; AltName: Full=Transcriptase subunit beta'

MSKFKVIEIKEDARPRDFEAFQLRLASPEKIKSWSYGEVKKPETINYRTLKPERDGLFCAKIFGPIRDYE

CLCGKYKKMRFKGVKCEKCGVEVANSKVRRSRMGHIELVTPVAHIWYVNSLPSRIGTLLGVKMKDLERVL

YYEAYIVENPGDAFYDNESTKKVEYCDVLNEEQYQNLMQRYENSGFKARMGGEVVRDLLANLDLVALLNQ

LKEEMAATNSEAKKKTIIKRLKVVENFLNSNLNANTDSDEAVPNRPEWMMITNLPVLPPDLRPLVALDGG

KFAVSDVNDLYRRVINRNTRLKKLMELDAPEIIIRNEKRMLQEAVDALFDNGRRANAVKGANKRPLKSLS

EIIKGKQGRFRQNLLGKRVDFSGRSVIVVGPKLRMDQCGLPKKMALELFKPHLLAKLEEKGYATTVKQAK

KMIENKTNEVWECLEEVVKGHPVMLNRAPTLHKLSIQAFHPVLVEGKAIQLHPLVCAAFNADFDGDQMAV

HVPLSQEAIAECKVLMLSSMNILLPASGKSVTVPSQDMVLGIYYLSLEKAGAKGSHKICTGIDEVMMALE

SKCLDIHASIQTMVDGRKITTTAGRLIIKSILPDFVPENSWNKVLKKKDIAALVDYVYKQGGLEITASFL

DRLKNLGFEYATKAGISISIADIIVPNDKQKAIDEAKKQVREIQNSYNLGLITSGERYNKIIDIWKSTNN

VLSKEMMKLVEKDKEGFNSIYMMADSGARGSAAQISQLAAMRGLMTKPDGSIIETPIISNFREGLNVLEY

FISTHGARKGLADTALKTANAGYLTRKLIDVAQNVKITIEDCGTHEGVEINEITADSSIIETLEERILGR

VLAEDVIDPITNSVLFAEGTLMDEEKAKILGESGIKSVNIRTPITCKAKKGICAKCYGINLGEGKLVKPG

EAVGIVSAQSIGEPGTQLTLRTFHSGGTASTDLQDRQVSAQKEGFIRFYNLKTYKNKEGKNIVANRRNAA

ILLVEPKIKTPFKGVINIENIHEDVIVSIKDKKQEVKYILRKYDLAKPNELAGVSGSIDGKLYLPYQSGM

QVEENESIVEVIKEGWNVLNRIPFASEILVEDGEPVVQNIKAGEKGTLKFYILKGDGLDRVKNVKKGDIV

KEKGFFVVIADENDREAKRHYIPRESKIEFNDSEKIDDANTIIASAPKKERKVIAEWDAYNNTIIAEIDG

VVSFEDIEAGYSADEQIDEATGKRSLVINEYLPSGVRPTLVIAGKGDKAVRYQLEPKTVIFVHDGDKIAQ

ADILAKTPKAAAKSKDITGGLPRVSELFEARKPKNAAVIAEIDGVVRFDKPLRSKERIIIQAEDGTSAEY

LIDKSKHIQVRDGEFIHAGEKLTDGVVSSHDVLKILGEKALHYYLISEIQQVYRGQGVVISDKHIEVIVS

QMLRQVKVVDSGHTKFIEGDLVSRRKFREENERIIRMGGEPAIAEPVLLGVTRAAIGSDSVISAASFQET

TKVLTEASIAGKFDYLEDLKENVILGRMIPVGTGLYGEQNLKLKEQE

>sp|A1W1J4.1|RS13\_CAMJJ RecName: Full=30S ribosomal protein S13

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>sp|A1VY17.1|PANC\_CAMJJ RecName: Full=Pantothenate synthetase; Short=PS; AltName: Full=Pantoate--beta-alanine ligase; AltName: Full=Pantoate-activating enzyme

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>sp|A1VY80.2|GLMM\_CAMJJ RecName: Full=Phosphoglucosamine mutase

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIAALQFS

ALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>sp|A1VZJ8.1|FOLD\_CAMJJ RecName: Full=Bifunctional protein FolD; Includes: RecName: Full=Methylenetetrahydrofolate dehydrogenase; Includes: RecName: Full=Methenyltetrahydrofolate cyclohydrolase

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>sp|A1W1K9.1|ISPDF\_CAMJJ RecName: Full=Bifunctional enzyme IspD/IspF; Includes: RecName: Full=2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase; AltName: Full=4-diphosphocytidyl-2C-methyl-D-erythritol synthase; AltName: Full=MEP cytidylyltransferase; Short=MCT; Includes: RecName: Full=2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase; Short=MECDP-synthase; Short=MECPP-synthase; Short=MECPS

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>sp|A1W1J7.1|RPOA\_CAMJJ RecName: Full=DNA-directed RNA polymerase subunit alpha; Short=RNAP subunit alpha; AltName: Full=RNA polymerase subunit alpha; AltName: Full=Transcriptase subunit alpha

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>sp|A1W1J3.1|RL36\_CAMJJ RecName: Full=50S ribosomal protein L36

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>sp|A1W085.1|PYRB\_CAMJJ RecName: Full=Aspartate carbamoyltransferase; AltName: Full=Aspartate transcarbamylase; Short=ATCase

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>sp|A1VYQ4.1|HEM3\_CAMJJ RecName: Full=Porphobilinogen deaminase; Short=PBG; AltName: Full=Hydroxymethylbilane synthase; Short=HMBS; AltName: Full=Pre-uroporphyrinogen synthase

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>sp|A1VYE9.1|MURD\_CAMJJ RecName: Full=UDP-N-acetylmuramoylalanine--D-glutamate ligase; AltName: Full=D-glutamic acid-adding enzyme; AltName: Full=UDP-N-acetylmuramoyl-L-alanyl-D-glutamate synthetase

MKISLFGYGKTTRAIAENLVDKFGPFDIYDDHFIETKKDTLGNLLLNPNDFDDNLSDIEIPSPGFPPKHK

LIQKAKNLQSEYDFFYDIMPKSVWISGTNGKTTTTQMATHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFDNYVQDKLSVLKRMNECDVAILPKIYANTPTKAHKIS

YEDEKDLAVKFGIDTEKISFKSPFLLDAIMALAIEKILLDTLSYELLNSFVMEKNKLEELKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKNFNIELYAIGISTEKMLDYAKKANLKA

YKCEVLSKAVNEISNHLRVNEVALLSPACASLDQFNSYAERGKVFKECVNKI

>sp|A1VY44.1|EX7L\_CAMJJ RecName: Full=Exodeoxyribonuclease 7 large subunit; AltName: Full=Exodeoxyribonuclease VII large subunit; Short=Exonuclease VII large subunit

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>sp|A1W1J6.1|RS4\_CAMJJ RecName: Full=30S ribosomal protein S4

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>sp|A1W1J5.1|RS11\_CAMJJ RecName: Full=30S ribosomal protein S11

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>sp|A1W1U6.1|RS8\_CAMJJ RecName: Full=30S ribosomal protein S8

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>sp|A1VZF9.1|LPXK\_CAMJJ RecName: Full=Tetraacyldisaccharide 4'-kinase; AltName: Full=Lipid A 4'-kinase

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>sp|A1VXQ2.1|SODF\_CAMJJ RecName: Full=Superoxide dismutase [Fe]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>sp|A1VZL9.1|RS15\_CAMJJ RecName: Full=30S ribosomal protein S15

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>sp|A1W1S5.1|RECA\_CAMJJ RecName: Full=Protein RecA; AltName: Full=Recombinase A

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>sp|A1VZQ6.1|CHER\_CAMJJ RecName: Full=Chemotaxis protein methyltransferase

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>sp|A1VZM0.1|FTSK\_CAMJJ RecName: Full=DNA translocase FtsK

MLAPGMGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYR

EFGYILEIVYGFFSIILGRTGSGIFALLLLLFSLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVF

GGENEKEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQ

ILDETIEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIK

QIDTNKNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKK

LEEYDAINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKN

INEIVIEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLD

FLANPKEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLT

MALMAKSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKL

PHLLIAGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALS

NMVAEMERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARA

SGIHLIVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRL

HAPFASEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYL

QRRLKIGYNRSANIIEQLTQNGILSEPDAKGQREIL

>sp|A1VZH5.1|TRMA\_CAMJJ RecName: Full=tRNA/tmRNA (uracil-C(5))-methyltransferase; AltName: Full=tRNA (uracil(54)-C(5))-methyltransferase; AltName: Full=tRNA(m5U54)-methyltransferase; Short=RUMT; AltName: Full=tmRNA (uracil(341)-C(5))-methyltransferase

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>sp|Q0Q7H1.1|ATPL\_CAMJJ RecName: Full=ATP synthase subunit c; AltName: Full=ATP synthase F(0) sector subunit c; AltName: Full=F-type ATPase subunit c; Short=F-ATPase subunit c; AltName: Full=Lipid-binding protein

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>sp|Q2M5Q2.1|PSEF\_CAMJJ RecName: Full=Pseudaminic acid cytidylyltransferase; AltName: Full=Pseudaminic acid biosynthesis protein F

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>sp|Q939J8.1|PSEI\_CAMJJ RecName: Full=Pseudaminic acid synthase; AltName: Full=Pseudaminic acid biosynthesis protein I

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>sp|Q5QKR8.1|PSEB\_CAMJJ RecName: Full=UDP-N-acetylglucosamine 4,6-dehydratase (inverting); AltName: Full=Pseudaminic acid biosynthesis protein B; AltName: Full=UDP-GlcNAc-inverting 4,6-dehydratase

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>sp|A1VZZ6.1|AROB\_CAMJJ RecName: Full=3-dehydroquinate synthase; Short=DHQS

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDSILDFIEKIDEKSFLNATCENEIFTQI

IARSIELKSRVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQKIKDILLKFGLPISYKINNVDEFYEAFFMDKKSSNKKINFVLASPLGKGFIKGDISKEDIIATLREF

Q

>sp|A1VY43.1|UBIE\_CAMJJ RecName: Full=Ubiquinone/menaquinone biosynthesis C-methyltransferase UbiE; AltName: Full=2-methoxy-6-polyprenyl-1,4-benzoquinol methylase; AltName: Full=Demethylmenaquinone methyltransferase

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>sp|A1W118.1|NADD\_CAMJJ RecName: Full=Probable nicotinate-nucleotide adenylyltransferase; AltName: Full=Deamido-NAD(+) diphosphorylase; AltName: Full=Deamido-NAD(+) pyrophosphorylase; AltName: Full=Nicotinate mononucleotide adenylyltransferase; Short=NaMN adenylyltransferase

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKN

>sp|A1VXD7.1|MNMA\_CAMJJ RecName: Full=tRNA-specific 2-thiouridylase MnmA

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKSLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGAHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYDHDKVIASGFIE

>sp|A1W027.1|MURG\_CAMJJ RecName: Full=UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol N-acetylglucosamine transferase; AltName: Full=Undecaprenyl-PP-MurNAc-pentapeptide-UDPGlcNAc GlcNAc transferase

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>sp|A1W0A5.1|CHEY\_CAMJJ RecName: Full=Chemotaxis protein CheY homolog

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>sp|A1VYW8.1|MACB\_CAMJJ RecName: Full=Macrolide export ATP-binding/permease protein MacB

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>sp|A1VZY1.1|Y1011\_CAMJJ RecName: Full=UPF0763 protein CJJ81176\_1011

MKELEKYNTCLKRIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFDSPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIERVNQNERL

>sp|A1VZ48.1|RSMH\_CAMJJ RecName: Full=Ribosomal RNA small subunit methyltransferase H; AltName: Full=16S rRNA m(4)C1402 methyltransferase; AltName: Full=rRNA (cytosine-N(4)-)-methyltransferase RsmH

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDFHN

RITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINTYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITKKA

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>sp|A1W1H5.1|NUOD\_CAMJJ RecName: Full=NADH-quinone oxidoreductase subunit D; AltName: Full=NADH dehydrogenase I subunit D; AltName: Full=NDH-1 subunit D

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>sp|A1VYH4.1|MIAB\_CAMJJ RecName: Full=tRNA-2-methylthio-N(6)-dimethylallyladenosine synthase; AltName: Full=(Dimethylallyl)adenosine tRNA methylthiotransferase MiaB; AltName: Full=tRNA-i(6)A37 methylthiotransferase

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGVDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIYKEAQKAIEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEGLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKEW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETVDVLEKVRFEQIFSFKYSKRPLTKAATMPNQIDE

EIASRRLSTLQNRHSEILDKIVKKQENKTFKVLFEELRAGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEIV

>sp|A1W0N3.1|GUAA\_CAMJJ RecName: Full=GMP synthase [glutamine-hydrolyzing]; AltName: Full=GMP synthetase; AltName: Full=Glutamine amidotransferase

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>sp|A1VXA6.1|PYRG\_CAMJJ RecName: Full=CTP synthase; AltName: Full=Cytidine 5'-triphosphate synthase; AltName: Full=Cytidine triphosphate synthetase; Short=CTP synthetase; Short=CTPS; AltName: Full=UTP--ammonia ligase

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>sp|A1VZN9.1|ALR\_CAMJJ RecName: Full=Alanine racemase

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>sp|A1VXN9.1|RL31\_CAMJJ RecName: Full=50S ribosomal protein L31

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>sp|A1VZI4.1|F16PA\_CAMJJ RecName: Full=Fructose-1,6-bisphosphatase class 1; Short=FBPase class 1; AltName: Full=D-fructose-1,6-bisphosphate 1-phosphohydrolase class 1

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>sp|A1VYI7.1|RL33\_CAMJJ RecName: Full=50S ribosomal protein L33

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTLHKEVKLKS

>sp|A1W1W6.1|RLMN\_CAMJJ RecName: Full=Dual-specificity RNA methyltransferase RlmN; AltName: Full=23S rRNA (adenine(2503)-C(2))-methyltransferase; AltName: Full=23S rRNA m2A2503 methyltransferase; AltName: Full=Ribosomal RNA large subunit methyltransferase N; AltName: Full=tRNA (adenine(37)-C(2))-methyltransferase; AltName: Full=tRNA m2A37 methyltransferase

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>sp|A1VYP2.1|SUCC\_CAMJJ RecName: Full=Succinate--CoA ligase [ADP-forming] subunit beta; AltName: Full=Succinyl-CoA synthetase subunit beta; Short=SCS-beta

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>sp|A1VZF8.1|NADE\_CAMJJ RecName: Full=NH(3)-dependent NAD(+) synthetase

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFALLMPTQISNKANLEDAL

RLCADLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSALKNSLVIGTSNKSELLLGY

GTIYGDLACAFNPIGSLYKSEIYALAKYLNLHENFIKKAPSADLWENQSDEADLGFSYAKIDEGLKALET

NDEKLLRTLDPSLIAMLKNRMQKNAFKGKMPEILEI

>sp|A1W1U3.1|RS5\_CAMJJ RecName: Full=30S ribosomal protein S5

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>sp|A1VY36.1|HIS8\_CAMJJ RecName: Full=Histidinol-phosphate aminotransferase; AltName: Full=Imidazole acetol-phosphate transaminase

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>sp|A1W1X5.1|QUEF\_CAMJJ RecName: Full=NADPH-dependent 7-cyano-7-deazaguanine reductase; AltName: Full=7-cyano-7-carbaguanine reductase; AltName: Full=NADPH-dependent nitrile oxidoreductase; AltName: Full=PreQ(0) reductase

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>sp|A1VX95.1|QUEC\_CAMJJ RecName: Full=7-cyano-7-deazaguanine synthase; AltName: Full=7-cyano-7-carbaguanine synthase; AltName: Full=PreQ(0) synthase; AltName: Full=Queuosine biosynthesis protein QueC

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>sp|A1W0Z2.1|IXTPA\_CAMJJ RecName: Full=dITP/XTP pyrophosphatase; AltName: Full=Non-canonical purine NTP pyrophosphatase; AltName: Full=Non-standard purine NTP pyrophosphatase; AltName: Full=Nucleoside-triphosphate diphosphatase; AltName: Full=Nucleoside-triphosphate pyrophosphatase; Short=NTPase

MKIILATSNKHKVLELKEILKDFEIYAFDEVLMPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFKQSKAYYVAAIAMVGLMGEFSTHGTM

HGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILNKG

>sp|A1VYA1.1|PYRF\_CAMJJ RecName: Full=Orotidine 5'-phosphate decarboxylase; AltName: Full=OMP decarboxylase; Short=OMPDCase; Short=OMPdecase

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>sp|A1VXV5.1|PYRE\_CAMJJ RecName: Full=Orotate phosphoribosyltransferase; Short=OPRT; Short=OPRTase

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>sp|A1VY78.1|PLSY\_CAMJJ RecName: Full=Glycerol-3-phosphate acyltransferase; AltName: Full=Acyl-PO4 G3P acyltransferase; AltName: Full=Acyl-phosphate--glycerol-3-phosphate acyltransferase; AltName: Full=G3P acyltransferase; Short=GPAT; AltName: Full=Lysophosphatidic acid synthase; Short=LPA synthase

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>sp|A1VYZ9.1|KAD\_CAMJJ RecName: Full=Adenylate kinase; Short=AK; AltName: Full=ATP-AMP transphosphorylase; AltName: Full=ATP:AMP phosphotransferase; AltName: Full=Adenylate monophosphate kinase

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>sp|A1VY45.1|SERC\_CAMJJ RecName: Full=Phosphoserine aminotransferase; AltName: Full=Phosphohydroxythreonine aminotransferase; Short=PSAT

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKAAMLYECIDLSNGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQIKTLCEFM

KEFQGKYA

>sp|A1W1D6.1|ACSA\_CAMJJ RecName: Full=Acetyl-coenzyme A synthetase; Short=AcCoA synthetase; Short=Acs; AltName: Full=Acetate--CoA ligase; AltName: Full=Acyl-activating enzyme

MLNQNNQELFKPSKEFSRNARIKNLCEYYDLCDEAKEDFEGFWKRQAFEKIEWFSPFSRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKAANLLKKFGVKKGDRVVIYM

PMIPETAIVMLACARIGAIHSVVFGGFSPEALRDRIIDAGAKLVVTADGAFRRGKPYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYIKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

ISKFYTSPTAIRMLHADAPNEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGGTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKDEGEDGLLCITKPWPSMIRGIWGNDERYIESYFS

QAKKDGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIGTAEIESAIAKHPSVAESAVVSILDTIKG

ESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGPIAKIEKILYTPGLPKTRSGKIMRRILRTIARGE

EIKQDISTLEDSKVVETIVKLAKAEFE

>sp|A1W0M7.1|DCUP\_CAMJJ RecName: Full=Uroporphyrinogen decarboxylase; Short=UPD; Short=URO-D

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>sp|A1W0I5.1|METE\_CAMJJ RecName: Full=5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase; AltName: Full=Cobalamin-independent methionine synthase; AltName: Full=Methionine synthase, vitamin-B12 independent isozyme

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>sp|A1VYC2.1|GLYA\_CAMJJ RecName: Full=Serine hydroxymethyltransferase; Short=SHMT; Short=Serine methylase

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>sp|A1VY47.1|FABH\_CAMJJ RecName: Full=3-oxoacyl-[acyl-carrier-protein] synthase 3; AltName: Full=3-oxoacyl-[acyl-carrier-protein] synthase III; AltName: Full=Beta-ketoacyl-ACP synthase III; Short=KAS III

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>sp|A1W1A5.1|PURA\_CAMJJ RecName: Full=Adenylosuccinate synthetase; Short=AMPSase; Short=AdSS; AltName: Full=IMP--aspartate ligase

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>sp|A1VY92.1|Y395\_CAMJJ RecName: Full=UPF0323 lipoprotein CJJ81176\_0395; Flags: Precursor

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>sp|A1VYK3.1|TRPC\_CAMJJ RecName: Full=Indole-3-glycerol phosphate synthase; Short=IGPS

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKATAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPQIP

NSKIIIAESGLENKEFLEHLQNLGVDAFLIGEYFMREEDEGKALKALL

>sp|A1VZV0.1|YIDD\_CAMJJ RecName: Full=Putative membrane protein insertion efficiency factor

MICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFFSTFFRILRCNPFFKGGFDYPRVSK

NFYPINLCFKPIFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>sp|A1W0G0.1|TATA\_CAMJJ RecName: Full=Sec-independent protein translocase protein TatA

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>sp|A1VZV1.1|RNPA\_CAMJJ RecName: Full=Ribonuclease P protein component; Short=RNase P protein; Short=RNaseP protein; AltName: Full=Protein C5

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>sp|A1VYC7.1|LGT\_CAMJJ RecName: Full=Prolipoprotein diacylglyceryl transferase

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>sp|A1VZ10.1|ENGB\_CAMJJ RecName: Full=Probable GTP-binding protein EngB

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>sp|A1VY04.1|TAL\_CAMJJ RecName: Full=Transaldolase

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>sp|A1VXN2.1|Y184\_CAMJJ RecName: Full=UPF0102 protein CJJ81176\_0184

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>sp|A1VXH8.1|RL27\_CAMJJ RecName: Full=50S ribosomal protein L27

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>sp|A1VYR7.1|PROA\_CAMJJ RecName: Full=Gamma-glutamyl phosphate reductase; Short=GPR; AltName: Full=Glutamate-5-semialdehyde dehydrogenase; AltName: Full=Glutamyl-gamma-semialdehyde dehydrogenase; Short=GSA dehydrogenase

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>sp|A1VZY5.1|RSMG\_CAMJJ RecName: Full=Ribosomal RNA small subunit methyltransferase G; AltName: Full=16S rRNA 7-methylguanosine methyltransferase; Short=16S rRNA m7G methyltransferase

MIFKDYDFLQNYDLKNFEEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKAAFLRTLKIECELPNLHIYKEKVQEYKNTFKADIITSRALMDVK

PLLEICKNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRRYCILK

>sp|A1W1D0.1|DAPF\_CAMJJ RecName: Full=Diaminopimelate epimerase; Short=DAP epimerase; AltName: Full=PLP-independent amino acid racemase

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>sp|A1VY90.1|RS21\_CAMJJ RecName: Full=30S ribosomal protein S21

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>sp|A1W0A4.1|PRMA\_CAMJJ RecName: Full=Ribosomal protein L11 methyltransferase; Short=L11 Mtase

MQKKYYELFFIVEERYKNLFLDFAFDLGIEAIEEKDNGVYIRSHESLEDLSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTYSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFYKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

G

>sp|A1W1V6.1|RS19\_CAMJJ RecName: Full=30S ribosomal protein S19

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>sp|A1VZR5.1|PCKA\_CAMJJ RecName: Full=Phosphoenolpyruvate carboxykinase (ATP); Short=PCK; Short=PEP carboxykinase; Short=PEPCK

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>sp|A1VZ22.1|HSLV\_CAMJJ RecName: Full=ATP-dependent protease subunit HslV

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>sp|A1VZ21.1|HSLU\_CAMJJ RecName: Full=ATP-dependent protease ATPase subunit HslU; AltName: Full=Unfoldase HslU

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRAENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKALYEILTRPKNSLLKQ

YSQLLKTENLELEFDDEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>sp|A1VZF4.1|DAPA\_CAMJJ RecName: Full=4-hydroxy-tetrahydrodipicolinate synthase; Short=HTPA synthase

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>sp|A1VZ24.1|ASSY\_CAMJJ RecName: Full=Argininosuccinate synthase; AltName: Full=Citrulline--aspartate ligase

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>sp|A1W1V1.1|RS17\_CAMJJ RecName: Full=30S ribosomal protein S17

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>sp|A1W1U4.1|RL18\_CAMJJ RecName: Full=50S ribosomal protein L18

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>sp|A1VXS2.1|GCH1\_CAMJJ RecName: Full=GTP cyclohydrolase 1; AltName: Full=GTP cyclohydrolase I; Short=GTP-CH-I

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVI

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>sp|A1VYM9.1|CRCB\_CAMJJ RecName: Full=Putative fluoride ion transporter CrcB

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>sp|A1W1J9.1|HIS1\_CAMJJ RecName: Full=ATP phosphoribosyltransferase; Short=ATP-PRT; Short=ATP-PRTase

MQENTRLRIAIQKSGRLSKESIELLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELERQSLGENPSYKLLKKLDFGYCRLSLALPQEKKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSVEVAPRANLADAICDLVSSGATLQANNLKEVKVIYESRACLIQKENALSKEKQTLV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>sp|A1VZR0.1|APT\_CAMJJ RecName: Full=Adenine phosphoribosyltransferase; Short=APRT

MIKLTQEEQKYLFDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>sp|A1VZW5.1|CMOB\_CAMJJ RecName: Full=tRNA U34 carboxymethyltransferase

MQENLLEKQFLNHPLYTKIQELKALNLTCNFSLDDSVNLSTNSQAKDEILAITKELKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMNEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPSYSLKFDVIFCLGVIYHRSDPVKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>sp|A1W094.1|CLPS\_CAMJJ RecName: Full=ATP-dependent Clp protease adapter protein ClpS

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>sp|A1VY70.1|TRPA\_CAMJJ RecName: Full=Tryptophan synthase alpha chain

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>sp|A1W187.1|RS9\_CAMJJ RecName: Full=30S ribosomal protein S9

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>sp|A1VZV2.1|RL34\_CAMJJ RecName: Full=50S ribosomal protein L34

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>sp|A1VZ44.1|ACKA\_CAMJJ RecName: Full=Acetate kinase; AltName: Full=Acetokinase

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>sp|A1VYJ1.1|RL1\_CAMJJ RecName: Full=50S ribosomal protein L1

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>sp|A1W096.1|LFTR\_CAMJJ RecName: Full=Leucyl/phenylalanyl-tRNA--protein transferase; AltName: Full=L/F-transferase; AltName: Full=Leucyltransferase; AltName: Full=Phenyalanyltransferase

MESSNLYSKLLNAPKNAPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCILIPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDTRSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVSIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>sp|A1VZJ6.1|GSA\_CAMJJ RecName: Full=Glutamate-1-semialdehyde 2,1-aminomutase; Short=GSA; AltName: Full=Glutamate-1-semialdehyde aminotransferase; Short=GSA-AT

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>sp|A1VYJ6.1|RS12\_CAMJJ RecName: Full=30S ribosomal protein S12

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>sp|A1VYA4.1|KDSA\_CAMJJ RecName: Full=2-dehydro-3-deoxyphosphooctonate aldolase; AltName: Full=3-deoxy-D-manno-octulosonic acid 8-phosphate synthase; AltName: Full=KDO-8-phosphate synthase; Short=KDO 8-P synthase; Short=KDOPS; AltName: Full=Phospho-2-dehydro-3-deoxyoctonate aldolase

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKNGVFVAERGSSFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLNLTRLKNCVNTLLEIQNIIKENK

>sp|A1VY49.1|RL32\_CAMJJ RecName: Full=50S ribosomal protein L32

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>sp|A1VY27.1|BIOD\_CAMJJ RecName: Full=ATP-dependent dethiobiotin synthetase BioD; AltName: Full=DTB synthetase; Short=DTBS; AltName: Full=Dethiobiotin synthase

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>sp|A1W1H0.1|NUOI\_CAMJJ RecName: Full=NADH-quinone oxidoreductase subunit I; AltName: Full=NADH dehydrogenase I subunit I; AltName: Full=NDH-1 subunit I

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>sp|A1W1H1.1|NUOH\_CAMJJ RecName: Full=NADH-quinone oxidoreductase subunit H; AltName: Full=NADH dehydrogenase I subunit H; AltName: Full=NDH-1 subunit H

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>sp|A1W0R3.1|TRMB\_CAMJJ RecName: Full=tRNA (guanine-N(7)-)-methyltransferase; AltName: Full=tRNA (guanine(46)-N(7))-methyltransferase; AltName: Full=tRNA(m7G46)-methyltransferase

MPNFKSKKIKEINLPYSKDDVEFLWLAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKVQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWDKKPHRRVIGK

DFCKECARVLTQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECKNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

PEHCYLHLDKTIDFVFKEPFKIQENIKAINELKEILKVQFKI

>sp|A1W0D6.1|HLDE\_CAMJJ RecName: Full=Bifunctional protein HldE; Includes: RecName: Full=D-beta-D-heptose 7-phosphate kinase; AltName: Full=D-beta-D-heptose 7-phosphotransferase; AltName: Full=D-glycero-beta-D-manno-heptose-7-phosphate kinase; Includes: RecName: Full=D-beta-D-heptose 1-phosphate adenylyltransferase; AltName: Full=D-glycero-beta-D-manno-heptose 1-phosphate adenylyltransferase

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>sp|A1VXT4.1|UPPP\_CAMJJ RecName: Full=Undecaprenyl-diphosphatase; AltName: Full=Bacitracin resistance protein; AltName: Full=Undecaprenyl pyrophosphate phosphatase

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>sp|A1W1K3.1|HIS4\_CAMJJ RecName: Full=1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerase; AltName: Full=Phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase

MTQIIPALDLIDGEVVRLVKGDYEQKKVYKYNPLEKFKEYEKAGAKELHLVDLTGAKDPSKRQLALIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKNATLCLEILKEFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPNICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSIEEGIRCLAN

>sp|A1VZQ4.1|PEB1A\_CAMJJ RecName: Full=Major cell-binding factor; AltName: Full=CBF1; AltName: Full=PEB1; Flags: Precursor

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>sp|A1VZQ5.1|PEB1C\_CAMJJ RecName: Full=Probable ABC transporter ATP-binding protein PEB1C

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>sp|A1VYV6.1|CBF2\_CAMJJ RecName: Full=Putative peptidyl-prolyl cis-trans isomerase Cbf2; Short=PPIase Cbf2; AltName: Full=Cell-binding factor 2; AltName: Full=Major antigen peb4A; AltName: Full=Rotamase Cbf2; Flags: Precursor

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>sp|A1W0U8.1|HIS62\_CAMJJ RecName: Full=Putative imidazole glycerol phosphate synthase subunit hisF2; AltName: Full=IGP synthase cyclase subunit; AltName: Full=IGP synthase subunit hisF2; AltName: Full=ImGP synthase subunit hisF2; Short=IGPS subunit hisF2

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>sp|Q29W37.1|PANB\_CAMJJ RecName: Full=3-methyl-2-oxobutanoate hydroxymethyltransferase; AltName: Full=Ketopantoate hydroxymethyltransferase; Short=KPHMT

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>sp|A1VYJ2.1|RL10\_CAMJJ RecName: Full=50S ribosomal protein L10

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKVKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>sp|A1W1L4.1|RF1\_CAMJJ RecName: Full=Peptide chain release factor 1; Short=RF-1

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>sp|A1VYF0.1|MRAY\_CAMJJ RecName: Full=Phospho-N-acetylmuramoyl-pentapeptide-transferase; AltName: Full=UDP-MurNAc-pentapeptide phosphotransferase

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFLMPKFITWAKNKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLSCIKFDNIFAISALLCLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLTQIIAGLICI

LPLYFSSELSTELFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>sp|A1VYL5.1|HEMH\_CAMJJ RecName: Full=Ferrochelatase; AltName: Full=Heme synthase; AltName: Full=Protoheme ferro-lyase

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>sp|A1VY40.1|DXS\_CAMJJ RecName: Full=1-deoxy-D-xylulose-5-phosphate synthase; AltName: Full=1-deoxyxylulose-5-phosphate synthase; Short=DXP synthase; Short=DXPS

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKEFNPCEIKLGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>pdb|5I0W|B Chain B, Iron And Copper-bound P19 From Campylobacter Jejuni Under Reducing Conditions

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|5I0W|A Chain A, Iron And Copper-bound P19 From Campylobacter Jejuni Under Reducing Conditions

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|5I0V|B Chain B, Iron And Copper-bound P19 From Campylobacter Jejuni Under Oxidizing Conditions

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|5I0V|A Chain A, Iron And Copper-bound P19 From Campylobacter Jejuni Under Oxidizing Conditions

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>ABC69289.1 PseH [Campylobacter jejuni subsp. jejuni 81-176]

MKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVIDFVNITTKSCEFGLYAKPNLKGVGQILMNEI

IKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDKDFYHICLKQSDCKALPS

>ABC69288.1 PseG [Campylobacter jejuni subsp. jejuni 81-176]

MKVLFRSDSSSQIGFGHIKRDLVLAKQYSDVSFACLPLEGSLIDEIPYPVYELDSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNPQPK

>ABC69287.1 PseF [Campylobacter jejuni subsp. jejuni 81-176]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>ABC69286.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGSAVPPLNYILGREMEHSYSEYYEDFPHNRIIFFLKTHWTRKENSPYFFNNENYFIRTLL

NKDHLILQSQKNKNIIYVSYHSKEDPLTPANFKEQTMQILKILGYDVSLNLIDENKIDGKFIKNLDHGCG

IPDKALFRKELPLMLEKLQKRKSLMQENSISYPCGKKVFIFKDVGDKFELEIKD

>ABC69285.1 AccP [Campylobacter jejuni subsp. jejuni 81-176]

MTKTEFLEELKEAMHRDEELNEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSNLINLA

KLD

>ABC69284.1 FabH2 [Campylobacter jejuni subsp. jejuni 81-176]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHAANT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLICGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFELGSDGKYFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVDEKDIAFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>ABC69283.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>ABC69282.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>ABC69281.1 AccP [Campylobacter jejuni subsp. jejuni 81-176]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>ABC69280.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTFSYSFCKNEIYDKNKSKC

TVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILTRNNAKIVYLGADWAHTF

IHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIAKLLEESGSLKKKSFGGT

NISAIDTNDFKKIIIQALNTDKYILVRKD

>ABC69279.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>ABC69278.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MIVSKTYEIDSCDDVELGIKRESKLEFKLCFDDEKEIKALVFIIPGLGGDVDENYREHLAEFVAGEFNVA

VASVNYHCIGNRPQTGSTFYLDDIDKLILKVSCEAADIKLPYDVDNIQDYKQMSEIFHFVNNQIIEGKQK

GNFTPNYFLNLHVSLQPAKNEYQNFGIMQAQDLLNVALYLKKNAPFDTMGGGIPVIMIGSSHGGYLAHLA

AKIVPWLIDGVIDNSSYAKFLWHLIGFGKEIDFMQYSEFSTFDFFHHIKTHCSTKTFWTSNSSSNNFFSM

PRRMIRYILEPKHLEIQANYPKPCYTSYHSFYDKEIAPPDEKLELYKYLEQFGFDADLYMIKNPDQVDGR

FIKSLEHGMGMSIKTLISKELPLMLEKIKQNLKKDCKEKYISYPCEDLLYQFSEKDDKILLKIDKI

>ABC69277.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MTILEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNIDENLNIFDKTHNVFMYENLEEEINFFYQSILEK

TPRYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSMIDLSEELCSGKIYLVDIKEERVNLQL

RILFDQNDMFLWLNIYEMFINHKFYEKYYYEEILNTDKIIYENINLVIRNLDPDSKISLSCYENFYKNIP

LMLKNIPFKRIIDERKGLFESCIVVCAGPSLQKQIPLLKQYQENFVIFCVDGAYPLLVKNNIIPDYVLNL

DFEEYPLKFFKEVNPENKTLFILSASTHPSVVDYLYKKQIPLSIALNDNLPYQNLHIDEFGYLEFGTHVG

HACYALAIALKFKNIIIIGQDLSYDKQGNSHFDSFDLGSDIDATLNIPTLKTIAYGGLGEVLTHLAWDDY

KRKLEDLFARNLELNFFNATEGGARIEFAKELDFKSCCKKFANLNNKSNKYLPKTLTTNRGAKILNKILA

TFKREKQNTLICLEHAIRLNDVLKIILASDRKFPIDFLKNTYESIAKFEIFLEENSFLNDGVLKGVIFHK

GKLLSEVIVSKIEDEREYLLIYLTFYKQWLEIFICRFQLKCDIYNFLV

>ABC69276.1 FlaA [Campylobacter jejuni subsp. jejuni 81-176]

MGFRINTNVAALNAKANSDLNAKSLDASLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAISNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQEFAINGVTIGKIEYKDGDGNGSLISAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSIQNQVTSTINNITVTQVNVKAAESQIRDVDFASESANYSKANILAQSGSYA

MAQANSSQQNVLRLLQ

>ABA29495.1 putative ABC-type transport protein, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLKKLFFILSKEDKNFLFFLLIFSVFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHAIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLVSEIFVVLLLYALMLLINYKITLFLSVFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKL

>ABA29494.1 UDP-GlcNAc/Glc 4-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MMMKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFE

REKFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETS

PLAPINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKR

DKLFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVD

FKVELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>ABA29493.1 hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MILAKLFKKRLKMAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHK

IISICAVLSDNFGKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAAT

YLDTQSDKWNNYKTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIY

EYCESDVLNTYMLFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>ABA29492.1 heptosyltransferase I, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSL

>ABA26841.1 putative oxidoreductase, partial [Campylobacter jejuni subsp. jejuni 81-176]

MNLPILDLQAYEKDKSTFLKNLREIASKIGFFYLINTSIDKNLNEKLFK

>ABA26839.1 aspartyl/glutamyl-tRNA amidotransferase, B subunit, partial [Campylobacter jejuni subsp. jejuni 81-176]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEG

>ABA26840.1 S-ribosylhomocysteine lyase [Campylobacter jejuni subsp. jejuni 81-176]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>AAY17137.1 putative glycosyl transferase, partial [Campylobacter jejuni subsp. jejuni 81-176]

HFSIILFSLSKMIYIIKSKKYKYRLRQNSSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWI

ITCNTLLDFLKSKNRCFMDTIIYTFINKYFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNII

KFSLEYRIGELLCKKKKILFIFNIIKALYDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAI

VLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>AAY17136.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSW

RNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFSDLTIIKNNLTKDQIYLNQILENKDKIL

TTQTNQIYNLNTTLENKNQLLIAKQNLINFQNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFII

LSIVISHKQEQKAYKFKVKKNPNLALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGVYQVAT

>AAY17135.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYV

YLNILSDFLNYSQRIYNIKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLD

LKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEY

KNKKGK

>AAY17134.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>AAY17133.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGGYMSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIE

KCPYSHENIIFHKKFIGNINNENTITLAQALKDNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQ

VIFEFHGCNPEEQDGVEKRISLLKKLNEYFIPIHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQG

LHYRKECGNLQNLDFPVWPSNPEIPLRF

>AAY17132.1 putative GDP-4-keto-6-deoxy-D-sugar 3,5-epimerase-4-reductase [Campylobacter jejuni subsp. jejuni 81-176]

MMQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGG

ILANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAI

AKISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKF

DSIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGP

HKNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQN

IRQ

>AAY17131.1 putative nucleotidyl sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>AAY17130.1 putative nucleotidyl sugar epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKVYS

>AAY17129.1 putative D-glycero-D-manno heptose-7-phosphate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYLQILQEKQ

KI

>AAY17128.1 putative galactokinase [Campylobacter jejuni subsp. jejuni 81-176]

MHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYHLAMQNGAYSGKTSGAGAGG

FMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>AAY17127.1 putative sedoheptulose-7-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>AAY17126.1 putative heptose-1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLGIKIKYSIEKEPLGTGGAIKEALKI

IKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNVNEQGFVISFEEKIFKNQGLINGGI

YLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGVPEDYYNFTTNQSHF

>AAY17125.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYL

DNFEHSYDCIHILFLDRNDFNKSFKYINLLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIP

IQKILDRVQYPFFEQITLEHMLNYWINHGVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFK

LNNIDNLEIMQNIIFGPYRYILPLIINFSFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSI

SELDFEYLNNPLIKQINDFQKDFLDVLNKKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIK

QYRPDIVASWKYYQEFEQMCKELDGDIQEKDL

>AAY17124.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGVFYRDL

ESSPHCRGFGF

>AAX99160.1 B0741, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINEAMVGFLENQGGVVSKDYNNGY

VSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDTKTWTYTDSKGVVGKDEASEI

TQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMDKIKTGEGYFASFKEELQKYQE

ALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFA

>AAX99159.1 B0737, partial [Campylobacter jejuni subsp. jejuni 81-176]

GPTNAKTAHLIGNYVYVSVGKDKENKNTIKIDKDGFKGTAIVEGFMQRDMTSFANDKYQFGDFGSIKSQS

YDGKNSVDFYRAITIGGHYYNNGQNINHYMNANEWKLFADGWNSDALNGDIFKDGLTTIRLMSDIDFSYL

TSNGKQIAIDPVGANKYAFSGNFDGGNYTLKNILINAQNTDKGWNTGIFGKVEGKDSNKKAKIYNLNVDG

LKFSGKTNSGGAFVGQSSNADFSNIHLKNIGDLIFFDPNSKNGTDGFLYGGGFVGYAQSGSSFNRISLDN

FSKIALQPEGKFSSAYIDIYLGGFAGYSEGSNFSNILLNNIGGVTILGSETGGNIFAGGFVGYAGDKSYF

SQIDLKNIGSVQADGKTFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLD

LVDLLEF

>AAX99097.1 putative ABC transporter ATPase, partial [Campylobacter jejuni subsp. jejuni 81-176]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEI

>AAX99096.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLG

>AAX99095.1 YceI family member [Campylobacter jejuni subsp. jejuni 81-176]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>AAX99094.1 HIT family member [Campylobacter jejuni subsp. jejuni 81-176]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFTNLKKSISPLLQIM

CQGCIFMLWQDLKKMRFFQVYVGKTAKRSNKA

>AAX99093.1 hypothetical protein Cj0418c [Campylobacter jejuni subsp. jejuni 81-176]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>AAX99092.1 hypothetical protein Cj0417 [Campylobacter jejuni subsp. jejuni 81-176]

MLNILHANSSHRFHKCMPKEVHQIYDTLKLMEQQEGTKKVEAKKEEQSNSTNTDKVDNKKINF

>AAX99091.1 unknown, partial [Campylobacter jejuni subsp. jejuni 81-176]

DPKTGKGTLGRNYCYQMNMGTTAFFDEQFNTFMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGT

RPIQSAPLPAGAPTWGAEFKKALNYNFTRAITVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTD

QDRALHKFITDKTAEVAKRMQGVKSIKKGAYLKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDAD

NLFVVGAGNFQHNSGYNPTDTVGALAYRCAEGILKYHKSGKSLA

>AAX31325.1 pTet44 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKKPFTIAEALNYETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>AAX31324.1 pTet43 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>AAX31323.1 pTet42 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>AAX31322.1 pTet41 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>AAX31321.1 pTet40 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MILTRIKPSLKLYLLQQNIIFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIK

SFDENKYGFVMAVYGDKHIEVVLQNKENDTFFELRCNEEGCKEILKEDK

>AAX31320.1 pTet39 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>AAX31319.1 pTet38 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKDIAISME

>AAX31318.1 pTet37 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAKYTKRRDKRGYEWKSAYREKEALMLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGK

GRTRQWVIDDSLKMLDKVIGDRFGLIPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGV

QLRPTYLVSSGKGVHLYYFLQEPVQLYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVG

SQSKLGVDFPVKAYKLSENRYTLEDIKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQG

EPKQKSKKQGGTWVCNEALYEWWKRKITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLES

LTEDEDNHFSRADVKDGIKKPKMIYFYGILKY

>AAX31317.1 pTet36 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>AAX31316.1 pTet35 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MHVPEKGKTFAGEVREETVAWSKDTYQLLKQAEQGKVKSYVQDIALAVLDCKETATSRETFIRLMNERGY

GVDWQDSHKYITYTDLAREQAGEKACKIRDNKLEKYYNMDFGKESMEHEFERNARTAEAEQSKRAASRVK

PTEPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQAERRRAEQEAHQRAEAERRAAEEQQRIAS

RRYIGRDWEPER

>AAX31315.1 pTet34 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>AAX31314.1 pTet33 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>AAX31313.1 pTet32 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>AAX31312.1 pTet31 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>AAX31311.1 pTet30 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>AAX31310.1 pTet29 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKT

YGFRINPELTNSCKLLASSKYTDYHLKYTCDKKFYEQKDWERGYELKEVSQEIYNALPVSQREQGEKLTP

ISYGEFIKLPANKRKQEGFGKYYRIDIAYYQKIIIKKDCWINEK

>AAX31309.1 pTet28 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>AAX31308.1 pTet27 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>AAX31307.1 pTet26 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFEQAGHFATASASFKKDKID

VSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLFEDLNPDDKNKIKPSDEEL

IKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIITIEDVEEIKFYEHKNFVQL

FYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGGSITSCHAGSPEETFTRLA

LMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>AAX31306.1 pTet25 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKLKGISMQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEE

VQKEDNKDLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGF

GNNGTGNREEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGC

ALKTRLVSSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIP

VYSGATDELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIA

NTALEKMIDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>AAX31305.1 pTet24 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>AAX31304.1 pTet23 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>AAX31303.1 pTet22 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGSVLNPV

GRLAGWAGGKVAGKTVNTAKAGGKLAAKGTLASAKGGYSFAKKMYERARNAG

>AAX31302.1 pTet21 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>AAX31301.1 pTet20 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>AAX31300.1 pTet19 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>AAX31299.1 pTet18 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>AAX31298.1 pTet17 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNKVIINKQEVQFDTQNNQIFCTSLDVAKVFGKRHFHVLRDIENILNDLREIGTSQDLSNFGETYRNTE

IRGFGKVKGKTRKDRCYNLTRDGFSLLAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLME

LIYPNLPQNDYKVSVIITDNPYSKEAKNVFSLNYLVDNRTPKDPKKLQ

>AAX31297.1 pTet16 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPLGNENLKILSTETAYIDVIEKIFSQENKSLDE

KVLELKEIYKNS

>AAX31296.1 pTet15 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>AAX31295.1 pTet14 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>AAX31294.1 pTet13 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKFTWLGECVKEFDITEIGEQYSLKETIQDLCAKDFH

QKLKEFTEKTPKNQKLKDLER

>AAX31293.1 pTet12 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>AAX31292.1 pTet11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>AAX31291.1 pTet10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MCKIIKYLDYTKLNTLEKLYFDLTIMLIVTFLSFLFLVFEFFIYENIAVFFQDCFLMSVIFIIGITGLFH

TCKGLRKYKEILKKV

>AAX31290.1 pTet09 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>AAX31289.1 pTet08 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>AAX31288.1 pTet07 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>AAX31287.1 pTet06 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>AAX31286.1 pTet05 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>AAX31285.1 pTet04 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>AAX31284.1 pTet03 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>AAX31283.1 pTet02 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRARIKLMSFVLIALAVWIVYLLK

>AAX31282.1 pTet01 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILEFKYPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPTKYLRKNEYKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>AAW56189.1 Cj81-130, partial [Campylobacter jejuni subsp. jejuni 81-176]

MMQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGG

ILANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLS

>AAW56188.1 Cj81-129, partial [Campylobacter jejuni subsp. jejuni 81-176]

NINNENTITLAQALKDNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQVIFEFHGCNPEEQDGVE

KRISLLKKLNEYFIPIHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGLHYRKECGNLQNLDFPV

WPSNPEIPLRF

>AAW56187.1 Cj81-128, partial [Campylobacter jejuni subsp. jejuni 81-176]

VAKQIALIEAGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVI

DILLNFSDMGRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIP

LNR

>AAW56186.1 Cj81-127, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDN

>AAW56185.1 Cj81-126, partial [Campylobacter jejuni subsp. jejuni 81-176]

SVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIITNKKPEHKKGKVQLINATN

EEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKIIIEKPKSIEALKDDEKFA

KLKDKDKIL

>AAW56184.1 Cj81-125, partial [Campylobacter jejuni subsp. jejuni 81-176]

SVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVALARALAREPQILLLDEPLSALDFKM

RSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKIIKD

>AAW56183.1 Cj81-124, partial [Campylobacter jejuni subsp. jejuni 81-176]

SKFNNPYAFASASVIGFYSILMTYFGVNFYLSGLHSYATGDPVPVPKFLYFFIAFTVILILGAFFKRKLK

SPA

>AAW56181.1 Cj81-120, partial [Campylobacter jejuni subsp. jejuni 81-176]

NRQEKRLVKSGITSWKNTTIWILERRVWSMSLREMHEQQKQSSPREQLQELNRQSRTELENSLLKEALAM

SSENCEELMKQSNQEQVRAEQNRQRDAEQNRKLISELKQSVELLKNSNELLQDAISGEIGSLKDEVKENT

VQEVRKALQANIEAIQRATKLLEKQSDTLTSVMKQKIRELEESKNSFFRYEGLKLYLFWGGMV

>AAW56180.1 Cj81-119, partial [Campylobacter jejuni subsp. jejuni 81-176]

NGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQATQNGVIFWGDENNAVNLDITLNGVRIQNN

SIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEFINTNADGTTDNMKNIDLVVNQANTAGERHN

LTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVTAHKYVYSSTPVQLDPMYNPDGGPAFNQANI

NTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDARYGVDYDGSGGFEADGSDVNEGVKVTVGAT

GEFI

>AAW56179.1 Cj81-118, partial [Campylobacter jejuni subsp. jejuni 81-176]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWEN

>AAW56178.1 Cj81-117, partial [Campylobacter jejuni subsp. jejuni 81-176]

QKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIPIFGRWL

GETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVKSDGKVI

RLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKNYNDKIV

QEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>AAW56177.1 Cj81-116 [Campylobacter jejuni subsp. jejuni 81-176]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>AAW56176.1 Cj81-115, partial [Campylobacter jejuni subsp. jejuni 81-176]

AAPRGDEVWAVGAGVASLQYARNIDGVVTKFNTQSVMGDNTKNSETSNANMTGTNVDGMMSGAKLSAGTM

TTVNSVSQANSDAWNKNFNDQYSHMSQSGRASAFK

>AAW56175.1 Cj81-111, partial [Campylobacter jejuni subsp. jejuni 81-176]

SNILTKEDFKNCLMDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTFSYSF

CKNEIYDKNKSKCTVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILTRNNA

KIVYLGADWAHTFIHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIAKLLE

ESGSLKKKSFGGTNISAIDTNDFKKIIIQALNTDKYILVRKD

>AAW56174.1 Cj81-110 [Campylobacter jejuni subsp. jejuni 81-176]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>AAW56173.1 Cj81-109, partial [Campylobacter jejuni subsp. jejuni 81-176]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSLECYLIDFISPWKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTK

>AAW56172.1 Cj81-108, partial [Campylobacter jejuni subsp. jejuni 81-176]

PVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYDILSDTYACITDGVGGVFGEGIYRFDEIDVLVE

HNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADIILTQTSDKEYFYIKGKMQVKENEKLVFDKNYN

YKTLRKSL

>AAW56171.1 Cj81-0107, partial [Campylobacter jejuni subsp. jejuni 81-176]

LCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVNNTAYLFS

ICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFYNVHCVFIFKAKT

>AAW56170.1 Cj81-106, partial [Campylobacter jejuni subsp. jejuni 81-176]

LVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPGNAKISIYEIMQKCALDY

KDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKHIAAFKKPMIVSTGMNSI

ESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEF

>AAW56169.1 Cj81-105, partial [Campylobacter jejuni subsp. jejuni 81-176]

FLKWSSLFGGLTLSPISLSANLLKTPPLISKWAGCNVNCGTKCPVKVHTQDGIIKYVSTDNEGDDSFDNR

QARACIRGRSSRYKVYNANRLKRPLKRVGKRGEGKFMPISWEQAFDEISAKMQEIKEKYGNEAFYINYAT

GTTGTIINRCTQGPWARLLSLYGGYLNYHNSYSTAQISNAMNFFYGGSPASDIYTLRSAKLAIFFGANHV

ETRMGGGGVGYAYQKALEESGCKIIHIDPRCNDSMIGHCDEWIPIAPGTDAALIAALTYVMIKEDLLDRT

FLDKYTIGFSENTLPQDAAKNSSYESYVLGLNDGVEKTPDWASKITKIPARRIVQLAREIATIKPCFIEQ

GWGVQRHSNGEQNARAIATLACITGNIGIEGTNTGCRTGSSKTYDIMGMPFKNPIKDSIPCFLFTDAIYR

GKEMTDISDGVRGTTQLKQNIKFIFNTAGNCLTNQHSTIKEVHDILSDENLCECIVDVNVTRTPSNNYAD

YILPDATMLEQEDFIRPSAGYYSNKPYIIYCQKAIEPVGEAKPIYEMCLELA

>AAW56168.1 Cj81-104, partial [Campylobacter jejuni subsp. jejuni 81-176]

KDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFFKARSCFSPAFDVSKQG

NIINLGKINADNIVLIGNKVEIGVGAELAGQDGQTNAKTAHLIGNYVYVSVGKDKENKNTIKIDKDGFKG

TAI

>AAW56167.1 Cj81-103, partial [Campylobacter jejuni subsp. jejuni 81-176]

GLNHGGYKKGCNSYDIVDSNIPIQKILDRVQYPFFEQITLEHMLNYWINHGVWRYDSIIKNICKEKIYFL

DMEELMPNKILSTFVDLKFKFKLNNIDNLEIMQNIIFGPYRYILPLIINFSFENINIKVYIELKDRVTNG

NINLNCMLKYKHDLL

>AAW56166.1 Cj81-102, partial [Campylobacter jejuni subsp. jejuni 81-176]

EYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQNSSSNHDG

NFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINKYFNAGLI

LLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKK

>AAW56165.1 Cj81-133 [Campylobacter jejuni subsp. jejuni 81-176]

MNLYINFYFLFKILSINQVADHANNFFKRTKFIQSIQIY

>AAW56164.1 Cj81-101, partial [Campylobacter jejuni subsp. jejuni 81-176]

MSVIIQMWKRLAPSRTKKLSTSWVMILRLTGRGKVAHCGLVKCLHYLLYIYKSYVYFYCCFRWCLESCLK

KEFVTG

>AAW56163.1 Cj81-100, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKKLISKGKVLTLLLGVGFALNVSSAENSNVLIQGEAAQDGDTKPRTLEGYVHQEDA

>AAW56162.1 Cj81-099, partial [Campylobacter jejuni subsp. jejuni 81-176]

KKPMYNSQSTILPDGIYPDDVYAVIGTPRTKYGFIDRWLVRGTYHVEDGNLSNMTGKIVAGGNQFSRLWS

EFLTPEMTKKIAEFSPGFPTTMEQFGGNGSQVWGTNSYAAQYRKNMLFQPASSYCETCHSFKFDFKSKEE

FYKALGNTQELRKHTISKGISCEECHGAGAHLYGARGAGMPSNCERCHQRFSYNEEDAKKNPRKPFNAFF

KSSCPACGTEGAQMYSSAHYDKGMRCSTCHDPHEVTFNDWKDGYTKVGLKKTCTDCHDTQASFFKQGGIH

SKDNCTACHMPNMMSCENFGAVQNPDKGGFDNVRASHIWKIKVDKTAKTLNPPEGKERSPKTPGWTIARD

DDGRFFLDLMWACGRTSFSDPNLMGPGASG

>AAW56161.1 Cj81-098 [Campylobacter jejuni subsp. jejuni 81-176]

MKQSLIKFILLAVFCFSTPFLLADGKIQIGIVEGVTPISMKDAEKLLGQKNVYFVDVNSKEEREVAGNIP

NAVLVDAQNWQNLLPDDFNATLIFYGSNRFTFDASNIANLSQKLGYTHVYVMLDGIEILGAFWKKSSKRT

NRKMAKR

>AAW56160.1 Cj81-097, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLSGRKVQKEQIEKWQNAKNLDDFKDSIHSRMYFGDVPSCRDCHGKGEDKKSIRYNNAANLDLINKNCAS

CHKDVDKEFKHSIHQNISQIQLDKDGKKKKIPTCTTCHDIHNNDPLMNAMTLKQRSDFKCGECHQDKQDR

YHDTFHGKAMVLNSPGSAPKIAACYDCHGKHNILKVEDLNSTLSSLNRVQTCA

>AAW56159.1 Cj81-096 [Campylobacter jejuni subsp. jejuni 81-176]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>AAW56158.1 Cj81-095, partial [Campylobacter jejuni subsp. jejuni 81-176]

KEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSSSSSRSLSGNFTIYEELESFLKSKFKEKEIL

HFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKLGGAKFFRFPHNDMNHLENLIQKHYDHYENI

IILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSVGCFDEEGLGLVKALNLEEKVDFIVFTFGKA

LASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTKFIFEKMSELKEKREKLQIIGNFFKNQLIEK

NHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKEPTVPKNTARIRFSLHAGLSKEDLKKVIELL

>AAW56157.1 Cj81-094, partial [Campylobacter jejuni subsp. jejuni 81-176]

MIASFEKSGMNLKPEEASAIMGIFASCLYLAALPGGWLADNYLGQKRAILLGALTIAFGHLCIAFSYFNN

KMIFVGMVFLVIGTGLFKTCASVMVGMLYKKMMQGVTLVLLFFICALILVLLLAPLICGFLQKEYGWHFG

FGAGGIGMLLAVIIFYLKTMPDLKEFDEKVGIDSTWDRPSKKSKNAFYIIIVSGIVLLGAIFLILGGFIK

LDAQVINKNIILTILACAGIYFLYLFAFTSLKIEEKRNLIIFIVLFLAAALFWSVYEQQYTSFNFFAEKL

TDKTILNYEIPTIWFQSLGGLFVILFAPFSTFIWTICAKNNKEIS

>AAW56156.1 Cj81-93, partial [Campylobacter jejuni subsp. jejuni 81-176]

KTFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>AAW56155.1 Cj81-092, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINEAMVGFLENQGGVVSKDYNNGY

VSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDTKTWTYTDSKGVVGKDEASEI

>AAW56154.1 Cj81-088, partial [Campylobacter jejuni subsp. jejuni 81-176]

AKNSRFQKLSNYLKNQKNLLLILFCLFAFNIKSFADENTLKLIQNIKENSAKHSMLFGSLLVQDFDGRIK

PIDTLAMNYIHKITKKNDFLGLNYNQIFLGMMMYPQHFRQIKMISVKTAKLKEILGVDKNEKYLAYDDVF

DGDFYKLSNYIEEANRKKPALRDQFDKDILALDEKINTAFYIYSGEIFRIFPDPSQKTYTWYSPATPMPF

DLKDIENIQSLLAKYFFDFEQALSTKDFSKADESLERLKNFQNFYGSNLIPTPTQISLELFLNHYNIFDN

LTPIYLLLGSMLFILLVYEILSLKKAPKMLKNAIFILIALSVLAHALALIFRWYVGDHAPWSNAYESMVY

IAFACAFAGLVFYKRSSLALCTASIMAGISLFVAHLGFM

>AAW56153.1 Cj81-087, partial [Campylobacter jejuni subsp. jejuni 81-176]

KEKIVYPCIMAKEPCFSYETSFAFAMAPANIITSNSDILKYILAFLNSDFIYLMLRKFYMGGGIEGELKT

NNLEKLPIPKINSKNQKLADELINLVDKILKAKEQDKNANTQELENKINSLVYKLYNLTEEEIKIIEGK

>AAW56152.1 Cj81-086 [Campylobacter jejuni subsp. jejuni 81-176]

MERKIYNIKRGWLFKTKRDFAKRWNIEIEDRFYERCITLIGDIINPKQLSELEQKIFLIVGEIYKGEKKF

SGVISIFNHFNGLHDSYFAFHETALYSLLMQLKDVKFLEALENIINFCKKDKDDEFLLTFNDIVLMSNKP

FRLYYNDKYEFHPSNIEIFDQVLINDVLEFLKDYPKAKKQLSEALKIFITKENYRDVVDKTRLSLELFLT

QLLNNEKSLENQKDEILRYFGNLLDENFKKMFLEILNYYQRLNNNRAKHCKSNGQEFKDYEVEFLIYLVG

NFLQLFMTFNKFKK

>AAW56151.1 Cj81-085 [Campylobacter jejuni subsp. jejuni 81-176]

MKNYNKVLKTKKTENFSNSKNYEEQVVNWQQYFPTYHFDYKKNRDIALEEYKFCCKILESEERIFDNLIK

YMLTFGTIIISLLSGASEKIKAIFKDVTENPNYIIWFIIALVLLFFIFMTKNFAEKQKSIIFAKRKIIIL

RRMLGMDYGTQEFLFKKGMLEGANMPFSIKLRFNYLYHIIPILCVTALLIIIHMFLGYSLMYAIVFNSII

IIALYLFYIYCILDINETILLVIIRILFSRLGINFVDNFEHVLYRAKLSAYECKRQKIDLDNLKKILVAI

EDQKFYQHKGVDFKALCRALLSRGRKIPFFNKISFIKNIPFTGGSTITQQLFRTLFIENMNKKRYRRKIA

EILLSYLWFNKILSKEEQLEIYLSAVRFDKKIFGIMQAIRHFYGGDKYIKNLSKAQSFFLIERVSVTSGT

MLPKVIDTIVRLEKEKILNKEDIEDIIKIYTKAQQDNKITVFFKNRNILEELSKKYKHQN

>AAW56150.1 Cj81-084, partial [Campylobacter jejuni subsp. jejuni 81-176]

FFISKTILIIRALCIGLEMRLNKNPLNAFARLRDEKILENICLYTVSLQSRQIFCPFSSYFQLCLVCPNL

SCPHKLHFSCILHFASFLIS

>AAW56149.1 Cj81-083, partial [Campylobacter jejuni subsp. jejuni 81-176]

TILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDITHIFNVLNRMGVFYANN

EWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSMQESVPTWDFKITLLYF

FASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIMGLVNPFELLGGTYDWF

ISL

>AAW56148.1 Cj81-081, partial [Campylobacter jejuni subsp. jejuni 81-176]

NHNFIGHSYEDHDFFARLLFYTTNFSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYH

EEPNQNNYMSYRHKNHKIFYKNLANLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVIS

KNENYFFEDEKFNQDKLLDFLKQNNINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDT

NGFNYDSNLYNEENWNKVLSKSQILECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQV

ESDTVIKYFTYKPFDWSGFLDIINDMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISL

CDVVVTLNSGVGLYAMIMNKPCINCANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNN

FYSFGKSYYKKSFNNGRFYNKVYKIDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIK

LFNILIPDFIKTKISHMKFYRILKKFLFHRKEFFRDRKNKNKEKPYV

>AAW56147.1 Cj81-080 [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGHGTGEKAFQEMLSRCNVKILEKNIWYDNGLD

RYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHVPAICLVRDPIKIMTSVYNYKILKNKDNLTF

SNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNINKHIRFTYIARTHLKNLKNISHVYYIDVSEI

SNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIFDIKKPIIYKHYFNNKFIEIYLYGSYNMINK

NFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLLYEIKLNINIFLDKINNMINMFKKESIKDND

ILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKEIKT

>AAW56146.1 Cj81-079, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDISKNNILKLKKLIQHLSNSYY

NCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLVCGDIRELFYMELNNKVAGV

VTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNKCIDAFNIYDHGGLADQSYL

NIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSEFEEAMKNKKIVHFCAAKPW

WNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTIEW

>AAW56145.1 Cj81-074, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLL

>AAW56144.1 Cj81-073, partial [Campylobacter jejuni subsp. jejuni 81-176]

LACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAIGIVSTFGYLPEVFAPVLAGDLLDKYQGVKGFHIYF

SIMIAMAIMGANFCLFWIKKYNKKRKKI

>AAW56143.1 Cj81-070, partial [Campylobacter jejuni subsp. jejuni 81-176]

LDNHNNQLVRYFNTNPSIKFAILTNGIEYRFFTDIEQQNLMDKIPFLVVNLEKLKPRDIKDLKRFICTDL

NLDEILSIAMEKKYYRSIQEIFKSEIENPSDEFTSFFAKQMTEKRMTSAVLEEFKNYIKKSFKEIINDLA

YEKITSIKNNLQNINDDENDEQIDE

>AAW56140.1 hypothetical protein, partial [Campylobacter jejuni subsp. jejuni 81-176]

STYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLKLYQEQYTNYPFLFFYG

LGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLDYNNNIAELIFGLTEIS

LFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQAIWNLPEMFKHYSYKEL

LDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPDYVLSLERIPLTSEFFN

NDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYIGGGMSVAHSAYELAIL

LKCENIILIGQDLAYSKEGKSHTDDYINLA

>AAW56139.1 Cj81-066, partial [Campylobacter jejuni subsp. jejuni 81-176]

IEWFIPSLKPFFWSVEDKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLI

VLDTFSAFFSTLGFKDQNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKL

SFEKGEDKNSTTYRLLEVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISA

VSVNELAKGYVTMNENRGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRN

ILDALFLYIKKNVDTSVIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAY

>AAW56138.1 Cj81-132 [Campylobacter jejuni subsp. jejuni 81-176]

MERGAGKNKAQLDHVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRDLMEWGKEID

LKTGKTNFEKYGIDEKKLKKFTIQPNQT

>AAW56137.1 Cj81-065, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMIS

>AAW56136.1 Cj81-064, partial [Campylobacter jejuni subsp. jejuni 81-176]

LENLSKKECLRIEIDKGLENSLKELEDLMEKLPEQQTQTLFEQCTKNAMDAVTGHFGLASTILNAKDGGN

VTTLHNFEKGIVATEEDLQKAYKISTRL

>AAW56135.1 Cj81-063, partial [Campylobacter jejuni subsp. jejuni 81-176]

LALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRLKIKKLKREQ

>AAW56134.1 Cj81-063, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDI

>AAW56133.1 Cj81-061, partial [Campylobacter jejuni subsp. jejuni 81-176]

FREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDEFKKDEYRFLIVAEKYQTGFDEPLLH

TMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDI

>AAW56132.1 Cj81-91a, partial [Campylobacter jejuni subsp. jejuni 81-176]

HDLCYMSTKLDQDATTFLPFNLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQV

VKKKNEEIIIFPRYHQFDVVEKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDS

IIVVTDRKVLDSQIRENVKSFSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKT

FAIIIDEAHSSQSGSNAQKM

>AAW56131.1 Cj81-059, partial [Campylobacter jejuni subsp. jejuni 81-176]

QLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEITSIKNQADNLVKALIQS

NKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFIIGNSSCILKEALYLKTAG

ILVGSRQNGRLGNENTLKVNADSDEVLKAINTIHKKQDLFSTKLEILDSSKLFFEYLLSGEFFKLSTQKV

FKDIKHA

>AAW56130.1 Cj81-58, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLKKIISLYKRYSISKKLVLDNEHFIKENKNIYGKKHKGFFDFDEKAKDVKSPLNPWGFIRVKNEALTLR

VSLESILPALQRGIIAYNDCDDGSEELILEFCKQYPNFIAKKYPYKVDLENPKNEENKLYSYYNWAASFI

PLDEWFIKIDVDHYYDAKKLYKSFYRIDQENKALCYPRINFIILNGNIYVQNSGNYGFIGGGDQLLIKRR

NSSFIERRVSKKSQWIDPKGLIEELYSEQQVLSQGVKILQAPLLQWHFP

>AAW56128.1 Cj81-049, partial [Campylobacter jejuni subsp. jejuni 81-176]

TFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYLNEVASRLTLSGSIYLGLVATLPWV

LVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVGL

>AAW56127.1 Cj81-048 [Campylobacter jejuni subsp. jejuni 81-176]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>AAW56126.1 Cj81-047, partial [Campylobacter jejuni subsp. jejuni 81-176]

LCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYVYLNILSDFLNYSQRIYNIKYLYPKYFLYYHLNY

KIKFICRIFSKTTFILLARKTYCANQNQFLDIIELPLDLKNIVDSHKRNQLIPYNIKIENCLDYGEALKI

KNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEYKNKKGK

>AAW56125.1 Cj81-046, partial [Campylobacter jejuni subsp. jejuni 81-176]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIIN

>AAW56124.1 Cj81-045, partial [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFE

>AAW56123.1 Cj81-044, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLFQSYFVKIICLFIPFRKIRHKIKKTFLLKNIQRDKIDSYLPKKFLYKLINTTM

>AAW56122.1 Cj81-043, partial [Campylobacter jejuni subsp. jejuni 81-176]

NIYKAYKSSQAFNNEKDLTNFTYPNIDYIIFLDSDDYWELNCIEECVIRMKNVDVLWFDHDCTYEDNIKN

KHKKTRMEIFDFKKECIITPKEYANRALSVGSRDISFGWNGMIDFNFLKKIKLKFINFIINEDIHFGIIL

FASANKIYILSQKLYLCRLRANSISNHDKKITKANVSEYFKDIYETFGENAKEAKNYLKAASRVTTALKL

IEFFKDQKSENALAIKETFLPCYAKKALMIKKFKKDPLNLKEQLVLIKPFIQTKLPYDIWKFWQKIKKN

>AAW56121.1 Cj81-42, partial [Campylobacter jejuni subsp. jejuni 81-176]

DKIFNDILKYNIKDLEEIQTRVKYYNQINEFFTPTAKEKIGKFPFKSTSYAFDAYEISKYFKDEFLWNKE

FGDVRHTFKEATICKSRSLENNINNILLKLDKNRHFCFLKDNINYENKKDIAIFRGAVYQKHRKEFFDSY

FGRTFCDIGDTSKQPSQWKKNFLNKKEQMKYKFIISLEGNDVASNLKWAMNSNSLVLAPKITCETWFMEG

TLKQ

>AAW56120.1 Cj81-041, partial [Campylobacter jejuni subsp. jejuni 81-176]

DTLKEIYYFIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGK

YLEIGPGHGNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDF

ITIGEVLEHVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYF

MANNYSLKKALETRNAIIMV

>AAW56119.1 Cj81-040, partial [Campylobacter jejuni subsp. jejuni 81-176]

PFKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKVSDKVKKAERGMT

TIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYADIAYTRAYMASDR

NNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTKDTDYAGRTIGLE

LDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDILDKLGKGVKYDDL

SEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGLKPEDATKLNYDN

LGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>AAW56118.1 Cj81-039, partial [Campylobacter jejuni subsp. jejuni 81-176]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCP

>AAW56117.1 Cj81-038, partial [Campylobacter jejuni subsp. jejuni 81-176]

KDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYEKMLKMLDLCKNEKDPNLAAFLKITQ

>AAW56116.1 Cj81-037, partial [Campylobacter jejuni subsp. jejuni 81-176]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMN

>AAW56115.1 Cj81-034, partial [Campylobacter jejuni subsp. jejuni 81-176]

QELMKYLKENIQIYNGLKNRNINEDIKEIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSE

IANILFEMINFIVGEIITKPKEREERLNKLKSAIGEKQ

>AAW56114.1 Cj81-033 [Campylobacter jejuni subsp. jejuni 81-176]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>AAW56113.1 Cj81-032, partial [Campylobacter jejuni subsp. jejuni 81-176]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLA

>AAW56112.1 hypothetical protein, partial [Campylobacter jejuni subsp. jejuni 81-176]

YKKPDKIDLELNTDDILKAKEEILRYFKLKNYILI

>AAW56111.1 hypothetical protein, partial [Campylobacter jejuni subsp. jejuni 81-176]

ESLKQNFSIPPPSEVKKLNSWHRCPWKIKLK

>AAW56110.1 Cj81-131 [Campylobacter jejuni subsp. jejuni 81-176]

MTYSHIYIIGTGKVTKECQKIASDFFKQEVIFVKILKIALLLVQIILIFSKKNVCKIIPL

>AAW56109.1 Cj81-030, partial [Campylobacter jejuni subsp. jejuni 81-176]

ACIFKEKIICFYESDEELDFKAFLKDKLPSYMIPKHFIKIEKFKLNQNSKIDRKALHELI

>AAW56108.1 Cj81-29 [Campylobacter jejuni subsp. jejuni 81-176]

MNSFEKAFYEGFKLSNCYDNFNLIREKILKQELILEKHENNNFFFFNRTDGLLYYFINDLQDYDLKACYI

KILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHEDSKELYSFFRKYFDPYLFYF

SQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVAFALLNHYFAANTQNKFFKL

FVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>AAW56107.1 Cj81-028, partial [Campylobacter jejuni subsp. jejuni 81-176]

MVEESIDTGAILTQKEIKLDDNFTALSLLDTQHKLAIASFKEALKNLENK

>AAW56106.1 Cj81-027, partial [Campylobacter jejuni subsp. jejuni 81-176]

MDGTNKTLCLNLEKCLYFFAVVWVMFLKTPNDNNHRFMIHDEVTSKDYVISQISIGIGKSFALITQFEKV

ILEAMEKHFSTPQSTNFSNAGLGFSLQVMSTLPSVKLSAIDATLQKNIDFYFRNCVSVGILLNQQGRNLF

QNSDNLMQDLFTNIGNGFQLTPLFKNNNNIEEQSVVPCSDASPQIVEMIQKDTDEAIKIHAALLGMANDM

ANYEQKFLGAAQIYNKQAVSARSYLQQSMIMLASQDAIINTAKSVGLNPASVAANTAYADQQFY

>AAW56105.1 Cj81-026 [Campylobacter jejuni subsp. jejuni 81-176]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>AAW56104.1 Cj81-011, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDI

>AAW56103.1 Cj81-010, partial [Campylobacter jejuni subsp. jejuni 81-176]

MFKISIILPTYNVEQYIARAIESCINQTFKDIEIIVVDDCGNDNSINIAKEYSKKDKRIKIIHNEKNLGL

LRARYEGVKVANSPYIMFLDPDDYLELNACEECIKILDEQDEVDLVFFNA

>AAW56102.1 Cj81-009, partial [Campylobacter jejuni subsp. jejuni 81-176]

YHYVPNNNSICNTKNEVLVKNNIQELQLVLNYLRQNYILNKYCSVLYVLIKYLLYIQIYKIKRTKLMVTL

LAKINILTLKILFKYKKFLKQC

>AAW56101.1 Cj81-008, partial [Campylobacter jejuni subsp. jejuni 81-176]

YEIQIQNPKSEENKLYSYYNYVASFIPKDEWLIKIDVDHIYDAKKLYKSFYIPKNKYDVVSYSRVDIHYF

NDNFFLCKDNNGNILKEPGDCLLINNYNLKWKEVLIDRINNNWKKATKQSFSSNIHSLEQLKYKHRILFH

TELNNYHFPFLKKHRAQDIYKYNWISIEEFKKFYLQNINHKIEPSMISKETLKKIFLTLF

>AAW56100.1 Cj81-007, partial [Campylobacter jejuni subsp. jejuni 81-176]

MFKKIFFSFWMSLILLFIYALSCAVATFVENDFGTNAAKALVYNALWFDILHLLLLINLIGIIFIHKLLQ

RKKYASLLLHSAFIVILLGAAITRYFGIEGGMHIREGQSSDIIVTRDEFIALMLYNDEGKVVEYQSFGVA

FNPLLHNSFEKKVSMQQNKTINLK

>AAW56099.1 Cj081-006 [Campylobacter jejuni subsp. jejuni 81-176]

MLKKLILGFIILLFCACNDEKIDENILSKGTKTTEQYKQDANNLDLNSYKEIAEFFKDNQNIVFSDKPVL

IIFSANNCVYCDKLKHEIQNDKEVQNILKNTYNSYYINTSYHKIHNYDNKKTSTEELSREFNIDATPTLV

FFTPKHKTLLIYPGFMSAKRLALTMEILKDEKNQKLNEDELFKTLFLAYKEKNV

>AAW56098.1 Cj081-005, partial [Campylobacter jejuni subsp. jejuni 81-176]

KRFSTFHKIQHFFMAASFLGLAFSGLPQKFYTAPWAQTMIDLMGGPIGATIVHHISAIVMFIVFFSHIGE

IILVNWKRRDLVRDPQTGKLDKMKILKALFGPDSLMPNWQDFKDMKAHFKWFFGMGERPQFDRWTYWEKF

DYLAVFWGMFVIGLSGLVLWFPTFFSAFLPGWMINLCSLVHSDEALLATGFIFAIHFFNTHFRADRFPMD

MVIFSGTQSEAEIKQERNAYYQRLKESGRLESLYEKNSKFNSYKGIAKLAGYLMLITGMIFLFLMIYAFI

VDLLK

>AAW56097.1 Cj81-004 [Campylobacter jejuni subsp. jejuni 81-176]

MHFKVIFSISVQPFLNPLNSQYLNLSFRPLKNAWFCFAKS

>AAW56096.1 Cj81-003, partial [Campylobacter jejuni subsp. jejuni 81-176]

MEKITLKCNKNILNLLKQYNIYTKTYIENPRRFSRLKTKDFITIPLKNNQLESAAGLGIEEYCA

>AAR29583.1 cpp51 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNTNKITDLHIQISKEDLKILDLLLKANEYSNIVFYCENDEEHFIFTEVKLGNYFCINR

>AAR29582.1 cpp50 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>AAR29581.1 cpp49 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>AAR29580.1 cpp47 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>AAR29579.1 cpp46 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>AAR29578.1 cpp45 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKN

LWI

>AAR29577.1 cpp44 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>AAR29576.1 cmgD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>AAR29575.1 cmgB11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLIVILIFQKFINLQGKRMSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFE

QAGHFATASASFKKDKIDVSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLF

EDLNPDDKNKIKPSDEELIKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIIT

IEDVEEIKFYEHKNFVQLFYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGG

SITSCHAGSPEETFTRLALMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>AAR29574.1 cmgB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKLKGISMQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEE

VQKEDNKDLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGF

GNNGTGNREEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGC

ALKTRLVSSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIP

VYSGATDELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIA

NTALEKMIDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>AAR29573.1 cmgB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>AAR29572.1 cmgB8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>AAR29571.1 cmgB7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQAKLIFILLLGVLFFSACSTKNQGKYDEFFNNQTGWIPVNTQNKDLNKGTMDEK

>AAR29570.1 cmgB6 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGFCFKPC

W

>AAR29569.1 cmgB5 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>AAR29568.1 cpp35 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>AAR29567.1 ssb1 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>AAR29566.1 cpp33 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>AAR29565.1 cpp32 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MWLRFLEKGILHVLRDIENILNDLREIGTSQDLSNFGETYRNTEIRGFGKVKGKTRKDRCYNLTRDGFSL

LAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLMELIYPNLPQNDYKVSVIITDNPYSKEA

KNVFSLNYLVDNRTPKDPKKLQ

>AAR29564.1 cmgB3/4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPWVMKI

>AAR29563.1 cmgB2 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>AAR29562.1 cpp29 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>AAR29561.1 vapD (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGINRKAINFDLSTKSLEKYFKDTREPYSLIKKFMLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKF

TWLGECVKEFDITEIGEQYSLKETIQDLCAKDFHQKLKEFTEKTPKNQKLKDLER

>AAR29560.1 cpp27 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>AAR29559.1 cpp26 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>AAR29558.1 cpp25 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPELPRMTAKEAEKLLLQNNFLIDRQKGSHRIYKKGLYRMVIPHHIGEILHPKIIKQLFEIIEVAKD

>AAR29557.1 cpp24 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLLNIIIEKDQDGYFARILELEGCVSQGNTYEETLANIKEAGELYLESLANEEKRIIENKTTSIIPMVLA

NA

>AAR29556.1 cpp23 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>AAR29555.1 cpp22 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>AAR29554.1 cpp21 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>AAR29553.1 cpp20 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>AAR29552.1 cpp19 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>AAR29551.1 cpp18 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>AAR29550.1 cpp17 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>AAR29549.1 cpp16 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRXRIKLMSFVLIALAVWIVYLLK

>AAR29548.1 cpp14 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILDLNDPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPQNILGKMNIKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>AAR29547.1 cpp13 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKKPFTIAEALNSETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>AAR29546.1 cpp12 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>AAR29545.1 cpp11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>AAR29544.1 cpp10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>AAR29543.1 cpp9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKITIVAYAICFLSGLWFLFSSVKDDFGILSFILGIALIYFGVINIKRILNDSNENKTELETLFATANI

IFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIKSFDENKYGFVMAVYGDKHI

EVVLQNKENDTFFELRCNEEGCKEILKEDK

>AAR29542.1 cpp8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>AAR29541.1 cpp7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKELQYYGINEKDFIKTDI

>AAR29540.1 cpp6 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MYSYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQPNEKFIFKCPNCSRKNRKVFYAF

>AAR29539.1 repA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAKYTKRRDKRGYEWKSAYREKEALMLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGK

GRTRQWVIDDSLKMLDKVIGDRFGLIPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGV

QLRPTYLVSSGKGVHLYYFLQEPVQLYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVG

SQSKLGVDFPVKAYKLSENRYTLEDIKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQG

EPKQKSKKQGGTWVCNEALYEWWKRKITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLES

LTEDEDNHFSRADVKDGIKKPKMIYFYGILKY

>AAR29538.1 cpp4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>AAR29537.1 cpp3 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSLREMHEQQKQSSPREQLQELNRQSRTELENSLLKEALAMSSENCEELMKQSNQEQVRAEQNRQRDAEQ

NRKLISELKQSVELLKNSNELLQDAISGEIGSLKDEVKENTVQEVRKALQANIEAIQRATKLLEKQSDTL

TSVMKQKIRELEESKNSFFRYEGLKLYLFWGGMVCNILVFLMLLYGMISK

>AAR29536.1 cpp2 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MMKCEWILCPVCGSKTRNKIRKDTVLENYPLYCPKCRQERLIKVDNLKITVIKEPDA

>AAR29535.1 tetO (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>AAP12669.1 PseC [Campylobacter jejuni subsp. jejuni 81-176]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>AAP12668.1 putative UDP GlcNAc dehydratase/reductase [Campylobacter jejuni subsp. jejuni 81-176]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>AAP12667.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MGLKADNWIRKMALERKMIEPFCEANIGKGVVSYGLSSYGYDIRVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAETGITLPRILK

>AAP12666.1 putative biotin decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MTKEEIKELVNLFAEANISKIKIKEQDGFEIELERDMCCDVPAPVCPPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>AAP12665.1 putative biotin decarboxylase, partial [Campylobacter jejuni subsp. jejuni 81-176]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPSQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAED

>AAM76286.1 FlaB [Campylobacter jejuni subsp. jejuni 81-176]

MGFRINTNIGALNAHANSVVNSNELDKSLSRLSSGLRINSAADDASGMAIADSLRSQAATLGQAINNGND

AIGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQDFAINGVAIGQINYKDGDNNGQLVSAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSVQNQLQVTINNITVTQVNVKAAESTIRDVDFASESANFSKYNILAQSGSYA

MSQANAVQQNVLKLLQ

>AAM76285.1 PseE [Campylobacter jejuni subsp. jejuni 81-176]

MQTNEIFKKNLEAMQGSTYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLK

LYQEQYTNYPFLFFYGLGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLD

YNNNIAELIFGLTEISLFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQA

IWNLPEMFKHYSYKELLDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPD

YVLSLERIPLTSEFFNNDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYI

GGGMSVAHSAYELAILLKCENIILIGQDLAYSKEGKSHTDDYINLALHEKDFERNKGHFTTIAYGGEGEV

ESSEVWTLFRKIFENYAINNQKYIKTYNCTEGGARIKGTIEKPFAEICKEILTKDIKKPLKKLKKKTKKE

QFDKMLKSYRKIKTNIQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEI

LGPTLHHEESLIAPIYTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRS

LI

>AAM76284.1 PseD [Campylobacter jejuni subsp. jejuni 81-176]

MKFNLNQKELFNKNIEALDNIPLKESLKEIKSSKFKLILGKDNLDINLQNTSDNTFLYENVIDELNTMLN

TYNDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWTMFHILDFSNELQKNNLIIINTNI

LSEFDLLNFYKKANSIFLQFSRIYFLELISNYYERYNEEILKLNDTILSTIKISIIQYGNDSIDNLMGIK

HFIYNLSKLLTHPHSEIFLKKRYKLSDTAIIVSTGPSLTKQLPLLKQYANKATIFCADSAYPILAKHNIK

PDYVCMLERDDIVSKCFDNDFKEFDKGILFILASVVHKEVIEFLERNNREYMLVPRAYDFFYYLNLAKYF

QPIDGMVSVAHMNYWLAKFLSHKNIIFIGQDLAYSKDQSSHAKDFIHEKLHEGHFQKDENLFTSIAYGGK

GEVESSYFWKLFREIFEKWISHDNNFINIYNCTEGGARIKGTIEKPFLWACENLLGKDLNKPFPKLNPLN

INKQNELMLKAYNKIYKSIYHCKDFNKKLLQEYNEIKELYLTLENLQIEESKELLNFIIQKIDTIKYQID

DAKNMQDLYEILGPLLVQFELNLARIYVLNPKTPEDSFNKSLIWIKEHLEWIEMIYGHIQAQENALFENI

IPLEQKLKERKMQKYLRRIKNANK

>AAM76283.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MNKDLFLKNTQALFEVDQILAYKLRALEKNDFKILQNENGINFIKDDIMLYKNPEQELLENLTLFQNKYK

KYPVLFFYGFGNGMFYKTLCENKNHKHIIVFEDELEILALALHLFDFSKELKNEKLILFHTPNITTAQLT

TLFMYEHIQKSVKIFNLFIHSDFYLKFYSHQIQELNKKLIENIRFIVLAKGNDPYDSIIGIKHMLNNLPK

LLNHGVFQNFLKARKQKVKNAIIVSTGPSLTKQLPLLKKYANKATIFCADSAYPILAKHNIKPDYVCMLE

RDDIVSKCFDNDFKEFDQGILFIISSVVHQEVIDFLEKNSRKYILVHRPLHFAVSLNLKEFGYIGVGASV

ANMAYELAASLRHENIIFIGQDLAYAKDGSSHPREHIYGNQGEKLRGEIYTLAYGGEKQVRTQLTWNLFR

QAFEKDIFWAKEKLKINTYNCTEGGARIEGAIEKPFQEVCETLLKENLKKPFDKPKILEKNKIKNKFLQT

QKLLIKNVKQSEEFIKKCQNELKKLDFELSKSQLNSQTLIKIKKNLLFFFNEFKS

>AAP34260.1 GlnH, partial [Campylobacter jejuni subsp. jejuni 81-176]

FFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGLIPALKTAKID

LIMSSMTITDERKKVVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHLYAVKNLKNAT

INLFDKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQKGNAELKKELD

EFIAESKKDGLFDSLGEKYLKDVKDTFKKNNLEFFF

>AAP34259.1 FliP [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>AAP34258.1 GlmU, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFEL

>AAK58488.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>AAK58487.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALKEQVL

VQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQGINNK

SDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>AAK58486.1 PseA [Campylobacter jejuni subsp. jejuni 81-176]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNQNINWQEREKEFFELIKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLDNLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELQRVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLEFSGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>AAK58485.1 PseI [Campylobacter jejuni subsp. jejuni 81-176]

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>AAD51389.1 PglG [Campylobacter jejuni subsp. jejuni 81-176]

MYIKDIHRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQDEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMVYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>AAD51388.1 PglF [Campylobacter jejuni subsp. jejuni 81-176]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>AAD51387.1 PglE [Campylobacter jejuni subsp. jejuni 81-176]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELENSRSNR

WLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>AAD51386.1 PglD [Campylobacter jejuni subsp. jejuni 81-176]

MLQQRNLMARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>AAD51385.1 PglC [Campylobacter jejuni subsp. jejuni 81-176]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>AAD51384.1 PglA [Campylobacter jejuni subsp. jejuni 81-176]

MRIGFLSHAGASIYHFRMPIIKALKDRKDEVFVIVPQDEYTQKLRDLGLKVIVYELSRASLNPFVVLKNF

FYLAKVLKNLNLDLIQSAAHKSNTFGILAAKWAKIPYRFALVEGLGSFYIDQGFKANLVRFVINNLYKLG

FKFAHQFIFVNESNAEFMRNLGFKESKICVIKSVGINLKKFFPIYVESEKKELFWKKLNIDKKPIVLMIA

RALWHKGVKEFYESATMLKDKANFVLVGGRDENPSCASLEFLNSGVVHYLGARSDIVELLQNCDIFVLPS

YKEGFPVSVLEAKACGKAIVVSDCEGCVEAISNAYDGLWAKTKNAKDLSEKISLLLEDEKLRLNLAKNAA

QDALQYDENNIAQRYLKLYDRVIKNV

>AAD51383.1 PglB, partial [Campylobacter jejuni subsp. jejuni 81-176]

IISNDGYAFAEGARDMIAGFHQPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILL

ANEYKRPLMGFVAALLASIANSYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGI

YLWWYPSSYTLNVALIGLFLIYTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRL

NFVIIGILASVTLIFLILSGGVDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRI

SGSEIVFLFSLFGFVWLLRKHKSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKK

YSQLTSNVCIVFATILTLAPVFIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSD

VKTLVDGGKHLGKDNFFPSFALSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVD

LFLASLSKPDFKIDTPKTRDIYLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYL

SNGVVLSDDFRSFKIGDNVVSVNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMF

NSAYVQMFFLGNYDKNLFDLVINSRDAKVFKLKI

>AAN46947.1 VirB7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>AAN46946.1 VirB4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>AAN46945.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>AAN46944.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGVIWITVMLLMTFINMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>AAN46943.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKSIFQKILTLILISPIFLFGAMVEILLQS

>AAN46942.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVKETM

DNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHYHNQ

VSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLDFIN

LFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTKNLK

NFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKINNIN

NYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCEYLN

INDDLKLVSVKSNKINYGGFNKSKDNQKIL

>AAN46941.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>AAN46940.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>AAN46939.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFLSELEKGVDFRSYEFSNDEDEYIVNAFELFSCVFWGM

DFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKVLKELKKCSKK

>AAN46938.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>AAN46937.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>AAN46936.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>AAN46935.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>AAN46934.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>AAN46933.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>AAN46932.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>AAN46931.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>AAN46930.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFLFLEK

>AAN46929.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>AAN46928.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>AAN46927.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>AAN46926.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFFNDDRLISQEILET

FNTLKQDKHYNVCVPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNK

DNKQKIEDIKTIIITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDN

DEKGLDFTLKTKQCFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKS

VLIESKKTELIKEISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>AAN46925.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>AAN46924.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>AAN46923.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>AAN46922.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>AAN46921.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>AAN46920.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>AAN46919.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>AAN46918.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>AAN46917.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEELKVKE

>AAN46916.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>AAN46915.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFKRTKNLSSNALIAREKIERFFMRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIE

RQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKND

EQHFLFAEVDTGRDYYIKEGAEIIHEEYNIMKNIKFKGKEK

>AAN46914.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>AAN46913.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>AAN46912.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>AAN46911.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>AAN46910.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MASLIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKK

HFQEYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKE

KFFELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERL

L

>AAN46909.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>AAN46908.1 Ssb (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>AAN46907.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>AAN46906.1 TopA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>AAN46905.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>AAN46904.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKYYEESEIIDLGNQKIEVIKSIKINPLGKGKAMKTSQIKEQRIIKF

>AAN46903.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>AAN46902.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>AAN46901.1 VirD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>AAN46900.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEISNYEKIKKDIEEGIQKRKEEDKKNKKIINQIKIISSLENKVQKEKEKLDKLVKNETKELENE

>AAF97748.1 VirB11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>AAF97747.1 VirB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>AAF97746.1 VirB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>AAF97745.1 VirB8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>EAQ71832.1 cpp26 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>EAQ71831.1 cpp16 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRARIKLMSFVLIALAVWIVYLLK

>EAQ71830.1 DNA topoisomerase III (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>EAQ71829.1 vapD (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGINRKAINFDLSTKSLEKYFKDTREPYSLIKKFMLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKF

TWLGECVKEFDITEIGEQYSLKETIQDLCAKDFHQKLKEFTEKTPKNQKLKDLER

>EAQ71828.1 conserved domain protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPELPRMTAKEAEKLLLQNNFLIDRQKGSHRIYKKGLYRMVIPHHIGEILHPKIIKQLFEIIEVAKD

>EAQ71827.1 cpp33 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>EAQ71826.1 cpp10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>EAQ71825.1 cpp27 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>EAQ71824.1 cpp45 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKT

YGFRINPELTNSCKLLASSKYTDYHLKYTCDKKFYEQKDWERGYELKEVSQEIYNALPVSQREQGEKLTP

ISYGEFIKLPANKRKQEGFGKYYRIDIAYYQKIIIKKDCWINEK

>EAQ71823.1 cpp17 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>EAQ71822.1 conserved domain protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQAKLIFILLLGVLFFSACSTKNQGKYDEFFNNQTGWIPVNTQNKDLNKGTMDEK

>EAQ71821.1 cpp46 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>EAQ71820.1 cpp35 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>EAQ71819.1 cpp11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>EAQ71818.1 cpp7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKELQYYGINEKDFIKTDI

>EAQ71817.1 cpp44 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>EAQ71816.1 Single-strand binding protein family (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>EAQ71815.1 cpp22 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>EAQ71814.1 cmgD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>EAQ71813.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEHEFERNARTAEAEQSKRAASRVKPTEPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQAERR

RAEQEAHQRAEAERRAAEEQQRIASRRYIGRDWEPER

>EAQ71812.1 cmgB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEEVQKEDNK

DLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGFGNNGTGN

REEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGCALKTRLV

SSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIPVYSGATD

ELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIANTALEKM

IDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>EAQ71811.1 hypothetical protein CJJ81176\_pTet0051 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFIFCPHETSPSNSNLSISFYLLIIPYNSIRNTKILQTIPPQNRYNFKPSYLKKLFLLSSSSRIFCFITL

VSVSDCFSRSFVALCIASIFACNAFLTSWTVFSLTSSFRLPISPDIAS

>EAQ71810.1 conserved domain protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNTNKITDLHIQISKEDLKILDLLLKANEYSNIVFYCENDEEHFIFTEVKLGNYFCINR

>EAQ71809.1 hypothetical protein CJJ81176\_pTet0020 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENKNFKKTIDLNVIIPKFLNSLNSIILNKVNQKLKFLNFYFKKLQTESVANRNRNYDIMF

>EAQ71808.1 conserved domain protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLLNIIIEKDQDGYFARILELEGCVSQGNTYEETLANIKEAGELYLESLANEEKRIIENKTTSIIPMVLA

NA

>EAQ71807.1 cpp50 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>EAQ71806.1 cpp13 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKKPFTIAEALNSETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>EAQ71805.1 cmgB3/4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPLGNENLKILSTETAYIDVIEKIFSQENKSLDE

KVLELKEIYKNS

>EAQ71804.1 cmgB8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>EAQ71803.1 cpp20 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>EAQ71802.1 cpp14 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILDLNDPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPQNILGKMNIKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>EAQ71801.1 cpp23 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>EAQ71800.1 cmgB11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFEQAGHFATASASFKKDKID

VSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLFEDLNPDDKNKIKPSDEEL

IKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIITIEDVEEIKFYEHKNFVQL

FYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGGSITSCHAGSPEETFTRLA

LMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>EAQ71799.1 tetO (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>EAQ71798.1 cpp4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLQSKWGNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKI

IYDTKE

>EAQ71797.1 conserved domain protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTMYSYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQPNEKFIFKCPNCSRKNRKVFYAF

>EAQ71796.1 cpp18 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>EAQ71795.1 cmgB6 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGSVLNPV

GRLAGWAGGKVAGKTVNTAKAGGKLAAKGTLASAKGGYSFAKKMYERARNAG

>EAQ71794.1 cpp32 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNKVIINKQEVQFDTQNNQIFCTSLDVAKVFGKRHFHVLRDIENILNDLREIGTSQDLSNFGETYRNTE

IRGFGKVKGKTRKDRCYNLTRDGFSLLAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLME

LIYPNLPQNDYKVSVIITDNPYSKEAKNVFSLNYLVDNRTPKDPKKLQ

>EAQ71793.1 cmgB5 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>EAQ71792.1 cpp21 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>EAQ71791.1 cmgB2 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>EAQ71790.1 cpp47 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>EAQ71789.1 cpp12 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>EAQ71788.1 repA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGKGRTRQWVIDDSLKMLDKVIGDRFGL

IPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGVQLRPTYLVSSGKGVHLYYFLQEPVQ

LYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVGSQSKLGVDFPVKAYKLSENRYTLED

IKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQGEPKQKSKKQGGTWVCNEALYEWWKR

KITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLESLTEDEDNHFSRADVKDGIKKPKMIY

FYGILKY

>EAQ71787.1 cpp9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKITIVAYAICFLSGLWFLFSSVKDDFGILSFILGIALIYFGVINIKRILNDSNENKTELETLFATANI

IFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIKSFDENKYGFVMAVYGDKHI

EVVLQNKENDTFFELRCNEEGCKEILKEDK

>EAQ71786.1 cpp19 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>EAQ71785.1 hypothetical protein CJJ81176\_pTet0019 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MCKIIKYLDYTKLNTLEKLYFDLTIMLIVTFLSFLFLVFEFFIYENIAVFFQDCFLMSVIFIIGITGLFH

TCKGLRKYKEILKKV

>EAQ71784.1 cmgB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>EAQ71783.1 cpp29 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>EAQ71782.1 cpp8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>EAQ71781.1 hypothetical protein CJJ81176\_pTet0049 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQRAELGTGLACAGERKDICWRSPGRNGGMEQRHLPAFETGRAGKGQKLCAGYCPCGAGL

>EAQ71780.1 VirB4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>EAQ71779.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>EAQ71778.1 VirB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>EAQ71777.1 RepE replication protein, putative (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKNKK

RFYENVVEFALKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTI

LDLRNFCKISNKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYF

KNLEYIKEKDKTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPPTKRERIEVSF

>EAQ71776.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEEVEG

>EAQ71775.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEISNYEKIKKDIEEGIQKRKEEDKKNKKIINQIKIISSLENKVQKEKEKLDKLVKNETKELENE

>EAQ71774.1 VirD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>EAQ71773.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKSFSDYWEEIQKIKKASSVIKDNYKRNKVFNSFVNSYSIKHNINNINQTTYSKQAVVKLCSNLSKDGA

KRAMDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVK

ETMDNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHY

HNQVSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLD

FINLFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTK

NLKNFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKIN

NINNYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCE

YLNINDDLKLVSVKSNKINYGGFNKSKDNQKIL

>EAQ71772.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>EAQ71771.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>EAQ71770.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFFNDDRLISQEILET

FNTLKQDKHYNVCVPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNK

DNKQKIEDIKTIIITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDN

DEKGLDFTLKTKQCFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKS

VLIESKKTELIKEISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>EAQ71769.1 DNA topoisomerase I (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>EAQ71768.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKSIFQKILTLILISPIFLFGADGGNIASKLANSVNQQITEAGSSVASIINTISIVMGVIWITVMLLMTF

INMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>EAQ71767.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>EAQ71766.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>EAQ71765.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>EAQ71764.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>EAQ71763.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>EAQ71762.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>EAQ71761.1 VirB8, partial (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>EAQ71760.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>EAQ71759.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>EAQ71758.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>EAQ71757.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>EAQ71756.1 hypothetical protein CJJ81176\_pVir0037 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFFVFRKIKNSKEFKEYILKLEDKKSPKLFSDESLKVR

LIY

>EAQ71755.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>EAQ71754.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLGVLAEFIKFLGLNNETNFTKTRTEEKEDELKELIEYENDMPKYYEESEIIDLGNQKIEVIKSIKINPL

GKGKAMKTSQIKEQRIIKF

>EAQ71753.1 pTet39 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>EAQ71752.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>EAQ71751.1 cpp45 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRKISLAVIAFSLINVSASAIDLSEFTGDTKLSCEAVLCLASPYKPSECAPALARYFGFSARYWSDVVRM

RTNFLNLCPLGANNTIKSDDKDLEAWRNSLVNLTGTCYIPDLNKKYQRTVLWIETIQKCSHGEGCTTESI

KHYGYRIDPTLDNNCKILSSNKYSDYNLKYTCPTKFYPEEDWNNGYEKKEVNQSEFNSLKEEDRFTADKL

TEVSYSEYKNLPNNKRKISTSGFKTTYYRIDLGYYKKEWINKNCWVNQGK

>EAQ71750.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>EAQ71749.1 hypothetical protein CJJ81176\_pVir0006 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGTIRVYLNEYEQRQLKKLSIKRNESQSAVIRKLIAIEKYAKTLEILEKNNEINVEYLYHIAQCGNNLNQ

IAYHLNIGIESPSQTQNRLPKLIEELSQILNEHKEHIKNKAIKTSINKKIKRLSPDENFIGEENQ

>EAQ71748.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>EAQ71747.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>EAQ71746.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>EAQ71745.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>EAQ71744.1 conjugative transfer regulon protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>EAQ71743.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFLSELEKGVDFRSYEFSNDEDEYIVNAFELFSCVFWGM

DFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKVLKELKKCSKK

>EAQ71742.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>EAQ71741.1 VirB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>EAQ71740.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>EAQ71739.1 hypothetical protein CJJ81176\_pVir0050 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKIFFLSKKATIKTPQNVGIIFFFIFSKKYKKINIEYFIFSLFLKLFYSKNIFLIKNHFLKFIIKSLID

FFFSYYDYLFYH

>EAQ71738.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNMEVVKL

FMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKELKYIT

TILCSKSIEDEYKFLHKKF

>EAQ71737.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>EAQ71736.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKKHFQEYKNIDIFKTMDLFKETL

LFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKEKFFELLKQSKIKELNYLCFLF

FGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERLL

>EAQ71735.1 hypothetical protein CJJ81176\_pVir0034 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLFILFLYVFLNSFCTKPKTFSPFFTYLKSFFGFRKGLKNK

>EAQ71734.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>EAQ71733.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>EAQ71732.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>EAQ71731.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFKRTKNLSSNALIAREKIERFFMRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIE

RQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKND

EQHFLFAEVDTGRDYYIKEGAEIIHEEYNIMKNIKFKGKEK

>EAQ71730.1 para protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>EAQ71729.1 conserved hypothetical protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>EAQ71728.1 Ssb (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>CDK02658.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_700819, partial [Campylobacter jejuni subsp. jejuni 81-176]

ANNVKFAPAYAKAA

>CDK02657.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_700819, partial [Campylobacter jejuni subsp. jejuni 81-176]

ANNVKFAPAYAKAA

>CDI30520.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_700819, partial [Campylobacter jejuni subsp. jejuni 81-176]

ANNVKFAPAYAKAA

>CDI30519.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_700819, partial [Campylobacter jejuni subsp. jejuni 81-176]

ANNVKFAPAYAKAA

>YP\_247572.1 pTet44 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKKPFTIAEALNYETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>YP\_247571.1 pTet43 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>YP\_247570.1 pTet42 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>YP\_247569.1 pTet41 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>YP\_247568.1 pTet40 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MILTRIKPSLKLYLLQQNIIFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIK

SFDENKYGFVMAVYGDKHIEVVLQNKENDTFFELRCNEEGCKEILKEDK

>YP\_247567.1 pTet39 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>YP\_247566.1 pTet38 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKDIAISME

>YP\_247565.1 pTet37 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAKYTKRRDKRGYEWKSAYREKEALMLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGK

GRTRQWVIDDSLKMLDKVIGDRFGLIPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGV

QLRPTYLVSSGKGVHLYYFLQEPVQLYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVG

SQSKLGVDFPVKAYKLSENRYTLEDIKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQG

EPKQKSKKQGGTWVCNEALYEWWKRKITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLES

LTEDEDNHFSRADVKDGIKKPKMIYFYGILKY

>YP\_247564.1 pTet36 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>YP\_247563.1 pTet35 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MHVPEKGKTFAGEVREETVAWSKDTYQLLKQAEQGKVKSYVQDIALAVLDCKETATSRETFIRLMNERGY

GVDWQDSHKYITYTDLAREQAGEKACKIRDNKLEKYYNMDFGKESMEHEFERNARTAEAEQSKRAASRVK

PTEPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQAERRRAEQEAHQRAEAERRAAEEQQRIAS

RRYIGRDWEPER

>YP\_247562.1 pTet34 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>YP\_247561.1 pTet33 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>YP\_247560.1 pTet32 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>YP\_247559.1 pTet31 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>YP\_247558.1 pTet30 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>YP\_247557.1 pTet29 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKT

YGFRINPELTNSCKLLASSKYTDYHLKYTCDKKFYEQKDWERGYELKEVSQEIYNALPVSQREQGEKLTP

ISYGEFIKLPANKRKQEGFGKYYRIDIAYYQKIIIKKDCWINEK

>YP\_247556.1 pTet28 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>YP\_247555.1 pTet27 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>YP\_247554.1 pTet26 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFEQAGHFATASASFKKDKID

VSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLFEDLNPDDKNKIKPSDEEL

IKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIITIEDVEEIKFYEHKNFVQL

FYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGGSITSCHAGSPEETFTRLA

LMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>YP\_247553.1 pTet25 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKLKGISMQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEE

VQKEDNKDLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGF

GNNGTGNREEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGC

ALKTRLVSSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIP

VYSGATDELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIA

NTALEKMIDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>YP\_247552.1 pTet24 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>YP\_247551.1 pTet23 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>YP\_247550.1 pTet22 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGSVLNPV

GRLAGWAGGKVAGKTVNTAKAGGKLAAKGTLASAKGGYSFAKKMYERARNAG

>YP\_247549.1 pTet21 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>YP\_247548.1 pTet20 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>YP\_247547.1 pTet19 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>YP\_247546.1 pTet18 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>YP\_247545.1 pTet17 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNKVIINKQEVQFDTQNNQIFCTSLDVAKVFGKRHFHVLRDIENILNDLREIGTSQDLSNFGETYRNTE

IRGFGKVKGKTRKDRCYNLTRDGFSLLAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLME

LIYPNLPQNDYKVSVIITDNPYSKEAKNVFSLNYLVDNRTPKDPKKLQ

>YP\_247544.1 pTet16 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPLGNENLKILSTETAYIDVIEKIFSQENKSLDE

KVLELKEIYKNS

>YP\_247543.1 pTet15 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>YP\_247542.1 pTet14 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>YP\_247541.1 pTet13 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKFTWLGECVKEFDITEIGEQYSLKETIQDLCAKDFH

QKLKEFTEKTPKNQKLKDLER

>YP\_247540.1 pTet12 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>YP\_247539.1 pTet11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>YP\_247538.1 pTet10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MCKIIKYLDYTKLNTLEKLYFDLTIMLIVTFLSFLFLVFEFFIYENIAVFFQDCFLMSVIFIIGITGLFH

TCKGLRKYKEILKKV

>YP\_247537.1 pTet09 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>YP\_247536.1 pTet08 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>YP\_247535.1 pTet07 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>YP\_247534.1 pTet06 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>YP\_247533.1 pTet05 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>YP\_247532.1 pTet04 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>YP\_247531.1 pTet03 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>YP\_247530.1 pTet02 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRARIKLMSFVLIALAVWIVYLLK

>YP\_247529.1 pTet01 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILEFKYPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPTKYLRKNEYKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>YP\_063494.1 cpp51 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNTNKITDLHIQISKEDLKILDLLLKANEYSNIVFYCENDEEHFIFTEVKLGNYFCINR

>YP\_063493.1 cpp50 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>YP\_063492.1 cpp49 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>YP\_063491.1 cpp47 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>YP\_063490.1 cpp46 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>YP\_063489.1 cpp45 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKN

LWI

>YP\_063488.1 cpp44 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>YP\_063487.1 cmgD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>YP\_063486.1 cmgB11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLIVILIFQKFINLQGKRMSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFE

QAGHFATASASFKKDKIDVSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLF

EDLNPDDKNKIKPSDEELIKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIIT

IEDVEEIKFYEHKNFVQLFYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGG

SITSCHAGSPEETFTRLALMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>YP\_063485.1 cmgB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKLKGISMQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEE

VQKEDNKDLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGF

GNNGTGNREEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGC

ALKTRLVSSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIP

VYSGATDELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIA

NTALEKMIDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>YP\_063484.1 cmgB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>YP\_063483.1 cmgB8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>YP\_063482.1 cmgB7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQAKLIFILLLGVLFFSACSTKNQGKYDEFFNNQTGWIPVNTQNKDLNKGTMDEK

>YP\_063481.1 cmgB6 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGFCFKPC

W

>YP\_063480.1 cmgB5 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>YP\_063479.1 cpp35 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>YP\_063478.1 ssb1 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>YP\_063477.1 cpp33 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>YP\_063476.1 cpp32 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MWLRFLEKGILHVLRDIENILNDLREIGTSQDLSNFGETYRNTEIRGFGKVKGKTRKDRCYNLTRDGFSL

LAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLMELIYPNLPQNDYKVSVIITDNPYSKEA

KNVFSLNYLVDNRTPKDPKKLQ

>YP\_063475.1 cmgB3/4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPWVMKI

>YP\_063474.1 cmgB2 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>YP\_063473.1 cpp29 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>YP\_063472.1 vapD (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGINRKAINFDLSTKSLEKYFKDTREPYSLIKKFMLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKF

TWLGECVKEFDITEIGEQYSLKETIQDLCAKDFHQKLKEFTEKTPKNQKLKDLER

>YP\_063471.1 cpp27 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>YP\_063470.1 cpp26 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>YP\_063469.1 cpp25 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPELPRMTAKEAEKLLLQNNFLIDRQKGSHRIYKKGLYRMVIPHHIGEILHPKIIKQLFEIIEVAKD

>YP\_063468.1 cpp24 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLLNIIIEKDQDGYFARILELEGCVSQGNTYEETLANIKEAGELYLESLANEEKRIIENKTTSIIPMVLA

NA

>YP\_063467.1 cpp23 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>YP\_063466.1 cpp22 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>YP\_063465.1 cpp21 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>YP\_063464.1 cpp20 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>YP\_063463.1 cpp19 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>YP\_063462.1 cpp18 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>YP\_063461.1 cpp17 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>YP\_063460.1 cpp16 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRXRIKLMSFVLIALAVWIVYLLK

>YP\_063459.1 cpp14 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILDLNDPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPQNILGKMNIKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>YP\_063458.1 cpp13 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKKPFTIAEALNSETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>YP\_063457.1 cpp12 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>YP\_063456.1 cpp11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>YP\_063455.1 cpp10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>YP\_063454.1 cpp9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKITIVAYAICFLSGLWFLFSSVKDDFGILSFILGIALIYFGVINIKRILNDSNENKTELETLFATANI

IFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIKSFDENKYGFVMAVYGDKHI

EVVLQNKENDTFFELRCNEEGCKEILKEDK

>YP\_063453.1 cpp8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>YP\_063452.1 cpp7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKELQYYGINEKDFIKTDI

>YP\_063451.1 cpp6 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MYSYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQPNEKFIFKCPNCSRKNRKVFYAF

>YP\_063450.1 repA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAKYTKRRDKRGYEWKSAYREKEALMLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGK

GRTRQWVIDDSLKMLDKVIGDRFGLIPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGV

QLRPTYLVSSGKGVHLYYFLQEPVQLYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVG

SQSKLGVDFPVKAYKLSENRYTLEDIKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQG

EPKQKSKKQGGTWVCNEALYEWWKRKITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLES

LTEDEDNHFSRADVKDGIKKPKMIYFYGILKY

>YP\_063449.1 cpp4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>YP\_063448.1 cpp3 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSLREMHEQQKQSSPREQLQELNRQSRTELENSLLKEALAMSSENCEELMKQSNQEQVRAEQNRQRDAEQ

NRKLISELKQSVELLKNSNELLQDAISGEIGSLKDEVKENTVQEVRKALQANIEAIQRATKLLEKQSDTL

TSVMKQKIRELEESKNSFFRYEGLKLYLFWGGMVCNILVFLMLLYGMISK

>YP\_063447.1 cpp2 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MMKCEWILCPVCGSKTRNKIRKDTVLENYPLYCPKCRQERLIKVDNLKITVIKEPDA

>YP\_063446.1 tetO (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>NP\_863349.1 VirB7 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>NP\_863348.1 VirB4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>NP\_863347.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>NP\_863346.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MGVIWITVMLLMTFINMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>NP\_863345.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKSIFQKILTLILISPIFLFGAMVEILLQS

>NP\_863344.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVKETM

DNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHYHNQ

VSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLDFIN

LFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTKNLK

NFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKINNIN

NYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCEYLN

INDDLKLVSVKSNKINYGGFNKSKDNQKIL

>NP\_863343.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>NP\_863342.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>NP\_863341.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFLSELEKGVDFRSYEFSNDEDEYIVNAFELFSCVFWGM

DFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKVLKELKKCSKK

>NP\_863340.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>NP\_863339.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>NP\_863338.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>NP\_863337.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>NP\_863336.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>NP\_863335.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>NP\_863334.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>NP\_863333.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>NP\_863332.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFLFLEK

>NP\_863331.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>NP\_863330.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>NP\_863329.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>NP\_863328.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFFNDDRLISQEILET

FNTLKQDKHYNVCVPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNK

DNKQKIEDIKTIIITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDN

DEKGLDFTLKTKQCFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKS

VLIESKKTELIKEISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>NP\_863327.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>NP\_863326.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>NP\_863325.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>NP\_863324.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>NP\_863323.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>NP\_863322.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>NP\_863321.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>NP\_863320.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>NP\_863319.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEELKVKE

>NP\_863318.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>NP\_863317.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLSFKRTKNLSSNALIAREKIERFFMRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIE

RQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKND

EQHFLFAEVDTGRDYYIKEGAEIIHEEYNIMKNIKFKGKEK

>NP\_863316.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>NP\_863315.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>NP\_863314.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>NP\_863313.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>NP\_863312.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MASLIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKK

HFQEYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKE

KFFELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERL

L

>NP\_863311.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>NP\_863310.1 Ssb (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>NP\_863309.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>NP\_863308.1 TopA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>NP\_863307.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>NP\_863306.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MPKYYEESEIIDLGNQKIEVIKSIKINPLGKGKAMKTSQIKEQRIIKF

>NP\_863305.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>NP\_863304.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>NP\_863303.1 VirD4 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>NP\_863302.1 VirB11 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>NP\_863301.1 unknown (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MQEISNYEKIKKDIEEGIQKRKEEDKKNKKIINQIKIISSLENKVQKEKEKLDKLVKNETKELENE

>NP\_863300.1 VirB10 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>NP\_863299.1 VirB9 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>NP\_863298.1 VirB8 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>pdb|4NWN|W Chain W, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|U Chain U, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|S Chain S, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|Q Chain Q, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|O Chain O, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|M Chain M, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|K Chain K, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|I Chain I, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|G Chain G, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|E Chain E, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|C Chain C, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>pdb|4NWN|A Chain A, Computationally Designed Two-component Self-assembling Tetrahedral Cage T32-28

MSQAIGILELTSIAKGMELGDAMLKSANVDLLVSKTISPGKFLLMLGGDIGAIQQAIETGTSQAGEMLVD

SLVLANIHPSVLPAISGLNSVDKRQAVGIVETWSVAACISAADLAVKGSNVTLVRVHMAFGIGGKCYMVV

AGDVLDVAAAVATASLAAGAKGLLVYASIIPRPHEAMWRQMVEGLEHHHHHH

>EAQ72391.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKRPNFKPF

EEGLALIIAILQDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRAKY

LEIYLYFSVFGALKILIDSQGISVFTPFAKVQKFLNEHLDFNVSQENKIEPLFVFKRLFDFKG

>EAQ72547.2 acetyltransferase, GNAT family [Campylobacter jejuni subsp. jejuni 81-176]

MLYYFINDLQDYDLKACYIKILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHED

SKELYSFFRKYFDPYLFYFSQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVA

FALLNHYFAANTQNKFFKLFVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>EAQ72379.2 3-phosphoshikimate 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTPVNAILENIAADKSISHRFAIFSLLTQEENKAQNYLLAQDTLNTLEIIKNLGAKIEQKDSCVKIIPP

KEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKYLNNRPMRRISKPLTQIGARIYGRNEANLAP

LCIEGQKLKAFNFKSEISSAQVKTAMILSAFRADNVCTFSEISLSRNHSENMLKAMKAPIRVSNDDLSLE

INPLKKPLKAQNIIIPNDPSSAFYFVLAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMTITQND

FETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSSLINAKELRVKESDRIAVMVENLKLC

GVEARELDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILSNLGAR

IDY

>EAQ72110.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLFGALFFFFKYNSFFYLCLGIIPGLLLSLIFVLLIENHKLKNEIKLR

>EAQ72368.2 phosphate acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MFHIYKFKEKMMANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQ

TVKSAYGFTFREAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPI

AAIINDEDKLIAQKYFDHALDGRNYVLINENFNFEEVQKLKEYDFITPHRFKYELIKQSIKNKKTVVLPE

SNDERILKAAEILLKSKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKG

MSLEEARKLVQDKTYFGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVL

AFADCAVNPSPTAEQLATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELN

IDGPMQFDCAYDPKTAAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDL

SRGCLVDDIVDTVILSAIQAQ

>EAQ72012.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFYFVVFKGRIYMYLKHLYFSISQIFNFYKEGFKNLTLGKTLWKIIFIKLFVMFVILKLFVFDVNFNSIF

KSDKEKSTFVLKNLTLEGK

>EAQ72337.2 flagellar biosynthesis protein FlhA [Campylobacter jejuni subsp. jejuni 81-176]

MGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYIPKPTDLTTFPTLI

LIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVLINFMVVTKGSTRV

SEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFIKGDAVAGIIITII

NIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDEENFAEGTLTQLLS

EYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSKPSAAVASQSGAGG

TTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSIAESLGFLMPKIRI

RDNLRLKPNEYSFKLKGVSIASAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDALWIDANLKDEATLN

GYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIVEGALGVAPVSLIQKILKDLLKHH

IPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSASSAVLMENVQFRD

GSYHLPLSVAQTGTLVDTLRAEVAAVANGRIKPFILCVEPQLRKFIADICYNFSINIVVLSFAEIAENTN

FNTEGIIRIEL

>EAQ72622.2 thioredoxin family protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKNYDFNIFVVLGDANDANDAKAWADEKGLSNLAMFYEKRAAKYLSSAIGEIYGVPVLSFFKEGKMDEK

FIGLTPYSILEKEIKKVKS

>EAQ73042.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLTWQRTVFSLFFLIPIFLTLFWEFFLFLKLRKNIIKEATLIKGSLFYRISIGDFYLYIFSFFLAIFGLI

SLFLNFLNLEKIDFVFIFIILPLLMIFLKKELHLQFVDNAYNDFRIVVIASFFTALFYAFYGLFFTYNEI

LNLELFSRKIIAYKSASFVYFDFLSEFLHFISNLKFFIFSYFGYLGFRALNFIFDFFNFFMFCSLLAFVF

NFVLKIKIKIIVLFLCFIMVLASYFLKEQRNNALKSEQEQILLWMNNFDFLKDHNLSLIQKEKDLFEKDL

KDLREIFKKNAFEIGIWWFSKEKEDLEKRINESLK

>EAQ72359.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFFKPDLSDFNTPHITWLGHSSLFIS

FKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITHSHFDHLDAKSIKALKEKARFFIT

PLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGDGKNKTLWASFVMEFLSVDKRVFF

SADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKEAKDLNAKAVMPIHWGRFLAGTHA

WNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>EAQ72167.2 general glycosylation pathway protein [Campylobacter jejuni subsp. jejuni 81-176]

MMKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVKVTSLEQFKFDTLYHKIAS

RFKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCD

ALSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPVMFLKAIAHLDKN

LQENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRIENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEV

CRISSSYYNGAKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWL

KLIAEVKNA

>EAQ72246.2 hypothetical protein CJJ81176\_1008 [Campylobacter jejuni subsp. jejuni 81-176]

MMMKIVFKGKSSEYEIQRSCFCVDAFVIKDKIEERDGVDFITSNVDLLEFSDDSFTFEEIVKHFNICDTE

DMIIVEDFDMKSNKDNQNQEDDIEHNILKSEKIMHENTKQTSMQFKNLKFFSRIFKNENFLSDFKESKQE

VVTIKKHEKLEIFKNLSQEDQEISFVKIEILNYDSNEDSLIFNLDIFPSGMSYKYGILKGSMHIILQGKT

SSTMLFPFLKSMIYKNKSENSSEKIFTLMINQKKHYKLIANLS

>EAQ72086.2 general glycosylation pathway protein [Campylobacter jejuni subsp. jejuni 81-176]

MLQQRNLMARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>EAQ73304.2 exodeoxyribonuclease III [Campylobacter jejuni subsp. jejuni 81-176]

MKILRKIMKLLSWNVNGLRAICDKNALDWIAQEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRA

GYSGVMSLCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYADFLVYLDKL

LKDGFEIIICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFIDTFREINGEIKEKYSWWSY

RMKARERNVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>EAQ72904.2 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MPKSGSIAELRSNLSMAQVGREALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKVLEAEEIKQKQKEL

AKAEEKFLDEIAISRFFKGEKDD

>EAQ72996.2 flagellar protein FlaG [Campylobacter jejuni subsp. jejuni 81-176]

MEISKANGQMDTALANISQRTSETQASLNIQTDRSQGQEGDDGQQRGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>EAQ73248.2 transcription antitermination protein NusG [Campylobacter jejuni subsp. jejuni 81-176]

MSTHKWYAIQTYAGSEMAVKRAIENLVKDNGIEEQLKEIVVPTEDVIEFKNGKEKISERSLYSGYVFALL

DLNTELWHRIQSLPKVGRFIGESKKPTPLTEKDINLILEKVHNRAAPKPKISFEEGENVRITEGPFANFT

AIVEEYDMVRGLLKLNVSIFGRSTPVEILYSQVEKII

>EAQ72875.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDKQVMINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKS

VDLAINDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYP

RRLIDYVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRN

SYRRIEFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESR

IKHYDKLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVL

DDEREIDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTH

SPFIYDNIFEDYIVDLEKYRVNNG

>EAQ73428.2 hypothetical protein CJJ81176\_0575 [Campylobacter jejuni subsp. jejuni 81-176]

MKAFIKNLAKESPSEDFLKENANDVFYQVQALLQEAVILIEQKKKTKAVEIQKFQKALTYFKS

>EAQ72568.2 integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MTRTKYLYILLVIAMFLWGSSWPTSKILANYTDTSIITFWRFFFVVLGSFFVLNFLKIPLKIEKTALKWV

LIAGVLNGLYAFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAIFFQKNKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALMAVFNHKAKGAHPLAINFYINLISILMFSWILFDVKSY

EIFHFEFKFWISMFVVAFLSTIIGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CALAIGAIYFINIYGKKA

>EAQ73075.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFFLLKKIENGLFYLNKILYFFLILFLLIGILGFFINSNPSNQIIKKPYLPFLEIGDLVFRAGIGSESFL

IENLSQSPYSHIAMVVKTSPTILIHATTDDDKNAKNQVILSSMDDFLKLSHKIAIKRLKFDEKTKQKIVA

KALEHLGRKFIISTDKDAFYCTTFLEQSINSITPFHLQYTLIKAPFNEGLYLFPQAFFENN

>EAQ72587.2 fibronectin type III domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKRFRLGFYLSFLTLLLSACSVSQMNSLASSKEPAVNESLPKVESLKSLSDMSNIAFEWESLYNENIKGF

YLYRSSDENPDFKLVGTIKDKFQTHYVDTKLEPGTKYRYMMKSFNEQGQISEDGKVIEVSTAPRLEAVPF

VQAVTNLPNRIKLIWRPHPDFRVDSYIIERTKGDDKEFKKIAEVKNRLNAEYIDSDLKPNENSSYRIIAV

SFNGIKSEPSQVVSSTSKALPPQVEHLSASTDGSNKIMLTWDAPTYEDFSYYKVYSTSSSFLPFSVLAKT

DKNSYEDIVEGVGKSKYYKVTMVDKDGLESPMPKDGVEGKTLGNPLAPSIILAQSTSEGINLEWSDNDTR

AVEYEVRRYGGEQNAVFKGIKEKRLKDVKALPGVEYSYEVIAIDSAGLRSEPSSKVKAAQ

>EAQ72193.2 high affinity branched-chain amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MMLIVKDLHVYYGLIEAVKGIDFKVETGHIVSLIGSNGAGKTSTLNALLNSVKRTGEVNFLGYDTKRHLT

HTLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLTSKKHALAGTLSGGEAQM

LAISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRI

VMENEAKNLIGDDEIRKKYLGL

>ABM55260.1 hypothetical protein CJJ81176\_1742 [Campylobacter jejuni subsp. jejuni 81-176]

MQKNKEDFKLSSIDRLKKMNLQKLSYEVRISQDGKSIYAKIK

>EAQ72586.2 conserved hypothetical protein, authentic frameshift [Campylobacter jejuni subsp. jejuni 81-176]

MLHILINFINFGKMFTLGNIMKFKKIYIELSDICGLKCDFCPSRKGIRGVMSEEKFQNLAHEISNKAELF

TFHLLGDPLLLPNLENYLKIAKSEAMKLEITTSGFYLNSKNQALLLGYENIHQINISLMSFLSQSKISLE

QYFKPILELCKKHLEQKSLSFINLRLWNLDANFKAPKSNLKIYEFLAKEFEVKIDTNLSKNRLQRHILLH

QNKLFKWPNLKDEPLYKKGKCHALKEQIGILSDGSLVPCCLDTKADINLGNVFENNFDKLFKSPRIKMMK

KAFEEDKRIEKLCQTCEFFKARLGD

>ABM55259.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MFNFYAGAYNNGEVNYNTLNIELKHPLEIANNFLGYNQHSFYGDFATKGVNHNTINIKNDLTTTDLSQSY

KDALNIVAARTLEGSADYNKVYINNSMSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTV

LTEAKEASYNTINYNNVQSITDASNTDKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYN

KIIINDTLFGVASDKREGILSIIAGLSNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNT

LYRREFKYI

>EAQ72542.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSIQAFF

KEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILVKSKIRRNEKFFKESEDSVGFCLLLMSEFLRQ

NEDDLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQNDLS

RSEFLRREANKQRRTREKSQGIS

>EAQ73111.2 rare lipoprotein A [Campylobacter jejuni subsp. jejuni 81-176]

MSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPTVVAVGETAD

GIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFVNNRIIDLSK

GAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQIGAFKNPAGA

QTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>EAQ72064.2 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MCFLALNLSLFAVGFDLKPIKSELVKVDDIYGYIKDSDDIKLYSSGVVVQHFSNSQSIIARASVIDKKNG

LAKLEFSVFSALKQDALPLPNVLPKVGDEVVLNFLYDRGLVIAPDEQTYNELVREFPQIYFTHIDIFGAQ

LIRTATLSPKRSDFRQFCDDNAVGILVVALENQAEVVDCQDFNKLYEVPISKPTSVQVPFYSRIGGYKSN

FFDFNSQEIGNYYRYYDALINLPKVQ

>EAQ73043.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKPEDKMAFDAFVVEIQRNMIRNKKGQE

>ABM55258.1 DNA-binding protein HU [Campylobacter jejuni subsp. jejuni 81-176]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>EAQ72044.2 hypothetical protein CJJ81176\_1177 [Campylobacter jejuni subsp. jejuni 81-176]

MNCVNLIKNSLEDEFGNIEVDLDQKILSLNLEENQVTNFTKEFQDLGFEIVERL

>EAQ73109.2 serine hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>EAQ73293.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKHIPIRMCIVCKNRFEQNMLFRFKVVLGDIVPKAEHGRSGYLCQNCIEREDKVLQKAFSKICKNLNTK

ITQQGLKEIFLNGKD

>EAQ72835.2 peptidase, M23/M37 family [Campylobacter jejuni subsp. jejuni 81-176]

MELDKKDFLSLKNNDKNIPTFAHPKNQEKILAIFSLPYKNPPQNTKLIAFYKDKKEEIFIKTLEGNYKSE

KLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKALFNGAFNIPLNSFITSDFGKARTFNEKVASYHS

GTDFRAAIGTPIYAANSGIVKIAKDRYFAGNSVVVDHGFGIYSQYYHLSKIDVKVGQKIKKGELIGLSGA

SGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFR

>EAQ72608.2 quinone-reactive Ni/Fe-hydrogenase, small subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKDNDSITKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADRLPVVWLHMAECTGCSESLL

RSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVEGGIPMGDTEHFLTIGAHGK

TGYELSKIASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVINVPGCPPSEKNIVGNVLHYL

LFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFCLYKVGCKGPYTFNNCSRER

FNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVSDKIGIGVLTLTGVAIAAHA

VISSMQKDKE

>EAQ72928.2 biopolymer transport exbD protein [Campylobacter jejuni subsp. jejuni 81-176]

MLIRQIKMLKLPKNEGLNIVPFIDIMLVLLAIVLSISTFIAYGKIQISLPSSENATNISNNKKKLLITID

EKNTFYLNDKLADLNEVKNAIFSLDKKTIVELKSDKNAKFESFVKIIDFLKAKEHENFQILTEKNK

>EAQ72949.2 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MRENHRNIVISILNSRFTPIDISAKNIAQSTALKFAIFDAKKIVFSNIDFDLRKAKIELKGRGICDNKVF

FLAPMSADHYFLRHASNEEVNTNDGLQILIQGEDVGKDLFWIRTKVFSFAIMAFCILGLISYILVKIALK

PLEDKISTLNRFIKDSTHELNTPLSVILMSIEQLEHQNLGDNTKFTRIKLAAKSLSQVYSDLVFYNFPNT

LETEKQKFDLRILLEERLEYFKVFFEQKKITLKLDLNQANIFAPKSQISKLIDNLISNAIKYNKKGGVIS

IILKTNFLSIADTGCGISKSNLNHIFDRYTRFNTDQGGFGIGLSLVKKVCDDNDIKIICESVENQGSVFK

LNW

>EAQ72646.2 peptide ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKVRNLNISLKNNLLLKDINLDIKTGKTLMILGQSGVGKSLLGKVLVRLLDSNFTISFDELSFHNSCIFN

FNKEELRNFRSKVALVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWH

SYANELSLGMARRVSLALALLNQPQILICDEITASLDKENASKIISILKELKNTTALVCITHDLNLVNSL

ADEILMLEKNSSNLYSLDEFLRYYNA

>ABM55257.1 hypothetical protein CJJ81176\_1747 [Campylobacter jejuni subsp. jejuni 81-176]

MKFSFECLKRRIFCNALKSVFSINMPLKKYYLMYVIILAFL

>EAQ72335.2 tRNA pseudouridine synthase A [Campylobacter jejuni subsp. jejuni 81-176]

MMKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFV

NLEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANE

LLGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMS

EKELKEQIEAKKQYNHFLAPPNGLYLSRICY

>EAQ73397.2 phosphoglucosamine mutase [Campylobacter jejuni subsp. jejuni 81-176]

MLERFAMKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLT

SIGYNVIQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDK

LIQASKVDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIV

MSDKPNGLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQ

GKLQSSVVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLI

AALQFSALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTEN

LIRLLLEAKDIKLLEKEMKNVVEFFKKALNG

>EAQ73409.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIWLVIPLFIYMILAVLHIAFYGFLRYLKFKHFFKDAAKFEAYTQDLLLEKDLKTTFQTKEFRAVAQLFK

TIKTHEKIPHSNKINEILDLIDGLNKNEFFNLSKFKLENNNVLYLQNEKNHLKNDANYAYNKLKNLNEIK

DEFEEIAFNTLIEKASYEQIKNVKIPKKPSEVLTLIKRFKEGNLELSVAEYEVLLSHNTLSEKDYLNAAK

LSTKLLNPDAILGIFNKIKNEKSEALRAHLYLLAEFGLLDELREQIHNDDKKFNDFKAFLVLREKNIKID

LNQLIQ

>EAQ73444.2 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MHASYALENELKELVFSLDKNVNIAIIGQFSSGKSSLLNLILGRDCLPTGVVPVTFKPTFLRYAKEYFLR

VEFEDGSDIITNIEKLAFYTDQRNEVKQAKSLHIFAPIPLLEKITLVDTPGLNANENDTLTTLDELKNIH

GAIWLSLIDNAGKKSEEDAIKANLELLGENSICVLNQKDKLSAEELDNVLNYAKSVFLKYFNELIAISCK

EAKDEQSYEKSNFQSLLDFLTQLDTTVLKEKFVKRKILNLCEILEDENQLFVGIFDRLLNQFQSYEKHLL

LAYENFLKEIEILNHQILEQLKSISERISSEIFASVKEKDAYFYKESKGFLKKDLYTRYDYKAPYISSDD

AFLAMFYNSDVMSKEFKKIKNELYKSFEEIKMKLKDFINILEREILLFKAEFSNIQKDHIFQSDKNFSEL

RAFCNASDEYFLKDFKELLFKSILELDLFFEKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEF

VLFYPKKSEIYERVLNELNVYEFETLLINKPILTKIAKNFLEQSQNLIQEKNKFLDLKKAELQKRRAQIL

NVRESIKED

>EAQ73356.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIFFARTINFLSNLIYNCSNFKKSNWILEMTIPFLSTINKANISTTKNTTIYKIFFFIRNFFLIFILGIF

YYLTQPLKSNSVVFIPQGSISQIITYLKQNKYQMSSIDKYILFFLGHPQSGWINIGTKDLNRAEFLHKLT

IAKAALQTITLIPGETSVIFLEQAAKQLELDKDMLLKEFQAQAPYDEGVFLPETYKIPKGITENLLIQML

LNHAEISNKKTSEKIFGDYNPKKWHQYIIIASVIQKEAANDNEMPIVASVIYNRLKKGMKLQMDGTLNYG

IYSHVKVTPQRIRQDNSSYNTYKFTGLPKEAVCNVSLAAIRAAIFPLKTDYLYFVRDKNTGVHIFSTNID

DHNKAINLQKGK

>EAQ72878.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVIKKERV

>EAQ72031.2 RNA pseudouridine synthase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MAYIKIKLSNNGKKAFQVLMENLKISINEAQKLIDKKRLFCDGILVEEKNKILNGLVELIVYENNPKGVE

IVFENEDFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKEACVAHRLDKETSGLILIAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEENFIVDKAINLTKNYDDVKTRMQICKEGKQAITEFEILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKQQIESILDEKLNPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>EAQ73023.2 di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176]

MAKVAPDLIKNQIMGLWFVASALGNFVAGLIGGNVNIKNIDQLPNIFEQCMWMLFVVALLLFIAKKPIYK

ILNEKNKQLSN

>EAQ72977.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQDPYSLNLQTNALNFKNIEAKNLKAYESNTSIIKAYYKANSWVRYADRDEFNDFITLNLDFNLSANRLE

FFNKDMSKVLFEGNVTYIGSNNVKIISQEVEYQPKDKILHTNTNFKALINGSIINGNTLNYDVKNKILNI

QGVNAWLQDK

>EAQ72407.2 hypothetical protein CJJ81176\_0909 [Campylobacter jejuni subsp. jejuni 81-176]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>EAQ72747.2 TonB system transport protein ExbB [Campylobacter jejuni subsp. jejuni 81-176]

MEKNVEFLKDYIDLIIFLILGIMAFIAFWCVIERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNA

PYIGLLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKVSLLSNAYK

ANKNA

>EAQ72743.2 ribonuclease III [Campylobacter jejuni subsp. jejuni 81-176]

MMKNIEKLERSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFAKDAEGDLSK

LRAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLI

EKNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEA

QQMAAKIALEKLGAL

>EAQ73447.2 transcriptional regulator, putative [Campylobacter jejuni subsp. jejuni 81-176]

MYIMKDYLELLSSVGKLKKFQKNSILFYEGEEAKKFFILLKGKIRIYKSTASDKEITLHYFNPPNFIAEM

PAFKKLNYPANAIFEEDGEILEIDFINFQNLCSENKEFNFLLISSLFDKIKILEKKLSQNALDLRTRLLK

YLLENEKNLDTISQKQIAIDLNVRAQSLSRVLKELKISELIDTKKGRIEILNKDMIMKELW

>EAQ72815.2 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MWLIEYDQQNYTRELNTKYSLIANARLLNFAGVISEKEFEEQTKNYNKMDEITEAKQIRKILFRGDVLAR

VEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKAIAVAVICILVLLYIYIFKKLKPLKR

LKKQIDKFAQGKLGDIEDVSTGVDEISQVSEAFYQAIVQIRKLNQSRQFFLRNIMHELKTPITKGLLTLE

MIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNILDVLDEAKEIAMRDDSNIRIFMEES

FFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRGPELNNTLEYYTQAFTQGSKQKSSFG

LGLYIVNTILETHGMKLDYLYEDGVNLFYFRNLKSVIVKE

>EAQ72636.2 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKYPNHKLYDYTSVRTISDINNPEGKIKEMKRDLEIDKTPYSNYVFLLNPNDKKTIKL

>EAQ73336.2 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MVACGSSKINVVYPDYTKYKSNDFDLRVMKAYNYEYYKQYKEARDEFLSLYQDYNNTNFLENAFLLTLAN

NLDRQAELNNLAKPYLNQNDNLKRLSALYALNSNDINNAQKLMKELLVKKDSDPRNLELYGDILVKKNDL

KNATKYYRSAYNQVQNEEILFKLIGIYAILNDTLNIKNVLEFSRKTNGCTLKTCVLLAKIYFDEKNIEAL

KSIYKELYQLTKNKSFALALVELLNSQGKTEEALKISLQYDLDDDIKFALYQNLKRFDDAKKMSLALYHK

TKNKEYLLRAAVFEFEAANEAKKITPKVIDSVKEKFEQAIDKDSNALYLNYYGYLLIDYDLDVKKGIELV

KLALEKDPQNLYYLDSLAWGYYKLGDCRQAWEILKQTLDDKEFANSDESKAHIKAIKACVKP

>EAQ73348.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>EAQ71911.2 non-heme iron protein, hemerythrin family [Campylobacter jejuni subsp. jejuni 81-176]

MHDVPFGIHQKIQLKGVKFKCKKCKEAIQFYKKYSENF

>EAQ73012.2 iron ABC transporter, ATP binding subunit [Campylobacter jejuni subsp. jejuni 81-176]

MMLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMF

QNYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCQLL

LLDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSDQIAFLEKGKILAHANPKELYFKP

DFKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFCRLKLLYKNII

FFILVSSSYDLEEKISFDIINF

>EAQ72438.2 DNA-binding response regulator [Campylobacter jejuni subsp. jejuni 81-176]

MLKFKILIIEDDIDLNELLVLKLKSSGYEVISLADFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLSFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>EAQ71912.2 ribosomal protein L3 [Campylobacter jejuni subsp. jejuni 81-176]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>EAQ72294.2 thiol:disulfide interchange protein DsbA, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKILFNQGYNMRKFFCKFVLALVFYSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLE

KLREAFPNLHFKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRN

FSNLDEFYDIGLKAMNVNKNEVLNFLNTQKAKEILSEFQRANDIAKTYGTPAFVVNGKYQINPSAINSMQ

DLEDLVKKLSNMK

>EAQ73466.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQSVWFYMGKSFKIHCLTYIIFILQWLIFLSCKKHYKGEKVDRKAGVILFWHGKLALMPFAFRHYRQKNK

KAYVMISHHKDGEQIAKIIKLFGLDTVRGSTSRGASSALRAAFKVLEQNDDIVITPDGPRGPYHSISDGS

IILAQKKELKIRILNYEANRFWEFKSWDKMIMPKPFSRITYSLSEPLDILSLDKEKAKEFLMEQFDKISL

ADQFKE

>EAQ72477.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDKKKEILLSCQNSKNLNSCYNCDEIFNCQTRKNYVDAVYNSMSKGKTEGGFDF

>EAQ73187.2 DNA-directed RNA polymerase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MCDMLDNKLGNRLRVDFSNISKQIEIPNLLQLQKKSFDYFLNLDNGESGIEKVFKSIFPIHDPQNRLSLE

YVSSEIGKPKYTIRECMERGLTYSVNLKMKIRLTLHEKDEKTGEKVGVKDIKEQEIYIREIPLMTDRVSF

IINGVERVVVNQLHRSPGVIFKEEESSTVANKLVYTAQIIPDRGSWLYFEYDAKDVLYVRINKRRKVPVT

MLFRALGYKKQDIIKLFYPIQTIHVKKDKFLTEFNPNDFMDRIEYDIKDEKGKIVHQAGKRLTKKKAEQL

IKDGLKWIEYPVEILLNRYLANPIIDKESGEVLFDSLTLLDESKLAKIKEQKSFDIANDLANGVDAAIIN

SFAQDGETLKLLKQSENIDDENDLAAIRIYKVMRPGEPVVKDAAKAFVNDLFFNPERYDLTKVGRMKMNH

KLGLEVPEYVTVLTNEDIIKTAKYLIKVKNGKGHIDDRDHLGNRRIRSIGELLANELHLGLAKMQKAIRD

KFTSLNADLDKVMPYDLINPKMITTTIIEFFTGGQLSQFMDQTNPLSEVTHKRRLSALGEGGLVKERAGF

EVRDVHATHYGRICPVETPEGQNIGLINTLSTYAKVNELGFVEAPYRKVVNGKVTNEVVYLTATQEEGLF

IAPASTKVDAKGNIVEEFVEARQDGETILARREEVQLIDLCSGMVVGVAASLIPFLEHDDANRALMGSNM

QRQAVPLLTASAPIVGTGMEQIIARDAWEAVKAKRGGVVEKVDNKSIFILGEDDKGPFIDHYTMEKNLRT

NQNTNYIQHPIVKKGDIVKAGQIIADGPSMDQGELAIGKNALIAFMPWNGYNYEDAIVVSERIIREDTFT

SVHIYEKEIEARELKDGIEEITKDIPNVKEEDVAHLDESGIAKIGTHIKPGMILVGKVSPKGEVKPTPEE

RLLRAIFGEKAGHVVNKSLYATASLEGVVVDVKIFTKKGYEKDDRAIKSYDKEKMALEKEHHDRLLMMDR

EEMLRVCALLSKAPLNSDQKIGDKNYKKGQTADISELEKINRFTLTTLIKAYSKEIQKEYDDLKNHFQNE

KKKLKAEHDEKLEILEKDDILPSGVIKLVKVYIATKRKLKVGDKMAGRHGNKGIVSTIVPEVDMPYLPNG

KSVDIALNPLGVPSRMNIGQILESHLGLIGLRLGDQIQEIFDRRQKDFLKELRAKMLEICSIPRLASEKE

FIKSLSDEELLNYARDWSKGVKFATPVFEGVNIEEFSKLFEMAKIDMDGKTELYDGRTGEKIAERVHVGC

MYMLKLHHLVDEKVHARSTGPYSLVTQQPVGGKALFGGQRFGEMEVWALEAYGAAHTLREMLTIKSDDVE

GRFSAYKALTKGENVPATGIPETFFVLTNELKSLALDVEIFDKDEDNE

>EAQ72505.2 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176]

MFEVDQILAYKLRALEKNDFKILQNENGINFIKDDIMLYKNPEQELLENLTLFQNKYKKYPVLFFYGFGN

GMFYKTLCENKNHKHIIVFEDELEILALALHLFDFSKELKNEKLILFHTPNITTAQLTTLFMYEHIQKSV

KIFNLFIHSDFYLKFYSHQIQELNKKLIENIRFIVLAKGNDPYDSIIGIKHMLNNLPKLLNHGVFQNFLK

ARKQKVKNAIIVSTGPSLTKQLPLLKKYANKATIFCADSAYPILAKHNIKPDYVCMLERDDIVSKCFDND

FKEFDQGILFIISSVVHQEVIDFLEKNSRKYILVHRPLHFAVSLNLKEFGYIGVGASVANMAYELAASLR

HENIIFIGQDLAYAKDGSSHPREHIYGNQGEKLRGEIYTLAYGGEKQVRTQLTWNLFRQAFEKDIFWAKE

KLKINTYNCTEGGARIEGAIEKPFQEVCETLLKENLKKPFDKPKILEKNKIKNKFLQTQKLLIKNVKQSE

EFIKKCQNELKKLDFELSKSQLNSQTLIKIKKNLLFFFNEFKRLKLFNELTQAIYYHNECEIMYYEVLND

LEQDKKIEDFLTNQKKWWLQSFEYLNTQNQIIKETLKKYKNDDI

>EAQ72967.2 NOL1/NOP2/sun family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNILSSFAQEKNVCVFANTLKTSIEELEKEFLKQNLKFKKINAYCYLFDAKDKAILSSMKAFNEAHFYI

QNYSSYLCALNLEVKAGQSVLDMCAAPGGKSINLANFMQNTGYLACNEMSRDRFFILQKNLKNYGVNAKV

FMKDGKNIGNLCPLKFDKILLDAPCSTFAKIGFDLEKSYKEIKNIAKTQKKLLHSALKALKIGGELVYST

CTFTKEENEEVIENALKSEFKLELLDIDLENVEAKAGQSEEFAEISKCRRILPSLDYDGFFIAKLRKLC

>EAQ73261.2 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGSLVLTNDEYPSKVYVGEVFPITIYARTTEN

TKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNSNASLSKISIKLLRNNEAFQEADINLNPIK

FENTLFNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNATNTNLKSFFIEGIQKQGIENLKGDFNASS

AFYYAILPLSKTNFEFSYFNKDSKKLENINLKLKISDDEISTQSDLNPVNKDLNIYKQYALWFLAVLFGV

LFVWRKNYIILALAVVCFALSFLVDTNTQNAIIKAGSRAKILPTEPSTYFYTANADEKVEVLGKRQNYIK

VLFSDGKIGWVNKDDLQKN

>EAQ72259.2 galactosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MEIKHEENRCSYTNIQRRRIFERMFNSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDERFILFDKK

NGGLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNI

DYIIFLDSDDYWELNCIEECVIRMKNVDVLWFDHDCTYEDNIKNKHKKTRMEIFDFKKECIITPKEYANR

ALSVGSRDISFGWNGMIDFNFLKKIKLKFINFIINEDIHFGIILFASANKIYILSQKLYLCRLRANSISN

HDKKITKANVSEYFKDIYETFGENAKEAKNYLKAASRVTTALKLIEFFKDQKSENALAIKETFLPCYAKK

ALMIKKFKKDPLNLKEQLVLIKPFIQTKLPYDIWKFWQKIKKN

>EAQ72352.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQRDMTSFANDKYQFGDFGSIKSQSYDGKNSVDFYRAITIGGHYYNNGQNINHYMNANEWKLFADGWNSD

ALNGDIFKDGLTTIRLMSDIDFSYLTSNGKQIAIDPVGANKYAFSGNFDGGNYTLKNILINAQNTDKGWN

TGIFGKVEGKDSNKKAKIYNLNVDGLKFSGKTNSGGAFVGQSSNADFSNIHLKNIGDLIFFDPNSKNGTD

GFLYGGGFVGYAQSGSSFNRISLDNFSKIALQPEGKFSSAYIDIYLGGFAGYSEGSNFSNILLNNIGGVT

ILGSETGGNIFAGGFVGYAGDKSYFSQIDLKNIGSVQADGKTFVKHAGAGGFAGAINGTNSFEKISLINF

GDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>EAQ72524.2 site-specific DNA methyltransferase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MMNDEFISVKDFFNHNEKRKKFLQKQEIKPLKEKTKKTKETKLYTNIESGKYKGKKLLLPSLTTTRSTKS

MVKSCVFNVIREDLRSKIFIEAFGGSALIAAEALSNHALKAYAIELDVKAYKIALENAKNIDPNLEVIHA

NTFEILPKLIENSKNEIILYLDPPFDTREGFSDIYEKIYHFLENLDLKTLNLIIFEHHSTIKTPEKIQNF

QKVKEKKFGSTSLSFYAS

>EAQ72237.2 chaperonin GroES [Campylobacter jejuni subsp. jejuni 81-176]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>EAQ71980.2 flagellar motor switch protein [Campylobacter jejuni subsp. jejuni 81-176]

MFTNECISTIEGLTGKSAEFSEYKEFDVNASDTLKAPLVYAIFNIANGGKIGILAGAVLMSAIGEWMMGE

EEITKNDKLGPDEMDAAKEAIQNIISAFSTTLGAQKDIPKMDFSIESCEFVPESVDFKDFKKLFLYDVKI

GDLEEQVSLAMDQTLHNILSGKPAETGNTSTDSNHNTEEKAIMLSEELKNINLIMDVRLPVRVRIGNKKM

LLKDVLTMDIGSVVELNQLANDPLEILIGDKRIAYGEVVIVDGNFGVQITEIGSKKERLEQLR

>EAQ71967.2 glutamate 5-kinase [Campylobacter jejuni subsp. jejuni 81-176]

MAKIIKIFQGISMKRIVVKVGSHVISEENTLSFERLKNLVAFLAKLMEKYEVILVTSAAISAGHTKLDID

RKNLINKQVLAAIGQPFLISVYNELLAKFNKLGGQILLTGKDFDSRKATKHAKNAIDMMINLGILPIINE

NDATAIEEIVFGDNDSLSAYATHFFDADLLVILSDIDGFYDKNPSEFSDAKRLEKITHIKEEWLQATIKT

GSEHGTGGIVTKLKAAKFLLEHNKKMFLASGFDLSVAKTFLLEDKQIGGTLFE

>EAQ71885.2 DnaJ domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MEERMDEFKRRMNYYVIALLAKIAKSDGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAF

YVAKDFLKEVPLPKNERFNVLRVLVFMALIDADFNAKKREILEQIAKAFDIAKSELDAFIASLSNLKSTK

KELSLDEAFAILELPNNADLNAVKKQYRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHL

ER

>EAQ72682.2 cytochrome c oxidase, cbb3-type, subunit IV [Campylobacter jejuni subsp. jejuni 81-176]

MMEHLSIVFDVIKNLITFDLATVQKHEWEIFQGYGFFALVMFLSIVLYAYLYHLYRTEKKGERNYENYAN

LALKDDIDDSVLESKRSA

>EAQ72828.2 quinone-reactive Ni/Fe hydrogenase, cytochrome b subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSIYKEAFMQNKEEKLQRKAEYEFSIGLRLTHWVRAIAIVILIGTGYYLSYVFQSPISNGEPVNFMQAKY

RLVHQAVGFVLIACIIFKVYLFFCDKVSAKERRSVWDIFNIKLWIEQVKFYIFLGKHPHLKGVYNPLQFV

TYFFFYLVMLGIILTGLILYTHTYHEGLGGLLYHILRPLEAAMGGLADVRTYHRILMWVIMIFVPVHIYM

AIFNAVKGKDGAMDAIISGYKFVKEEKH

>EAQ72780.2 hypothetical protein CJJ81176\_1262 [Campylobacter jejuni subsp. jejuni 81-176]

MGKRNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDENLSKNSYLELSKGEFKNC

FKDEKLFKKFEDLRELIKKGSNLD

>EAQ72150.2 hypothetical protein CJJ81176\_1044 [Campylobacter jejuni subsp. jejuni 81-176]

MTQSENVEEQWVCEISYSDQDLKVLPRTSLALIDDNMPKTIKFNFLNSHKDELSDCFIGARISVKDIVNT

DLLHAQSETYVKILPLRFTVEFGEQNAIIYYLKKK

>EAQ71865.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MGFNFVDTHINHFEQVQNFQELKQLVSSCTLCQFSKTRKFSLMEPKIKNAKLLILDVFGQKSENESGILL

NSKKGEKLKRYIYQILGLCDEDFYFSYLFKCFCNGKFDDFSLQSCLPFFWNELKLIQPAFLLCLGEYTFK

SLGFKDYHILKGEVFAYKNFFIMPSYDLDFIEKNPSYEKNFIQDLKKIKGFL

>EAQ72538.2 DNA primase [Campylobacter jejuni subsp. jejuni 81-176]

MYNFNKVCKMITKESIENLSQRLNIVDIIENYIEVKKQGSSFVCICPFHADKNPSMHINPTKGFYHCFAC

KAGGDAFKFVMDYEKLSFADAVEKVASLSNFTLSYTKEKQENKKELKSILPSLNAYFKDNLKHHKEVLTY

LYQRALNDKDIAKFELGFAGASEDSIRLLRNQKIPLEDAMSVGALKKDENNEFYASFIWRITFPIYDHKD

LLVGFGGRTLNPNVPAKYVNSPQNILFDKSRIFYAFNIAKENIAKKKEIIVCEGYMDAIAFHKAGFNNAV

AVLGTALTEHHLPLIRRYDAKVILCFDNDEAGLKAATRSAFLLSTNKIDGKVAILQGGKDPAELVAKNES

TKLHDILDEGIELGEFYIRRLISTHSIISALDKQKALETIQKFTFNLEPLVANSYTSLVSNLLKVDEKFI

VLSQNSKKTIHTPLISQNKYNFPKEKIHIAELELIAFLKQHPDICNDFKQISDSVCFKHKILLDKILEKK

GYEDSDIREFENKNIRKNLNYSEFLLGICKVNLAFLNNVKIKNSTLALKKQLFTLIDKNLNLLIKNLNTE

ELNNFLKEYLSFLKYEKNEEILQQSFRNLNGIFSNKNFTAYDLGFSTQDNDEPF

>EAQ71863.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLNAKEQKLVDVKPVENFYPKLSVQECNTNCLFDLLESRLYLSFLSEFTDQNDQFLSNVYAKLLNSITDF

EKNVQKITSVKLAIIIPEKTIKSYSNTIINSSIAYLLRQRAEIKVKVFLTGTEDSDKIRAALDAAQAQGY

QYAIAGFTLKGANELKNYSGNMKIFIPTIHKNNIQISNQNIIFGSIDYDAQIATLLSKSNANIAIFSDGS

ALSSNLNSRILAQNNNARIYTIEGEKLDFSRLLRSQGGVNNASIFFNTPLIKTALASSQLRIYNIHPYVL

LSTQINYNPTFLSLTQQGDRENFIIANSINNHDDNLVYLNEIFNQSIDYNWIAYATSIGVDYFYTEFLNK

KSESLFDEKIKNSQVDYKVRLMQGKQASFEELK

>EAQ73427.2 shikimate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MMKAKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKVSEIFEQKGENFFREQEQKMSDFF

SSCEKTCIATGGGFVNVSNLEKAGFCIYLKASFEYLKKRLDKDEISKRPLFYDEIKAKKLYNERLSKYEQ

KANFILNIENKNIDELLSEIKKVIK

>EAQ72291.2 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFMSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDV

TKDPLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSL

SGGERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAY

VIRSGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>EAQ71836.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIFFIFIGQLFALELNFNTFSSNFTQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKNQVTIV

EHDLEQVIFSHLDNIPNLNEIFKKASLIDKDKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVIINLNN

QIKNPKINSDVFKAKIPQNYDIVR

>EAQ71904.2 rubrerythrin [Campylobacter jejuni subsp. jejuni 81-176]

MKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEGWHAVARHFREAAENEKWHARAEFKAYHEIVDG

KPLEVTTKNLVTAAEGENYEHTTMYPNFAKIAEDEGKKAIARLFTAIGKVEIEHEREYLALKKMLEEEEF

FNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFKREFLG

>EAQ72445.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWGISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKN

K

>EAQ71951.2 anaerobic C4-dicarboxylate membrane transporter DcuA [Campylobacter jejuni subsp. jejuni 81-176]

MIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVILGLVLGMKPGNIPWDVILIIAAAIAAISAMQQAGGL

DYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVSSQI

GITASPVSAAVVYMSGVLEPLGWNYPTLIGIWISTTFIACMLTAFIVSLITPMDLSKDSVYQERLKAGLV

KDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITWLCK

VEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEASIKEVAGDWVKQTPAMLAVAFFFASMLLYSQA

ATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNHSFF

IPGVLAIAIAVALGFVLAPMLI

>EAQ73472.2 hypothetical protein CJJ81176\_0242 [Campylobacter jejuni subsp. jejuni 81-176]

MSKISLNKSANLSKDLNLIEKNSGDGGDIYEYKDPFWDSCQSGKCDYSKGKGKLFDSSRYEYFVREGSGI

VALGFEDTNKVPIKIFDSNEINLGGFVSLTPKNTEDKRFKLQFLNYTNDKRNSFTSSSISRDSGSGVYVY

DKMDKNGI

>EAQ71946.2 conserved hypothetical protein, authentic frameshift [Campylobacter jejuni subsp. jejuni 81-176]

MLLDKLIPTWNEKYSIHNTMIDIQHQKLCELASKVESAVYKFVKREELKEILTELFNYMKEHFSNEEDYM

QEIHYPYLNEHKIMHKISFVICLILYKT

>EAQ72905.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MNFSGFFYARNDLRLFKIEKKNELKSFFYKDYTLSSYKDALNLNNEIFFYQSLKEGLFKENDEILVSNLG

KKIILFRNFTQNCDNFNEAKLKQILLLFFLLLASVFFASLAMINEFGAIDLVFLMICLLLLVMGAINLGL

LFKQIRILKSFSKEEMKEFLSQRMKKYTKV

>EAQ71987.2 TonB domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNYGLSNLNSFLLALAIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQVDIEKLFAQTTNKTVKTEDIDQKASNFNELFGNIKEIQEEKTTKIQSSAKSGASSAPKPQASELV

KQLNDSLLQEESSTQGQSTKAQKIGIYDEFLGKVVRIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDAKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>EAQ72070.2 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MVISKLGRKLALKHEADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYN

FEISPNSIISDSARYEAIRAASSEAFDEFISVIAIKGQKRDSKY

>EAQ71982.2 crossover junction endodeoxyribonuclease RuvC [Campylobacter jejuni subsp. jejuni 81-176]

MNLKILGIDPGSRNCGYAIMEANKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDI

FFAYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPL

DITDAIAVALTHAANLRVRV

>EAQ72917.2 PDZ domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFTLSFGIERPKFEDFLAGYERNKASMLNYEGMPAFALSENLLAVLKQPNTKLNKYVKYDPFLNLYLVR

TDFSLIPTPMGDEEKLTRNDWVGIWDPNKPYIGHIKYLAQNIDEKDQLDFNSKIGLLGTPCCEMMGIALN

NSSFIGNRYLKHFMKYNDVYWGDIGVDFVVRENKIYVNNVRKNPQFLINDQVISVDGLPANDLRKLNEKI

LFADRGSTLYFQVLRDNMDLNISTEVFAKDLSKFNLPDSKPKPKITNFTSNLGLTVNTSLVVTKIDPKSK

ASNAGFMVGDKILRVNNIILNNFKELQNILSAGNDFSILIERKSTKLPLSNFNNELGGNANSGGDGKFQF

FIRLTK

>EAQ72214.2 guanylate kinase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKLQGFVLLISGPSGAGKSTLLKKLFDEFEDELYFSISSTTRKPREGEKNGIHYHFISHEEFQKGIDSDH

FLEWARVHENFYGTSLKHTQNALDNGKIVVFDIDVQGFKIARKKMADKIVSVFITTKNKDELKKRLIKRN

TDTIIQLEKRLQNASDEMKELSEYDYLIINDELKQSYEALRAILIAHKFRTKGQNLGQIQNIWNEGE

>EAQ73307.2 thiF family protein [Campylobacter jejuni subsp. jejuni 81-176]

MMNDRFTRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFQNLTLIDADKFEITNQNRQIHSE

NLGEEKAKVFARIYNVKGIVSKIDNEFLANFDLSEFDLIIDAIDDIPAKVALANLIDFKRQIFISSTGGA

RKLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLA

LRKVLAR

>EAQ72959.2 hypothetical protein CJJ81176\_0241 [Campylobacter jejuni subsp. jejuni 81-176]

MAMIDFSTSNRGGKFQGEFTNIGQSYIVSASHMSTSLNTGK

>EAQ72249.2 lipoprotein, NLPA family [Campylobacter jejuni subsp. jejuni 81-176]

MRKGEKMTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSVLQKQGYDLKIYEFNDGVIPNV

MVENGELDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRA

LRIVASKGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLNDVDYSLINSNFAILAGLNPVKDGLY

TESKYSEYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>EAQ72539.2 general secretory pathway protein E [Campylobacter jejuni subsp. jejuni 81-176]

MESRMDKIFQAYIDNEISLDEICTKFNITSWDFFKKLANFCNLHFVDLDEDNDFIYEGIPFSLLLKFKFL

LIKNNDGFMIIRSKPCSLELLEQVKTFMICEKIDTAIADELKIAKILNQIRIQEEIKRLSIKLRLEWQEN

HKRDDQSCISQIFDFLLHEILSFHASDIHIEARNDDALIRFRVDGILREFAIFEKDIYEALVFHVKFLAC

LNLAESRKTQDGSFELDFENERYDFRVSCLPLIYGESVVIRILKHDKEILDLYKLNLGNKNLEILKKILH

RPNGMILLTGPTGSGKSTTLYACLNELKSIEKKIISAEDPIEYKIPLVQQILLNSKVGVEFNSVLRAILR

QDPDIIMIGEIRDEESLDIALKASLTGHLLLSTLHTNDALSTIDRLLDMQAKSYLIASALSLVIAQRLVR

KLCPWCKQKSKKHYIEFEGEFFEPKGCERCHHSGFFGRELIAECLEINEDLACAIRENQDKTILMELAKK

YGFQTMFEQGLKKAKEGLTSIDELLRVVR

>EAQ72257.2 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKNNQLESAAGLGIEEYCAFKFSNILHEMGSFSFSGSFLPHYAKVGRYCSIADGVSMFNFQHPIDRISTA

SFTYETNHSFINDACQNHINKTFPIVNHNPSSSITHLIIQDDVWIGKDVLLKQGITLGTGCVIGQRAVVT

KDVPPYAIVAGIPAKIIKYRFDEKTIERLLKIQWWRYHFADFYDIDLNLKINQYLDLLEKKS

>EAQ72378.2 S4 domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQKYKVLAIPSTKSIP

KNAQNEYVVKL

>EAQ73353.2 transporter, putative [Campylobacter jejuni subsp. jejuni 81-176]

MVVVALALVFLNGFFVLSEFSIVKVRRSKLEEMVKEKKAGAKKALEVTSRLDTYLSACQLGITLSSLALG

WIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGELVPKSIAIAVADKAVLFIARPLHW

FWILFLPCIKIFDFLAAISLKLFGIKPAKESELTHSEEEIKIIASESQKGGVLDEFETEIIRNAVDFSDT

VAKEIMTPRKDMICLNKQKSYEENMQIICEHKHTRFPYIDGSKDTILGMIHIRDIIQNELSHKSQNLDTF

VKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDIMEEIIGEIKSEHEEDSYKKLAENI

YEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDRIEDELCYYEVKKMDGNSIERVKVV

KKTNKDEE

>ABM55256.1 ribosomal protein L36 [Campylobacter jejuni subsp. jejuni 81-176]

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>EAQ72552.2 hypothetical protein CJJ81176\_1321 [Campylobacter jejuni subsp. jejuni 81-176]

MDGVIDNSGSAVPPLNYILGREMEHSYSEYYEDFPHNRIIFFLKTHWTRKENSPYFFNNENYFIRTLLNK

DHLILQSQKNKNIIYVSYHSKEDPLTPANFKEQTMQILKILGYDVSLNLIDENKIDGKFIKNLDHGCGIP

DKALFRKELPLMLEKLQKRKSLMQENSISYPCGKKVFIFKDVGDKFELEIKD

>EAQ72122.2 S-adenosylmethionine synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MKGLFMYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKAD

YDNLVKDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGETGAGDQGIMFGFASCE

AEEYMPAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMK

IEDLRSLVMKLILDSNLPKELFDPNKTRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQS

SKDYTKVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQN

FSLTPNWIRDQFHLDKPSKETFLYADVAARGQVGQKDYPWEKLDALEQFKKLL

>ABM55255.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFAN

GVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLL

YFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDL

SKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILS

QIPKITEQQKNIQKAYDQAVDAYNEAVKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLEST

TASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNN

NPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>EAQ72553.2 cell division protein FtsX, putative [Campylobacter jejuni subsp. jejuni 81-176]

MMFAFEFILITNATLKHYEELVNKDYNIIVVSKTELDQNVVKTKVPFFAGLESLDPKDLIDRLKNDVSEK

NLKVLKDSLPKFYTLKLNSLPDQNELNSIKNQLLNIVGVSKVETFSKTHDKIYSLLILMKFVFWLFLFII

ILLAFVLFLKQMRIWLYEHTDRIEIMCLFGAPFWFRSFMLYKVVVIDCFIAFVILLAFFTQIFDLSIIQE

SLKAVDIIFPPINFILHLTLIFLATLFICLLCVNTVMFKVKR

>EAQ72658.2 preprotein translocase, SecY subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>EAQ73167.2 isocitrate dehydrogenase, NADP-dependent [Campylobacter jejuni subsp. jejuni 81-176]

MKTKTNFKLTLAFFFICNILKNENKNKYFKGLKMQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTS

DISLSGRILATFSEYLKEEQRCEDALELLGELVKRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNY

PDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNSDRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGD

FFSNEKAVLIDQDCVANIEFTSVDGKNEILKEGLKLEKNEILDATFMDVQKLQEFYAKEIKASKDDDVLF

SLHLKATMMKVSDPILFGYAVKVFFKELFIEFQDEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEI

LAKSADISMVNSDKGITNLHVPSDVIVDASMPAMLKNGARLWDKEGKEKDTNAVIPDQTYATIYEAVIED

LHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDKTFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKF

DAVLNWIDLGIERSELSGAEAIFWLDSKRASNKIMITLVQNRLKEKGKNIAILTPKEACLRSLELIREGK

DVISITGNVLRDYLTDLFPILELGTSAKMLSVVPMLKGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGE

FLALQASLEFYANKCSNHKAKVLAECLDEAIGEWLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQAS

DMELQSFFKDIALELSSNEEKIRAEFNNAQGVKVDLGGYYKFDDEKANKIMRPSATFNAILEKIGQR

>EAQ73019.2 McrBC restriction endonuclease system, McrB subunit, putative [Campylobacter jejuni subsp. jejuni 81-176]

MSSKDEVVNFNFFKKYDFYVDLSYGKGNVAKIPWIIFIRMDTQEYKASYGVYVYCGIKRENREIVVCIGE

SEDKTVNYLARNKVDEYNAQFNHQVYNYSNLSNDINLIVDKIILNMQWFKELPLNEIQDININTLESKSL

EVENNVQQISSKMENKNMPLNQILYGSPGTGKTYHTIDKALEILGKNLESRDDKKAKFDEYVKKGQIVFT

TFHQSYGYEEFVEGIKPRIDSKENSKEIEYKIKDGIFKELCEKALDNYENSILNADELNKKIELKEKVEN

FLNWLLETNEPIGKTKGGNFFVVEIDNKTIVIYSEGVERFDGIFNLNLSIFMELLKCKDEFNNATEMFKK

VFNRDYADRTHTYYFNLVKKFKAYEEKQLAAKIENNKNNDNSLKPYIIIIDEINRGNLSKIFGELITLIE

PSKRIGEKEELKVTLPYSGEKFGVPKNVYIIGTMNTADRSITSLDTALRRRFEFVEMMPDVSKLSIDCEG

INLQELLKAINTRIEYLLDREKTIGHAFFISVENLESLKKVFKNRIIPLLQEYFYNDYALIDAVLNKNGM

LEISVENKDYLKNMTEFIESDKIVYKFSDSNNWNKDTFIKIYK

>EAQ73046.2 3,4-dihydroxy-2-butanone 4-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MSSNLSYNFKNFKEIKMKFVSVEQAIKDLQAGKMLVMVDAEDRENEGDLIFPAQFSTQEKVNFMIKEARG

VVCVALDETLAKKFELPLMVPKNTSNHETAFTITVDAKDATTGVSAYERNMTIQIFADDNAKASDFVRPG

HINPLIAKKGGVLERTGHTEGTVDLCKLAGLKGACVICEIVKDNGDMARREDLEIFCQKYDLNMIAVSDL

IEYRLKHESLIKLEEKSQSVLAGFKAEKFIFSDHNQTQHIAFCFKDIKKCENVKFHISGSDFELLTSDKF

SKLLEQIKFLSENGGVIVFMQGEKSSTIQYKNYGIGAQILRYFGIEEIKLLSQSCDKDYIGLEGFGLNLK

ACNFN

>EAQ73063.2 malonyl CoA-acyl carrier protein transacylase [Campylobacter jejuni subsp. jejuni 81-176]

MKTAFIFPGQGSQSLGMGKDFYENSIKAKELLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLM

AYSVLLEKKPDLSSKFALGHSLGEFSALAVNGAFDFLEALSLVNKRGLFMQEDCAKVEAGMMVVLGLDDE

KVEELCQKAQKENKQIFAANYNCDGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASA

KLCVELEKVLKPNFKAVLSNANAKIYTCKEEALELLKAQLISPVLYKQSIKACENEVDYFIEFGASVLKG

LNKKITSKETYALTNMNDIDEFLKVI

>ABM55254.1 conserved hypothetical protein, degenerate [Campylobacter jejuni subsp. jejuni 81-176]

MIIIDHSNTSDDNNSKTINTKKNTQKDNNNTQKNQPNLSNDNTLKTKTPNSNTPSLKNTSKEESIHKVSF

SFHITNKNINFKDLGLDEQVLQEALNDYKKESISVQDLQDIANIISYYVQVSGYPAATAYIPQQELKDQI

QINITLGVLGKYVVQNNSSVRDYAIESKLPNHKGEIITTKLVEDAVYKVNEMYGIQTLASLKAGDNPGET

DVVIETTPSDSFVSVLFYGDNYGIKESGRYRGGASMSFNNIAHQGDSLNAYLQRSDEAQTNYGISYTTFL

GNLKITPSYSKGNYALGGIWREFDFIGTSENLGVDLKYPLWITTYNSFYLTSSYYHKKLSDSKFDILTFD

KSSDTISFGIEGVYNGISNDSFSYSANVSYGNVKDEGMTIVGIGTSKVGGVEFGKFAKLNVNLNNAYFFN

DTFTHLFSLNYQQVINGATLDSSETISLGGPYGVRAYNNGDGEGDNAVVASFGLRMATPLKDFYITPFYD

IGYSWYENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKKYKLDDDYSSKAYVSFGKYF

>EAQ73022.2 hypothetical protein CJJ81176\_0276 [Campylobacter jejuni subsp. jejuni 81-176]

MKSLILPPNEFLDHYILNAEFHRFAGISKNAYKFWKNVEIGRYQGTRIIFLHRNCILEKHQQALRQCSGL

NGFVLASAFCSFTGLAPSHLVEKNNSSIYKLLELKEICGIKFVNLKKFYDFLGLNYHQHIYIEKCHFFSP

APFEKRIKITESMCVGYY

>EAQ72343.2 polyA polymerase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQISKISLKNNPDLQFIAEFLKPYTKRVYLVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGAQG

FGKSFFVCKFKNYDLALARTENKISYGHKGFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLK

DLGAGFLRHIDKQSFQEDSLRVLRAVVFASRFNFKITSESLKLMQSMDITDLSKDRINAELCKFFKSPRL

DVGYRYLQELGLEKQIFGFESVFMSLEFQNLLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEY

LKYANQAFYLDDISDFELAKIAFEMPLKEWLGLWSKKRIEQAKRLGLYENKFESKILAKDFINAGFCGKI

LGLKLQEARENELKEYIKGLAK

>EAQ72741.2 ModE repressor domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MRELLNSNEKLDCGTAFKIAKKFNINIEKIGQLADENHMRIDNCELGQFGHLDFEKAKIEVLKKIEPSLD

EKRRIFCKDARDIAKEGCGLKSMRSALKTYKVDVKYCQLGCFKEKKGKQFIVRTKTWIENADGDLLFGRG

KTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKLTPRAMELMENYS

ILQKDIEEYANKRFKELFLKGKK

>EAQ72427.2 hypothetical protein CJJ81176\_0765 [Campylobacter jejuni subsp. jejuni 81-176]

MDAMGMQILYTRSANFYVKMDAARAVHRFKHDGEHRSRVYVSLGKYF

>ABM55253.1 hypothetical protein CJJ81176\_1709 [Campylobacter jejuni subsp. jejuni 81-176]

MSILLLQNGHSFSIVFKFELYSIEKKFSQNEHFVSLVSIG

>EAQ72516.2 ribosomal protein L13 [Campylobacter jejuni subsp. jejuni 81-176]

MAKVKIMTKITKPNEVKREWIVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFT

GANKAEDKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTA

QIAKEGK

>EAQ72749.2 riboflavin biosynthesis protein RibD [Campylobacter jejuni subsp. jejuni 81-176]

MSNFKIQGRQMKEFYMNLALNEAWKYQFLTYPNPAVGCVILDKNGKILAIKAHEKAGLAHAELNAITHAF

KSLRPEISLPKEANALHEFICKNHQGVFKDSIAFVTLEPCSHQGKTPPCAKLFSELGFKKIFISVKDGNK

IASGGAEFLKKQGIEVEFDILKEEGKKLLKPFLKWQKGQFKLFKLALSMNGSPFGKIVSNELSRTYAHKI

RAVIDLLVVGGETIRKDHPILDARLCKAKAPNLCILSRQNIDNFDKNIPLFKVPNRQIYTQIPSEAKFLM

YEGGENFLKTFKDGIDMFLIFQSSSLNDEKNVTIPLNFKPLYRNFLGSDTYGIYEL

>EAQ72328.2 Di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176]

MTKQEIQKLDTNFLGHPKPLFSLSMVELWERFAFYGIRSLLVLFMATTISKGGLGISTEYASAIYGIFAG

CLYLAALPGGWITDNYLGQKKALFLGSFIIALGHISIALSILSTPIFFLGLTFIVIGTGFFKTSASVTVG

MLYKQNDTRCDTGYTIFYIGINIGAFIAPLICGFIQAKWNYHLGFGIGGLGMLISLLILYFKAIPELEEF

HKNCTLRQNWEQPFKKSKNLTLILSISLLSIIGFFLIFINLADINPIILSKKLLIVILLCLVIYFIYLFV

FKTLNKREKQQLTILIVLFFVATFFGALLNKNLPLIIFLRKILQIEIFLIGKFQQTGFNLLIQFLSSYLL

L

>EAQ72625.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLEFTLNFNDYGLKMGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAH

NTAWAARRLNLEEVTDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPL

IVNVPNIISK

>EAQ73108.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIAALFIIAFDIIICFLVYIYGYKLIDNEVRTRK

TAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKSREIKDLK

KNATQVQRIAFENFNYENNYTIRLVSECF

>EAQ72199.2 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MRCINCGAFALLCFCELCELELSEFSLNVRKLDNNFKVYSFYKYHEIQHLLHSKHYFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVIALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>EAQ72687.2 NifU family protein [Campylobacter jejuni subsp. jejuni 81-176]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>EAQ72451.2 ankyrin repeat protein [Campylobacter jejuni subsp. jejuni 81-176]

MKLLFTSFCCFASLMASDAINCDNIKNNKTLLNESSNLDYLNCKESLKNQDFTKKLYAISNEIRGGNSSC

NGIAYLPKLQQFNLLLLKIAIDPITYQKTLDTPENLEKKYDILKSYFRYWAYQSIGNFRLYKAFWQEYNN

AIEPLEKYFESNFNFDKGSNIYYTSNALNEFLNWAVGETKIYKDISPLAKIMSNKNYSVSYIQDFIFSNN

PSQDDLTIALQAALLNQREKEILELLIRFGTRIDEGYESAIFYALENYENTNFLIQNGANVNQANAFGKT

PLFYAIEFNRLDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITFCALEHTSKNVLMHAAAYGN

VEILKLLISKGANFNAVDDLGFNALDFALSAGKKENADYLKSLGLKANENLFYGGSLE

>EAQ73470.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVGLSTLSIVKNIPL

FAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLDAI

>EAQ72776.2 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MVCVLFIVLLKIEGNTYNEEESLKQENLIKNLLISYENTSGVEIGAYLGNSGFNAIQNPNLVKAIRNNGQ

SLFKAGGELCTLSSLKYHSNLYFDVQCKDFDGLYEENTSDRVYNLLLIGFFSFSLLVVFMYFSVLKSLEP

LKKLRRQVAEVANGEQPDFLDYQEDEVGKIAFEFQKAFKKNQELIQSRQLFLRTIMHELKTPIGKGRIIS

EMIKEDRQKERLIAIFLRMDSLINEFAKIENLFSKNYNLHFKPSRFSTILEEAKEHLMIDDFNKVVKVDI

RYDALINVDMEIFSVILKNLIDNALKYSNNGTCELFCCKECFTIKNPGKPLAEPIEHYLEAFTREKHNQV

KGMGLGLYIVSEVCKLHNFDLIYFYDDGKHCFKIFFGDKEK

>EAQ72084.2 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQAKQENKECL

DNIYFNYAKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>EAQ73281.2 TonB-dependent receptor, putative, degenerate [Campylobacter jejuni subsp. jejuni 81-176]

MILNIKIIIFKGINLTQIKNMKFKKSLLCFLILSGALLKAEEKYQLNDVVVSASGFEQDLVDAPASISII

TKEELEKKPIKDIGEAIGDIPGVDVTMNKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYDNGFSGSES

GYLPPLSMIERIEVIRGPASTLYGSDAVGGVINIITKKNPDKTEANIEFNTLLQQHSNHYGNAGGFNAYV

ATPLIEDILSISARLKYYDKAASDLKWPTPVWNNGNQRPDNYQIASHSPGAFTSLGFGSRLNWTVDDKNN

IYFDIERYINEISVNSTSSRAIKSERQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGK

VVLPWNLGQYGNLVNTFGARIDYEILKNDQASAGSQIRGKNLDQTTVALYGENEYFIADDLIFTTGLRYI

YSDLFDSEFTPRVYLVYHLNDNIALKGGVSKGYKTPAAKQLTNGYYNYANNNAYFGNPDLKPEESINYEL

GVDFMVFDFAHYSITGFITDFTNQISSEDLTGMQNDINCSNGIVCKRPINLGKTQTKGIEFAFNTKTYNG

FSLNSSYTFMDNRYKDGQKNWFGGDRIENLPRHIAMLKLNYERGKFSSYIKTRARLDAIAKAKGGGNGSL

PWQKYKPFYIVDLGINYKINKQSSLSFAVQNLFDKNFFNPQVTRWDGANPAGYANRYQDYTEGRSFWLSY

KYDF

>EAQ71894.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MMNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTRGEFFKECLDKKYNSGGLNKC

>EAQ73254.2 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQTHSSDNASTEILK

ITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQRQNKELIADIKKLLLKDYDL

NIDGNLSINTKSEFYYFQGRASGELFDFNASISYKDKNLAYKIEDLNIRNITEIFKRVNKRIELPQSLNL

WVAYRAKGEFYHLDYLQGFIDFTKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKLDLNLNKQKLDFVF

NKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFYQKSGKIKSDLELK

IDFHDKGEISYSGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADFNAKFDLQKQQGNF

NTQISRLYFDNGELLDLKNQNAEVKLDYSQNVNISIPQWNLILNFKDGLEANLNNPKILFSFSPLLKKFG

FIDAKNVYYKTLNFEDFNASVNDAYFKNNLLINGQTPYENDSFDIVKNKGIMEIHTQSDTASAKISSDNK

EIHLKNLSYIYKKDSNSSNSTFDISTNTQNISFGGANVALILPDSNKTLAFDRVEADLKGNALDLKGSRG

NAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLSIKGSGLEYFDGQIDFKNTYVKDLRGINQ

LISFIDTVPSLLMFKSPTFNQKGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGLGSANLRLNTVDFS

LELKTLKSASEAISKVPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTPFNLIKNIIQLPAN

LLN

>EAQ72729.2 ribosomal protein L4 [Campylobacter jejuni subsp. jejuni 81-176]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>EAQ72130.2 folC bifunctional protein [Campylobacter jejuni subsp. jejuni 81-176]

MNNIMKVENFLAQKSINYDKIDRFLMFRMYEKYKKYFKNIPIIQLIGTNGKGSTGRYLTQLLENLNYKIG

HYTSPHIFSFNERFYLDGKIANDEELEQAHIRLEEIFKQDLQKLSYFEYATFLAMILFQKCDFIVLEAGV

GGEYDATSVFERRMNIFTRIGFDHIQILGNSLEDIARTKLKVMAPIALISDEQEQNVLNLAKKIAFLKKA

NLQVSSLNPFLKEKFEIYCEKFVLPCFLKHNLKLALKACEILTSQEKTLEALKKLQELNLQGRCQEISPN

FFVDVGHNPMAAKAMLDKFQGEKINLIYNAYLDKDIFQILNTLKPIIDTIQIYKYKSAERKLADDEIYSI

ASKLGIQCKEFVKLEENKKNLVFGSFMLVENFLKEWCGKK

>EAQ72554.2 organic solvent tolerance protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLGTSIALNAAQVDIYALDAKKEGDILTANNDVVIFSDFYFITANKAIYNEKTEDVELFGDVNILRGQNE

RSHSDYAKINLNSNQADFSNFFFSNNNLEVWFQSKTSHLNDKVFESKISAVSSCNVEDPDWEIRFSKGWL

NRETNFVHLYNARLYVKNTPVFYLPYFGFSADTHRQSGLLIPKIVLKSSEGLYYEQPIYIATQENWDLEL

DPQIRTNRGFGLYSILRFLDSPYSTGELNFGAFRENSSYFHDENLKNQTHYGIELKYSRDDLIKSLLSDN

FQEGLWIDATYLNDVDYLNLGSRDYRDLNSLVTSKINYFLADENNFYGAYARYYIDTSKLSNNTTLQEYP

SFQYHRFLNNLFDERLRYSFDASFHNFYRPAGSYANELNLDLPISYHNAFFGDFLHFTFTERFYASFVNY

SNDPERNHEHYFRNTHDFNLYTDLSKAYENFFHTLNLGVNYILPGAKSGKITQDYLEEYDKENEHTSLYA

VQYFYNNEGQKKLKHRISLDYLNKQNEFYELENLLTYYFNENINLNSEVLYSYEQSRFTNVISQIEVNTN

SKFNWMFSHAYQNDEYGKYSFIGTRANYIATPNYNLFGGIWFDTQRAHTNMWELGYTYQRKCWNYSLMYR

ERIDPQLTSGGITAKNQSGIYFIFNFYPLGGVKYDFSLAESENKI

>EAQ72187.2 integral membrane protein, MarC family [Campylobacter jejuni subsp. jejuni 81-176]

MGSELYLMFFAAITLLAILNPFGNLTQFLAMSDGLPLMLRKKLFRTILYTAFTIVLVFLLSGPLFMNYIF

RVSLDDLRVSGGLVLIIMAIKNLLFSTKIATKDFSSYQDMDDKEILRQSLIPMAFPMLVGPGTLASVIVI

AEDGGLDVALGGVMIAFIFMFILFHFAATIEKIVGKLILHVFSRIAQVFIAAMGFKMIIVGLKDIFNL

>EAQ72812.2 RelA/SpoT family protein [Campylobacter jejuni subsp. jejuni 81-176]

MLEQLIDNVKNCKDLEAAKALLFEICGHDAILEKAVDYCIFCHEGQFRKSGEPYAVHPILVATLVGFLSE

NKSNILAALLHDVIEDTNCTEEELREQFGSEVLKLVLGLTKIIEIREDNLISSKSKKSLTKSALTFRNML

LASIEDVGVLIVKLCDRLHNMLTLDILREDKQKRISEETLVVYAPIAHRLGISSIKNYLEDLSFKYLMPD

EYKLIDNYINSNNQEMQLGLNEFISKIELLFLSNGFRQGSFEIQKRIKHSYSIYLKMQRKGIGIEEVLDL

LGVRILVEKVSDCYLALGILHTHFNPLVSRFKDYIALPKQNGYQTIHTTLFDAKSIIEAQIRTFDMHKIA

EFGIAAHWKYKEDGSVVAPRLDWLTDISMQSINNLENAEDYNAIELYEYAKDSLYVEDVAVYSPKGEIFT

LPRGATVLDFAYEVHTKVGLHAKSAYVNRIKVPLLTELKNGDIVRVVTSNDKFYRCSWIDSVKTGKAKAS

IREFCKQKIREINLASSINMLSFIFGVDKNRIETWIEKENLARRIRQVATDSAYLKDIVNGLKKYAKKSY

WFDKYEIKEQKIGNFTLYCNHKIANVDFDFCCHPKRGDAVLAFVKGGNAIVHHKLCDRADKMIDNNQDMV

FIKWDSNIPKSYKLIFSLENKKGVLAEFLAFLAKMQINLLTINLSSDLNSAVDYFEITIEFPDNINPDSV

KDRLKSRCKILDFTSLNDAYKEG

>EAQ73078.2 nicotinate phosphoribosyltransferase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAEDI

EFLRKQGIFDTEFLDFLANFKFKGEIYAMREGEVIFPNEPLLCIKATTIEAQLLETFLLLSLNHQSLIAT

KTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFEN

ELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQKGGVRIDSGNLLKLSLKIRQELDQAGL

QKCKIIVSNALDEWSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNEK

STLPHFKKLFRVYDKNTQKILFDELYVFDENPNQDENLERKELLKLVYKEKRLLKKSSLNTMQDYTKEQI

SKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>EAQ73206.2 TOBE domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MLDLHSLQDLKIGTKIQVLFKEHELGFALPHSILSVENSFLARIKSIKKGKILYHIFFDFEGDEISSIIA

KEKALELKLEEGQEWLCFVKENDIILKAIYG

>EAQ72655.2 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKVMPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDD

QKDYFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSE

KIYKEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFY

TTNFSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYK

NLANLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFL

KQNNINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSK

SQILECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLD

IINDMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKP

CINCANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNK

VYKIDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYR

ILKKFLFHRKEFFRDRKNKNKEKPYV

>EAQ72638.2 cytochrome c-type protein nrfH [Campylobacter jejuni subsp. jejuni 81-176]

MIILRRKILKKTSNLFTIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGPHSQ

KVKGEPRATCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFA

QTAINATTNPHADKSLNCASCHKDVGHKHGI

>EAQ72135.2 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MIIFYIGPILFLNSLFTFLPTFYAQYAGFSKELADFAKKEIPALANFAIIFGPYLGLFFKRKNISFKIML

LSGGACIFICGFCMLFLQNLVLIQIFAVLSGIFYSMWFPFFFNLPSELKNSNPNQTAYIMSAFWSITFVI

LSFNLWVVSWSVDKTHSFTLGFVYIFALIFISAILAQFVLPRRENFIQGEK

>EAQ71906.2 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKFIILSTLVLAFILVLLGIIFNNYSSSKDNKELINIVQQLEISDEKINSVFQNSFNFINYDPSVQAIK

KMQENFTKLKTFGIDINKAEEIFNAKLIQLNYFKSANSIAVNSKLYLFELAKNYFEELEQNHETNKNNYK

TMSSMLSVLSTENILQKTTLNQLNNLMKEIKNDTKSENLQLFLKHYNMIVKQISIMQDNSSIYENNSLMK

ELKQLNTFTQNTIEQSNLFKFYIALAVFGITLVLFVFFILLTLKKVIMPIHTLEKLSANLASKEANLHSR

LNIEPKSELGQSAQYINSFISTVQNSIIEAIENAKSSHQNSQKLKNNSMMLENSSNSQHEQIQGVKEITH

VLDDHINLAGNLAQESIENMQDMHILMDKVELTLSELVNLINENNEKEQNIVANMDNLTQSADNIIEITN

SIKDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVGQLADKTSKSLLNINATVNTIVQQINDNKALMD

LIHDSMKETSSKTNDLQQELVNSMHKLESSIESTQTMKDKSMEVKDKMLILGTNIDKVNELANSVKDLSC

EINNISQNVLNGASKLSEKLSSFQ

>EAQ73481.1 hydrogenase accessory protein HypB [Campylobacter jejuni subsp. jejuni 81-176]

MCKDCGCSINSSHTHDHHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEANTLCINLMSSPG

SGKTTLLESTIKALKNELKIAVIEGDLETNNDAIRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDD

VDLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADIVLITKADLAHHFDFDVKEAT

RLIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>EAQ73480.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSDDVLYLVFIIVLLIAMLAYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGVKDDSEEDEDYKTSL

LKEEIMIELDKQISSKITPVLRTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLRIGTGNVELVLKFKKLIK

>EAQ73479.1 conserved hypothetical protein TIGR00701 [Campylobacter jejuni subsp. jejuni 81-176]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEIVKIQERKLYFYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>EAQ73478.1 phosphate ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDEEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>EAQ73477.1 ribosomal protein L32 [Campylobacter jejuni subsp. jejuni 81-176]

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>EAQ73476.1 Di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176]

MSKNVKNLDTSFFGHPKPLLSLSLTELWERFSFYGIRPLLYLFMIASFEKSGMNLKPEEASAIMGIFASC

LYLAALPGGWLADNYLGQKRAILLGALTIAFGHLCIAFSYFNNKMIFVGMVFLVIGTGLFKTCASVMVGM

LYKKMMQGVTLVLLFFICALILVLL

>EAQ73475.1 ribosomal RNA small subunit methyltransferase C [Campylobacter jejuni subsp. jejuni 81-176]

MSDLITLAQLSQGYRYNSDSLILADFILKQGIKGAVFDVGAGCGIIGILLKKNIANLSLSLIDIQKENIK

LIEKNLKSNQIQGDIFYDDFNQFQSIKKFDFIVCNPPFYRQGAYKSEDQHKAISKFQEFLPLHSFLTKAN

SMLKPNGTLYFCYEALALDEICFILKDMKMKITKLCFVHTHQNKKARLVLIQVKKGSKSPCEILPPFFVY

ENEILSKQMQEIHLRFRLKSYDI

>EAQ73474.1 putative oxygen-independent coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFQALKEDIVFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKVGFKNINLDLIYDTKLDNKKMLEFELLHLKQIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LMKFFIKQLLELNFFQYEISNFSKTKAQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>EAQ73473.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>EAQ73471.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MENLSKKECLRIEIDKGLENSLKELEDLMEKLPEQQTQTLFEQCTKNAMDAVTGHFGLASTILNAKDGGN

VTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKIVRSEYTGEEMERGAGKNKAQLD

HVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRDLMEWGKEIDLKTGKTNFEKYGI

DEKKLKKFTIQPNQT

>EAQ73469.1 putative Sec-independent protein translocase protein TatB homolog [Campylobacter jejuni subsp. jejuni 81-176]

MSFGEIIVILVVAILVLGPDKLPEAIVQIAKILKAVKRNIDDAKSSIEKEIRINDLKEEAKKYKDEFSST

NENIRKKLSFEEFDDLKRDILDKTKVDLTFDSRDDNTKNNLSGQNLNTEEKPNLSKLETQDKTEK

>EAQ73468.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. jejuni 81-176]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWQYILTAIGVCISFTCFLKACERLEVSITYSVFVGI

GTIGVVLNEMFIFNEAVSIIKLVLIAILLLSIIALKWVSKEA

>EAQ73467.1 saccharopine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKNLLIIGAGGVSRVTTVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDADDSNAVVE

LIKKTEAQILLNVALPYQDLSLMDACIKARIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGVTNVFCAYAQQNLFDEISYIDILDCNAGDHGYAFATNFNPEINLREVSAKGRYWENGKWIETQPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEECYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPSLGE

>EAQ73465.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MQEYKKNRVSKVAFAYCMALLFMIIFISSTFFLTSKRHIPNTEKDQYALALRGSIITKDNFTITSSKQIY

RAEIDLRSINKDKFDLFLKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKL

YIQGFFKAFTNNSGRVETRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYDE

CLSPVQNEKIQGLKDIGGNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVM

ESKTGRILALASSRRYDPQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSY

KLGRFTIKDDHKMDKMTMEEVIRYSSNIGMIQIAKRLNNIEIVSGLKIFKFGEKSGIDLPYEQKGEIPNP

KRLRDIEKSVLSYGYGLKTTFMQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAA

KTMQNVLINVIEKGTGKKAITQGIIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHP

TKPYSYYAAQSALPMFKDVVDILINEEFLTPIQDNNQTSTNN

>EAQ73464.1 inosine-uridine preferring nucleoside hydrolase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MRLILDTDIGNAIAGANTDDGLALALILSSKEIKLEMLSTVCGNVPSLVAYSVAKDLFKRLNLNIPVYLG

ANEALKEPSKAWRQRLDESVKNFKLEYLWENIKSPEILENINPDAIFKMGELVSKNPKEISICAIGPLTN

IAMTMKIFKDFDINLKELFIMGGSFDMPYYTKDTNFGFDPEAASIVLNSRAKITLIPYNATMQTLLTHED

LKELQGKNILCDFIVETLGVWIDYASKTRGTKGTWMHDALTIAYALDSSIADFDECYADVICDSSLARGM

SWRCFKEPKMSMGVDLSTKNCVKILKNVDNAKLLKLIKERFLKGVCYENYESITT

>EAQ73463.1 GTP-binding protein engA [Campylobacter jejuni subsp. jejuni 81-176]

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>EAQ73462.1 phosphoribosylformylglycinamidine synthase I [Campylobacter jejuni subsp. jejuni 81-176]

MKVAIIRFPGTNCEIDTAYAFEKLGVKTQIVWHEEKEFDADLVVLPGGFSYGDYLRCAAIAKLAPAMQGV

FNHAKKGGYILGICNGFQILLESGLLKGAMKHNNNLSFISKNQSLRVVSNDNAFLKNFKKDEIISLPIAH

GEGNYYADETTLKELQDKDLITLKYEPNPNGSVFDIAGICDENKKIFGLMPHPERACEKILGNDVGLKML

KGFLF

>EAQ73461.1 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVNKDNYERYFLLKEFQELCKKIDLRVDIFSMQ

NAQICILNLFKSGFISKQDLLKALKILEKISKNTEIFDFILQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKSRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLKNNISIVDTPGLDDVVVQREIVTNEYLRESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIVLTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQEFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLKEAQDEISNSIAKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNLSRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGISKNIDSIFQSEKFALLRLKIEKLSNL

KSDLYELETNLDTVIFDTFKEFKMSEILNSLNINGAFFEFLNDKLKHYEKNQKSKLESLEKVLQSLKNQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>EAQ73460.1 two-component regulator [Campylobacter jejuni subsp. jejuni 81-176]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTIKHKS

PRTSVMIMSSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIEDLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>EAQ73459.1 phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFLMPKFITWAKNKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLSCIKFDNIFAISALLCLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLTQIIAGLICI

LPLYFSSELSTELFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>EAQ73458.1 integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFFIVYLLKRSKAHKEGGHFWL

LVFRGVVGTLSLYMFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQ

PWAHNLNHSGFDLKNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQ

HLDSLHLDFILAPFVMPSLTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIIL

GDSLPSAMVFLGIIGIIFGGLILVKNKGKK

>EAQ73457.1 polyphosphate kinase 2 [Campylobacter jejuni subsp. jejuni 81-176]

MQENNSPKTQAVVKKNEIYVSVKRKKSTIEYEKDLKNLQIELLKFQNHVKAKGLKVLILIEGRDAAGKGG

AIKRLIEHLNPRGCRVVALEKPSDVEKTQWYFQRYIAHLPSAGEIVIFDRSWYNRAGVEPVMGFCTPQQH

KDFLREVPLFENMISNSDIIFF

>EAQ73456.1 DNA modification methylase [Campylobacter jejuni subsp. jejuni 81-176]

MKENPSFLKEQIITYLGNKRALLSFLNNGFKVAKKELGKDKFSFCDIFSGSGVVSRFAKAHSNYILANDL

EDYSKLINECYLANKDKDLLQNIKKYYKNLIQNLDFQKGFISELYAPKDDDDIKKNERVFYTFKNALYLD

TIRQKIENEIPKELRHFFIAPLIYEASVHSNTSGVFKGFYKGKDGIGKFGGEGQNALKRIKGEIELKIPI

FSNFSCEFEVMQKDANMLAKELDFFDVVYLDPPYNQHPYSSNYFMLNLIANYKKPEEISKISGIPKDWNR

STFNKSKFAQDALFELINDLKARVILLSYNCEGFVKKEIFLKRLSTLGKCRILEQKYNTFRASRNLKNRN

IHLHEQLYILVKN

>EAQ73455.1 putative transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176]

MPIKKENGRYVLESFALGKLSFKDIQNFATLSGIAELYPKLDQGFIVDLLSHRVNKVLMVKNEGFQKVDY

ELFKDLSVAILKHNVLNFFYKEKERQIKPYKLVNYKGIWYLLGDESDKLKHFNLDKISKLRTKNENFIPN

EKLEKQIQNDPNIWLGESKEVILKLDKNAKEYFFRKEILSNYQIIDEDETSYTLSTQVSYEDEILHLVKQ

WIPYMKILAPIELKTRLEDILKSYLNNLSK

>EAQ73454.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MCQEKHTHTHSQKHLKAVCNRLSRTIGHLSAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAIEENDIQSIEELNKAIDMFMK

>EAQ73453.1 flagellar M-ring protein FliF [Campylobacter jejuni subsp. jejuni 81-176]

MDFKNMLHQIGQLYQNLTRKQRIVIAASIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQVYRQRMFIASEGLIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRVQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

TKKQFATVLRTSAAVTIDGKYQDVVDENGDVKSEYVPLTKEELASVESIVKNTINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAARKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>EAQ73452.1 glycerol-3-phosphate transporter [Campylobacter jejuni subsp. jejuni 81-176]

MRTWSLSGVFIGYMGYYLVRNNITLANWYPKKERGIYTAVWNISHNIGGGIVAPIVSLSGFALAALLGVS

MANFNETYWHMNHFYTPAACAVIISLYALYAVKGNPKNEGLVDITEINEMRGIKTEEIKAIETPNLSSFE

IFYHYVLKNKNAWYVAWMDTFVYMVRFGLISWLPIYLLETKGFNKEQIGIAFWLFEWAAIPSTLLAGYIS

DKIFKGYRMPPAIGAIVIIFFMIIGYFTSNNLYMVIFFAAMAGCLVYIPQFLASMQTMEVVPAFAVESCV

GLHGFMSYVVGASLGTKA

>EAQ73451.1 ATP-dependent DNA helicase recG [Campylobacter jejuni subsp. jejuni 81-176]

MKIKESDFEFFKKLKIRSAIDLALLLPKKIENLNPSKNPKENEICTQKITIKSVSSRKNQLFGLGFCEEW

QENISFVFFHPRAWHFGICKVGKELIFNAKLSHFNHTWQFNNPKILTSFEGFSPKYQILGLKDTKIAAFI

HKYLNYVNLKESGIEDKYIHFLLNLHAYDEKSFFMFENLQNFSKDLKYIEIYNFLKRLKAKKTHFKAHQI

NVFNIANWLKDLPFSLTKDQLNALKDIEKDLHSKEAKRRVIMGDVGCGKTLVLLGAALMVYPKQAILMAP

TSILAYQLYEEAKKFLPDFMNILFIKGGKKEKDLEQNIQKANLVIGTHALIHLESHNAVLVMIDEQHRFG

SAQREKIHSLNKQEFTPHFIQFSATPIPRTLSMIQSELLNFSFIKQMPFEKDITTYCIQNEGFSKLSEKI

KEEIVKNHQIIIIYPLVSASDKIPYLSLEQAKEYWQSHYEKVFVTHGKDKQKDEILERFRDEGNILLSTT

VVEVGISLPRLSMIVIVGAERLGLATLHQLRGRVGRVGLKSTCYLYTKLKEIPSRLKEFASTLDGFKIAE

LDLKNRLSGDLLDGFMQHGNEFKFFDFSKDEEILQKVKKDLAKKLPN

>EAQ73450.1 N-(5'phosphoribosyl)anthranilate isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MLKLKICGIKDEKNAKDLAFLNIDFFGLIFAKSPRRVSLEQARNLSAIFHEKDKKVVGVFVDENLEQILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVENSLDLKSEIFANLVLFDAKGILKGGNGISFDW

TLLGSYTKDFALAGGIGLDNIHKAVQTGAKILDLNSKLEDEKGLKDINKIKQILKELKK

>EAQ73449.1 OstA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNRKPIRY

EAMQNARFKIVLKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDK

>EAQ73448.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALNEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHFTAYKTKTPGHLHLYIHKGHTALNEGYSLA

SKLSMMFASKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHM

>EAQ73446.1 acetylglutamate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>EAQ73445.1 penicillin-binding protein 2 [Campylobacter jejuni subsp. jejuni 81-176]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKIEFLPPVRGQITDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELTNLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLLEGNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSVVKMGVGLSFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKHAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPHFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDKNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>EAQ73443.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MFNFYAGAYNNGEVNYNTLNIELKHPLEIANNFLGYNQHSFYGDFATKGVNHNTINIKNDLTTTDLSQSY

KDALNIVAARTLEGSADYNKVYINNSMSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTV

LTEAKEASYNTINYNNVQSITDASNTDKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYN

KIIINDTLFGVASDKREGILSIIAGLSNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNT

LYRREFKYI

>EAQ73442.1 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MLSEVEFAEFQKENFSLLIDARSPREFLHSHLIGALNFYALNDEEYQEIGTIYKKNQALAKARGASYICQ

NTAKHILKITQNFRIGEKVGIYCSRGGLRSKSIAVILSELGFRVVRLKGGFKAYRTFVTHYFENEINFDF

FTLCGNTGCGKTELLEQLPQAINLEKIANHLGSSFGDILGKQPTQKAFEAELFHNMQNLENFAFIESESR

KIGDIILPLKFYEKMQKAFKIYCFCSLENRVKRIQKIYQEKMTPLKFQQCVQKISPYISLNLRQDLLQSY

ERKEWQKLIVMLLEYYDKTYKKPDKIDLELNTDDILKAKEEILRYFKLKNYILI

>EAQ73441.1 pantoate--beta-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>EAQ73440.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKLEKSIIFPLCFNILFSSIMKNYKYFKLFIVKYALF

>EAQ73439.1 glutamyl-tRNA(Gln) amidotransferase, C subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFVVPKIIE

>EAQ73438.1 conserved hypothetical protein TIGR00250 [Campylobacter jejuni subsp. jejuni 81-176]

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>EAQ73437.1 ribosome recycling factor [Campylobacter jejuni subsp. jejuni 81-176]

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKVNIHILDHITVDYYGTQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDTYTTKIDESVKSKESELLKV

>EAQ73436.1 predicted membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MEINALTITTLYIIGISAEGMTGALAAGRHKMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIIAGAIYYSLIIWLELNALVCTLLTLFIGVFARLLAIKYQWSLPIFSYNEEK

>EAQ73435.1 P-protein [Campylobacter jejuni subsp. jejuni 81-176]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGAIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALANIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFAGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>EAQ73434.1 glutamyl-tRNA reductase [Campylobacter jejuni subsp. jejuni 81-176]

MYYCISFTHKNTDIALREKLSFSNEAKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNNFCGVHLSRAV

HSAFKCAAKVRNETQISKNSISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLVEELSYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHTPTVNLKHLQGKMQSDTVINAMRYVFDLQNNLEGLNQYK

CEFDMENNDEIY

>EAQ73433.1 diacylglycerol kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKPKYHFLNNARYALEGLFALFKNEMAFRIELCIIIPAIVFSFFLKVSFLEHLLLISVLILILIVEALNS

AIEACVDLITNKWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>EAQ73432.1 inner membrane metabolite transport protein ydfJ [Campylobacter jejuni subsp. jejuni 81-176]

MLGEYAPSKRRGLVSSVIALGSNSGTLLASFVWLLMVQMDEASFKEWGWRVPFMGSILIALFAVYIRFHV

KETPVFEKQKNEMMKLRLNNEKHMKKDERSFWQRSRAFWTMVGLRIGENGPSYLAQGFIVGYVTKILLLD

KSVATTAVMIASLVGFLVIPLAGYLSDKFGRCITYRMFCLLLMIYAFPAFMLLDSKNEIIVILTIIVGMS

LASLGIFGVQAAWGVELFGVKNRYTKMAFAKELGSILSGGTAPMVASALLAYYGTWWPIATYFVLTAGIG

FVTTFFAPETRGRDLNKIEDAI

>EAQ73431.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKTSNTFSIIEHQAFSKEDLKEIFKEKAEGFYKELEDFAKNNENLLGFKNKNTLKAKNYVGIIQTKSGVL

EILPKCTNLDSYKKEDSSSNHDKEKLKRYYELDNISKNNDFYEQDFKFNPKNLLINMLKTLKNFPFKNHK

FHLCKVLKFLYLKCLSLCF

>EAQ73430.1 preprotein translocase, SecE subunit [Campylobacter jejuni subsp. jejuni 81-176]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>EAQ73429.1 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>EAQ73426.1 catpA [Campylobacter jejuni subsp. jejuni 81-176]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSTLQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFAGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIAHAISPDTGSMHLGATIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIALGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>EAQ73425.1 flagellar basal-body rod protein FlgB [Campylobacter jejuni subsp. jejuni 81-176]

MINPFKSKELVTGALAGRNLRNQLINANLANVDTPFYKARDIEFETALVNRANEIFKKNDNKELQLAVTE

EGHQKPWKFPDPSKSTIYLRDGHLARNDANTVDLDVETTEMSKNTVMITALDGVLRRQSNIFSSILDASS

KLS

>EAQ73424.1 homoserine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKVAILGYGTVGSAVVKFLLENDKLIRARCGQSITPVIALARSPKKNALIPITHSVEEILNADVDVFVEL

MGGVDEAFKIVSEILKKKKAVVTANKAMLAYHRYELENLAKNLAFGYEASVAGGIPIIKVLKEGLSANNI

LAIKGILNGTSNYILSSMSQKNMSFEQALQIAQNLGYAEADPTFDIEGQDAAHKLLVLSSIAYNLKAKPE

DILIEGISEIGPEDMYFANEFEFTIKLLGIAKVRENKVELRVHPTMIDKEKMLAKVDGVMNAISINGDLL

GESLYYGVGAGGEATASAVISDLMDIARDQVKAPMLGFVNTLEYELLSKDEIYTKYYLRVKVEDKIGVLS

KITQLMSENNISIDSFLQKPKKNDENYSTLFFTTHLTYEKSIQNLLEILRKQDFIKTKPFMMRIE

>EAQ73423.1 putative helix-turn-helix motif protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFENLIREILGKKRFELLKFLCENADENGFIMIKISDLEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGGKNDT

>EAQ73422.1 phosphate ABC transporter, permease protein PstC [Campylobacter jejuni subsp. jejuni 81-176]

MLKEKIIKFALFLCAFVSVIVSFAIMLTILIEALKFFQKESVVTFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGIQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACLLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FVITLIINMFSVYLINRFHKRKNL

>EAQ73421.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLG

>EAQ73420.1 GTP cyclohydrolase I [Campylobacter jejuni subsp. jejuni 81-176]

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVI

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>EAQ73419.1 chemotaxis protein motA [Campylobacter jejuni subsp. jejuni 81-176]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGKKLKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPRISQFDKG

>EAQ73418.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>EAQ73417.1 DNA repair protein recN [Campylobacter jejuni subsp. jejuni 81-176]

MINRIFMKENLGFKKAELEISKGLTVFTGLSGAGKSVLFKGILSAFSLSESEAKIVEIELDDKLDLESFG

IESEEENVFKLLKEKNTKYFINNQSIAKKSLQNLSKTFIKYLSAKENNEFGNEKFLNLLDALEMQENTNF

ISFLEDFKKDFNAYSQISNELNAILEEEKKVEELKELARVQIEKISSINPKIGEYEELLILKKKLSKKDK

LEEAWSKAERIFELEKVVIEALNLSEVDASFFSECLNELRVICENQKMEDLDFDVETLLDRIENLSYLIK

RYESIENALEVLKQKKHELEHYENLSFEKKELEKKFQELKQKLEEKAQILTQTRKKNLKKLEKCLNNYLK

DLYMKDASLTLKENEKISILGKDEMMLDINLAHLKNLSSGELNRLRLAFIATECKILNAGKGILFLDEID

ANLSGKEAMSIAKVLEELSKFYQIFAISHLPQLSSKAHNHFLVEKNGEESKVKKLDQEERIKELARMVSG

ELVSDEAIEFAKTLFKD

>EAQ73416.1 amino acid ABC transporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. jejuni 81-176]

MLEFLNTDTLLRLWQGLFVTLEISFISIIITSIGGLFLGILMSFKNTYIYAFCRLGLEFVRVMPLLVWLF

VVYFGFPRWFGWDLSSVSAAIIVFSIWGCFEMMDLVRVSLQSIPKHQYESASSLGLNTVQSFVYIIIPQA

MRRLTPMSMNLLTRMIKSTTFAYLIGAVELVKVGQQIIEFHNRNDFAPFIIYGLIFFIFFILCYPITLYS

RKLEKKWS

>EAQ73415.1 inositol monophosphatase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KASPKQMILDPLDGSSNFVSKIPFYGTSIALMEKDQAKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFSKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFVLILGKTRIFDTAAALAIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>EAQ73414.1 dihydroorotase, homodimeric type [Campylobacter jejuni subsp. jejuni 81-176]

MILKNPLDMHLHLRDNQMLELIAPLSVRDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLYSAKDEIFGIKLYPVGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKHFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLIITLDDVIGGKMNPHLFCKP

IAKRYEDKEALCELAFSGYEKVMFGSDSAPHPRDTKECCGCAAGIFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMAGEILKFQLKH

>EAQ73413.1 putative ATP [Campylobacter jejuni subsp. jejuni 81-176]

MKKISCNFFLSDYANLFVAKVVKISKNVDESLIPSYYKEKNLEVEDFFIISDLRELVREDFSLLRDKFLA

NFITPNDHTYAIYGNNYTYPLPVRLKEECSYFLGDEKHYLSVYKSKEYLAMQENFIRFVFGKRIFYLLHP

DSISNIIHAELELLQSENDLLNDFTSIVVKYSKTLEYEIYAFAKKVLLKACMKDPSLYDLTYNVQGKSFI

LKDFFTQKPNLGSIKFLLRHENIQCHLGKSLTQFINYPFSKSLTLIQEIRNEAVHAKAPSLNEVKKLRNE

ILGIEGVSLLKSILTHKEIS

>EAQ73412.1 tail-specific protease precursor [Campylobacter jejuni subsp. jejuni 81-176]

MMELILKTKRFFAGLAGFATTFILCLFLTSHLQAKVDQKEEQVQKRLEALDKLTKTLAIIEQYYVDDQNI

SDLVDKSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVGMKDGALTVVSPIEGTPADKAGIKS

GDIILKINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENIL

YLRVTNFDKNVVDVASKELKKYPNVRGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRITSENQEY

KADPKNKISDVSLAVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSVQQIIPINKTEALRLTIARY

YLPSGRTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKKEDKQENKDNKNLISQK

QINDDAQLKSAIDTIKILNIKQGQ

>EAQ73411.1 sodium-dependent transporter [Campylobacter jejuni subsp. jejuni 81-176]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLGNFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIINYIILKRGIIDGIEKSVKFLMPLLFICLIIVVGRNLTLDGAMAGVKFYLEPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFVLLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>EAQ73410.1 putative ATP [Campylobacter jejuni subsp. jejuni 81-176]

MNHLLILYNPYYQEDVIKQHLSILQEKSQVAFGKIKSKLNDQEKQNSLEEIYQSTNEENFLQLFFKRLC

>EAQ73408.1 SMF family protein [Campylobacter jejuni subsp. jejuni 81-176]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCVVS

GGALGVDITASIAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYLPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELNKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>EAQ73407.1 translation initiation factor IF-3 [Campylobacter jejuni subsp. jejuni 81-176]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>EAQ73406.1 carbamoyl-phosphate synthase, large subunit [Campylobacter jejuni subsp. jejuni 81-176]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGTQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAADEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQVMRNASFAILREIGVDTGGS

NVQFAINSKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFGAKIIGTSARVIDVAEDRKKFAEFITKLGINQPKNSTATSVE

EAVLKASDIGYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKIAAEYV

KLGFKLMATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIR

FKIPYFTNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKS

>EAQ73405.1 phosphoribosylformylglycinamidine synthase, purS protein [Campylobacter jejuni subsp. jejuni 81-176]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNSV

IEDYELVIEKE

>EAQ73404.1 hypothetical aminotransferase yfdZ [Campylobacter jejuni subsp. jejuni 81-176]

MFDEIRFNTIERLPNYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLAYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPESKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQATRNIKKYLKE

>EAQ73403.1 excinuclease ABC, A subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVSEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKIIDENLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFMQLSEEQKRL

VLYGNAKTIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAVKVAKKGL

GEILDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQR

IRIASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKA

GKFGGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRTQKEWLELKNVNINNIQDLSVKFPLQNLVAI

TGVSGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGAM

DEIRNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCEGKRYNDATLEI

KYKGKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSD

TGKTLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGIKGGKVIST

GSVEKVAKEHKKTRSYTGYYLDLELKNTQKS

>EAQ73402.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MRRNLSAYKAKFNGAYVFLGFFFLIYQILGSTFIYAPLLYGIFFCYMFCLLEERERTFSKLDFRWYFSLF

FLFFTDITYNFFIFSSWLAFFIFYYLCADWIKTNLKIGKFIPVVFVLCAYGIILFLDMILSYIGDEKIKI

LGWAYIVSVFIECCLAYVFFKGKI

>EAQ73401.1 foldase protein prsA precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>EAQ73400.1 zinc transporter ZupT [Campylobacter jejuni subsp. jejuni 81-176]

MQFTFEQIFIAMLLTLFAGFSTAIGSIIAFFSRKDDLRVLSLGLGFSAGVMIYISFMEILPTALKDFKNH

YDSHWAELLGLACFFGGILISLLIDKLIPEDVNPHEPKEDLSELKICPLPQKGQNPPKFHPGEKLHQINT

KALKRTGIFTALAIAIHNFPEGFATFISSLDNLTLGIAIAIAVAIHNIPEGLAVSLPIYHATGDKKKAFI

YSALSGFAEPLGAFVGALILLPFIGDLTLAISFAVIAGIMVFISLDELLPAAKTYDKAHDSLYGLIAGMA

IMALSLNLLGQ

>EAQ73399.1 UPF0141 protein yjdB [Campylobacter jejuni subsp. jejuni 81-176]

MLRLTWFQFTFFNSLMIVLLNFNLFYFVYEKNTQNWFITFVFIVAYFALVHVICSLLFIKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVKDLLNLKLILFIVLALLLVFYVVKVKIDYYGSFKSH

IKIKIINIISGLIVVCAVLIPLSKTFLPFFRNYNEIRMYNTPFYQIYAVYRYYVRFVKAKPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGVCDRLAYKQKLSSDLDENLLIPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDEKLMNLAKEHKGLKLSQDNLFSTLLGYF

NVKTSVYEPEYDLLNPKLKANP

>EAQ73398.1 beta-ketoacyl-acyl carrier protein synthase II [Campylobacter jejuni subsp. jejuni 81-176]

MKRVVVTGIGMINALGLDKESSFKAICNGESGVNKITLFDATDFPVQIAAEVKNFDPLEVVDGKEVKKID

RFIQLGIKAAREAMQDAGFNEELDKEEFGIVSAAGIGGLPNIEKNSIICSERGPRKISPFFIPSALVNML

GGLISIEHGLKGPNISCVTACAAGTHAIGEAYKSIALGNAKKMLVIGAEAAICPVGIGGFASMKALSTRN

EDPQHASRPFDKERDGFVMGEGAGALVFEEYEEAKKRGATIYAELIGFGESADAHHITSPTLDGPLRAMK

KALNMAGNPKVDYINAHGTSTPVNDKNETAAIKELFGNNIPLISSTKGQTGHCLGAAGAIEAVVSVMALR

DGVVPPTINQLVKDDECDLDYVPNISRKVDLKVVMSNSFGFGGTNGCVVFKKVD

>EAQ73396.1 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>EAQ73395.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MNHDKQPLAYNSVLFADFLGGKTEQGQALDNTINIKRY

>EAQ73394.1 thiamine biosynthesis protein ThiC [Campylobacter jejuni subsp. jejuni 81-176]

MKTQMNYAKEGIFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQINA

KDFLDVVYHHAKSGVDFMTIHAGINSRAAHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGIQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVIDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLA

>EAQ73393.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYNINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLSRDL

ISKLSSGFSTDNGEFLSQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLRSNSIENFLDRRQKQANINKILNSYMSVMV

>EAQ73392.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MQTKYFKFLAYFSFIISLIYGFYHIIKAFDFVKEAYIYTGIFALIFLNLSLLFSLLKFKKTKNYPKILGI

FAAFWAILHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCL

VLASYHYFLTPKIPMFWEWSALIIALFYFIVRYTKTLKKLKSNNLTFIKT

>EAQ73391.1 dna polymerase iii delta prime subunit holb [Campylobacter jejuni subsp. jejuni 81-176]

MFISKIIISEDFLGIKEEMINNFGIKKLRFFMPQNEFLLDDARAVEKESYIAETEEKIIVLMADSYRIEA

QNFLLKLLEEPPKNIKFLIVIPSKNLLLPTIKSRLICEKRKVEKEVKKLDLDLKRMDLRMLFDFLQKNEN

LDKNELMDQIALLAKECVKYKDFNAEELEFFYESYELAKLNSKSGVLLATLLLNYYTKK

>EAQ73390.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFIFANQSLYYLTKQAFKEAVQEFYELCNEGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLS

GSSYIRFTKDIEELKEDFKPFKPLFWGDYELINLYNFEGSVEHFIYIGQK

>EAQ73389.1 tRNA-dihydrouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNEMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFISIHGRTRKQLYSGKADYESIASAKASVSIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDEVNRINDAKIMQEKIESFF

>EAQ73388.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLINGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTASSSNNNDSTNFAMPDQEVPAEPTAATSENT

APQASAPKQEVKQTVKPKEEAKKQTAVKKEKESTKQTPKKEQNANDLFKNVDAKPVHPSGLASGIYVQIF

SVSNLDQKSKELASVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>EAQ73387.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVYEIQKNFLLSDCTLLGNLKKDNIPFRNSKFETFYTQITSNHSVKFQSFCNEFYKITKFNNSILEQNQE

EKISKKKFEKARKKIIGKSIKKERFEFKFCSLKSYIDMYEEPKICILKIFFPTLDSSNEFKIPKDFKIQK

ELHHDLNSKHIVLYGFEYQNFDIEKYFKIIEKNQNFSLDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLE

RKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILALKFKDITKKTQDILASENSNQDLLLFLSDEKIQ

DLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKIILFRKNILKNFDLELFENSFFELAIFLEYFYRF

LEIKNLNKLYEKYCKDRDKNIFSKIINNKNKFCKLLKKSSKNLKIYKG

>EAQ73386.1 thiol:disulfide interchange protein dsbD precursor [Campylobacter jejuni subsp. jejuni 81-176]

MRIFGIILLSFCLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKLKLYINEKDISSLINLPQ

SSTRGNENVYYQKLNLALPNLLLEHFAKNTTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKDAFEISKPY

KTQKTDKKTKIESEESSIANFLATDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIVAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGASIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVLGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFGFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFTIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISASKSALSYDYINNFEQLKQEIQTNTKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSENNNEQIKTMKEFNVFGPPVLIFFENGKEKLKITGFISADD

LLKKLEP

>EAQ73385.1 cation ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMALVDS

VVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMVLASFLSMIFCVLGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>EAQ73384.1 Sec-independent protein translocase TatC [Campylobacter jejuni subsp. jejuni 81-176]

MFEELRPHLIELRKRLFISVACIVVMFIVCFALRSYILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

VSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITIGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPAPKDKESDE

>EAQ73383.1 conserved protein YitK [Campylobacter jejuni subsp. jejuni 81-176]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>EAQ73382.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSSVNKQILPASIEARIALYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPVKSHILFYSHFKNAYTRFSLDEESLKQNLKEGFYRS

TKDEMVFVEFWRFNAFFKNKWKNFEDFLKKPLSIQAEVRWRNQVFGAYNLSPVIILEEIFPSRYEVIAKS

EIYHDNQEVLAKI

>EAQ73381.1 transcriptional activator, putative, Baf family [Campylobacter jejuni subsp. jejuni 81-176]

MLLCDIGNSNANFLDDNKYFTLSIDQFLEFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYGVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>EAQ73380.1 UDP-N-acetylmuramoylalanine--D-glutamate ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKISLFGYGKTTRAIAENLVDKFGPFDIYDDHFIETKKDTLGNLLLNPNDFDDNLSDIEIPSPGFPPKHK

LIQKAKNLQSEYDFFYDIMPKSVWISGTNGKTTTTQMATHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFDNYVQDKLSVLKRMNECDVAILPKIYANTPTKAHKIS

YEDEKDLAVKFGIDTEKISFKSPFLLDAIMALAIEKILLDTLSYELLNSFVMEKNKLEELKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKNFNIELYAIGISTEKMLDYAKKANLKA

YKCEVLSKAVNEISNHLRVNEVALLSPACASLDQFNSYAERGKVFKECVNKI

>EAQ73379.1 alginate O-acetyltransferase AlgI [Campylobacter jejuni subsp. jejuni 81-176]

MTYFSLEFSILMIAFFAIYWTFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKREFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYVDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYIYIPLGGNRKGIPRTVANILIAFILSGMWHGNTLAFIVWGLLHGIGIVFIHLLTLSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLEDAIEYFKACYYNFFQIPSYNDIYMLVAFGVLFMIYPLFINFKEYCI

KILNLTPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>EAQ73378.1 fumarate reductase iron-sulfur protein [Campylobacter jejuni subsp. jejuni 81-176]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>EAQ73377.1 8-amino-7-oxononanoate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MSLENILEALEKNHNLRKLTSLKHEGNFVFKEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSS

SSSRSLSGNFTIYEELESFLKSKFKEKEILHFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKL

GGAKFFRFHHNDMNHLENLIQKHYDHYENIIILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSV

GCFDEEGLGLVKALNLEEKVDFIVFTFGKALASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTK

FIFEKMSELKEKREKLQIIGNFFKNQLIEKNHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKE

PTVPKNTARIRFSLHAGLSKEDLKKVIELL

>EAQ73376.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKILEYSITHFCEHILRLRIEAAQDISGELYGASIPIMGKSEGECNFYLFFPKEFLKKIAEILINDEKF

KEDDWCDLTKECANQIIGYAKNLLNDAKGDDEYKLGIPEYLGKVDFSEIVLDEALTYKFENCYFRIGYCK

>EAQ73375.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176]

MATFDDVKAVVVEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>EAQ73374.1 pyrazinamidase/nicotinamidase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>EAQ73373.1 phosphoserine phosphatase SerB [Campylobacter jejuni subsp. jejuni 81-176]

MIKLCVFDFDATLMDGETIDILATAHGKGNQTSEITRHAMAGELDFFESLQKRVSLLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGISLGFANYLHHKNDILTGLVGGEMMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLTMFNESGLKIAFCAKEILRSKADICIDIKDLKEIIKVI

>EAQ73372.1 acid phosphatase SurE [Campylobacter jejuni subsp. jejuni 81-176]

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKIIQNIFDKGFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAA

ANLDFEDEKNSDIALLKKGYATITPIMLDLTAYERMKKVKKWLKANDE

>EAQ73371.1 conserved protein [Campylobacter jejuni subsp. jejuni 81-176]

MFDFLYNDISYLGLFMVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIVATLGNTLGSLSTYALAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSIFAFFTFLPLVGDLFALGLGFAKYSFLKTIFFILLGKLSRYAFI

IFIANSF

>EAQ73370.1 prolyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MMRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEV

NLSFITPASLWQESGRYNVFGKELLRFKDRKKNEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKF

RDEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKE

FMVLAKNGEDDILICENCDYAANVEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKINAFYTI

KAVVKKAIYENESKLVVFFIRGSDDLQEIKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYI

DFELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQK

YSKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEANHDEKGCIWNKTLAPFVLEIIVSNLKDEKALE

FANKLYEDLTNLGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIELIQREDLVKELIKTDEL

MEILKKKVL

>EAQ73369.1 adenylate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>EAQ73368.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRRLSILLTILIVINITACDSKTENYYKNHPSEAKEKAKECKESGTLSEDCINALKVGVKPTNEESKYSP

NTPKKSDNQILETLKQNDLKKEKTTKDINQSSENNESIIIPPITETPSEIYPSKTTENNQSSIFSDDVNI

TQEKLP

>EAQ73367.1 homoserine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>EAQ73366.1 hydrogenase assembly chaperone HypC/HupF [Campylobacter jejuni subsp. jejuni 81-176]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDLGLNEFHR

>EAQ73365.1 permease [Campylobacter jejuni subsp. jejuni 81-176]

MISLDLLYYIVGILFLVFGILSFSNQAKDIKSRISGGVFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAVHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIAV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>EAQ73364.1 protein sbmA [Campylobacter jejuni subsp. jejuni 81-176]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

TTLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>EAQ73363.1 dethiobiotin synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>EAQ73362.1 flagellar protein FliS [Campylobacter jejuni subsp. jejuni 81-176]

MQNNLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKVAIRNEDIEQRVYFVKRTTAIFIELINTLNY

EKGGEVAHYLSGLYTREIQLLSLANLENNEDRINEVINVTKGLLEAWREVHNNETVAQ

>EAQ73361.1 [NiFe] hydrogenase maturation protein HypF [Campylobacter jejuni subsp. jejuni 81-176]

MYHLGYKIKISGLVQGVGFRPLVYELALKSKLFGEVRNDGFGIEIILACTQKECENFIENLKNHLPPLAR

IDQLIITQISILNYENFSITPSLENTKSTPMLSDFALCKECKKEFFDEKNPRFLYPFITCTHCGPRFSII

KSLPYDRFNTSMQELLMCEFCKSEYEDPKNRRFHAQPISCPKCKINVFLKNPKGEILAKDQEAFIQSAKF

LKEGKILAIKGMGGFHLMCDAFNEEALKTLRLRKNRPKKPFALMCKDLQSTKELAFIDEKEEALLGGVLA

PIVILKAKKAFSLIAPDVDKIGIMLAYTPLHLLLFEYFKGNLVATSANLSGESIIKDEFNLRQKLDKVFD

FYLDYDREIINASDDSIAQVVNGKTMFLRTSRGLNPFYLERNFNKKGTFLALGAELKNEFVIFYENKLLI

SPYIGDLKSLDVHERFFKLLEFFKQNYDLKFDAILCDKHPHFSYAKEFEERIKISHHYAHFCAAYFEYEE

NFAKDEKALAFICDGTGYGEDGKIWGGEVFVGNLKEYERIAHFENFTLINSDIKNIQNLALSLIFHYDLE

DKAKEFLAKIPKIELENLKKIYSHSNLQTSSLGRIIDAFGSIVFNLEKSSYEAQVGLMCEAFYDKNLDFS

YKLFVEKGQVNFKNLILGALQDEKTKAITGMFNALANFIIDFSKDYDLKVLLSGGVFQNKTLLEILKAKN

FDFFIPLKYPCNDSSIALGQMVHFLKKE

>EAQ73360.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFFLLVFCFVNLALAQVYKGELYFYHLQDKEIFAIVYDNTPMTPLFDRDKNQTSSSFLIVDDINGNLEI

PLFKTNDFWQDEHKKYKINSSKMLTYDNKNFQGENLGTTTLELVETQDGIRIKRSLDFIGFKDDFKEFHP

VHKGVFSFEQIRQKPIFLQDGKISFEEWYYFYEDGMSRAILELNNFVYDINAHAFVKLNDLYNTKNQKFQ

NLLHEKLKNTCDECFEDLQNLQFNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>EAQ73359.1 DNA/RNA non-specific endonuclease [Campylobacter jejuni subsp. jejuni 81-176]

MKIFIFLLAISLNIFALEPYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEASNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQIAQINNKIWN

EIEQRERNLAFKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYVKIIKTPKFKECYQVPNHEVNNENIKQYQ

INCDKF

>EAQ73358.1 putative outer-membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MIIIDHSNTSDDNNSKTINTKKNTQKDNNNTQKNQPNLSNDNTLKTKTPNSNTPSLKNTSKEESIHKVSF

SFHITNKNINFKDLGLDEQVLQEALNDYKKESISVQDLQDIANIISYYVQVSGYPAATAYIPQQELKDQI

QINITLGVLGKYVVQNNSSVRDYAIESKLPNHKGEIITTKLVEDAVYKVNEMYGIQTLASLKAGDNPGET

DVVIETTPSDSFVSVLFYGDNYGIKESGRYRGGASMSFNNIAHQGDSLNAYLQRSDEAQTNYGISYTTFL

GNLKITPSYSKGNYALGGIWREFDFIGTSENLGVDLKYPLWITTYNSFYLTSSYYHKKLSDSKFDILTFD

KSSDTISFGIEGVYNGISNDSFSYSANVSYGNVKDEGMTIVGIGTSKVGGVEFGKFAKLNVNLNNAYFFN

DTFTHLFSLNYQQVINGATLDSSETISLGGPYGVRAYNNGDGEGDNAVVASFGLRMATPLKDFYITPFYD

IGYSWYENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKKYKLDDDYSSKAYVSFGKYF

>EAQ73357.1 molybdenum ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>EAQ73355.1 phosphate ABC transporter, permease protein PstA [Campylobacter jejuni subsp. jejuni 81-176]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGFPAFKQTYIFVEANRNSPSYDLLSRAEQR

KIRTGQIAEKSWLLANSEVDQYMKQKYNRLSEKQRTLVDDLVQKGEIELKFNSNFFLNGDSKSPENSGIL

SSVIGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>EAQ73354.1 histidinol-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>EAQ73352.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MEGAIKLVIQTIQSIAKSSNSSTQEMNFIRDKSNEFSKIISNLINSGKEISDKLEQRSNVSEDFEKNVNE

LKCYEDVLAKLNQC

>EAQ73351.1 putative oxidoreductase subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQDNIIDRRSFFKLGLLGGSVVAASTIGGGAVLKAAELTHSHQASQGKSNKIRGRMFFQTQTEFDTLSAA

CERIYPKDEQGEGAIGLGVPYFIDNQLASAYGYNDREYMQGPFMEGKAEQGYQTPMQRKDIFLEGVHALE

ENAQKRYKKSFSLLKGGDQDKILSDFEKGKIQTTGFKSSYFFTLLRDMTVAGVLADPIYGGNDNKNGWRM

MQYPGAQMSYVDKIASDEFFNIEPMGLADMES

>EAQ73350.1 flagellar protein export ATPase FliI [Campylobacter jejuni subsp. jejuni 81-176]

MNLEKLRSKLGKENLSAIFGEITKISATSIEIRGLKTGVGDIVKLVSNENENLNTLAMVVEIKEQFSYLS

PFSFIEGFKIGDRAFISDAGMQIGVSDELLGRVVDPFMRPKDGKGAIEVSKYMPIMRAPIDAMKRGLIEE

VFPVGVKTIDALLTCGVGQKLGIFAGSGVGKSTLMGMIVKNSKAPIKVVALIGERGREIPEFIQKNLGGK

LDDTVIIVATSDDSALMRKYGAFCAMSVAEYFKEQGKDVLFIMDSVTRFAMAQREIGLALGEPPTTKGYP

PSVLSLLPQLMERTGKEEGKGTITAFFTVLVDGDDMSDPIADQSRSILDGHIVLSRELTDFGIYPPINIQ

NSASRVMSDIISPEHKLWARKFKRLNSLLKENEVLLRIGAYQKGSDKELDEAISKKEFMQKFLGQNPEES

FEFNQTLELLSQIDTPNTPLPPTQNINVGSASATLPNPNLK

>EAQ73349.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKQIAFGSIALTATGYGIKKLYEKLSKPERKFDTHAIVPSCKDMINIEEYKLKRELEVEQKKNQIQEFL

CECMECYSGFSKYFNSKEFLEFEQNFTSKNNHKTEFLLSSYKDQMIKVIDYAKKFECLSAFLETQSEKND

LAVVKMISESMERKTQRFYLQTKFQTFPQYIFPSVWSSPMWGKQWE

>EAQ73347.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKILEQTIKALKLNLKPYDLSMLTRKKSYICAKDQNNILFMYTGKTKFLMKDALFLENLAQQININNKY

FFSMTSLCSKAKNHLEMKGFNIYAAL

>EAQ73346.1 1-acyl-sn-glycerol-3-phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MIYKKIKALYFWIFFVLSVALVIFCFCFTKSQNTLWKIRKIWAKFQRYTISYKQEIIGTFNPQAQMILMN

HQSALDIIALEELYPKNLCWIAKKELGEIPIFKVAMKKPKLLCIDRKNPRDLVRVLKEAKERISEDRVLA

IFPEGTRSKNEKMLKFQSGAKILSEKLNLKVQPILIVDSAKILDTKSFSASSGVLKIICMDLVDTNDEKW

LENTRKKMQELLDQERAKLC

>EAQ73345.1 HAD-superfamily hydrolase, subfamily IIA [Campylobacter jejuni subsp. jejuni 81-176]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYVIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLKPCKVAAFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFVDFASMIELARREVRFIAMHETS

IYKKDGRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRKQNSKIDFEDIKIISDDFRGDLLK

AKELGMKTLLVLSGKISDTKGLDTDLLDGVYPSVFEFLKELKCQI

>EAQ73344.1 4-hydroxybenzoate polyprenyltransferase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MNTFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVGARNFAMATNRLM

DEDIDKDNPRCANRPNVSGKIGRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGKIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHRIVHKNFAHINRAFFTLNGYLS

IIFFIFIWIDLLWN

>EAQ73343.1 major facilitator family transporter [Campylobacter jejuni subsp. jejuni 81-176]

MTNQQIDGIADKNFNTPEGRKVFKKAVFSCWLGTAMEYADFALYGLAAATIFSEVFFPEQTPVIALFLVL

>EAQ73342.1 ribosomal protein S21 [Campylobacter jejuni subsp. jejuni 81-176]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>EAQ73341.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>EAQ73340.1 threonyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFRVESKIGEEDLVKIEKKMKELAEAKIEISKYEITKSEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHAPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLTIIEEAKKRDHR

KLGTELKLFTFDDEIGGGLPIWLSNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKIYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEIATKALKEALNEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTVQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVVKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVHF

>EAQ73339.1 ribonuclease R [Campylobacter jejuni subsp. jejuni 81-176]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKSKYYLNNGFAFGVLDISSKGTGFLQCFDESFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKRANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDIQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLAYCFKIALDHENKVIKEELFEGIINSKRRFNYDEVDEILIQKPDLKE

LSWLYELFEITKNLRKMRLKNAFEFRTEELRMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGVFRNHLSADARKIDKLLNELRELGIDVNFKPNLPELIRDIQALSDELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKNDEKLFNYLLLNIESTCESLSTLEREADKVAF

DFMDRKFARWAAKNIGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIVMAKI

YAKITQRLIKEENV

>EAQ73338.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFLMSSTFTHYSNASYNQTILQKDAHISMGVENTYDLALNGSPYLIGAITTYGDSTNNSLNIKASSSVE

FFTSLPKKDKNGNNTFDERITHLVGGLAYQGNVKNNKIFIKDANMIIHGPSKAYASLAAAHISAGYIIKT

FKPVKTF

>EAQ73337.1 biotin biosynthesis protein BioC [Campylobacter jejuni subsp. jejuni 81-176]

MNFLKAKDYQKHAKVQDLMGLKLCEILKNLEISHFKKVFEFGCGRGEFSDKLSKIITFDEYLKNDILDYP

DNLNVEIFDMNTLATQILSKQKFDLITSNASLQWLDLKQVLPTLANMLNEKGILLLSTFGKMNLKEIKQS

TGLGLKYFSTKELEQIFKPYFSDIKITEEIVNLEFQNALEVFKHLKLSGVNSLGFYRLNKQFLKEFEEKF

QNKLTYHPIFILCKKDTK

>EAQ73335.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>EAQ73334.1 acetyl-CoA carboxylase, carboxyl transferase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYALDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKVMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>EAQ73333.1 putative MCP-domain signal transduction protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSQNFNPQSNITFTILDASLYDKTIHEFIDKKTSQSINAVEALCNYFNCTFEELKNKIQEYTFALKIGE

DYLISPMEINPDKTLFSYCDIESAQELCLLKKTNFIEAIKKIMKNFLLINQNH

>EAQ73332.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLSD

KEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>EAQ73331.1 phosphoribosylaminoimidazole-succinocarboxamide synthase [Campylobacter jejuni subsp. jejuni 81-176]

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>EAQ73330.1 glutamine transport ATP-binding protein glnQ [Campylobacter jejuni subsp. jejuni 81-176]

MSILKIENLQKYYGSHHALKDINLEVKAKEVVVILGPSGCGKSTLLRCINGLEEIASGNIYIDNEKIDKD

FKEWPRMRQKVGMVFQSYELFEHLSVEENILLGPMKVQKRKKDEVLKEAKIWLEKVGLLHKIHAYPRELS

GGQKQRIAIVRSLCMNPELMLFDEVTAALDPEIVREVLEVMLNLAKEGMTMLIVTHEMGFAKAVADKIIF

MDEGKIIEENDPKSFFENPKSERAKKFLNLFDYHK

>EAQ73329.1 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter jejuni subsp. jejuni 81-176]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>EAQ73328.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQVNTFSNIASMAQTQVSNKKADDAKENTKDKNVQSANSSKDVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNAVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSGKNPLDMNTDELQQLVSEDGFFGVENTA

NRIADFVIKGGGDDVEKLKKGLEGMKKGFEQAEKMWGGELPQISQNTIDAALKKVSDRIDELGGKTLDLQ

A

>EAQ73327.1 ubiquinone/menaquinone biosynthesis methyltransferase ubiE [Campylobacter jejuni subsp. jejuni 81-176]

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>EAQ73326.1 chemotaxis protein MotB, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANITNYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGFIRENLSKELQSKLDNNITIDEKTGSISLPAEVLFDKDSYVLKNEAKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKLQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>EAQ73325.1 phosphoribosylglycinamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLVKLAVLFSGNGGNLENILEKLHKKTIGENTYEVVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYNTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESDMKVAGVSVH

WVSEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>EAQ73324.1 iron ABC transporter, periplasmic iron-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLMFLTAFSFLGASELNIYSARHYDADFEIIKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFITADISNLTEAKNLGLLSPVSSKYLEEFIPAHLRDKDKEWFAITKRARIIAYNKNANIDISKMKNYED

LARAEFKGEIVMRSATAPYSKTLLASIIANDGNKEAKAWAKGVLDNLATNPKGGDRDQARQVFAGEAKFA

VMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDAVKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>EAQ73323.1 hypothetical protein CJJ81176\_0247 [Campylobacter jejuni subsp. jejuni 81-176]

MGYRKAYDKFYLELSLEFISGYVGAMDLKGDIASLKRFSYIPLVVKTAFFIGSQN

>EAQ73322.1 bacterioferritin comigratory protein Bcp [Campylobacter jejuni subsp. jejuni 81-176]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSANYDKFGGKNAVIIGIS

PDSVTSHEKFISKFNLKHILLSDSEKEVAKAYRAWGLKKNYGKEYEGIIRSTFVIDETGKIAQIYSNVRV

KDHALKVLESL

>EAQ73321.1 PacB [Campylobacter jejuni subsp. jejuni 81-176]

MSVVRFFFILIIVLGLVVVVMNQSISSYIEQKYHFAFYPHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

EETTNQENKSIDENLSKIDKVLNTLENDENTSHKETNPTLIQDANISFIDNTKLELQNGDEFLFIGDSLM

QGVAIALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFIKNSNIKYLVVLLGANDPWDIKKGGN

YHRFGSLSWIDIYTSRVDEIIKIAKKHKAKVFWFEIPPVKKEDLNKKIQVLNKIYSDEILKNKEIFINTK

LFFSVNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>EAQ73320.1 translation elongation factor P [Campylobacter jejuni subsp. jejuni 81-176]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>EAQ73318.1 tryptophan synthase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>EAQ73317.1 aspartate 1-decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>EAQ73316.1 Di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176]

MCFNFGAFVAPLICGFLQKEYGWHFGFGAGGIGMLLAVIIFYLKTMPDLKEFDEKVGIDSTWDRPSKKSK

NAFYIIIVSGIVLLGAIFLILGGFIKLDAQVINKNIILTILACAGIYFLYLFAFTSLKIEEKRNLIIFIV

LFLAAALFWSVYEQQYTSFNFFAEKLTDKTILNYEIPTIWFQSLGGLFVILFAPFSTFIWTICAKNNKEI

SSIIKFALGLLGAALAFLIMALASNHAISLNGDANTLRENLENSSQIILVSPWWLVSSFLLMVLGELCLS

PVGLSIMTKIAPNLIKSQVMGLWFVASALGNALAGFIGGKASEENIAYLPNLFYQCMWILLGAVIILLIL

KKPINKILKN

>EAQ73315.1 penicillin-binding protein 1A (PBP-1a) (PBP1a) [Campylobacter jejuni subsp. jejuni 81-176]

MKILKYIFSFFTLLFIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYAPYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAALGYFHKNLNELSLKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYNLGWISKADYDTAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPNIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYDEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGGKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGTIKDPQIIRQVQDK

TGKTIMEFNSNERKVSDEAQSFLVLDMMRNVVEKGTGRNARVKDIEIAGKTGTTNKSVDAWFCGLTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPNGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>EAQ73314.1 dehydrogenase subunit precursor [Campylobacter jejuni subsp. jejuni 81-176]

MAEVLKKVDVVTVGAGWTGGIVAAELTKAGLNVLSLERGHMQSTENFNYIHDEWRYGINYGLMQDCSKDT

VTFRHDPSGLALPYRKMGSFLLGNNVGGAGVHWNGWTFRFMPYDFEIQTLSKQRYGNKLGNDYTLQDWGV

TYKDMEPYYDRFEKTCGVSGEPNPLAEKMGAFRSSPYPQEPLENTKMLKRFESAAKSSNLHTYRLPASNS

KGGYTNPDGQDLAPCQYCAYCERFGCEYGAKASPLNTVIPKAMSTGKYTIRTYSNVTQILKKDGKVTGVK

FVDTRTMKEYIQPADIVVLTSYMFNNAKLLMVSSIGEQYDPKTGKGTLGRNYCYQMNMGTTAFFDEQFNT

FMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGTRPIQSAPLPAGAPTWGAEFKKALNYNFTRAI

TVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTDQDRALHKFITDKTAEVAKRMQGVKSIKKGAY

LKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDADNLFVVGAGNFQHNSGYNPTDTVGALAYRCAE

GILKYHKSGKSLA

>EAQ73313.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYDLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFARKDRLNLHDILTQSCIVTKA

>EAQ73312.1 succinate dehydrogenase, iron-sulfur protein subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKIIIDRFNGKEKYEQSYDIDDKDIQGKTLLSLLLFIKKTKDITLNFTASCQSAICGACAVRVNGHSYLA

CDTKMQDLLKEYDNPSSIRISPLGNFRVISDLIVDWEPSIENLRKIRPAMVAKNEFSAEKGCKQSQEEFD

RISKQWDCILCGSCASECNKLEADSSDYMQPFVFTHAWRAAADSRGKDPMLHVKPSVMNGLWLCVHCQEC

ADRCPKGISSVSDIANLRVMAIKKGLNEGLGPDHAEAFYKDLVEGSGRLNEIYLALRSEGVIGSMGKTDI

AFKLMRAGKMNPMHVFGEDEIEGHKDLVKMIKAAQEAAVKE

>EAQ73311.1 hydrogenase expression/formation protein HypD [Campylobacter jejuni subsp. jejuni 81-176]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNLNKNIIFFAIGF

ETTTPMSALLLQKIIEEKINNVFFHINHITVPAPVEAIMNDENVKINAFLGPSHVSVITGYGIYEPLAAK

FKTPIAVSGFEPVDILESVLNIIKQSNEGTFKVYNQYKRAVSKEGNIKAQNLVKKYFRVCDFEFRGLGLI

KDGGLELKEEFSAYDASKKFDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNV

>EAQ73310.1 uncharacterized conserved secreted protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKPPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLTLEINLLAKENDKAEIWAKNLEGI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLHKNDFVKFFKAYLPNLEAKEPVTLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKILSNFCDENLKILLRNNATEHFDKAIAHIEDDYLGSHWLGSFALLALDVDIL

>EAQ73309.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176]

MGKYIELTSDNFAQAKEGVALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>EAQ73308.1 signal peptidase II [Campylobacter jejuni subsp. jejuni 81-176]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>EAQ73306.1 mechanosensitive ion channel family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSSINLNSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLAFFISLRRFFANIVYFFLVQLFYR

NKNDVDDIKVIFIENIKKPVGFLLIVYAISLCLTIATYPAPLSVNLSNFFHIVYAVLIAWLILRMLDGYG

VVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVETGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYIKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>EAQ73305.1 ribulose-phosphate 3-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MYVAPSLLSANFLKLEEEVKAIEAAGADLLHIDVMDGHFVPNLTFGPCVIEKISTISKLPLDVHLMVKDV

SKFIDLFIPLKPKFISFHIESEVHPIRLCEYIRSQGIHPAIVLNPHTSIDSIKHMLEFVDMVLLMSVNPG

FGGQKFLPLVHEKIKELRQMIDKKNAKVFIEVDGGVNGLNASDLEESGADILVAGSYIFSSNDYKTAISS

LKLEF

>EAQ73303.1 ATP-dependent Clp protease, proteolytic subunit ClpP [Campylobacter jejuni subsp. jejuni 81-176]

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>EAQ73302.1 chemotaxis sensory transducer [Campylobacter jejuni subsp. jejuni 81-176]

MGIAKSLVAIFFYEVENFNDFKPRYLKTFIQKYSDFKYYYLNIRAQKLEITNEIKIK

>EAQ73301.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIINQIYSIDSCDDVELNIKRGSKLEFRLTYDDSKEIEAIICIIPGGAEDMNSYIYIDDYLTRNYKVAVI

NINYHCIGNRPHLGSSFYLDDIDKFILDTSLKAINLKCINVYGINSYENLNNAFIRIDQEIQKLKLNQQL

HQNYKLKTHVSFLPFKNEYQNFGIMQAMDILNAIFYIKENSPFKLMRGGVLERFCLEIHMVDI

>EAQ73300.1 chain A, Structural And Biochemical Identification Of A Novel Bacterial Oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MIITPENLYKKRRDFLKLGAGALISSSVLASKLSALNFTSDTNPNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSMEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEMAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>EAQ73299.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>EAQ73298.1 peptidoglycan-associated lipoprotein Omp18 [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFTSIAALAVVISGCSTKSTSVSGDSSVDSNRGSGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>EAQ73297.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>EAQ73296.1 flagellar motor component MotB [Campylobacter jejuni subsp. jejuni 81-176]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QEKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQVALNLPSKVEFERGSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKAP

>EAQ73295.1 endoribonuclease L-PSP family protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKRFDECDRMSQIIVFDKYFKTAGQVAFEPSGDIKKQTKEALAELDALFEKIGASKGDLIQIQIWLANM

QDFDAMNEIYDAWIKNYPKPVRACVGSALAEGYLVEIQAFGKLREN

>EAQ73294.1 flagellar assembly protein FliH [Campylobacter jejuni subsp. jejuni 81-176]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEENQAITPTQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELENAKEKFAKEGYEKAKEEFQKE

LSDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGELKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>EAQ73292.1 conserved hypothetical protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>EAQ73291.1 radical SAM domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLNA

NELLKRVIKLKQDFNPIVVITGGEPLIHYENPEFIKFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKEGV

>EAQ73290.1 hypothetical protein CJJ81176\_0593 [Campylobacter jejuni subsp. jejuni 81-176]

MNFLSSLKDKAVNASEAIKDKTIKTAEVVKDIGMEVKCGIGWHAGEYQNEKDKPKCFFSKICPDCGKYLT

KNQHDFEAPEILNPDNCYGYRRCTLCSIQVFDNFHNYYEIKKDAKCRMHEKCNLCGHERLGQTRHNWKYD

ENGQKICLDCKETV

>EAQ73289.1 Hit family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEDLGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>EAQ73288.1 bifunctional short chain isoprenyl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAAIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEKDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNENEKEWLKTKFEEQKALEKAILEAKTYAKKARKAIEKY

DNNKLNDIIKAMIDREF

>EAQ73287.1 serine protease pet precursor [Campylobacter jejuni subsp. jejuni 81-176]

MFINLGNDYKLNDKTRFSFEFEKTFFGDLNVDWSANANLRYSF

>EAQ73286.1 acetyltransferase, gnat family [Campylobacter jejuni subsp. jejuni 81-176]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLGEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>EAQ73285.1 heat shock protein [Campylobacter jejuni subsp. jejuni 81-176]

MANIQDFLTDNMLSNLESAASLAIHSKNTEVVPLHLLWALSVDSTSILNQILNKLNISKEALELEIKSRI

SKLATSSNVNRENIRFSNELINSLENAKGLMSANGDSYLSVDTWLISESQKSPIKEILAQFLDLREFQKE

LESLRAGRKMDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIERLMQILIRKTKNNPILLGEPG

VGKTAIVEALAQRIIKKDVPKSLQNKKVIALDMSALIAGAKYRGEFEDRLKAVVNEVIKSENIILFIDEI

HTIVGAGATEGSMDAANILKPALARGELHTIGATTLKEYRKYFEKDAALQRRFQPVNVGEPSVNEALAML

RGIKEKLEIHHNVTINDSALVAAAKLSKRYITDRFLPDKAIDLIDEAAAELKMQIESEPSSLRKVRKDIE

TLEVENEALKMENDEKNQKRLDEIAKELANLKEKQNALNSQFENEKSVFDGISAKKKEIDLLKNEASLAK

ARGEFQKAAELEYGKIPSLEKEVEILEDKWKKMSENGVLLKNQVDEDLVAGILSKWTGISVQKMLTSEKQ

KFLEVEKHLKESVIGQDKALSALARAIKRNKAGLNADNKPIGSFLFLGPTGVGKTQSAKALAKFLFDDEK

AMIRFDMSEFMEKHSVSRLLGAPPGYIGHEEGGELTEAVRRKPYSVLLFDEVEKAHKDVFNVLLGILDDG

RATDSKGVTVDFKNTIIILTSNIASSAIMNLSGKEQEDAVKNELKNFFKPEFLNRLDDIITFNPLGKDEA

YEIVKLLFKDLQMSLENKGIKASLSENAALLIAKDGFDPDFGARPLRRAIYDLIEDKLSDMILADELHEN

DSIIIDAKDDEIIIKKA

>EAQ73284.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>EAQ73283.1 fructose-bisphosphate aldolase, class II [Campylobacter jejuni subsp. jejuni 81-176]

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>EAQ73282.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MNKIEILKQYLKEIAKLNSSEQVWQMPFFAALGVGIVLGLSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPAIFAFIPIGIMAMGSSILIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAVFVDSLIMGSFVAFSIFI

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELILLMMSLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADKLILARLIDVVIGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>EAQ73280.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MPLVNIKLAKPSLSKEQKAELIADITELLSTKYNKSKERVVVVLEDVENYDIGFGGESVEAIKAKANK

>EAQ73279.1 trigger factor [Campylobacter jejuni subsp. jejuni 81-176]

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>EAQ73278.1 glutathionylspermidine synthase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANAYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLIPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANISIIKDGKTLHENVGPYGNNKAIYQEYVEFNSCE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>EAQ73277.1 predicted sugar kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKAIIDNIKILEQNAINKGLDELILMENAGLNLAKLIKKEAKKIRIQRKIRKVKTLFLLGGGNNASDGLV

ALRNLKHAKAYKIGFKENTLFKKQEQILQNYAFKFCKKEPNFKKFHIIVDCILGTGSNRCLDEKTSLIIQ

KVNQSKALKIACDIPTNLGFYPCFKADITFCMGALKEILLEDFAKEFVGRIKIANLGISSKKFYPNSQAF

LLEKKDLKTIDRKINANKGNFGHIYIVANASAGTLAGLGALNFGAGLVSLVAQKSFSPLLMLKEKIENNA

SAIALGMGLENLDFLKDEILQNTPLILDANCFLSEALLWYLNRKDIVITPHPKEFIKLYKMCFDENLDIE

TLQKNRFFYARKFSQNYDCVLVLKGANPIIAQKEKLFVVNLGNQALAKGGSGDVLSGMIAAHLGFGFSAL

EAAKNATLAHGLVAKKYKFNKNSFDALKLIKGLKCL

>EAQ73276.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVEPIDSGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEEQIKTIARLKGYKIVTANPDYTLKNSISIYTEEKNAQKTSNFMSGDYIKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSGFNSFDGDATFEESLPQTNSNQNNTIESTPTQNIPTNP

SSINQNNKSKNQDGVEIFE

>EAQ73275.1 2,3-bisphosphoglycerate-independent phosphoglycerate mutase [Campylobacter jejuni subsp. jejuni 81-176]

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIENKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVNPKSGLNFIKDLKEFCENLGVHFATLCGRFYAMDRDKRWDRVKECYECLLGKAYKVPNLLE

YLQKSYDENVTDEFIKAVQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKIFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLIPSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQAKGVSKIKDNMGLSNIAASVLKILDLEIPKEMNEA

LF

>EAQ73274.1 anthranilate synthase component II [Campylobacter jejuni subsp. jejuni 81-176]

MILLIDNYDSFVFNVKSMLEQLSNDEILVRRNDAISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKNSLIKQCRENELFSNLPSNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALGHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKPQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKDYEILQVAALLILITEKSLNEKSLSAFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNITTPNTLESVLKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYDNAKDLKDILSGRMQGAKFDLVVLN

AMFALYTANKASSPLVAKDMILEAIYSGKVIEYFKEYQAYAKA

>EAQ73273.1 cell shape-determining protein MreB [Campylobacter jejuni subsp. jejuni 81-176]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGFDKYLSEIVRLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>EAQ73272.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFFNFKNKSSTKKEESKKVLEALYLQENELEEKLKKINIKPKLIIGFASYQLNLAIIGNKIQNSINEQCD

IILSSATDLLCNLDSNSNIENSPYKQNIQGISLMLFSEDMIENLCTNKIKLFSNIKDYTERKKLIEKEVL

SINVPFEAHCINTLHYLIYDGLSQSESSLLELLYKHNPYPCALVGGGSSGNMDFSGTFIFYNGEILKNQA

LSLHIQFKPKISF

>EAQ73271.1 translation initiation factor IF-2 [Campylobacter jejuni subsp. jejuni 81-176]

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPEIAAAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENIKEQEKLNESEKKEPKKEEKLKQEVKKEELKIEKENAKEEEKQEIIDAHKPQSLASATLAKRRGL

VIVKKKKDEEEIQVKKEEVKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFL

DEHDFGDISLDDEDEVVLPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPSKKIEK

KEVEEVGSVAISKEIRVYEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEA

DEFDYVKDYEEETDEKDLVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRK

ITFIDTPGHEAFTAMRARGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDM

VKTQLAEMEIMPVEWGGSYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRG

AAATIIVQNGTLTVGSTVVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKE

AREYANKRHEYNRQKELSKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVN

IIHSGVGGITQSDIELASASENSIVLGFNIRPTGEVKERSKDKGVEIKTYNVIYNLLDDVKALLGGMMSP

IISEEQLGQAEIRQVINVPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKG

YECGVGIEGCDDMRVGDYIESYKEVEEQASL

>EAQ73270.1 (Di)nucleoside polyphosphate hydrolase ((Di)nucleosidepentaphosphate pyrophosphatase) [Campylobacter jejuni subsp. jejuni 81-176]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>EAQ73269.1 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKEFNPCEIKLGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>EAQ73268.1 diaminopimelate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAGAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIARKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIHEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECESDLYDYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFENQIALEEKFLKA

>EAQ73267.1 chemotaxis protein CheV [Campylobacter jejuni subsp. jejuni 81-176]

MFDENIVKTGSNEMELVDFRIFKQGHDKVYEGIYGVNVSKVREIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

EKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>EAQ73266.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFLLKKIFPQLFISIILEDKKNIVKASIYRGNKLISSNEKTFDKSENLLEYVKNLSKHFLFYHTALFLD

AKEQGLIPSTNIQDCEHFNIGKISLQHILFNNALVYTATEHVEYYSELFEEYRGLDFLYSPFALLYYNMQ

KEKQPDDQILLYGFKQGHLLAIIVAKGNTILYGDFKIFEQELGLELELPSEDNQEIENNNDDTEVTLDNF

NEALNNKFDLLDQENNLETLDNNDNFNLDELNQFSNDMELCRYIITSIEKFYNDDKYAGVFINGILLYSE

SDINISAIDFLESETFLEIKTKQINTLDLMIELMQKELK

>EAQ73265.1 chemotaxis protein cheA [Campylobacter jejuni subsp. jejuni 81-176]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLDLLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGNDTAIGMDIEPICARLTAISEGESPVAATDSN

EKSTPQAEPEAPKQETTTPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNTSSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGVEDPATRAANGKPEKGIVQLKAYNEGNHIVVEITDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLVEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>EAQ73264.1 OorD subunit of 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>EAQ73263.1 molybdenum cofactor biosynthesis protein A [Campylobacter jejuni subsp. jejuni 81-176]

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>EAQ73262.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSMKKIILFLLCVGFAFACSEHSHTDFKDLNKTEYNSQ

>EAQ73260.1 phosphatase, Ppx/GppA family [Campylobacter jejuni subsp. jejuni 81-176]

MAKKTAVVDLGSNSIRMVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCA

LKHKCKKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGG

GSSELCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAIS

NSIMQKNSYPLKNLHDFRYMLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKEGIFIFLKIAEKIKAKQ

VITSGVGIREGVYLQDLLRPKITFPPNFNPSLKCLQDKFLQSKQKNKTPHFALQIFTTLKNLHKLNDNYK

HTLLNAAKLCHIGEYLNFYFANEHSAHFVLGGLNYGFSHKEKALIASIIKLNGKKVNPYNLEPYKQLLPN

IHTISWLNFILCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>EAQ73259.1 3-deoxy-8-phosphooctulonate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKNGVFVAERGSSFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLNLTRLKNCVNTLLEIQNIIKENK

>EAQ73258.1 malate:quinone oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MSQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGLMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYVKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIIHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

VDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLVCNYLGMEFNEDKFSSELL

>EAQ73257.1 cysteine desulfurase [Campylobacter jejuni subsp. jejuni 81-176]

MKVYLDNNATTMLDPNAYELMLPFLKDMYGNPNSLHQYGSATHPALREALDKLYTGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQVGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVPYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKRERRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGAEHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>EAQ73256.1 TPR domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MAEQEDIILEKPEDGLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPQENSESGFKFTRESAPEDVST

FEEVESQEPTPWYKDRKFMSLVGLSLGIICILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDMEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLARLQNSYDNDKDRYKILDAYKIQVRLNKDLFNIAVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQAALYIKKANVTDFVDDSADAGVYLNTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDETKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPNIAREFYVNLMHIAGLLNLERQKIKEL

INVSGAKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAIGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>EAQ73255.1 oligopeptide transporter, OPT family [Campylobacter jejuni subsp. jejuni 81-176]

MYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVVISMAVLSLFKTSNILENNMVQT

QASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRTMVVESKLAYPEGRAAAE

ILKVANKDQSSKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGAG

YLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSAKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELLK

PVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVGT

LVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTSV

ILATAAISNDNLQDLKTGHLVGATPWKQQVALLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASSA

LAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILKGTQKMSLPPLAVGIGIYLPPAINIPL

VIGGILKYIVMQHLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENPL

ALNLANFHDSELFALIFFVGVVLYFIKRIVKKDA

>EAQ73253.1 flagellar motor switch protein FliG [Campylobacter jejuni subsp. jejuni 81-176]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQKLAEQGLVQTGDADEMIE

>EAQ73252.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKIAFFIIFVISFLTAQSPVNFKEDNNITKEQNIFKEQPPKRIKIPTH

>EAQ73251.1 Uncharacterized protein family UPF0029 [Campylobacter jejuni subsp. jejuni 81-176]

MQTINQIFQTQIDIKKSIFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLARAYSDAANAVINNSSLLSFELKKNISIAIDLK

NLNRFEYFLKTYSFNFTKDFKDCKAILHIKLNEKEDQEFEIFCKNFAPFEIEKL

>EAQ73250.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFGNSYGGYLANLCAKIAPWSIDFILDNSSFVNLFGNIFRLIGFGKEIDFTRYHGTYDDTLFKNIFLYLS

DKTYWNNNKFSKNYFSNARKIIREPLNKEHLIIQSLYPNPKYILYHSIFDERSPFKNKENFVHILKELNF

KVEFFAISQVDNKFIKNLNHGMGLSTKLFFKKHLLQILKEPLQDKICKKEVSYKCDELVYTFKEENHQII

LNITN

>EAQ73249.1 alanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>EAQ73247.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAYKVGFPKDEWEDENISN

P

>EAQ73246.1 acetolactate synthase, small subunit [Campylobacter jejuni subsp. jejuni 81-176]

MRRVLSVIVLNEHGVLSRIVGLFSGRGYNIDSLTVAPLENKEFSRINIVTSGNERTFEQIVKQLHKLIPT

YKVIESEEFIDKEMALVKIPLNENLGGLDAVLKAYNGTIANSNENFLFLMVADDANRIDNFLKTIKKYNP

SDIVRSGSVLMEIK

>EAQ73245.1 ATPase, AAA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLENNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FARIQLYERLSFIQKSAYNSEIKNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSTDINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFQKPDF

KDRLKIWEKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSKDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>EAQ73244.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFLDEFDSVYKKGLMRSYLSCEENRAFLKGKLLFNEHIKRNLIHKERFFTSNDEFVLDIAPNRLIKSTLN

FLKSKTSLNKFRLIKSMQILDEVEFSKNYEKDFSYKISRHFDYYENLLLWCKIFLKNESFMPYHGKNEAF

ALLFPMEKIFEDYVAYMLKKVNPAQDIKVQNNGKYLISKNDENCFMLKPDLYIENKMILDTKWKIPNDSE

DEKKQGIEQSDLYQMFAYACKFKIYDIKLVYPLCEKTQDLQRKIAEKFFVFKASEHLYFKEQGQKDIKVQ

VCFAPLPF

>EAQ73243.1 replicative DNA helicase [Campylobacter jejuni subsp. jejuni 81-176]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDISPKDFSLKAHQDIFKAVIACSNNKEPISVSFLRKHKKI

DEQILAEILATPSMIDLPAYVNELHEKSVKRQLLSFAHLLPTRINEDRAVSEIADEIGKEIFSITNRVNS

RDIKDVDIVISELFEEFKKQKTLENKGIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KVLRQKKGVALFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKAYQRLFIPNPMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYETTEFTG

>EAQ73242.1 superoxide dismutase (Fe) [Campylobacter jejuni subsp. jejuni 81-176]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>EAQ73241.1 aspartyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MRSHYNTDLGISHVGQSVKLCGWVNSYRDHGGVIFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVL

IAEGAIRPRGEGLVNPKLKTGEIEVVVSKLTIENESAVPPFTIADESVNEELRLKYRFLDLRNPKLYENF

ALRSKACIAARNSLANMGFLEVETPILTKATPEGARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDR

YFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEQKDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMEN

YGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIAKDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGA

QGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRCELEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLID

PNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMPKNIDETDLEEISSIAYDVVLNGVELGGGSIRIHKNDI

QQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPHGGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMT

DAPSPASNEAMRELGIKLRENIK

>EAQ73240.1 inner membrane metabolite transport protein ydfJ [Campylobacter jejuni subsp. jejuni 81-176]

MMATIALMGISTTLIGFIPSYAVIGVWAPICLVALRFM

>EAQ73239.1 acetyl-CoA carboxylase, carboxyl transferase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNFADIFSKIRRQQPSIKEAPNHWVKCQSCHALMYYKEIESCFNVCPKCNYHMRISADERIKLLSDEGSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINSLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSAALKLLSKEKLPYISILTNPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>EAQ73238.1 conserved hypothetical protein TIGR00043 [Campylobacter jejuni subsp. jejuni 81-176]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>EAQ73237.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIYLAQTDTTVGFLSKNLEEINALKGRDKNQPCLITSAKFCELKSLARIPKSFKNLVRRSKKTTFIYPNN

QAIRIVKECKHANFLSKNGYFYSSSANKHGKEFDEEWARSVADIILDEKFFENIPSKILKLSKNKMIKIR

>EAQ73236.1 CvpA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQAAEFIQSTFYKIENQSLAGFA

GFLAILIIFWIVCLLAGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFA

KNSYTLNLLKETGSFIMNQPLTENSLDHANEKLQDIVSDLNNTQKGE

>EAQ73235.1 conserved hypothetical protein TIGR00023 [Campylobacter jejuni subsp. jejuni 81-176]

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>EAQ73234.1 conserved hypothetical protein TIGR00096 [Campylobacter jejuni subsp. jejuni 81-176]

MLYFIPTPIGNLSDISFRALELLKTCDLVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGKALVEFAQENNITYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNFPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFEKKFKGNAKELSEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKINGKNAKEIYQKLLLSQD

>EAQ73233.1 undecaprenol kinase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>EAQ73232.1 peptidase, M24 family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFALLPLSLQKDLKINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNSELEKKLNLDGFWLKNYDEIIMELEKLANTNLLIEPSKMTALLINSLDKS

VKIIQEINPSTHLKAVKNTKEIAHIQDAMIEDGVALCKFFAWLEEAIENKELISELDIDAKASEFRAQSK

HYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRAPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KVKEGMLTSIEPGIYKVGKWGIRLENLVIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>EAQ73231.1 septin 6 [Campylobacter jejuni subsp. jejuni 81-176]

MLNILHANSSHRFHKCMPKEVHQIYDTLKLMEQQEGTKKVEAKKEEQSNSTNTDKVDNKKINF

>EAQ73230.1 Uncharacterised protein family UPF0102 [Campylobacter jejuni subsp. jejuni 81-176]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>EAQ73229.1 acetylornithine aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLHTS

NLYYNENIAAAAKNLAKASALERVFFTNSGTESIEGVMKTARKYAFNKGIKGGQFIAFKHSFHGRTLGAL

SLTANEKYQKPFKPLISGVKFAKYNDISSVEKLVNEKTCAIILESVQGEGGINPANKDFYKALRRLCDEK

DILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYGGN

PLVCAGVNAVFEIFKEEKILENVNKLTPYLEQSLDELINEFDFCKKRKGLGFMQGLSLDKNVKVAKVIQK

CQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>EAQ73228.1 adenosylmethionine-8-amino-7-oxononanoate transaminase [Campylobacter jejuni subsp. jejuni 81-176]

MQNEILKKLDLEHIWHPCTQMKDHENLPLIPIKRAKGVWLYDFDDKAYMDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGVKKSKF

LSLSNSYHGETLGALSVGDVALYKDTYKPLLLECLSTPVPQSKDYTQELEILKDILEKNASEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHKFGVQVIFDEIAVGFGRTGTLFALHQCKQSPDFICLSKGITGGFMP

LSVVLTRDEIYNAFYDTYESQKAFLHSHSYTGNTLACAAANAVLDIFEDENILVKNQILSEFIKKEFSRL

EKFDFLGNFRTCGMISAFDILSTKYKRVGLFVFQKALEKGLLLRPLANTIYFMPPYIITKEQIVYVLESL

EQIFKEF

>EAQ73227.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKKKLVQIQRYLIIAILFLLCIALALGILVKYQNSQDVFSVKPDYFIDKQEDLISSNKDHYEIGIFQEN

EFDNNKSVSILEQKIQEIDDLNTSLNEQNLSSVEQNLSLEQNQSLEQNFIPKDTNLTQDQNLTFDEDIHL

NKISKKPKLAIIIDDMANASQVRGLKALNLKLNPSFFPPDKNHSETPKLALKFDFYMVHLPLAAINYNKP

EIDTLNPNDSKERIFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSK

ANKIAKELSMPYIQRDVFLDNEDDVNYVKKQLESAVKLAQKKGFVIAIGHPRKNTFKALEQSKDLLKGVD

LVYLSEIYGK

>EAQ73226.1 amino-acid ABC transporter integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFDFILVQAPAFLTAAWLTIKLSFFGIIFSLIIGLFCILMSYFKIKILENICKLYIEFSRNTPLLIQLF

FLYYALPKFNIHLEQIPPLDLICLSVEETLRPSFACAIAGLSFLGGSYMAESLRAGFEAIRKQQFEAGLS

LGFSKFGNLRYVILPQALAISMPSISANIIFLIKETSVVSIIALPDLVNLMKSLNSLTYKTDELLFLLFM

GYLCIILPLSFILLKFEKRLLHA

>EAQ73225.1 fatty acid/phospholipid synthesis protein PlsX [Campylobacter jejuni subsp. jejuni 81-176]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEASEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>EAQ73224.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQGHITNYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFLTQEFYLMPFVLIFLFL

FIFFITTLGGRIWCAWSCPQTIFRVIYRDIIQTKFLKIRKNINNKQKEYEGQYFKKFLGVIIFYFISLVA

VSNLLWYFIPPEDFFNYIQNPGEHLLLLGILFCASLLFTLDITYLQEKFCVYICPYARIQSVMFDHDTMQ

VIYDEKRGGLIYDGHTKLHKKPPEGECIGCEACVSICPTHIDIRKGMQLECINCLECADACSKVQSKFNR

PSLINWTSAKAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELV

ISNAYTFLFQNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIRATKNLANNDKKDVI

FPLHIKAYAKDNEKISVFRKSIFVYPKSTLIKDKNELK

>EAQ73223.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLNNLLSKLPSKAKEN

LNKED

>EAQ73222.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFSHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGASISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYHLTFQKYKNLLWFLMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIFLIFCYFLIVANQLLYYFINNSNRHFANNYHFAKELALELKKQDVL

ELATAPSLQKRLRFYGIKNSNKFYLKALKQADKHDMDKKIVKVKLGKYEKVYQILNYD

>EAQ73221.1 folB domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPNLTNLNIKIFKPHIIKNATVGVKLKKKY

>EAQ73220.1 NifU family protein [Campylobacter jejuni subsp. jejuni 81-176]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKARNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>EAQ73219.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MNYIELLKNNKNIRILASVQFIVYFGAWFSQTGVFTLLVELNAPTWATATSAMLAFLPGVLLAPINGVIV

EKNKPKKLLLSMISIELISIFCLIFVTSLSMLWLLFILIFIRLCVASIYFQAEMSLLAKILTPQELKLAN

EMHSVIWAISYTAGMASAGIFIYFLGVKTTFLFDCILILIGISFLVRLSIPDFHQKTQSRFFTMIKEGFF

YVLNNKIIFHLILLHAFIGLTAYETLVTLLAQHQYKEVLSAALVIGFLNAVRACSLAIGPMVLSKFINDK

NLFYMYLGQGLGIILWALTQFNFYISFLGLIGAGFFTSALWAYTYTMIQKNADKEYHGRVIAYTDMIYLS

FSAIISMLMGFLFEIGLSLELITGLLGMIFIFAAFYWKWFYKKYL

>EAQ73218.1 permease [Campylobacter jejuni subsp. jejuni 81-176]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMCYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILFIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLSDDKS

>EAQ73217.1 riboflavin kinase/FAD synthase RibF [Campylobacter jejuni subsp. jejuni 81-176]

MLNIFTTISKINITSLAIGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIEVD

FENIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYDAKDIESLSGIKTIIVDEFSIGGVGVHASL

IKDFLSKANLQKAKEFLGRDYSIKGKMIKGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGEKFTQGEFFELEFISFLRENQKFQDLKKLKNQIAKDIEQARELLRK

NDER

>EAQ73216.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNTLIIFENSLSNLGKDEASDLLEDLSFNLAYKQISHNPHETKKVLNSLLVEFLTILKKLDFFDDENVT

KVIKALVKASIVDAQNSLYEYISEAELLNKQIENQKNLIKNQISDNFFEFENILQECSFCDEFSGGLNDA

ILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSIILNTAFEIA

NESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDVSLKSKELIGIEDDFIALLKKEIQLQNDP

CKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEIFELEKIAS

EKYKDLNSKKAKKLGVRLWEKAKKIVKK

>EAQ73215.1 flagellar biosynthetic protein FlhB [Campylobacter jejuni subsp. jejuni 81-176]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIMIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVTQLAWLRDRAIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVAGADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKETKTFKVL

>EAQ73214.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MWIFFRFISGIYLKNFFIIFFSLLGFYCGIDLLLNFKDLPKAANLDLLYVMFLSFSAVPYVLPISLIFAL

VVSLISMIRANEFVSLYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFAYANDYKRNILKNGTIMNQSG

EVFLKFNNNFVYISKINNGQNSAQNIKIFNINDLNLSSFVSAKNAHFEGESWILRDGNITLLPKNYELAN

DGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNTDTLKINLYKFVFTPFFAPFL

MLIMYYFFPVIARFFNLAIVTFVTFVVTLMIWGVLFLLTRLSENSVIASEIGIVVPIIILGCLSAYMYYK

HR

>EAQ73213.1 hydrogenase nickel insertion protein HypA [Campylobacter jejuni subsp. jejuni 81-176]

MHELSIVESLIELCEENALNNKAYNVQEIYVKIGRLSGIEADLFKRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVFKCPKCQSIEYKITQGEDLHLMRLVME

>EAQ73212.1 cation ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFFEISNLNYAYNNEIILKNINLSYDNKDFLSIIGPNGVGKSTLVKLILGLLKSKNEIHFKALQKKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTASVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEKNCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>EAQ73211.1 DNA polymerase I [Campylobacter jejuni subsp. jejuni 81-176]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMISGFANFIYSLKNEYKSDYIVFALDSKGKTFRSEIDP

NYKQNRTPPPPELLEQIPICIKMIEKMGFISVSQEGYEADDIIASFVKTCENRDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEAACLEKYGVKPNQIRDFLALCGDSSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLVRNERSRNLLLEGKENAFLSKKLASLYDNLEVQNLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLVQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMNENEAFYV

PLTHNYLGVGEQISLQSAKKAIEAIFNHFVIGHNLKYDFKIIQNNFDLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLETPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEILMKKFENEIKNLSEEIYTLCEDRFNLNSPKQMGDILFEKLKLPSGKK

GKTGYSTDEKVLNILLDKHPVIAKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFISLDYSQIELRILAHFSEDEKLLNAFANDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEANLAKSYIEKYFENFTSIKKYFEKVKNEAKQNGFI

VTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADVIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>EAQ73210.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKDKSLEEIDLLKLIICALSFISVCTALILFLLLPTLKNYKQANLRENSQLAILKAAKLKFDFSEDKIST

LRSENNKSLEQFEQNFNIGNFDIFLQKYFQNVKIQETKPEKQEKYLKNRLAIKATMNNPRRLYDFIDALK

NYNNLIKLDYPLNLKAGEQGISIDLTLKVYSS

>EAQ73209.1 putative Mg chelatase homolog [Campylobacter jejuni subsp. jejuni 81-176]

MKKLKCISFHEGLDIIEVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCDFAFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIKKAKIVVPKSIAQKA

SMIPNLEVYGLENLNEAIEFFKEKNYENFRFSHNHPLFASPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKTSISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNISKTH

ILEALSFRARN

>EAQ73208.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLVNKFKVILLFFIIFTSSYAQNLNTNDTIDSILNQNKNHSALTSYVSKKDLKNLEKKLEKNQNIGIRIY

GDSHMAADFFPRVIRGYLIRSNSIGFAYPLQPKYQQNLNLVYSYKNFEILNSRNPANAGHNFPLGGIIAK

AKTKGAKINLDTTLDKKNFKIGFLFKAKQNTNAFSIKDAKNQSYELRTTQINKWSYKELELDLPLQISAL

QKDAELGGYFITNKDNNVFLDTIAINGAKSDLWLSWNQTVVKKELGLLHNDLIILAYGSNDALFKGFEKQ

KFKNNLKKWISILKTYNKNAVIMLISPPTVVQKQGKNYKLAPDFFTIRKALYEVAKEEKTLIFDMHQFMQ

DSGGKNKWIEQKLSLNDVHLTIKGYELMAKKLLEDLKNIIDY

>EAQ73207.1 conserved hypothetical protein TIGR00052 [Campylobacter jejuni subsp. jejuni 81-176]

MAFKNLKELSFEKSNYIKPKRFAYESNGRLCTWDFIESKDSVSVLLYHKELESFIFVRQFRIPLWYHQMH

DKDYVKDDDMGYTIELCSGLVDKKLSLEEIAKEECIEELGYAPKNLEKIGDFYTGFGSGVSKQSFYFVEV

DEKDKISSGGGVDDEEIEAVYVKVQDFEKKCKNMIRTPLLDFAYMWFLKEKWGKLKII

>EAQ73205.1 citrate transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MEIFLALLGFFSLGLIVWLLLKDYTTPALAFISVSISVACILLILERLGFGVGVALGVKGGVFDIKTLVV

FIKDGVKSVTDTAALFVFSILFFSVLNASGFFTKILNAFLSKMKANVYQVCILTVFIAAAVHLDGSGAST

FLIVIPALLPIYERLGIRKTSMLLIITSAMGVMNVIPWGGPTLRAATNIGMDANLLWHHIIPIQIVGLVL

SLLLAIWIAKIEIKRGAGAGNLSGINLNIEKSEHHNEKWFWLNLLVAIGVIGLLISGIIPSYICFMIGLA

IILPLNYPNLKTAKKVLDRASGGAMLMYITLIGAGILIGVFDKSGIMEKMGVLILNFVPDYLGAYIPLMV

GILAVPMAIIFCTDSYFYGVMPIVLSVTKAFGAEPLTIAIIMVIARNCATFISPVVPATLLGCGLAEVNI

KDHIKRSFFYIWGISIICLIFAEVAGII

>EAQ73204.1 transcriptional regulator, Fur family [Campylobacter jejuni subsp. jejuni 81-176]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYTEIKKEYPSISLATVYKNLNTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCAKCGGIEDLSFKDAKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>EAQ73203.1 tRNA delta(2)-isopentenylpyrophosphate transferase [Campylobacter jejuni subsp. jejuni 81-176]

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>EAQ73202.1 outer membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKHLISICALVAIANAATIKDIKFIGLNHLSNTSAINITGLKIGEEINPAKINTAILNLYKQNYFENIA

VENNNGILEIIVTEKPTIAKVTITGIASNDRKQVESILGIKRGTLLDEGSIKEAIERIKAYYEAKSYFDT

IVEYKKKTLENTDGLELEFIVNRGENIIIDNVHLSGAKKFSYSDIEPAVVNKEKEFMGWMWGRNDGKLKV

FELSNDSSRIADEYMKKGYLDVQVSSPYLKTYTDTYQANLTYFIKEGKPYKIKSISIENPLFDDKQNAQT

VKDLRSSAGKTINIEDIRKDVKTIETQSADLGYAFVEVYPDIQKNDQTQEATVVFKVIPHDKVYIRNVII

SGNSRTVDRVIRRELYITEGNLYNRTDLSESKNALKRTSYFDDVNIKEEKVDDTHIDLIVDVKEASTGAI

SGGIGYGSSDGILLNASLSDTNIFGSGIKSSVSVDKSDDTLSGRISLINPRVLDSQYSLGGTLYSNDYEW

DNYSEKNYGFDITVGRQFARYYNVSLTYNLEQSDIYHLSPTLLRTGYELGKSIKSSITPAITFNNTDDYY

LPRSGIIASTSLEYAGLGGDQEFISSSSKFNFYQGLQDYIGYDLIYRYKASFYKVWDEGYLPINQRIYLG

GIRSIRGFESRTVSPKNQWGDEVGGTIAFANSVELSFPLIDRIKLRGSVFFDYGMIGRKNLDEIKRMSTG

IGIEWITPIGPLQLVFAKPLNDKKGDDTNSFEFNLGTRF

>EAQ73201.1 ribosomal protein S12 [Campylobacter jejuni subsp. jejuni 81-176]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>EAQ73200.1 prolipoprotein diacylglyceryl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>EAQ73199.1 anthranilate synthase component I [Campylobacter jejuni subsp. jejuni 81-176]

MFVKNVNFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKNKICDFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPMKKKQKNDF

EILNSLEDEKNDFLKMCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSAYMFYFPSKYG

VVLGSSPEFLLKIKKREIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQT

RVENLFSIIKNKFVMHIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEITSELEDCDRGIYGGA

VGFLNFNEDITLAILIRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>EAQ73198.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MELKLARTLINEKPKNISLEKIEEAIEKEGQKFFYFDKDNTHKQLIALVNHFEKKGVSIYHRTVKYGLDD

NDFMYEVHIL

>EAQ73197.1 flagellar switch protein FliN [Campylobacter jejuni subsp. jejuni 81-176]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>EAQ73196.1 spfh domain [Campylobacter jejuni subsp. jejuni 81-176]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIILFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSSGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIAAQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSAANMN

>EAQ73195.1 indole-3-glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKATAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPQIP

NSKIIIAESGLENKEFLEHLQNLGVDAFLIGEYFMREEDEGKALKALL

>EAQ73194.1 response regulator/ggdef domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIVLTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIVKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVRERFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLVDKASKILSQAKDNGKDRVEVCS

>EAQ73193.1 ribosome-binding factor A [Campylobacter jejuni subsp. jejuni 81-176]

MNPNEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNVHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>EAQ73192.1 chaperone protein htpG [Campylobacter jejuni subsp. jejuni 81-176]

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKDDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEIDDANKEEQGTSITLYLKDDEFANAYKIESIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKPDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNESFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>EAQ73191.1 putative cytochrome C-type haem-binding periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFISFVVLATCLWAKNIAYTDEVVSLYLNKDDTKVIGRLLPTNPFEVLKSENNKVLLKIDGYVNPKA

LSVIYFNDSQRIIVAAFSKNTKLNFSQRVAGKDGKWDKVSLEIWADKKEFAKDNKEMLNRAKELFVNNCG

ICHAIHKEKEFTANAWPAIFRSMADRTGIDKKDRWLVIEYLQKNAKDFKTK

>EAQ73190.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVIMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

GEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETSQMMSKLSGDENQNKGNETKQIEDFSESKTEENQDEIQAEISKQESNDELKNEDKENK

>EAQ73189.1 tetratricopeptide repeat domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDNLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQVKKVLAELSSLVDA

INANYVSKNELNDANLSVKTITPSVVVSTTDSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYKQKNYNNAIVYYKKSSSLSTKGDYFPKLLYHTAI

SLDKTGDTKTANGFYKALKTNYPNSPEAKASPNRK

>EAQ73188.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MAFEQKLQNTQNAKIEKVYFSVNLNLDHSDVTLQNTFFSGNIKGINDTQKNLAIKDSLLESHIQMSNLQV

EKSAIYRKVDAKKIKCK

>EAQ73186.1 ribosomal protein L25, Ctc-form [Campylobacter jejuni subsp. jejuni 81-176]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>EAQ73185.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKDGKKIENVSLISKTNVGYVSYKNSFDDKNNCDKRIEEMQNSKDLYFSQNGSINLNSDVDLGASVLNLI

KIQIGK

>EAQ73184.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MSSIFSTLSPFRLFVKCAVPNVISMAFISFYYIVDGIFVGKYLGSDALAALALIIPFIMMSFALADMIAI

GSAVQISMHLGLGKKNLTRKIFSSSMLIIFIISCFIGILEYFLGPVLIDCLNVSDEIKTMTKECMFVFAL

FAPFTMLSFALDNYLRICGKTAYSMVMNVIIALSNIVLDYIFIVELGWGLFSAALATCLGLVLGGIFGIF

PFLFQNLELKISSLYMNLKIFKNILYNGSSEFFGNISGSLYSIFANFVLLKISDTQAVAAFSIVLYIDSF

IIMLIIAIGDAMQPALSYNYAKKDFSRIKAIIKVVFFAGGFLSLFSIVLILIFGENLITLFTKENNQEFK

TFAYTALMLFAFNYFFAWFNVLSGSFLTAFNKASFSLVLSLAQNLFIPLFFLLFLSCFMGLNGVWLSPFF

AEFCVLILAWIFLKRIFKDLSL

>EAQ73183.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKKVTMESLKQNFSIPPPSEVKKLNSWHRCPWKIKLK

>EAQ73182.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQVNYRTISSYEYDAISGQYKQVDKQVEDYSSSGKSDFMDILNKADEKSSGDALNSSNSFQSNAQNSNSN

LSNYAQMSNVYAYRFRQNEGELSMRAQSASVHNDLVQQGANEQSKNNTLLNDLLNAI

>EAQ73181.1 ribosomal protein L31 [Campylobacter jejuni subsp. jejuni 81-176]

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>EAQ73180.1 cytochrome c family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKAKILIALSFFLLVLSACSNDEKNISKTQNTDQEVVQIEQNDEKTELSDSNLPLPVDDEAQSSDDEHE

ANPTIINSLYKQKCATCHGEKGELKPKNSTAIKTLGNKIFIQKIKMIKDKNHSFLSDEQIQNLADFINKG

K

>EAQ73179.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAA

RPMLPFVSLNSLCKKKVQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSRVQLG

>EAQ73178.1 UPF0053 inner membrane protein yoaE [Campylobacter jejuni subsp. jejuni 81-176]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEHRDKGRILGLAFAMITRILLLLSLFWVM

KLVTPLFSVLGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKLWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLVAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNG

>EAQ73177.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKYLFSCVLASILTQSATAVEFQEGFSGNLSIGVGARDIKSNISTLANSDYLSSYNADNSDSSFIPFIG

AELYYGNLIDNDRIFIKNYNGRDISGIALGYERAYLERFSTSFSVISSLREKAYANPYAIGNREETDVDR

YGFKISQLYESDFGKFTTSYLFSKNKYDKDTIAQSSLKREGYYHEIELNYNYSLLNLGLNYDYNDADGKA

QSYSRYGFSIGTNLAFANDYIFTPNLNLSKYEAVGTDPIFHKKQDGNIVKLNLKVVKNQFLGYNGLYGFA

NYGIEKRNSDIGFYDETYQIILTGIGYKF

>EAQ73176.1 alkaline phosphatase [Campylobacter jejuni subsp. jejuni 81-176]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDDNDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDILYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDANTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSDENLEFNDAFKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGADTSKILDEGTLYVGQFNGNMG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQVLINTRLAASIVGATPMDRCEWIASHKQSGSKEVFATLTNN

KNRQEPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>EAQ73175.1 ribosomal protein L1 [Campylobacter jejuni subsp. jejuni 81-176]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>EAQ73173.1 ribonucleoside-diphosphate reductase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQRKRIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVRKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>EAQ73172.1 prophage Lp2 protein 6 [Campylobacter jejuni subsp. jejuni 81-176]

MTFIMPFLKTLGYDVFNPSIVVPEYTADIGTKKGEKVDYAIFKDSKPFILIEAKNHTENLDNHNNQLVRY

FNTNPSIKFAILTNGIEYRFFTDIEQQNLMDKIPFLVVNLEKLKPRDIKDLKRFICTDLNLDEILSIAME

KKYYRSIQEIFKSEIENPSDEFTSFFAKQMTEKRMTSAVLEEFKNYIKKSFKEIINDLAYEKITSIKNNL

QNINDDENDEQIDEKRYCHNRRRITRFLYSKINSC

>EAQ73171.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>EAQ73170.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MGDIFDLLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPIKLNLHTS

KGNNLVLNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITCNFISNKILQNQNKKNLFYQIK

DFENLAKKRYERYENLGFWVCEGHYHQNHQINKENIKYLNLASFAYERSFFVVEYQQEIKFREQKLRGQN

V

>EAQ73169.1 3-oxoacyl-(acyl-carrier-protein) reductase [Campylobacter jejuni subsp. jejuni 81-176]

MKFSGKNVLITGASKGIGASIAKTLAGFGLKVWINYRSKPELADALKDEIIASGGVAAVIKFDASKEDEF

ENGVKIIVESDGELSYLVNNAGVTNDKLALRMKLEDFSGVVDTNLSSAFLGCREALKTMSKKRFGAVVNI

ASIVGEMGNAGQVNYSASKGGMIAMTKSFAKEGASRNLRFNCVTPGFIKSDMTEVLSDEIKQTYQDNIPL

KRFAEPEEVANCVAFLLSDYASYVTGDVLKINGGLYM

>EAQ73168.1 predicted membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>EAQ73166.1 UDP-3-0-acyl N-acetylglucosamine deacetylase [Campylobacter jejuni subsp. jejuni 81-176]

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>EAQ73165.1 ferredoxin, 4Fe-4S [Campylobacter jejuni subsp. jejuni 81-176]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>EAQ73164.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVNLCDLKKEPQINYPTFWDYKVIFEVHVRASEIFQEILGQREYKFEHSNSSASGKYQSYLLNVYVDSKK

DRLDIFDKLKAKAKFVL

>EAQ73163.1 OorA subunit of 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASVAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIEIINRKKFTGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGAIVKKNMERLIGKIKNNQDDICTYEEYMLDDAEFLIIAY

GSVSRSAKEAINRLREEGIKVGLFRPITLYPVAEKKIAEVVNKFKKVMVSELNMGQYLEEIERVSSRRDF

ISLHRANGRPITPSEIIAKVKENI

>EAQ73162.1 ribosomal protein L35 [Campylobacter jejuni subsp. jejuni 81-176]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>EAQ73161.1 cytochrome c551 peroxidase precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKVKSLLIASLVAFSSLNAASLIDEAKNSGLVALPKDQKGVDEILKQNGVKASEFTLEKAELGKKLYFEP

RLSKSGIISCNTCHNVGLGGTDGISTAIGHKWTANPHHLNSPTVYNAVLNNTQFWDGRAGTLADQAKGPI

QADPEMATPAKLAVEKISSLPEYVSEFKKIYGKSGVNFDNIADAIANFERTLITPSRFDKFLEGDEKALT

KEEQKGLKLFIDKGCVACHNGVNLGGNMQAFEVAGKYKFANLGDFKGDANGMVKTPTLRNVAETAPYFHN

GAIWNLKDAIKEMGSVQLGIKISDKEAKSIETFLKSLTGTKPAIVYPQLPISTEKTPKPEL

>EAQ73160.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KINLKFNNYFFLNKIIKGNFTNPFDFLDKVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEALMNKNLEIKNIKIHFDMINFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSKSQQQINFDYLVLD

NNKINSFYSKNLVNFNEENSTINLNIQGKSNEIDIDLKSLLGQNLNFDKTKFNITINKFLNSNFNISHFI

QKNLDLEIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKENNNFFL

NLSYDSLANPQLKINGSEFSNMDLN

>EAQ73159.1 mate efflux family protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKKQLSLTRLSFPIFWDLLSKYLTVIINTAMVSHYSNFLVGAMGAGNQILDLFITIFSFLSVGCSVLIA

QAIGAKDHVLARKVIHQSLFLNALLGFVCGVLILWHGEYLLYLLKIPQELLKDSEIYLHMLAICLFFDAI

GIVLAAIVRVYNMAYWVMFIGFLMDIVVICGNYYVLHYTKSELFGVGLSNIFARIVAIVALFAILFYKLK

IHLKIKEMIKLEKEVLKKVLNIGGFSAGENLLWIVQYTIAFAFVASLGEASLSVQTIYFQISMLIMLIGQ

ATSIANEIIVGKLVGARYENIAYKHAWRALYFSVIASALVAFLNYLCQDFTMQILGLKEELKNLMIPLFA

LSIFLEISRTFNIVMVNSLRASGDAKFPFFSGLVFMMGVSLPVGYVLCFHFNLGILGVWIGFCADEFLRG

MVNSYRWKSKKWQGKALV

>EAQ73158.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLD

VLQARVGSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQT

AVQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAI

EAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQ

TTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>EAQ73157.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKISPYLICIFFIFSNVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVH

SKFRKYPRQFVMSLRRNLDWVTQTLIPDYTNPHIDRARLILEFSGYNKGLATFTVYIEDKESRLMVEFLD

PRKKALQNPPQNNQVVPMINFNEPQVKPLTSKENNNSN

>EAQ73156.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPSNKNLLEQLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNTQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKFLEQNKIEEANVLLSQIKENSSLNQITKNLKHYQGITQ

>EAQ73155.1 molybdate ABC transporter, periplasmic molybdate-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLVLIFIVLFLSLNLNAQNLSVFVASSASKAMEEVKNEFLKSHPNDNIDLVFGASGKYYQLLKQGREF

DLFFSADTKYAQAIYEDQNALDKPKVYVLGILALYSLDESLLEGGIEKLKDKANKIHHLSLANPKVAPYG

VAAKEVLENLKLDKLFEDKIVLGENISVPVLHVDSNNADLGIVAYSLVSSINHPKGKAILIDQKYFTPLK

QSYVITRYAKDKKLAFEFSDFISSQKAKEIFKKYGFDTP

>EAQ73154.1 transferase, hexapeptide repeat family [Campylobacter jejuni subsp. jejuni 81-176]

MLIKFKNHSPKLGQNVFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRELNDEEISFLKQSALNYMDFKNEFLKDLQ

>EAQ73153.1 ribosomal RNA large subunit methyltransferase J [Campylobacter jejuni subsp. jejuni 81-176]

MRFDFFVSKRLNISRNKALELIENEEVLLNGKSFKASFDVKNFLENLKKTQDLNPEDILLTDGLKLDLLS

EIYVSRAALKLKNFLEENGIEIKHKNCLDIGSSTGGFVQILLENQALKITALDVGNNQLHLSLRTNEKII

LHENTDLRTFKSEEKFELITCDVSFISLINLLYYIDNLALKEIILLFKPQFEVGKNIKRDKKGVLKDDKA

ILKARMDFEKACAKLGWLLKNTQKSSIKGKEGNVEYFYYYIKN

>EAQ73152.1 methyltransferase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>EAQ73151.1 Prephenate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKIAIIGLGLMGGSLGLCLKENKLISCVYGMDLSKENEKDALRLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNVTIIELGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>EAQ73150.1 colicin E1 immunity protein [Campylobacter jejuni subsp. jejuni 81-176]

MNDFFDFFHKFILKTENLNLEILTKNNKYFLIPNEVCRYKKSPFGLLG

>EAQ73149.1 PP-loop family protein [Campylobacter jejuni subsp. jejuni 81-176]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQAHAPFKFELEAVTLSYGMGED

YSHLHAHCEEHGIKHSVLDSNIYEVSGDTIRENSSFCSYFSRMRRGALYTYALEKGFNKLAIAHHLDDAA

ESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRDNATQNELSVIGNEFCPGMKLSEKNVKFP

HAREEAKQLLANLEKNHPKLFTSLKTAFANLHTESFWLEKE

>EAQ73148.1 ketol-acid reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176]

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>EAQ73147.1 methionine-S-sulfoxide reductase [Campylobacter jejuni subsp. jejuni 81-176]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>EAQ73146.1 probable aminoglycoside efflux pump [Campylobacter jejuni subsp. jejuni 81-176]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGAIFYLYKAVPNS

LVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLFTSSLKENAAAMFIGLQ

DWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSGKSYDEIQKDVNKLVAA

ANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVNDFSMLGKNFQVNIRAK

GDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQPAPGYTSGQAIEAIAQ

VAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLAVVTAVPFAVFGSFLL

VYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKLRFRPIIMTSLAFTFG

VLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKRGKVHE

>EAQ73145.1 branched-chain amino acid aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MISADKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEDHTKRLLESAKITLLNC

PFSQKDLENAQIELLKANNFQSNVYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLKIAHDLGITVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARIIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>EAQ73144.1 peptidyl-tRNA hydrolase [Campylobacter jejuni subsp. jejuni 81-176]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>EAQ73143.1 putative deoxyribonuclease [Campylobacter jejuni subsp. jejuni 81-176]

MFLNLDFQDGLRIVDTHCHLDSEAFKDDLDETLNRAFKNGIEKIIIPGADIKDLPYAATIAHKYKNIFFA

AGVHPYEIDNYDEKILRQYLCDEKCVAVGECGLDYFRFKSDLAEEIQKEKENQKKIFIAQLELAIEFKKP

VIIHSREANHDTYEILHGYSKDLVGGVLHCFNASEHLLTLFEEGFYFGIGGVLTFKNAKKLVEILPKIPK

DKLLLETDAPYLTPEPYRGKRNEPLLTQFVANKMCEVLNLSRKELLEICFNNSEKLFFKGY

>EAQ73142.1 regulatory protein dnir [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLCFLICFNFLFAQINTPEFYERQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSMQNFS

KVTPMIRKILAQQEVPDEILYLAMVESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQVIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSASLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIREFNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>EAQ73141.1 ribosomal protein L28 [Campylobacter jejuni subsp. jejuni 81-176]

MARVCQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTRKMRIAASTLRTLKKQNSK

>EAQ73140.1 conserved hypothetical protein TIGR00423 [Campylobacter jejuni subsp. jejuni 81-176]

MKRLDKKEALDLLHHASLTELGEMAYKRKLELHPEKITTFVVDRNINYTNVCCIDCSFCAFYRHHKEDDA

YILSFEEIGKKIEELEAIGGTQILFQGGVHPKLKIEWYEELVSWIKEHYPNITVHGFSAVEIAYIAKASK

ISITEVLKRLQAKGLFSIPGAGAEVLSDRVRDIIAPNKCDTATWLEVHRQAHKIGMKSTATMMFGTVEND

EEIIDHFEHLRKLQDETGGFRAFILWSFQSDNTALIQKHPEIMKQSSNKYLRLLALARLYLDNFKNLQSS

WVTQGSLIGQLALKFGANDLGSTMMEENVVSAAGASYRMNQDEMIRLIRSLGENPAKRNTAYEILERF

>EAQ73139.1 transcription elongation factor greA [Campylobacter jejuni subsp. jejuni 81-176]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>EAQ73138.1 transcription antitermination factor NusB [Campylobacter jejuni subsp. jejuni 81-176]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTDTPSAIVINEAIELAKELANDNSPKFINGVLDALIKAKK

>EAQ73137.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDNSLSAYTQKYDKEGYGLQYPDGHVIRFYERILKYKLSKTSGKLLDFGCGNGVHSKYFKNITGGGYRAL

WH

>EAQ73136.1 Fumarate reductase respiratory complex, transmembrane subunit [Campylobacter jejuni subsp. jejuni 81-176]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQTTAMIKNYNGANYEYTI

>EAQ73135.1 crcB protein [Campylobacter jejuni subsp. jejuni 81-176]

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>EAQ73134.1 DNA-directed RNA polymerase, beta' subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSKFKVIEIKEDARPRDFEAFQLRLASPEKIKSWSYGEVKKPETINYRTLKPERDGLFCAKIFGPIRDYE

CLCGKYKKMRFKGVKCEKCGVEVANSKVRRSRMGHIELVTPVAHIWYVNSLPSRIGTLLGVKMKDLERVL

YYEAYIVENPGDAFYDNESTKKVEYCDVLNEEQYQNLMQRYENSGFKARMGGEVVRDLLANLDLVALLNQ

LKEEMAATNSEAKKKTIIKRLKVVENFLNSNLNANTDSDEAVPNRPEWMMITNLPVLPPDLRPLVALDGG

KFAVSDVNDLYRRVINRNTRLKKLMELDAPEIIIRNEKRMLQEAVDALFDNGRRANAVKGANKRPLKSLS

EIIKGKQGRFRQNLLGKRVDFSGRSVIVVGPKLRMDQCGLPKKMALELFKPHLLAKLEEKGYATTVKQAK

KMIENKTNEVWECLEEVVKGHPVMLNRAPTLHKLSIQAFHPVLVEGKAIQLHPLVCAAFNADFDGDQMAV

HVPLSQEAIAECKVLMLSSMNILLPASGKSVTVPSQDMVLGIYYLSLEKAGAKGSHKICTGIDEVMMALE

SKCLDIHASIQTMVDGRKITTTAGRLIIKSILPDFVPENSWNKVLKKKDIAALVDYVYKQGGLEITASFL

DRLKNLGFEYATKAGISISIADIIVPNDKQKAIDEAKKQVREIQNSYNLGLITSGERYNKIIDIWKSTNN

VLSKEMMKLVEKDKEGFNSIYMMADSGARGSAAQISQLAAMRGLMTKPDGSIIETPIISNFREGLNVLEY

FISTHGARKGLADTALKTANAGYLTRKLIDVAQNVKITIEDCGTHEGVEINEITADSSIIETLEERILGR

VLAEDVIDPITNSVLFAEGTLMDEEKAKILGESGIKSVNIRTPITCKAKKGICAKCYGINLGEGKLVKPG

EAVGIVSAQSIGEPGTQLTLRTFHSGGTASTDLQDRQVSAQKEGFIRFYNLKTYKNKEGKNIVANRRNAA

ILLVEPKIKTPFKGVINIENIHEDVIVSIKDKKQEVKYILRKYDLAKPNELAGVSGSIDGKLYLPYQSGM

QVEENESIVEVIKEGWNVLNRIPFASEILVEDGEPVVQNIKAGEKGTLKFYILKGDGLDRVKNVKKGDIV

KEKGFFVVIADENDREAKRHYIPRESKIEFNDSEKIDDANTIIASAPKKERKVIAEWDAYNNTIIAEIDG

VVSFEDIEAGYSADEQIDEATGKRSLVINEYLPSGVRPTLVIAGKGDKAVRYQLEPKTVIFVHDGDKIAQ

ADILAKTPKAAAKSKDITGGLPRVSELFEARKPKNAAVIAEIDGVVRFDKPLRSKERIIIQAEDGTSAEY

LIDKSKHIQVRDGEFIHAGEKLTDGVVSSHDVLKILGEKALHYYLISEIQQVYRGQGVVISDKHIEVIVS

QMLRQVKVVDSGHTKFIEGDLVSRRKFREENERIIRMGGEPAIAEPVLLGVTRAAIGSDSVISAASFQET

TKVLTEASIAGKFDYLEDLKENVILGRMIPVGTGLYGEQNLKLKEQE

>EAQ73133.1 purine-binding chemotaxis protein CheW [Campylobacter jejuni subsp. jejuni 81-176]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>EAQ73132.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNIDLLCAKDYTHTKNS

DIVLFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMLESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SLQEKDKLEKSLIKYQYKGE

>EAQ73131.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MAYGSSNPEDLAKNFTKDLYSGDTKSVMSYIDLSEAKSDEEKNIC

>EAQ73130.1 tryptophanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MRVLTGLQPSGDLHIGNYFGAIKQMVDAQEKSQMFMFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

PQKSVFWLQSDVKEVMELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMAADILLFDTQIV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEAKVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDFKNCNVFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELANAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>EAQ73129.1 iron ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MYKTLKYYKLGAILLALFLALPIFGIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISMGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLALFI

KKRKLNPIKQILSCIYCFMIAFVGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALVTALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYVIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRTSYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>EAQ73128.1 succinate dehydrogenase, subunit C [Campylobacter jejuni subsp. jejuni 81-176]

MQKEYAFFPGCVLSQAAKESKISLEAIAPILGWKLNEIKGWSCCGASQAQCVDPIATLVANARNIALAEE

MKMPMLTTCSTCMLTLTKAKNTLDKGAKERINTFLAKGGMKYQGSTPITSLLWELYEDLDNLKSKVKKPL

SNLKVALFYGCHSLRPEDTFGKKESSTNPKSFESVVEVLGAKIVPFEKRLDCCGFHASYPAEKSVKKMSS

QIVNNASENQADCVVTPCPLCQMQLDIYQERFQDYTNSKARLPIIHLSQLVGLALGLSKEMVGLDYNIID

ASKIA

>EAQ73127.1 YceI like family [Campylobacter jejuni subsp. jejuni 81-176]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>EAQ73126.1 ribosomal protein L11 [Campylobacter jejuni subsp. jejuni 81-176]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>EAQ73125.1 flagellar hook-basal body complex protein (FliE) [Campylobacter jejuni subsp. jejuni 81-176]

MNNINDLRLNNNISNTNKSQNSTGIGDEFAKMLKNEIDDLNKAQESGEAAMTDIATGQVKDLHQAAIAIT

KAESSMKFMLEVRNKAISAYKEITRTQI

>EAQ73124.1 molybdenum cofactor biosynthesis protein C [Campylobacter jejuni subsp. jejuni 81-176]

MKLSHLDEKNHPKMVDVGDKNITSRIATASGMIYMSQEAFDVIKNNTAKKGPVLQTAIIAAIMGAKKTSE

IIPMCHPLMLSKVETDIMEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRS

>EAQ73123.1 transcription termination factor NusA [Campylobacter jejuni subsp. jejuni 81-176]

MEKIADIIESIANEKNLNLENVREKVATALINTAKRIYGQEYEFFVDPKNLNLYQKITIVADNDERLQNK

SESFIALSKAKSEAPDVEIGDELTYECSLENLGRTAVNTLHKELEYHIQKLLEQTIFEKYKNKVGQMVFG

TVVRVDNEENTFIEIDELRAFLPRKNRIKGEKFKIGDVVKAVIRRVYTDKGIKIELSRTSPKFLECLLEA

EVPEIKDGYVNIIGCARIPGERAKIILQANGTNIDPVGATVGVKGVRINAVSKELHNENIDCIEFTNESE

ILISRALAPAIVNSVKIEDKKAIVSLNSEQKSKAIGKNGINIRLASMLSGYEIELNELSSSQLNNAISNE

EAMKNLQDLFKI

>EAQ73122.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>EAQ73121.1 acetolactate synthase, large subunit, biosynthetic type [Campylobacter jejuni subsp. jejuni 81-176]

MKELSGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNTITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPC

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKFAELLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSVGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENSNTTFKEWHETLK

RYNELYPLSYEDSNEILKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNIQELMTAYEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISNKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>EAQ73120.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MKKIDLIVVGAGPTGIGCAVEAKLKNKEVLILEKSNNICQTLMQFYKDGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFGSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSVLGNEKILVVGGGNSAAEYAVDLANSNQVSLCYRKKEFTRLNDINLKDIHEARNSGK

VELKLGIDINEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>EAQ73119.1 polyphosphate kinase 2 [Campylobacter jejuni subsp. jejuni 81-176]

MILFFFKFYFSVSKDEQKKRFEKRRSDPLKQYKLSPVDQKSQELWDKYTLAKYSMLLASNTPTCPWTIIS

SDDKKKARLNLLRFILSKVEYPNKKTGDFSKIDAKLVRSGEEEIRKMEANLEKLDSKKADEKIKDLD

>EAQ73118.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFK

IHKSTLDEIERFNQHNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLND

GCNQNKEYIVTHIFNAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGS

YSKEALFMSFLKSYSPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQD

GWLDAGIYAMEKGVAWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>EAQ73117.1 asparate kinase, monofunctional class [Campylobacter jejuni subsp. jejuni 81-176]

MLIVQKYGGTSVGTLERIEAVANRVIQSAQQGNQLVVVVSAMSGVTNTLIEQAEYFSKTPNGKDMDMLLS

SGERVTSALLSIALNEKGYPAISFSGRKAGIITDSVFTKARIHHIDTKAIKSELQNGKIVVIAGFQGVDE

EGNVTTLGRGGSDLSAVAVAGALNADLCEIYTDVDGVYTTDPRIEPKAKKLDKISYEEMLELASLGAKVL

QNRSVELAKKLNVNLVTRSSFNNNEGTMITKEDGMEQALVSGIALDKNQARVTLRNVEDKPGIAAEIFSV

LANENINVDMIIQNVGVDGATNLGFTVPQNELELAKNAMQKILSSKTTIESDSAVVKVSIVGVGMKSHSG

VASKAFKALADEGINIGMISTSEIKISMIVHEKYGELAVRALHECYGLDK

>EAQ73116.1 dihydropteroate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKFFKINPNTDFNLLCSFINPHKMGQKIMSEKTKIHFIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEE

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKVLDLIYEKNYYEQAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYGAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAGHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALAQAMDNIGV

>EAQ73115.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MVKNLIIKFGRLILDAIAAISFVVALLYSLFMMFSIGFLAGLLSLIVSFIALFLSFFVIYLVIDIRDALV

NKA

>EAQ73114.1 succinate dehydrogenase flavoprotein subunit [Campylobacter jejuni subsp. jejuni 81-176]

MGEFSRRDFIKTACISVGALAASSSGVYALDDSSKMDKDTNLPSCDVLVIGSGGAGLRAAAAVRKENPKL

SVVVATKMMPSRNATCMAEGGINGVTDFSNGDSYKLHAYDTIKGGAYLVDQDAALKFCELAGKAIFNMDF

IGTLFSRNEQGGVAQRLMGGASKKRCNYSADKTGHILMHSCLDDAISSGVKFLMDHELLDIGVVDGKCEG

VVLRDIQSGGIYPVLCKALVIATGGYTRIFYNRTSTPFIATGDGVAAALRAGLGFEDPEMIQFHPTGVAN

GGTLITEAARGEGGYLLNNRGERFMKNYHEKMELAPRDVVARAIETEIREGRGYGEGLGAYVLCDVRHLG

KEKILKDLPKIRHTAMLFENIDLVDTPVPIRPTAHYSMGGIEVAKFEDMSTKIAGIYVGGEASCISIHGA

NRLGGNSLADAVVTGHLAGIGATNYAKDASFGKGAKTHELAQKWQARFKEITNNGGNGQEMYELREELGS

QNWDNMGIFRTQEKLDLLAKNLEDIQARYEKIRIPNPNEVMNTAFTDYVELGNLILLSRCACLAARNRLE

SRGAHTREDYPKRDDKNFLKHSIVNLENDELKLSYKDVVVTEFSLDGRRVQ

>EAQ73113.1 GatB/Yqey family protein [Campylobacter jejuni subsp. jejuni 81-176]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEELGVSSLKEQGLIMKEAKIKLGASVDGKRLNL

ALKELLQ

>EAQ73112.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHVKDELSQYLANYK

K

>EAQ73110.1 orotate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>EAQ73107.1 putative 6-pyruvoyl tetrahydrobiopterin synthase [Campylobacter jejuni subsp. jejuni 81-176]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMINGEQGVTLQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>EAQ73106.1 pyruvate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKNLDTIRKVAKELHIRIGILQDISG

PKIRTGELKEPFELKKGDRLDFYRETILGEKIAQNHYKISINQKSILDMLKIDEYIYLYDGSIRAKVVNI

DDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFVQNAHDIDEVREIL

AQNNAKISIFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQKANNASKPVITAT

QMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVGIMCQTIIETEKRYPYNKFNDFN

DLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLNSLSIVWGVNPAIL

VNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGTSNLIRILNKEQIAYYLQ

>EAQ73105.1 outer membrane efflux protein [Campylobacter jejuni subsp. jejuni 81-176]

MRVIFSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALTRADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIEQSLLR

AKQNLLSNDQNRNLLIKNLQDLLAKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFTYEQL

LISYEQALQSAMNEFALNYKDYQSNTLLLQNLQSINIKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYQITALSFNDENLEFLKY

>EAQ73104.1 inorganic pyrophosphatase [Campylobacter jejuni subsp. jejuni 81-176]

MDLSKIKIGDIPNKINAVIEIPYGSSIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLNKIKNFFETY

KILEPNKWVKVQDFKDEKAAIEILEKAIKNYK

>EAQ73103.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKSILFASALLASSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGIPATPNTQAIPVARKIEIQCYKKAY

>EAQ73102.1 YlxS [Campylobacter jejuni subsp. jejuni 81-176]

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>EAQ73101.1 Pyridoxamine 5'-phosphate oxidase family [Campylobacter jejuni subsp. jejuni 81-176]

MDLKEIAQFLDDNAPAFLATLGTCGNPRVRPIQSPLLVRDKIYFCTANTKGLFKHIKNYNGIEFCSCAKD

GTFLRLRANAVFEPNLEVKKMMFEKYPYLVNLYETPQNPKFEVFYLDHLSARMQFMNGEFKLFKA

>EAQ73100.1 shikimate 5-dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDKIYAYNTDALGFLEVIKDFDNIKKALILGAGGTALALAYVLKQKGVEVH

IANRSKERFKDFLAYRAYLYKDLQDFDFDLVVNSTSAGLKDENLPCDRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>EAQ73099.1 biotin sulfoxide reductase [Campylobacter jejuni subsp. jejuni 81-176]

MLDRRKFLKIGASLSALPLIPSLSAGKTVEASKVSLGLVKNGEVITAAHWGILKLTIKDGKIVKSEPWEK

VTKMDNPLQHYTADMVYKSRVKYPYVRKSYLENPDNPKPELRGKDEFVRVSYDEAIKLIAKELKKTRDSK

GASAIFGGSYGWKSSGNMQNSRILLHRFLNVTGGFVGATGDYSTGASQVIMPYVVGSIEVYEQQTSWENI

LSDSKYVVIWGADPLSTLRIAWTSNEQRGLAYFEKLKNSKIKVICIDPVKTTTAKFLNAKWIAPRPNTDV

ALMMGMASHLIAKKKVNYEFLDTYTTGFDKFKDYLEGKEDGVKKDTKWASKICGIDEKTIKNLAETFYDN

PTMIMSGWGMQRAHHGEQPHWMLVTLCAMLGQIGTKGGGFGLSYHYSNGGVPTCKGGVIGGMTAGSLGIW

KNGKFKGLSKAEASSEGAEWLQNAASYSFPVARIADALLHPGKTIDHNGAKITYPDIDFIYWVGGNPLVH

HQDTNTNVKAWRKPRTVVVNEIYWTPTAKMADIIMPVTSSYERDDITMTGDYSNMHIAPMKQAVEPVGES

KDDYVIFSDICKIYGKDVFNAYTENGKKAKDFIKEYYNSALKQTQSFGEAFATPMPSFEEFWAKNEPITF

EPTAESLEWTRFSEFIEDPILNALGTDSGLIEIYSETIKNYNYDDCKAHPTWFEPIEWLGNASKEAPFHL

LTNHPRDRLHSQLCHTSLRDTYAIKDREPILINSKDAKKLGIKNGDVVRVFNKRGEVLAGAVVSDEIMQG

VVRLCEGAWYDPNENGLCKCGNANVLTMDIPTSKLANGNISHTGLVNIEKFKGELPKLTAFSAPKGAN

>EAQ73098.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176]

MSLLITKDCVCCDACREECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>EAQ73097.1 serine protease sepA precursor [Campylobacter jejuni subsp. jejuni 81-176]

MQKKLSANNTIFKINVDFENSKADYINSKESTQGVNNTLVLIFLNNPSKKRV

>EAQ73096.1 Uncharacterised protein family (UPF0153) [Campylobacter jejuni subsp. jejuni 81-176]

MIFDKNFSYAFDENACEKCGGKCCTGESGNIFASKEELEALRKHLKLESKEFAEKYLRKVGFKMSFKEVE

FEDGFACIFFDTQKRNCSIYDFRPKQCRTFPFWEYFKTHQKELEKECIGICYLS

>EAQ73095.1 beta-hydroxyacyl-(acyl-carrier-protein) dehydratase FabZ [Campylobacter jejuni subsp. jejuni 81-176]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>EAQ73094.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFFDEMFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEER

QNDIYIELGAKILGHEG

>EAQ73093.1 major facilitator superfamily protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKTLNQKDIKVLGLSSLGGTLEFYDFIIFVFFANYISTNFFPKDLSSFWQMFNTYGIFAAGYLTRPLGG

VILAHFGDKFGRKRMFMISILLMVIPTFTLAFIPNYESIGFLCIVLLVFIRICQGIAIGGELPGAWVFVY

EHAPQGQKRTYLGILTASVVGGILLGSLVFLIMNKIYTQEELHEWAWRIPFFLGGIFGIISAYLRKFLRE

TPVFEQMKKDKALEKFPLKEVFKKAKMGIVLSMMITWVLTGCIVVMILLMPSYMAKILQINTSIQTYLQI

GGILLICLGCIISGILADKIGIIKSCVFFSVFFGIVSLLYFNTLYRQNADFNLVACLYLLVCFFSGVMNF

CPLIMSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFSLGIYVFFLAIIALLC

AFIFSYLNNTQRTYSQ

>EAQ73092.1 oxidoreductase, Gfo/Idh/MocA family [Campylobacter jejuni subsp. jejuni 81-176]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNRNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSLYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCIASIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFSEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>EAQ73091.1 orotidine 5'-phosphate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>EAQ73090.1 thioredoxin-disulfide reductase [Campylobacter jejuni subsp. jejuni 81-176]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELTKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPSTVEKVKKNEKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTSVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>EAQ73089.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVK

SDGKVIRLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKN

YNDKIVQEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>EAQ73088.1 rod shape-determining protein MreC [Campylobacter jejuni subsp. jejuni 81-176]

MVFISFYYGGLIKQNVLRVNDFVIGNFYNIKDYLGKKISEHFNQANQIQQLKARNKELEDIAVKVTSFAN

QLNRILEDQNSTKYLPQVSLTRVISYVQLNDYKKLWLDWSKIPVGKNRGLIYQGYAAGIAINKNGRAMAL

LQGDDQCVFSVYIGKSKAPGLIQGEDGRIVVKFIPKWAKINTGDEILTSGLDNIFFSDIPVGIVNRVNDE

DMYQSVEVKPYVKISIPAYLYVVDNL

>EAQ73087.1 succinyl-CoA synthetase beta chain [Campylobacter jejuni subsp. jejuni 81-176]

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>EAQ73086.1 gamma-glutamyl phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>EAQ73085.1 D-3-phosphoglycerate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKNLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFMFAFLNQVLYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVVKISKAFGAEIYYYSTSGANKNADFVHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEALNALMDIVYNNLKEWIENGK

>EAQ73084.1 periplasmic phosphate binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILSLSVTSLALCGALNAVDLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKAGVTDIVGMMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>EAQ73083.1 3-oxoacyl-[acyl-carrier-protein] synthase III [Campylobacter jejuni subsp. jejuni 81-176]

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>EAQ73082.1 CmeC [Campylobacter jejuni subsp. jejuni 81-176]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKENNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>EAQ73081.1 integral membrane protein-predicted permeases [Campylobacter jejuni subsp. jejuni 81-176]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASVSGIISFSNSGVIDSEVIHKGILV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNFINF

>EAQ73080.1 lysyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>EAQ73079.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTYSFIQPRKKPIFTLFDKIWLGLFGFSISFILLVYFTYTIKIALINSSINNEKQQVIVLQNQTKQNEML

YEILFDQSQIAKNFNTQNQIVKESLRNLFDIIVKTDNITLESVEQDEYSLKLIGVTPTREMFTLLLETPL

KSIFDQSYTTYYRLDNGWYRFVSISKQIPGVADER

>EAQ73077.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFAN

GVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLL

YFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDL

SKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILS

QIPKITEQQKNIQKAYDQAVDAYNEAVKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLEST

TASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNN

NPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>EAQ73076.1 conserved hypothetical protein TIGR00046 [Campylobacter jejuni subsp. jejuni 81-176]

MQFLYNKQAGEEFIQLQGENFNHLKVRRVKENSELNLRNLQDNFLYNYTITNLTRNSCTLKFLNKKSQNI

KQSELNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFIQKFPNAIMVDFQGKQQSHFDEKELYFIGPEGGFNNDERLLFNRKISLKSSNILKSQTAII

AIASKILL

>EAQ73074.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTLDFDFIYNADNDIFEYLLRFYAKNYNYILSKEENTYHFSIDADEENLKTFCDSLNFMSHSVFLKKFDV

KAGQGFNPCIPEDKEFSRFSYITHLNSNAYQEKKLLNKNEWGVFCECEFSSNLSEFEKINEENFNTFLNL

AFDLLSQEKKIYLKDKNGIYEFSLFKNEFIGDFLLPCDIKAINSVFVCSNENLKLLASLEKPLMKLRLNA

MFRKNHNLDFSDFKIRLARDLFCFALGLKLFENEYKFLSVKKIEEYQKDFYISALDEQVVVLEGFEFINA

KARELIFSKEDKNMARISYLVSRYKEKAFILELSKDYEDILLINKELNLLKLCLPKHSKELYEEIKKDEI

GARLLENFSKEFPLLDESFELQNNFYSLFGLVGRVLNLGKNLQESVSELLKIADESKMPRGVKIDYRLKE

DKSFDYTRTLRSAMSFMLAGVDSVNIAYGAVESLAYFLRDTYDELREKKQSDLALISGSLFEHKSLLKNT

LKHLKNCQLSDVPLRV

>EAQ73073.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKKTFVSDKITQVVAENAAKAKRMGGVKDIQIEEKTINKDSAKIRVLVLFNNDNNQSSNVFLAKKDRKW

LVLLK

>EAQ73072.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRLLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKEL

NSQLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVPTTTANNSQELMPKP

KSTSLEGYDYTNYILVMLILVILLIVLWWFKKTMVYKNNNVSRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLIEQRQKGKKS

>EAQ73071.1 mosc domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIQSLQIGKIKNYKNFQSAFIKDTYLEETQIDFLGILDDQIADKIHHGGYHKAIFANSCQNYPIWERFL

NKKLNFGSMGENLSIDGLCEQNVCIGDIHQISNAILQVSEPRKPCVKISKIHNNSNFTHEIFKTGLSGWY

YKVLQVGQIRKYENIKILEKNSTSLSVFELNQLFYSPHQALRQNPILLDKLEKLNSLISQNWHETIHKRL

KNTYDISYMDSL

>EAQ73070.1 HIT family protein [Campylobacter jejuni subsp. jejuni 81-176]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREAIKLDLPKFEEFVKFLNSKIF

>EAQ73069.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNVNIWVMIFSWILIFALAIFHFVCFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>EAQ73068.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFGSKINHSDLQKLEEENKNLAHKIEKFQSENLELKNKITSLEQAALESKLKTDLLNVLLTGVLKNITIV

QGDMLENVNKAEVISSYSKTSLAEMDELNHIANSINASLGDITESANKTRDVAGTLHRSVDEITNVINLI

KDVSDQTNLLALNAAIEAARAGEHGRGFAVVADEVRKLAEKTQKATTEVEMNINLLKQNANEMYTQSEQV

EKISIDSNAHIMSFSEKFTHLVNEAHSTNSNAVGIASEAFVSLAKLDHIAFKLNGYKEIFSKSGKQLADH

TSCRLGKWLASTGKERFGQNKSFLKINEPHEKVHENMNNAITIANTEDISKDITQHSIINKCEVAENASL

DLFNVFKEMLDESDH

>EAQ73067.1 lipid-A-disaccharide synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKTFLVCALEPSANLHLKEVLKAYKKDFGEFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELINLSFAQKINGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDEIKEFKNQEDINHTFSKKDDEKTIAFLPGSRRSEIRRLMPIFKE

LSQKFKGEKILCVPSFNLEKLEIYGDISEFKIESNTPKVLKKADFAFICSGTATLEAALVGTPFVLTYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>EAQ73066.1 UDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFTELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

ALITQSPHLSFAFLSKLFAKPLISTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAINFKEKSQD

>EAQ73065.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MRIFLTLFLFFNSLFALSELEEGLKLYEANKFDKAYEIFKSLCEKDISKACFSLAFMHESARGVSKDLNQ

AYKFYDKACKLGLANACSNMALLLQNQGYENEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASVKSALAFYSKSCTLGFGDACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>EAQ73064.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIENIPASLWTKQDLNAYQIFDVRTPLEWEEGVLPNAQCVALYDNQGLLNAKFLDEFQSKRDENKKLAFI

CRSGHRSMVAAEFIAEKLGLESINLDGGMLALKGY

>EAQ73062.1 methyl-accepting chemotaxis signal transduction protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSVKLKVSLIANLIAVVCLIILGVVTFIFVKQAIFHEVVNAEINYVKTAKNSIESFKARNSLALESLAK

SILKHPIEQLDSQDALMHYVGKDLKNFRDAGRFLAVYIAQPNGELVVSDPDSDAKNLDFGTYGKADNYDA

RTREYYIEAVKTNKLYITPSYIDVTTNLPCFTYSIPLYKDGKFIGVLAVDILAADLQAEFENLPGRTFVF

DEENKVFVSTDKALLQKGYDISAIANLAKTKEDLEPFEYTRPKDGNERFAVCTKVSGIYTACVGEPIEQI

EAPVYKIAFIQTAIVIFTSIISVILLYFIVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFG

QISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDVLQARV

GSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLT

TSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAG

EHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNV

EIANESAIISSTVSDIANNILEDVKKKRF

>EAQ73061.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MVFLIISSIIVAIILGYITRHNVGIFAMIFAYIIGAFFMDLAPKKIIAFWPISIFFVIFAVSLFYNFATV

NGTLEKLAGHLMYRFANHPYLLPFVIFVVSAIIAALGAGFYTVLAFMAPLTFLLCDKIGLSKIAGAMAIN

YGALGGANFMTSQSGIIFRGLMENSGIEANEAFANSSIIFAFTIILPIVVLSFFVFNAFKNNIKISVISK

PDPFDYKQKTTLILMFMMIVVVLIFPVLNIIFPHNEIISYFNKKIDIAMIAMIFVAIALFLKLADEKQVV

ALIPWGTLIMICGVGMLISIAVEAGAIKLFSDLVENEINVIFIPLIMCAIAALMSLFSSTLGVVTPALFP

IVPSIAASSGLSEALLFSCIVVGAQASAISPFSSGGSLILGSCPDKYKEKLFKDLLIKAVPIGFIAAILA

TIIMSFIL

>EAQ73060.1 translation elongation factor G [Campylobacter jejuni subsp. jejuni 81-176]

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVPNIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKTVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFDHYDEVPKNVADEIIKKRNG

>EAQ73059.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MHFTIFHIIAFIILLICFALICILIFLKVKQKEMALISYTIATIFTALLIYSIFLTINQFTTQADLSKLT

YTRDLRHESVIVSGKVQNLTKFEIRKCYLMLSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>EAQ73058.1 alkyl hydroperoxide reducatase [Campylobacter jejuni subsp. jejuni 81-176]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>EAQ73057.1 Protein of unknown function family [Campylobacter jejuni subsp. jejuni 81-176]

MENKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

KDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>EAQ73056.1 fumarate reductase flavoprotein subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNIQYSDALVIGGGLAGLRAAIEVAKSGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRMEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGPKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>EAQ73055.1 TENA/THI-4 family [Campylobacter jejuni subsp. jejuni 81-176]

MLFSNLIKENQKIWNAYLHHDFVKKLEDKSLKQENFLFYLKQDYIYLLNYAKCYARLALNSNTAKELRFA

MKFQNYIVEGEMELHRAILSLGINADELDAKDESLVNIAYSRYMLSVGENGDFLDMLVALSACAIGYAKI

GAEIINRLKNENLKDHPYKEWILTYGSENFQNEAKEFEDFVNSYTSSVSAQKFQKLSEIFHTVTRLEVAF

WEHSLRMELNL

>EAQ73054.1 hypothetical protein CJJ81176\_0278 [Campylobacter jejuni subsp. jejuni 81-176]

MAYEDEEDLNYDDYENEDEEYPQNHHKNHNYDDDDYEYDDDNNDDDFYEMD

>EAQ73053.1 periplasmic solute binding protein for ABC transport system [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLFILSLGIFYTFTQAKNLEQEQNTSSNLVSVSIAPQAFFVKKIAANTLDVNVILPPNSNEHNFEF

KPSTMKKLEKSDIYFTIGLEFEKVFTDKFKQNFSKLQVVNMQKNIALIQTHDTHEHSHEHEHHEHEHFDP

HTWLDPILVQTMALNIYDTLIQKYPQNENLYKENLDKFLAELDSLNLQIASKLEKLKNREFVVYHPSWTY

FAKRYNLTQIPVEILGKEPKSKDLQKLITLMKDKNLKVIFVQNGFPENAAKTLAKECDAKIYKIDHLSYD

WENELLKTADAFSHNL

>EAQ73052.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. jejuni 81-176]

MEWFYLFLATACEIFGVVIMKELISTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIITCTAGLKFLS

>EAQ73051.1 acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>EAQ73050.1 hypothetical protein CJJ81176\_0268 [Campylobacter jejuni subsp. jejuni 81-176]

MKRLTALLTLFIFGIRFPYLDKFLFFKLKEKLNTIKFFLIFD

>EAQ73049.1 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176]

MTELIFLDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIKI

LYQGIKDKLACAKEILQKLNLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAV

AQMIEILVEKNHLEEEWNKLWL

>EAQ73048.1 carboxypeptidase [Campylobacter jejuni subsp. jejuni 81-176]

MQKLVENLALKYYDKVVDLRHQIHMHPELEFEEENTARLVCKILDEFGIKYQKNIAKTGILATIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGAALILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGSLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVVSRRLAPYEAGVITVGQICAGTTYNVIPINAYLKGTVRFLNDKTQDILKSSLE

EVAAATAKSNGGDYKLKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>EAQ73047.1 seryl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>EAQ73045.1 DnaK suppressor protein DskA [Campylobacter jejuni subsp. jejuni 81-176]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKHEN

>EAQ73044.1 OorC subunit of 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKDTMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>EAQ73041.1 exodeoxyribonuclease VII, large subunit [Campylobacter jejuni subsp. jejuni 81-176]

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>EAQ73040.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MNYKLSLSPLFVLEIIASILFIVFFGFGNFLFFILLSMIFGAVLLGIFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLVFPGIITSVFGIFVFFFGIALKLITKSKYQYTKQEYQNSNEEIIDVEIIEDRK

>EAQ73039.1 serine protease espP precursor [Campylobacter jejuni subsp. jejuni 81-176]

MLKPKKMIFFIKWAKESLLSKVKVWIQDLEWVRTKVSLEGEGLSFGEIYMNGRTLDLSGLTLNFDQIKTN

SNNVFITSSQSGTHLNLENKQDYLYHGNIFSDEAVTMSANTDKALIFDGNIYNKEGVFRTENAKLNFQGH

ARIHAYVSKEQAKKLQEHGLSALTKPVSFTQEDWVFVLKELNLEKKRVLFRA

>EAQ73038.1 preprotein translocase, SecG subunit [Campylobacter jejuni subsp. jejuni 81-176]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLGY

LYNKASKDSLAEKIKVENNNTTIPSAPIVPTTPNTNSIAPSAPQLPSDVNSSK

>EAQ73037.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENVQNANLALKISD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAEILREFLMNEFE

KLKG

>EAQ73036.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MVKKIIILTLWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYINNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTPKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>EAQ73035.1 nucleoside diphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>EAQ73034.1 ATPase, AAA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSLALTFRPENFDDILGQYELIEIFKKFTALQKLPHSIFFGTAGSGKTTFARVVAKEFGLDFYEFDGGNF

KLEELRKILDNYKNSLYKPLIFIDEIHRLSKTQQEMLLIPMENYRLILIGASTENPYFVLSSGIRSRSML

FEFKSLGAKELETLLLRVQEKMKFSIDKEAKDFLLKSADARAMLNLLEFVLVLDEKHISLENLKKLRNTI

NSEGVSSKDTHYILASAMIKSLRGSDVDAAIYYLARLIDAGESADFIARRLVIFSSEDVGNADPNALNLA

VSTLDAVKNIGYPEARIILAQCVVYLASTIKSNASYKAINEALNYVKNNEALEIPNYLNNNHQEKQNYLY

PHDFGGWVEQKYLSKNLKFYHSKGLGEEAKLLDNLYKLKNHKA

>EAQ73033.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFVSYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKNNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGTGTSAAFLAKYSKFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEFLTSDKKYHFAKPYKEFYELYMDLKLKCNIEFDLLYDILGLSIALKQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>EAQ73032.1 major antigenic peptide [Campylobacter jejuni subsp. jejuni 81-176]

MKKIITLFGACALAFSMANADVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATWFEKAKKDADIL

FGASDQSALAIASDFGKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSG

TGVWEDMIGRTQDIKTIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLV

VYRTFNVVAKEGASKETQDFIAYLSSKEAKEIFKKYGWRE

>EAQ73031.1 amidophosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MCAVVGVINSKNASTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENVVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNPMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>EAQ73030.1 translation elongation factor Tu [Campylobacter jejuni subsp. jejuni 81-176]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>EAQ73029.1 Ser/Thr protein phosphatase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MRILLVLRGNYYAGQEEFIKNNKLQNYTLDLNALRLLSGSVKNIVSEYKILNVKNDEDLSKILLKLLEMR

MQKGEFCIINAYNETLKIYKDLAKQYRYKMYVIVFDSSLKQCQEKNLLEAKKNGYIIPYALLEKTQDLLK

KNPKKYPILDSSDWKKCLYQMPNLSKYKKIHHIGDLQGCYSVLKEYIKTIKEDEFYIFLGDYINRGIENG

KVIKFLLKICEKENVCLLEGNHERHLIKWANGELSNSKEFNENTLKDFRKEKLTPRDARKLYPHLKECLY

YKFQNKFIFCSHGGVNFIPSKPEKISFIPSHDFIYGVGGYEDSQKVANQFCNFTSDNLYQIFGHRNKEKL

PMKIAKRVFLCEGKIDGGGYLRVVTLDKKGFECIEIKNQIYKKK

>EAQ73028.1 flagellar hook-associated protein FliD [Campylobacter jejuni subsp. jejuni 81-176]

MAFGSLSSLGFGSGVLTQDTIDKLKEAEQKARIDPYTKKIEENTTKQKDLTEIKTKLLSFQTAVSSLADA

TVFAKRKVVGSISDNPPASLTVNSGVALQSMNINVTQLAQKDVYQSKGLANDSGFINANLTGTTDLTFFS

NGKEYTVTVDKNTTYRELADKINEASGGEIVAKIVNTGEKGTPYRLTLTSKETGEDSAISFYAGKKDSNG

KYTSDSEAETIFKNLGWELDTTSSIDPAKDKKGYGIKDASLHIQTAQNAEFTLDGIKMFRSSNTVTDLGV

GMTLTLNKTGEINFDVQQDFEGVTKAMQDLVDAYNDLVTNLNAATDYNSETGTKGTLQGISEVNSIRSSI

LADLFDSQVVDGTTEDANGNKVNTKVMLSMQDFGLSLNDAGTLSFDSSKFEQKVKEDPDSTESFFSNITK

YEDINHTGEVIKQGSLNQYLDSSGTGNKGLDFKPGDFTIVFNNQTYDLSKNSDGTNFKLTGKTEEELLQN

LANHINSKGIEGLKVKVESYDQNGVKGFKLNFSGDGSSDFSIKGNATILKELGLSDVNITSKPIEGKGIF

SKLKATLQEMTGKDGSITKYDESLTNNIKSLNTSKDSTQAMIDTRYDTMANQWLQYESILNKLNQQLNTV

TNMINAANNSNN

>EAQ73027.1 macrolide-specific ABC-type efflux carrier [Campylobacter jejuni subsp. jejuni 81-176]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>EAQ73026.1 hypothetical protein CJJ81176\_0456 [Campylobacter jejuni subsp. jejuni 81-176]

MNLRIKLNLFISLLFSLFSFFFCFSLFFSYLLSLISFYIEYLKNNVKSKF

>EAQ73025.1 DNA polymerase III polC-type [Campylobacter jejuni subsp. jejuni 81-176]

MSLQQIDQIISILNKQSKPYDWVMQEFAKVEELKNFDLDLETFELLGLGLTLNKDNIFTLKTRTTKIKDE

IFCIVDIESTGGVSKGEILEIGAVKIQNSKEIARFQSFVKVKEIPENITELTGITYEMVENAPSLAKVLS

DFRLFLKDSIFVAHNVRFDYSFISRALNECGFGILLNRRICTIEFAQCCIESPKYKLEVLKEFLGVENTH

HRALDDALAAAEIFKYCLGKLPYHIKTTEELINFTKTARIKQK

>EAQ73024.1 ribosomal protein S7 [Campylobacter jejuni subsp. jejuni 81-176]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>EAQ73021.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKNKEDFKLSSIDRLKKMNLQKLSYEVRISQDGKSIYAKIK

>EAQ73020.1 fkbp-type peptidyl-prolyl cis-trans isomerase slyd [Campylobacter jejuni subsp. jejuni 81-176]

MAIEKNSVVSMFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLG

EYDENAVQTLPKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIVDA

RAASEDEILTGIIAGSHSCGCGSGHGHDHHHGHGHGHGGGGCCGGGGCGCH

>EAQ73018.1 amidohydrolase 2 [Campylobacter jejuni subsp. jejuni 81-176]

MKIDTHAHIFLKKLNTVANTRYKPDYDASFKDYKANLDHYDFNKGVLVQPSFLGIDNEFLLQSIEKDENI

KAIVVVDENIKFDELKKLKERKACGVRLNLIGKELPNFKSMVWTQFFENLSKLKMQIEIQRDLDNNLVDI

VENLIPYGCNIVIDHLARANANLTNLEDLICLKNSRIFFKISGFYRAKIDYANNEQAVKFAKKIYEILKE

HFPLSNFVFGSDWPHTNFEANINFSSALVAFNEVVVSKKEQEQILGDNACALFGF

>EAQ73017.1 ferric uptake regulation protein [Campylobacter jejuni subsp. jejuni 81-176]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>EAQ73016.1 tryptophan synthase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVVNLSGRGDKDMQMIRDYKKGVIYG

>EAQ73015.1 DNA ligase, NAD-dependent [Campylobacter jejuni subsp. jejuni 81-176]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>EAQ73014.1 transaldolase [Campylobacter jejuni subsp. jejuni 81-176]

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>EAQ73013.1 putative membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MLNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFVKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITPKLDAYSQKSSNAWPFLIVLIVLVIIGSGIYYFDTLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTPKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>EAQ73011.1 CmeR [Campylobacter jejuni subsp. jejuni 81-176]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>EAQ73010.1 MDS013 [Campylobacter jejuni subsp. jejuni 81-176]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWILFAVEI

GLLFALQWKKREAPLNLVLLFGFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>EAQ73009.1 hydrogenase expression/formation protein HypE [Campylobacter jejuni subsp. jejuni 81-176]

MKNISLAHGGGGEEMNELLTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELEKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEIISKKESKNIKAGLSILLSGDIGRHGASVLIKRNELEADVKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>EAQ73008.1 protein-L-isoaspartate O-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALDFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKAAQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDDGILVAPILHNGKQFITRLRKNGTNLQKEILEECLFVPIVDGKE

>EAQ73007.1 radical SAM domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLFQNLALKYSHTMMEKSLQKGFNVELLKQPEEKIPKQDKSYMLYAHVPFCHTFCPYCSFHKYYYDENL

AKVYFQNLREEIKIMKDKGFDFTSMYVGGGTTLINEEELLKTLELCKKLFNIKEISCESDPNHIDPNKLS

MFKGIIDRLSCGIQSFDDETLKKVARYNKFGSSKELQEKISKALGILPIFSIDLIFNLPGQSEKQLLNDL

EIAKNLAPQQITTYPLMKSNLTKDNIAKSLGVSIKDNEFAYYQIICEFFKDYTQNNGWSFSLEKNKLNDE

YVSSHHEYLGVGSGAFSFLDGELLINAFNLNDYAKFIQEKQNANIAKACFDKKEIIKYVFLTEIFSGKIE

IDKFNKTLNCNLEKELFIELLGLKTSGAIIKDQNALIATEFGQYLFVVLMKDFYTGMDLVRAVFRDDKRL

KNKDYIDIMKENIDPLNSASMEFKAETN

>EAQ73006.1 tRNA-i(6)A37 thiotransferase enzyme MiaB [Campylobacter jejuni subsp. jejuni 81-176]

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGVDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIYKEAQKAIEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEGLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKEW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETVDVLEKVRFEQIFSFKYSKRPLTKAATMPNQIDE

EIASRRLSTLQNRHSEILDKIVKKQENKTFKVLFEELRAGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEIV

>EAQ73005.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKAFSLLEFVFIILILGIVFNLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNLTKRFGIEKVEFKGSCSGFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYVYIPDFKTLKSQFVNIKNKNYECSKI

>EAQ73004.1 DegT/DnrJ/EryC1/StrS aminotransferase family [Campylobacter jejuni subsp. jejuni 81-176]

MNFINLQAQYLAYKDEINAEIESVLSSSSFIGGAKLNEFEQNLAHFLGVKHAIGCSSGTSALYLALRALD

IGKDDEVIVPSFTFIATAEVVALVGAKPVFVDINLSNYNLDFEAVQKAITPKTKAVIAVSMFGQMSDLRA

LEEILKNKNITLIEDGAQSFGASFKGEKSCSIAKISCTSFFPSKPLGAYGDGGAIFCHDDEIAKKIRILL

NHGQTQRYKHEFIGINGRLDTLQAAILNVKLKYLEKELDKRQKLAQTYNANLKNCQIPQIDPNAFSAYAQ

YSVLVEDRASVLQKFEKANIPYAIHYPTPLHKQPCFSEFSNLELKNSEYASEHILSLPFSPFLSEEEQEQ

VICIFKD

>EAQ73003.1 conserved protein [Campylobacter jejuni subsp. jejuni 81-176]

MQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>EAQ73002.1 ferrochelatase [Campylobacter jejuni subsp. jejuni 81-176]

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>EAQ73001.1 peptide deformylase [Campylobacter jejuni subsp. jejuni 81-176]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFNENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>EAQ73000.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKHCLALCFIFFLCACSAKNQNFSSQSLMVLIASPMIKINDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKQVFNQKFFKNVYYDDILNDILKANPLWQGRNLEKTDCGFEQNLKAKNYEIFYYVCDNKV

SFFDKISHTKIILTHIQN

>EAQ72999.1 molybdate ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>EAQ72998.1 RNA methyltransferase, TrmH family [Campylobacter jejuni subsp. jejuni 81-176]

MIVYGKQIFFYILEYHKDCINELYLAKECDKITFSKIAKSGFKIKKLDFKTAQAYAKGGNHQGFLLDIKE

SSFANLNEIKKNDFIVMLYGISDVGNIGAITRTAYALGVGALIFIGEKLAMEGVIRTSSGAALDLPIVIS

NDALSVINELKQVGFYFYASDGSGKEIHSVKINNGKKVLVLGSEGFGLSSKIVKKCDECVGIAMKNNFDS

LNVSAAFAILCDRMLNA

>EAQ72997.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLAYQDGEYFTADNNGNLKIFDNSYNEIYNFQFDASVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQIIKDVVISAENFFNNAIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFVKSNIYN

NYLYIFEKTGYLIKMNLNLDNTQVFKLSEAVDKISFMGNGKFYYGNKILDLL

>EAQ72995.1 Na/Pi-cotransporter, putative [Campylobacter jejuni subsp. jejuni 81-176]

MQEERNSLKYFKFISWSIFTLVLIFILIRYDELANLLAGVAILLIGMTNLGIGFKAFSGGLLEKILAKST

DTKIKSILFGTLSTLIMQSSTLVSIITISFLSAGLISLGAGIGIIFGANLGNTASSWLIVGLTNIKISML

AIPLLIIGVLFFFQKDSVLKGLGNIFIGIGFFFLGVDYIKSGFENFKHIIDLSRFDFAGFKGVFVFLGLG

ALLTGVIQSSTATMAIIVAALLAGQISLENSLAATLGTSVGGVVTAVLASLSTNIEGKKLAFANCIFNFG

IAFLIVLIFPYFIHFLNFLSIVLNIEDIALKVALFHTLFNLIGVVLFSFFTPQIVLFLNKIVKAPKDKNK

DKPLYLDSSLVKFSDTAIESLRKESEHLYNNTYAIVAHAIGFSRKDIQSDKSFKEILENKKWFSKNVDLD

YLYQTRIKVLFEAIIDFSTKAQVYINDETKNHKIFTFKMAAKNLAETTKNLKIIQANIKKYSSSSNEFLA

LEYNKIRSNLGELLRSIEELRVVEDREKLYLIIKNLQKGKEILKEIDTLTLSNVEHLISVRKITTAEGIS

ILNDTTFAAKIAEELIGAVEVIFSKDISN

>EAQ72994.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>EAQ72993.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKVVLISALLGAFAANVFAANTPSDVNQTHTKAHHSKAKADKKHEAKTHKKTKEQTPAQ

>EAQ72992.1 ribosomal protein L20 [Campylobacter jejuni subsp. jejuni 81-176]

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>EAQ72991.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLWDKKAKTYARYQNTLNTIQKQTFEYLQNLNISFQNKSIIDIGCGTGVWTLHLAKEAKEILALDSANT

MLEILQEDAKKLNLNNIKCENLSFETWMQNNPNVKFDLAFLSMSPALQNEKDYTNFLNLAKIKIYLGWAD

YRKSDFLDPIFKYFNTEFKGFYKKDLENYLLEKNIFFHKIVFDETRKVQRTKEEAIENALWHLSMNKITT

SKEAVSSFVENDIIETIESKIKLLIINNL

>EAQ72990.1 50S ribosomal protein L10 [Campylobacter jejuni subsp. jejuni 81-176]

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKVKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>EAQ72989.1 Protein of unknown function superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MARQSSSLKSFIYKDECYFYSKKCIKTLRLRLNEKGEFVLSIPYFCTFKSVYEFLDKSSSWMNEAKKRFE

KKALKDDELIFLAKKYQIIFDENVKKTYFNKDKILCQNKAKLDLFLRQNAKKIFTFYLKKWSQKTGLFYT

HLSIKNMKTRWGSCNHNKAYVNLNLKLIQKSLRAIEYVILHEISHLKFPNHSKEFYTFIEHFMSDFRQRE

KEFLS

>EAQ72988.1 nonheme iron-containing ferritin [Campylobacter jejuni subsp. jejuni 81-176]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHAKKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALSRKK

>EAQ72987.1 flagellar basal-body rod protein FlgC [Campylobacter jejuni subsp. jejuni 81-176]

MAYLSDFDISGYGLSAQRFRMNVISSNIANANTTRTAEGGPYRRREVIFKATDFDKLLNEQINKDNNFLK

YENPLNDPSSPEEAKPPIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>EAQ72986.1 endonuclease III [Campylobacter jejuni subsp. jejuni 81-176]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKAYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFGGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTGIFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>EAQ72985.1 DNA polymerase III, delta subunit superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MYRKELQTLLSKDSIPNFFFLYGADNFQSELYAEFIKEKYKPDETLKLFFEEYNFTRASDFLSAGSLFSE

KKLLEIKTSKKNPTKDLKILVELCKNNTNNFFLLELYDENSKQSDIEKIFSPHFARFFKANGAKEGVELL

SIKAKQLGVEITQNALFTLFTSFDENLYLAASELNKFSGLRVDEKTIEQYCYSLNTGSFESFFEKILKKQ

DFKSELEKILDNFNEIALINSLYNSFYRLFKIALYAKVNGKIDFKDLLGYTPPPQVGQNLSSQAFSLKIE

QYKEIFTLLLKCEYELKTNSKLVKKEFLISNLLKLARILKIN

>EAQ72984.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>EAQ72983.1 ATP-dependent Clp protease, ATP-binding subunit ClpX [Campylobacter jejuni subsp. jejuni 81-176]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKELKAYL

DRYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAIC

DATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLK

IIEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEK

IEPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIA

QLALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>EAQ72982.1 succinyl-CoA synthetase alpha chain [Campylobacter jejuni subsp. jejuni 81-176]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGVTPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIKENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESAAAKKEALKSYGIHVVDSPALI

GEEIQKILG

>EAQ72981.1 phosphoserine aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKAAMLYECIDLSNGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQIKTLCEFM

KEFQGKYA

>EAQ72980.1 probable inorganic polyphosphate/ATP-NAD kinase (Poly(P)/ATP NAD kinase) [Campylobacter jejuni subsp. jejuni 81-176]

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>EAQ72979.1 MTA/SAH nucleosidase [Campylobacter jejuni subsp. jejuni 81-176]

MKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFAKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQV

LLFTGVAGAFNPELEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIKL

RAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEFV

INSAKISANFVLKMCEKL

>EAQ72978.1 protein tolB precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKIVAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGSSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLASVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDKPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGVQSALGVIRVNANKTFYFPLRVGKIQSIDW

>EAQ72976.1 CmeA [Campylobacter jejuni subsp. jejuni 81-176]

MKLFQKNTILALGVVLLLAACSKEEAPKIQMPPQPVTTMSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQALMAKATFENASKDFNRSKALFSKSAISQKEYD

SSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSASTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>EAQ72975.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAIMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEVYLSDYFYCINCNN

>EAQ72974.1 OorB subunit of 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MAFNYDEYLRTDKLPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVVDKSKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>EAQ72973.1 S-adenosylmethionine:tRNA ribosyltransferase-isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MNKDLLLSSYDYTLANELIANYPANPKEDARLLVFDRKNKEIFHTTFKNLKDFLPDCAIFFNDTKVIKAR

IYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKARVVELLDDGLRKVQFFQNDKT

LDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSETMFENLRKKHKIYH

LTLHVGAGTFKGVECENIQEHKMHSEFFNIPQQACEIIDSKQAILGVGTTVTRTIEYYARTKTKSGFCDL

FLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYKLAIKEKYRFYSYGDAMLIL

>EAQ72972.1 processing protease [Campylobacter jejuni subsp. jejuni 81-176]

MQYLESRGIKIPFIFEKNSDFPIVVLKLVFRNCARSYDEIAGLAKMFSRILNEGVDDKFFKDLEFRAINL

EASSGFESLEINLSCLKENFDFALKSLEKLLLKPRIEEKTLQKLKINALGELASKNSDFDYLAKNLLNAQ

IFKCKEFQSPNDGDEKSIETLSLKDLQNFYKNFIHLSDLVVILGGDLEEKQAKEDLLKLLSKLQIGKKNT

PKKYELGKNIKDEILVRPESEQAYIYFATPFFADFKDKDLYLAKIALFVLGQGGFGSRIMEEIRVKRGLA

YSAYAMLDMNMSFSRVFGYLQTKNESAKEAKKIVKELFEDFIKNGMTQNELDQAKNFLIGSTPLRYESLS

KRLSMSFNEFYQGLNLGYYKEELKLMEKVKLETINAYIKKHQELLNISFASIQNEN

>EAQ72971.1 sec-independent protein translocase protein tatc [Campylobacter jejuni subsp. jejuni 81-176]

MKFETINQESIAKLMEIFYEKVRKDKDLGPIFNNAIGTSDEEWKDHKAKIGNFWAGMLLGEGDYNGQPLK

KHLDLPPFPQEFFEIWLKLFEESLNIVYNEEMKNVILQRAQMIASHFQNMLYKYGGH

>EAQ72970.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTSKEGEIEARVDKFGVIVLKTEFLKKI

>EAQ72969.1 Carbonic anhydrase [Campylobacter jejuni subsp. jejuni 81-176]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>EAQ72968.1 macrolide-specific efflux protein macA [Campylobacter jejuni subsp. jejuni 81-176]

MKKKVILIVLIAILGSVGAYFIFFNNDEKISYLTQKIQKKDISQTIEAVGKVYAKDQVDVGAQVSGQIIK

LYVDVGTHVKQGDLIAQIDKDKQQNDLDITKAQLESAKANLESKKVALEIASKQYQREQKLYAAKASSLE

NLETQKNNYYTLKANVAELNAQVVQLEITLKNAQKDLGYTTITAPMDGVVINVAVDEGQTVNANQNTPTI

VRIANLDEMEVRMEIAEADVSKIKVGTELDFSLLNDPQKTYHAKIASIDPADTEVSDSSTSSSSSSSSSS

SSSSSNAIYYYAKFYVPNKDDFLRIGMSIQNEIVVASAKAVLAVPTYAIKSDPKGYYVEILENQKAVKKY

VKLGIKDSINTQILEGVNENEELIVSSSADGLAPKMKLRF

>EAQ72966.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDKAKIVQNLNALFKQRAEFYSYFDENIAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>EAQ72965.1 ribosomal protein L7/L12 [Campylobacter jejuni subsp. jejuni 81-176]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAAPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>EAQ72964.1 ribosomal protein L33 [Campylobacter jejuni subsp. jejuni 81-176]

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTLHKEVKLKS

>EAQ72963.1 porphobilinogen deaminase [Campylobacter jejuni subsp. jejuni 81-176]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>EAQ72962.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. jejuni 81-176]

MAKRKGKTYLSVLILVLIAILIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDESSIKNVQIIL

HKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKAEDANLDKVYIETNKGKIFKVTPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYRVSNINLTDKFLDGKIENLANQYAPKDNNLNRYEKFKFVNETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGLDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWVENNIYNVLNDGKKIILGKN

>EAQ72961.1 hypothetical protein CJJ81176\_0445 [Campylobacter jejuni subsp. jejuni 81-176]

MILKNLIKTFQILDFNKSDNCIEKNLKAGFIYFNYEILDYQSQLFSSFF

>EAQ72960.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>EAQ72958.1 3-polyprenyl-4hydroxybenzoate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MKEFIQILKENDLLRVIEEPVDVDLEIAHLAYIEAKKGEKGKALLFKNPIDKKLNKQYKFPVLMNTFCNE

KALNLAFGRDYEEVAEEISKLTKLHIPTSFKAKMDFFMNLLSFKNIPPKRLKKNKALYDYEILNSLEELP

ILKTWEDDAGKFITMGQVYTQNLDKTQNNLGMYRLQMSDKNELLIHWQIHKDGANFYHEYKNVGFKKMPV

SIAIGGDPLYIWCSQAPLPKGIFELLLYGFIKKTPAKLTPCENGIFVPYDSDVVIEGYVDLEEFKIEGPF

GDHTGFYTPAELFPVMKVEKIYAKKDAIYQATVVGKPPLEDKIMGLGTERIFLPLLQTSVPDLIDYNMPE

NGVFHNLILAKIDAKYPAHAQQIMHAFWGVGQMSFVKHAIFVDKNAPSLKDYDALIPYMLDRFNTKKILI

SEGICDQLDHASPNSCFGGKAGLDACEEIQVEELEILEDEKLLELFKTKVELLNLKQFYKESKSPIVCIL

LDKKEKIEQSFDKLLEFKKHFRILVFLDVENKLENSYMLVWRVVNNIDAKRDIFIKEERLGVDASAKGEA

EGYLRAWPKQTDCTKSVIEDLILRNILENNPDLFNKFEIF

>EAQ72957.1 sodium/hydrogen exchanger family protein [Campylobacter jejuni subsp. jejuni 81-176]

MDNFLEIFLITVAIAIVLNVIFKKFEIPTIIGYIAAGEIISEIYHLSGKGEITHIAEFGIVFLMFTIGLE

FSFKHLMAMKQEVFLNGSLQMLTCGFVFMLLAIGILGLGDKSATIVGFALALSSTAVVLKILNDNGDINE

QYGRKALGILLFQDIAVIPLLLLVDIFSSNNQNIEKLLFTTLISALILITLLFFIGKYLVDRIFRLIIHT

SSQEIFISTVLFMVIGASFLANYFGFSYSLGAFIAGALIAETKYKHKIEADLIPFRDLLLGLFFITVGMQ

IQLDVVAQNWFLIIVLTLLVMALKFGIVFGFLFLYTKKRVALKTAFAIAQIGEFALAIFSLLQAKNMLDI

KTSQILIVVSILTMIITPFILNNIRKITNVVEDIALNTNAVQNIDSNIKLKNHLVVFGYGRLGQEVVQKI

KNTGVPYLVLESDLNLVELGVSRGENVVFANAAQEETLKIANIEECAVAIITVTNEAKLEILCQVLANYP

KPIDTIIHVNGTLKKMLFSSIDENIRIIRSEKVIARNLVQEALECRIHKNT

>EAQ72956.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MANTFGYGAMTNHLGDIQRSKCIIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYAR

IRPGTDIAFMYGMLKIIFDEGLEDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAK

NKPTTLIWAMGLTQHTVGTSNTRLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPL

NEATWRYYAKIWGVDYEWLLGNFVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGI

TSTAQQVKVKEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDP

LYESMEDQEILFELAKKLGFYEDFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWSPERLKKHTLYWD

KFDEVTLEGKDEVAGEYYGLPWPCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYEGESLLAKNAPLN

SPIDTGYPQITKDNIEKVLGITLSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNAKARAVVWTFKDK

IPLHREPLHSPRNDLVQKYPSFEDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLVNLNGAGMENRAS

MYLTRLTPEMFCEINPELAKEQDIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLPFHFTGVMQGVDL

THNFPEGTKPYASGESANTVTNYGYDIMCQIPETKGGLCRISKDGK

>EAQ72955.1 protein containing aminopeptidase domain [Campylobacter jejuni subsp. jejuni 81-176]

MLSCLGDDHAYSLIHTPKKNTLSDKVALHTLKNKENFKAFSFLDRGSDERQYNAPLVNLGIVGVCRTRYL

EYEQYHTSKDDLNFISEKGLMGGLQSMQEMILNLEINAVYKNTIVCEPNLGKRGLYHTLSTANDIPLACN

FLAYCDGENDIIDIANILNMQAYEFKELLEKILEYKLIL

>EAQ72954.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MFAKLLKFFISRPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDTDLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKAPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

RNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNDLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKSIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKVERIVLETLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSMGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSILSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNEFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVAAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLSGSLFLLPSFLITIYSKKTKFPNQHKEHILKQ

>EAQ72953.1 peptide ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKRLVFSIVVAFFSTFLCFVLLYFSKGSIAYTNGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGVSFLSGESVLKLIKERIFNTFILGFNALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKILPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSPIVAYFGGSALSFMMGTYVVESVFAYEGLGSLLFKSIIFKDYPVVL

ALIFFSVLLAAFFTFLSDIVARILNPRLRRLDFV

>EAQ72952.1 capsular polysaccharide ABC transporter [Campylobacter jejuni subsp. jejuni 81-176]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGILSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>EAQ72951.1 nadh-quinone oxidoreductase chain l [Campylobacter jejuni subsp. jejuni 81-176]

MQNLALISLFSPFVAFLFASCFALSEKKQFVGIICSLLVALSAFCSLYLLFCNEAFNVSLFEWFAGVNFG

FDIDAISLTMMSVVGIVATCVHFYSIFYMAHDEGFNKFFAYLGLFVFSMLFLVMSDNFLGLFVGWEGVGL

CSWLLIGFWYKNDTYSFAANEAFIMNRIADLGMLLGIFWLYLQAGTLKYDEVFSMAQSLDHNALILIATC

LFIGAMGKSAQFPFHTWLADAMAGPTPVSALIHAATMVTAGVYLVIRASTLYDLVPEVSYIIALLGAFVA

IFAASMALVVRDLKRIIAYSTLSQLGYMFVAAGLGAYGIALFHLATHAFFKSLLFLGAGNVMHAMNDKLD

IKKMGGLFKPLKITAILMCIGSLALAGIYPFAGFFSKDLILGYSFISFHHGIFLVLLIAAFLTAFYSFRL

LMLVFFTPARHDEHPHEASKIALLAMSPLMVLAIIAGFFEHSFFEYLSTKLVFIDAQNQIVMICASVAAI

LGAILAIFAYKNSWFKESIEENKIHKLLSNDYFIPQFYHQFIVSKYESLCAILKHCDLYIFDRIVEKIAL

YSQNISQKMIMPNSLNLMLRFLVAAFVILLILVWMV

>EAQ72950.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGVYEQY

>EAQ72948.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIIYGLWGITSLLTFWPSLMKIIRTLASKQEQARAYGVFEGGRGVVSTIYLAIATAIFGYFQTKALASKG

IEMIIIFYSLAL

>EAQ72947.1 ribosomal protein L2 [Campylobacter jejuni subsp. jejuni 81-176]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>EAQ72946.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MDREVFYIAGYDPKSYRFYYDLFKKNLKDYSHTFNIKADLSKIEKNEQFPFFKISCEGVQTKYHFLTWND

IVKKNWSENYKDALADCYSFFRIYTITGLFIKFGKESIYQLITGYYPFFYVLFSLLFSLVLAFGSFAFLQ

NYMHFSLAIIIGCFLGFLLNHFLFKLGKKLAVFWIARICAFCATWQDKKTGTMQERIKLFANTIVDKLKQ

NENKQDYELVLVAHSVGTIVCIEVLECILRQNLDLSLLHKLKILTLGECIPLVSYQKKADEFRKKLEFVS

RFDLKWYDYTSIIDGACFPQVDFFRTSGVNAKFTPPFLSAKFHTLYEKHEYKKIKRDKNKAHFLYLYSIS

VKGDYDFFSFIIMPKFLEEKVKI

>EAQ72945.1 CopG protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILTILFLLTLTQAKEIQVYESPTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYSEKYPVILMKKDGSYELYGYFI

GDKKL

>EAQ72944.1 recombination protein RecR [Campylobacter jejuni subsp. jejuni 81-176]

MVKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERNKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQIILKLNISELIFALTHSIN

SDATIFFIEDKFKGLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>EAQ72943.1 permease component of tungstate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176]

MDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLALLIGFPLGFILGFFEFKLKRFIKLIVDTSL

SFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFILALPIVIALFSNLIENMNKKHFLLIKSFHLS

PLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGNIKYDTRTITTAISLETNKGEFASGIALALV

LILIAFCLNFITHKLKRT

>EAQ72942.1 lipoprotein-releasing system ATP-binding protein lolD [Campylobacter jejuni subsp. jejuni 81-176]

MPNLIQANKLTLGYDELVIKEASFAFKDDDFVFITGKSGSGKSTLLKSFYGDLEPISGKLEVCGSLMNKI

GNLELLKLRQRIGIIFQDYKLVQEYSVEKNVMLPLMIKGYSKKVCHDQAAKLLKHVNLTFKADKLPNQLS

GGEQQRVAMARALAHNPKLLLCDEPTGNLDEYSSDIIWTLLKSARELLGTCVIVVTHRIPSNLRVDYRRF

NIENGKMNEIF

>EAQ72941.1 phosphomannomutase/phosphoglucomutase [Campylobacter jejuni subsp. jejuni 81-176]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIK

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKYLDDDIE

ENLEVEKYDILNLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKALNLKAHVMFAEPDGQFPNH

APDPTEEENLSAIREFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKDIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKALPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERAKELESMVFTLFNDIKARFKN

>EAQ72940.1 ABC transporter, periplasmic substrate-binding protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MENRANYFFVGLFVFGVFFASLGFILWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIQGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEILLQNLAELSANLNANSKNLSLNLSNASLKIGKMAN

NISLSAQNFNSSLKDIKESTMILKKFIKKADEKLNTYDDIKASLMQNLELFKRVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>EAQ72939.1 capsular polysaccharide ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MLNVIHALFFRELKTRFGKNRYLGYIWVVGEPMSVVLLVTIIGTVIREYHHQVMPEGISIFMFLISGIMP

FFMFRSIVTQLMNGIGANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRLDVFPVHLLG

VLFCIFLLICSAFALGICFAIVWHFVESLRTLLAYFSIVFYWSSGIIFPTWLTPRPLLDIFYYNPLLHIF

ELLRFNFFENYPLQDEYSYFYAIFWILLVLFIGLFIYYYNRQALTAAKKE

>EAQ72938.1 trna methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKALALFSGGLDSMLAMKLITAQGIEVKALNINIGFGSTSDKSEIMKKRAAMVGADFEMIDVRNSYLQEV

LFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRPMSQRSDAMAKVKKLALDEEDLI

LRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAVKFGLEDFESPGGGCLLTLDSFAKKIRDFI

EFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKYEVIELGDLIGAYSLVDEKISEK

DLELALKIALTYTKHEVGKSYELKFKNQAYTSIAFENKADINQFFIS

>EAQ72937.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALTLRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDEDSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPYSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>EAQ72936.1 DNA ligase [Campylobacter jejuni subsp. jejuni 81-176]

MRFVFLICCACLVFANEILLLSKFDKQDFNSKDFNTYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFTIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFKISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>EAQ72935.1 delta-1-pyrroline-5-carboxylate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MIQKALALAEELQGQIEANISNSEKEFHAKMQKLLNNPKNKVMLIELLDRSFRCKDKNASFELIEYTLSK

YGIADFFSTFEKFLLFSFLNFGKFAPNLSVPFFVKHLREDTKAMVLDANPSVLEPHIKKRKEQDKITLNV

NLIGEEVLGEAESKYRMQKYEEALKSSYITYISIKITTIFSQINIIDFNYSKEEVVKRLDYLYALALEEE

KKQGVSKFINLDMEEFRDLELTVAAFMESVAKFDIKAGIVLQAYIPDSYKYLKKLFAFSKERVLKGMKPI

KIRFVKGANMESEETIASQRGWELPTFYKKIDTDSNYNKMLDFILEGDNYKYINIGIASHNIFEIAYAYT

RISEVGALDSFTFEMLEGMSLQCSYELSKMHDLILYAPVCDEAHFNNAIAYLVRRLDENTSEDNFMRYFF

NLKVGDKNWNIQKELFLKSLEGIKTLDNTTHRKQDRNKESNIISSYESKKFSNESDTDFILAQNRAWAKE

IKTKYENLKDYDVYPVIGELDFKAENLNVLEVKDKIEDRVIGKAYLAGEKEIKQALEVAKNSKFTQKSHD

EIYQILAKSAKLMRERRGDLIGLAALEVGKTFLEIDPEVSEAIDFIEFYPHSLEELKKQNPKVTFTPKGI

GVTIAPWNFPIGISVGTIAAPLAAGNVVIYKPSSLSTLTGYMLCKCFWDSGIPKDALIFLPSKGSDISKY

LLIDEAIKFSILTGGEDTAYAMLKANPTLLLSAETGGKNATIVSKFADRDSAIKNIIHSAFSNSGQKCSA

TSLLVLEEEVYHDEEFKKTLVDAASSMAVGNPFEFKNKLGTLADKPSSKVQKALDELQPYEEWALKPKFL

EDNPYLMTPGIKYGTKKGDFTHMNELFVPILSVMKAKDLKEAIDIVNSTGYGLTAGFESLDEREWEYFHT

HIEAGNIYINKPTTGAIVLRQPFGGIKKSAIGLGRKVGIYNYITQFLEIKQEDFDDHLIEDKFSKKLAQI

DLKEAQDFMNNLIKMSQSYAYHYKNEFSVSKDYVNIRGEDNLFSYTKIKNMVLRLCGNESLKDVLGVVLG

ANIANIDLSISYDEQDVSMIERIVQSIGAKVLFLKENKENFIKSIKEYERVRYLAKPDVNDEIYKEAAKL

AKIIIREKPLLNGRFELLNYFNEKALSISFHRYGNLGIRAIS

>EAQ72934.1 inner membrane protein yfcA [Campylobacter jejuni subsp. jejuni 81-176]

MGFEHLDTIYYFILFFVALFAGFIDSIVGGGGLITLPALIACGIPAHLSLATNKLQSVFGSFTATLTYFK

STTLPHLAWGVFFTALGAAIGSYSVLFVKDEQLKLIILIFLTLTFLYTALRPNLGKHESEPKIKNIKIFH

LICGLTLGFYDGFLGPGTGSFWIFACVMLLGFNMRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLM

GVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGATIIKVAWDYFS

>EAQ72933.1 DNA-directed RNA polymerase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>EAQ72932.1 arsenical resistance operon repressor [Campylobacter jejuni subsp. jejuni 81-176]

MQKFLAIISAINDESRVLILHHLLRYKELCVCDLQELLNMGQSRLSRHLKILKDAGFCM

>EAQ72931.1 hypothetical protein CJJ81176\_1417 [Campylobacter jejuni subsp. jejuni 81-176]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>EAQ72930.1 L-seryl-tRNA selenium transferase [Campylobacter jejuni subsp. jejuni 81-176]

MNKFRTFPQINTLIEDESLKSYPFYIKAFFCKKVVAKLKENFFQDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELAKEKELLSYYDLGSGWCENLNEKLIKNEPKIRKLVQECDILSFSG

DKLFGSVQAGIILGKKELIEKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

KKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILTINQMENL

>EAQ72929.1 putative haemin uptake system periplasmic haemin-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMLKAEDQIVGIATLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKAERLEDITKNITTLGQITKKEKEAELLKQEFTQ

NLKKLSDKPLNKSVIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GINAKNNLLDTNALLKNTKAVKTGSIYFNKDTHILLRLSPKIIDRIQEFKTKLENNNF

>EAQ72927.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MENNNRCVFSLSGVTGMLIATVLLLAILAVLTIWGLKAQQEVMQKPYSLKDVQSVKMFGSKEQDHRSIKE

AQ

>EAQ72926.1 polyphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLERYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKICDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKTFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKVLEMIRIETSKKNEGVIVAKMNSLVDSDIIQALYEASMEGVQIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKIIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>EAQ72925.1 predicted glutamine amidotransferases [Campylobacter jejuni subsp. jejuni 81-176]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEICLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>EAQ72924.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTIDLNHNFTSFVLLDEVDFDFLELKSILEDKFNIKITDENFTKEGVIFSYENMLITLNLIKNPIPNHEA

EYYANFNFMWKDALEQTKKHKAHLLIAVLSQDQSKLEQAKMFTKIAALCLDNKHALGFYTGAVVLEPSFY

IENAKMLDDNRLPVYNWIYVSVYPSENGVNAYTYGLRNFDKLELEVCDLNIEEKELFFCIYDIVLHILTY

DINLKDKDILKFEDGKEIKFIKSQGISVENESLKIIF

>EAQ72923.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNKYFQESIKPIIDQPLFKKATFYEADIVAKVDPKEYNSTQAII

>EAQ72922.1 carboxynorspermidine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIDEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSTIEGLHFHALCEESADALEAVLKVFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYSVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNARILATRENEKISDLKESEFSYLLTGNTCLAGDVMGEYAFDKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLNAKNELQMIREFSYKDYSLRN

>EAQ72921.1 Phosphatidylglycerophosphatase A [Campylobacter jejuni subsp. jejuni 81-176]

MQKLFLTFFYSGSIKKASGTFGTIAALIPAFFILKYLGINTLFLLSILIFVASIRVIDDYEKKTGIHDDK

HIVIDEVAGVFLACAIAASVENSIVNFVLAFVLFRFFDITKPSIIGKIDKKVKGGLGVMLDDMLAGLFAG

LLSAVIYGFLLKFNLVFWDINLKDLF

>EAQ72920.1 GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>EAQ72919.1 uracil phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKNIHCINHPLIEHKLGILRAKETKPFQFRMLIDEISSFLLFEASKDFSLKEIEISTPIQKTTVKKLDEK

IMICPILRAALGMLESVFKMIPDASVGFLGFVRNEETLKADFYFQKLPKDAKKRTAIVIDPMFATGGTAI

EACNFLKSQGVKKIKFISILAAPQGLKKFSQMHDDVEVFVACIDEGLNEKGYIIPGLGDAGDRVFNTL

>EAQ72918.1 sialoglycoprotease [Campylobacter jejuni subsp. jejuni 81-176]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>EAQ72916.1 ribosomal protein L18 [Campylobacter jejuni subsp. jejuni 81-176]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>EAQ72915.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MSKFALILSFFIALFMSACTNATFIQSFIQTSNEGIFIRSQKQQSFKISFQNPSQLRTTLDRDLALKLKN

LGLKEVKENADYEILINLVDMKKHSYAQKITTSARFFYDFDPLESDGEWMVENYYTMQVNLQINSKNHNS

QKTSLLARTAYLGNKERCQLSLENKIINQIVSFFIFKKRQSRV

>EAQ72914.1 nadh-quinone oxidoreductase chain 8 [Campylobacter jejuni subsp. jejuni 81-176]

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>EAQ72913.1 amino acid adenylation domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MTTHIYDFLEKSLIKFSEKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQAPVLIILPKG

INCLISFFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLKFNLDLPTLYTQDFESFNIDESL

IKNAKEKHIDTNLLYVLFTSGSTGIPKGVSIAHKSVIDYAFHFCEAFEVDENEIIANQAPLYVDASLPDI

LATIKPSATLHLIPNHLFAFPNKILDYLEQEKITMIFWKPTVLIYFIKDQDNLKNYPLKNLNKILIGGEI

MPIKQLNIWRKHLPNALFANCYGPTEITDVCCYYILDREFSENEILPIGKAYKNTELLVFDENMNFISPK

QIGVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDLLYKTGDIVSYNEFGELLCYGRNDNRIKF

MGHRIELGEIESVINSHSKIILCACIFKEKIICFYESDEELDFKAFLKDKLPSYMIPKHFIKIEKFKLNQ

NSKIDRKALHELI

>EAQ72912.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MILAFLFLIFFCACGYKGNPQYTSYEQNGSVKTIKKYEQLHRW

>EAQ72911.1 Holliday junction DNA helicase RuvB [Campylobacter jejuni subsp. jejuni 81-176]

MDRIVEIEKYSFDETYETSLRPSNFDGYIGQESIKKNLNVFIAAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMSANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASAKSYSALKLNYEKTLFEE

>EAQ72910.1 cystathionine beta-lyase [Campylobacter jejuni subsp. jejuni 81-176]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRELRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDAHFLITDAIYGPVRTICELFLEKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGANGMITIEFAEGYSKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDWSARGPFVRFHIGLEDTKDLIADLTQAFDSIKK

>EAQ72909.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVVDNTQKTSNAIFSTTTKVKEKNTSADEFQATLNEVKNKEEKEEEKTSSSKFTNEDIDLGAVREDFRSY

AWQKMREDQYKKNEETLLNKLFATIDAGNATNNTKA

>EAQ72908.1 NADH dehydrogenase I, D subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>EAQ72907.1 cytochrome c oxidase, cbb3-type, subunit I [Campylobacter jejuni subsp. jejuni 81-176]

MHPGNVLNYDYTVARYFMFATILFGIVGMAIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

LVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVTGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>EAQ72906.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MDILKLAIKDFLSLKFLKFALIPLIFSLILMLFLGVLGFSALLDYFNSLFSVGEDSFWAWFYALHFVQIL

ITIISFLFSGFIVVFASVFLALFITSFLTPFIAKEINQKYYHYDNTNEVSTLKTIFEIFKIFIKFIGILL

LCTLALFLPFINIFVYYLAFYYLFHKLLMIDVTSTILDKESFKNFHSDFSPLEFKFSTLCFYLLSSVPLL

GLFLQVFFVIFLTHLSYQRILKLKAKA

>EAQ72903.1 serine protease, subtilase family [Campylobacter jejuni subsp. jejuni 81-176]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYEYKL

SGKTIENNVRFKDFPNQDFVQYHRLNSNLITWGLTSYFIYPNSFFYGFNVVNEFASDQYNINVLGQFGFY

F

>EAQ72902.1 methionine aminopeptidase, type I [Campylobacter jejuni subsp. jejuni 81-176]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGAICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIRDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGASAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDAGSIDGLNAAHYEHCVAVINGRAEILSMI

>EAQ72901.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>EAQ72900.1 enterochelin uptake periplasmic binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILNLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>EAQ72899.1 outer membrane lipoprotein Blc [Campylobacter jejuni subsp. jejuni 81-176]

MLELIGELSLQNYMGEWLEIARKPAFFQKSCLNSKAKYELKYKNGIPYVEIENFCSKKNEISSIKGKAKI

VSNRQLAVRFNIFMNLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILARNIIDEKNIKELLNIAKQRGFD

ISDVVFDKY

>EAQ72898.1 4-hydroxythreonine-4-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKKLAISIGDINSIGLEILVRSHEELSKICTPFYFIHESLLNKALKLLNLKLFNAKIVAFKDDKDYEFNF

IKKENSLEIYSFCLPLGFKVDENFEIQAGEIDAKSGLYGFLSFKAASYFVYEKHAHALLTLPIHKKAWED

AGLKYKGHTDALRDFFKKNAIMMLGCKELFVGLFSEHIPLAKVSKKITFKNLSIFLKDFYKETHFKKMGL

LGFNPHAGDYGVIGGEEEKIMEKAIAFVNAFLHSKKDEKFFKKALKDENLQKELLLNFKGKGVYLPYPLV

ADTAFTKAGLKNCNRLVAMYHDLALAPLKALYFDKSINVSLNLPIIRVSVDHGTAFDKAYKNAKINTKSY

FEAAKFAINLNSKA

>EAQ72897.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>EAQ72896.1 protein tonB [Campylobacter jejuni subsp. jejuni 81-176]

MKTLFLNHKYQASYITFIVFIPLLFVIFHSNDFFKMEIKNEDSFSLAIKQFTQTNPTNETKPTESIIEPI

KPKPQPKVIKKTPEKIQKKVKKIPPHPIPNKTPIAPTQEVKTFAKTTDTNVKPKITQLTQGKDNHPVLKE

IQKAIQQAQFYPRQAKKMRMQGTVKVEFLWKENKTLADLKIIESSGYDLLDKSALESIRKASLNFPHYNG

DLRITLPIIYDFKILRG

>EAQ72895.1 oxidoreductase, FAD-dependent [Campylobacter jejuni subsp. jejuni 81-176]

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIIAESGFGIGLNFFLTLKRFLQ

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLGFYEEFKELLEQFLKFYPKAKEGIYRFYFEDCFLDLVF

EDIAVLKELDFKADIWYLDGFSPNKNSQMFDGNLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKPKVNLGEFSELSFIEASRFYRQILDLKFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLNTPFPLSSKAYICPVKDDLQVIGASYDRLDTSLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEVFYKEEYKALLWTKNKEQKLAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLIRKLKKGL

>EAQ72894.1 GMP synthase (glutamine-hydrolyzing) [Campylobacter jejuni subsp. jejuni 81-176]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>EAQ72893.1 K+ uptake system component [Campylobacter jejuni subsp. jejuni 81-176]

MKNLNYGIIGLGKFGSVVADELIAGGHTVIVADKDEEALKSIQNPPSYAYILDSTNISALKEAGFHDVEV

VIVSIGENVEKSILTLMALKDIGVKNIIAKATSNIHGQILSKLGATKVIYPEKESAKRLVKEFLTKDADY

EVFDLSANTIRAIKINIDEKLAGNSLKHVAQNMKVISYKKLNSDWEILPDLETTTVYSGDVVILLGTVKE

LREFEH

>EAQ72892.1 polyribonucleotide nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQYSIEINKNTEIFDIDKVAKQAAGAVLMRQGKSIVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPG

GYVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPM

KAPVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQT

TSQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKEA

INQMAKSERASELNKIAKEILNLEITKDWSEESVLNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISI

ETNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPG

RRELGHGNLAKRALYPSVDENYPYIIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLI

FEDNKHAVLTDIMGLEDHDGDMDFKVAGSKDGVTALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEE

AAKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAK

DYIINITSSQKGTKKGSKDKDISGFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKSKHLNLSENQS

LKVKISEIKNGKISVDLCE

>EAQ72891.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MILVTPCGVMDTTNFGKSEVNKRTIDFSLKFQEKKEKVEAKAEKEEANKDNSNSTNTDTNKKDKLLDISA

>EAQ72890.1 NeuB3 [Campylobacter jejuni subsp. jejuni 81-176]

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>EAQ72889.1 protein containing aminopeptidase domain [Campylobacter jejuni subsp. jejuni 81-176]

MDKLDFRSQDFNQTGKAMYELACELFPIPRSITGQGFRASLEILNKTLGGGILKFHSIKSGTKVFDWIVP

DEWNAKEAYIITPEGEKICDFKKHNLHLLNYSEAIDKEIELEELQNHLYSIEEMPDAIPYVTSYYKRRWG

FCLTHNERKKLKKGKYKVYINAKHDENGVLDYADFILPSTQNSKDEILISTYLCHPSMANNELSGPVVAI

FLAKWLLSLKKRRYNYRFVIIPETIGSIVYLSKHLEHLKKTC

>EAQ72888.1 1-deoxy-D-xylulose 5-phosphate reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176]

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>EAQ72887.1 flagellar P-ring protein FlgI [Campylobacter jejuni subsp. jejuni 81-176]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>EAQ72886.1 sodium/hydrogen exchanger family protein [Campylobacter jejuni subsp. jejuni 81-176]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIARILRLPLSATEIILGAIIAYFGFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYTLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKRIGFKNMILFGLSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAVIVMSMIKFLSNSKK

>EAQ72885.1 putative two-component regulator [Campylobacter jejuni subsp. jejuni 81-176]

MKVLIIENEIYLAQSISIKLSDAGYSCEIINSFNEYNGEKYYDIVLLSTNTNNFLKAVGQFKHSIIILLI

SYISTDTVSNPLKLGASDYIQKPFMIEELIRKIKHYQDFRKLSILNKAYQSYIKSRLETIKIPEYNYKKL

KLPLILKSNKQSSADAFVFNYANECDITLSFIDLTSTNSVEKVMKLPTENNLLFLSNFQALKAAEKEKLL

DFIQNKNVILHTNSNTDDLKINCINLNDNEKNIDSNEILTIDEYVKYVIINYQNIFPDTDLSKKLGISRK

SLWEKRKKYEISKKK

>EAQ72884.1 radical SAM domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKILFGPVSSRRFGRSLGIDLSPSKKQCNFDCVYCELDPKKAQEKQDEIISIYKIISEVKAMLEKNVEFD

FLTLTANGEPSLYPHLNELILSLRSIAKDKKLLILSNGTAVLDEDKFNALLKLDVVKFSLDSAVAKTFYR

IDRALKNIDLEKMIEKMADFRARFNGDLIMEILVVKDLNDNEEEFEALNQALKKIMPLRVDLSTIDRPPA

YAVKKVSEEKLLELSKLIDSTPVLLAKRHYEGEKLSFNEEELLKMLHLRSQSEIDIEVKFDEQSKTLLNQ

LIKEKKVKILDLAGVKFYKA

>EAQ72883.1 FlaB [Campylobacter jejuni subsp. jejuni 81-176]

MGFRINTNIGALNAHANSVVNSNELDKSLSRLSSGLRINSAADDASGMAIADSLRSQAATLGQAINNGND

AIGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQDFAINGVVIGQINYKDGDNNGQLVSAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSVQNQLQVTINNITVTQVNVKAAESTIRDVDFASESANFSKYNILAQSGSYA

MSQANAVQQNVLKLLQ

>EAQ72882.1 histidinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIVKEVQEKGDEALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQDAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCEKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGATIDMQAGPSEVLVIADDLANEKFVASDLLSQAEHGADSQVILVCLSQDFAQKASN

EVQSQLELLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>EAQ72881.1 paralyzed flagella protein PflA [Campylobacter jejuni subsp. jejuni 81-176]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQKFITEAKVHFECDIVGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKIQARMFDTSQNIYIDKELSSSSSHKSKAFTFIFTPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVVIDAQNAINRYRGSIFTSEFI

LYKLRAQNKLYTQDPSMRDQQILEKMIDDAKNWTRTFTSDKNFSEVLHIMLRTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENTYFNTKNLDLAARAAMSLAKNLLSNEQVNKAIEY

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISASIYEDAFAKMSKLDPSYEETLKDLALVLSHANRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAINDLKNAIKADNCINAANIFMRFSAYDIGQKIENKK

QMLACLIRTSNVEQALDYIDKNYNEDSIFYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMVEAYDALLSYANDHNMQTTILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALTKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

SASNWQNLCKSKNQILNQ

>EAQ72880.1 glutamate racemase [Campylobacter jejuni subsp. jejuni 81-176]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQIDMLIIAC

NTASAYALDALRTKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLSQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGCSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>EAQ72879.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFEDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPKFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNAHYIKTLPFEEINRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDQKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIDNFLKVRGK

>EAQ72877.1 ribosomal protein L14 [Campylobacter jejuni subsp. jejuni 81-176]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>EAQ72876.1 N-acetylmuramoyl-L-alanine amidase [Campylobacter jejuni subsp. jejuni 81-176]

MAKIFVFLVFVFTTLFGAYENELANFDKNFIGSKSEVQVKFHHQLKSLYIQSVINEDEKTKIEILKRLII

SSNTLNLDDKSYANELKESGISEASINALRKAVVKDIKVQNIPQDAEKSTFEPIKTVQKNEKKSSNEQIK

NTEKTNSKTSQAPKSSIVSKVKSDDKIYVLKSSKTSQGVEFELNADLDKNQLKSFALDEKGNYRFISDFD

GVLEGGKKEFKFDEYRLVISQFNPKTIRIVVYAKEKIPIDISFKEEKLIFSKETTSQKKTEQASKISEKK

QDQKTEIKTKVLETKKQDKKTNNEKENQESLYVLDVDKISNAVVLNLSDDLDEKEIAVFDTKDQKFRYVV

SFKGVLEGNRKSFTFGQNAITVTQYNPKTVRVVLSAPKEFKLLKELDNKNLTLGFYTQTTNQNASKKANQ

SSSKTLNTNYKSGKLVVIDAGHGGKDSGALSDKKGSLKEKDIVLSTALKLGNELKKRGYKVLYTRSSDKF

INLRDRTKYANDKRADLFISIHANAAPNATKAKSSEGVETFFLSPARSERSKKAAEKENQGDFEEINYFS

KQSILNFLNREKIVASNKLAIDVQKNILTQTRKKYKIVDGGVREAPFWVLVGAQMPAILIEIGYITHPNE

GKRIANKAFQDLLVKGIADGVESYFYNNR

>EAQ72874.1 MloB [Campylobacter jejuni subsp. jejuni 81-176]

MDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIVGTNFK

PKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRKELDKY

PEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGLVKNLN

DSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQYVPKNE

VIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDMPSKSR

NDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIRATYQH

CCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>EAQ72873.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFGFDDKQEFIPQIYRYLNNQELMLTFLTQYNASVDSALKIPLLYAKNTKSLKMIFGNFLHNIMHVSFG

KIQNINIKLNTYAFYFQKRKSLIFNTKISKNVDLLRLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLEIENEIYELLNLIKENNFEKFYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>EAQ72872.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIFWAFLVVIGAIYFGNMFFGQYSLDALLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>EAQ72871.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLIDLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKEAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>EAQ72870.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKHSKYKVYLNFKLFKLKISSFLNRFIFYIFTVKTKSALIKNLFLD

>EAQ72869.1 extracellular tungstate binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIISLALALALSASAAELKMATTTSTDNTGLLDALKPLYEKESGNTLKWVAVGTGAALKMGEDCNADV

LFVHSPKAEKEFMKKGFGVDRTPVMYNDFIIIADKSLASKFKGKNLKESLELIKNEKLTFISRGDKSGTD

NKEKSLWKNLGGVPEKQSWYQQSGQGMLASIKIAEEKKGVILTDRGTYIKYEANEKGKPNLVIVNEGDDS

LKNFYSVIATNPKHCKNVNYTEASKFIKWVTSDKTLNFIADFKLLNKPLFVIDAKTRKD

>EAQ72868.1 acid membrane antigen A [Campylobacter jejuni subsp. jejuni 81-176]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTTCMVLLF

FAPFVYAMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASS

FTKSGAKFLIDMVLICVFYFFANLYGTELVIYLKSIIPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITIFYGYDGILMGVIFAVSSLIPAIGGALIYMPVSLYEFASNNLNSALVIFIYSVIVISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>EAQ72867.1 translation initiation factor IF-1 [Campylobacter jejuni subsp. jejuni 81-176]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>EAQ72866.1 protease do precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLSLSLASALFAASINFNESTATANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDIEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKIDRGFL

GVTILALQGDTKKAYKNQEGALITDVQKGSSADEAGLKRGDLVTKVNNKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQASFILKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGVGQSEIKNLKDLEQALKQVNKKEFTKVWVYRNGFATLLVLK

>EAQ72865.1 integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIYFVHFLISVLPLSILMAFIASDKKYIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFMLFLLLILIESDKALANILLTLMRNSIIETHTFLVSFVGKSNYFGVFGIYIYLIFI

AFLAFLSLKIRKKNISKKQILDINYRKNEAKTSLINRYFSSVFISCVISFCIILYFFMVSSKPLTIDEPK

EILPDKNGKFIFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDRDSPVAVFDACMICGDMGYIKKDGQ

LICISCNVRIFLPSVGKSGGCNPIPLKYEYDGKKITIDVKDVIAGSNYFSQIKEIEVQDPVSKTKVINTQ

APFSYSYKGITYYFSNQNNYEEFKKDPTKYVEENEAQFLIQRRNDVG

>EAQ72864.1 nadh dehydrogenase i chain j [Campylobacter jejuni subsp. jejuni 81-176]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALAGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSTILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAIVLTHKELTKEKQ

>EAQ72863.1 low molecular weight phosphotyrosine protein phosphatase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFICLGNICRSPMAEFIMKDLVKKANLEKEFFINSAGTSGEHDGEGMHYGTKNKLAQLNIEHKNFT

SKKLTQKLCDESDFLITMDNSNFKNVLKNFTNTQNKVLKITDFSPSLNYDEVPDPWYSGNFDETYKILSL

ACKNLLVFLSK

>EAQ72862.1 transcriptional regulator, MarR family [Campylobacter jejuni subsp. jejuni 81-176]

MKKYHSLCPIETTLNLIGNKWKILIIRDLLQGTKRFGELRKSISFTKNQNISQNVLTQNLRELEEAKLIK

RKVYAEVPPKVEYSLTSLGNSLESILKSLENWGNSYKNIV

>EAQ72861.1 ATP phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQENTRLRIAIQKSGRLSKESIELLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELERQSLGENPSYKLLKKLDFGYCRLSLALPQEKKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSVEVAPRANLADAICDLVSSGATLQANNLKEVKVIYESRACLIQKENALSKEKQTLV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>EAQ72860.1 ferrous iron uptake protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIKIALVGQPNVGKSLLINALCKANMKVGNFSGVTIEKASAKTFYKNYEFEVIDLPGTYSLDGYSEEE

KITRHFLNQNDYDVIVNVLDATNLERNLILSAELLSLNKKMLLALNMCDEAKKEGIELDTSILSQEFQSQ

VVEISAKTKENLELLLQKIIILFESKFIPRSQFYTPLCEKSPEKEDLLYFINELSKKIITHKKEERNLTK

KIDALLIHKFFGLPIFLFLMWLLFQLTFSLGQNSYGLYRIRL

>EAQ72859.1 hemin transport system permease protein hmuU [Campylobacter jejuni subsp. jejuni 81-176]

MLNLNTHSKILVIIGLLVAYIIASFTALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIG

MLLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKAS

IATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNEL

NILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCT

AFGGLFLLICDTLARTLLAPVQIPIGILTAFFGAPIFLYLALSARRFL

>EAQ72858.1 RNase H [Campylobacter jejuni subsp. jejuni 81-176]

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>EAQ72857.1 uroporphyrinogen decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>EAQ72856.1 putative anion-uptake ABC-transport system ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSKNISYFGNFKPNNKQ

KREIYLLFPEPILLNRSVRANFLFTLKTYGIKEDIEERIKESLMFLNLDESLLSKHPNELSSGQSQKIAF

AIALSVRAKYYLLDEPSAFLDKNTTLLFKKTILKMHENFNTGFLIASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFCNFIDFSNCKKYKDFKKPPSKIAIDPYKISFFNSKNIPKNNYDFILEKCYIIAL

RSRKSDVFIRVSCMDKILEFALEKQEFLRFDLKLYEELSLYFYEDAICFLN

>EAQ72855.1 Na+/H+ antiporter NhaA [Campylobacter jejuni subsp. jejuni 81-176]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>EAQ72854.1 spore coat polysaccharide biosynthesis protein spsC [Campylobacter jejuni subsp. jejuni 81-176]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>EAQ72853.1 phosphatase, Ppx/GppA family [Campylobacter jejuni subsp. jejuni 81-176]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALSILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGIDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFGK

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKHLAFRAFDEVAT

IKKELHSLGVKTVVLNSGVPTTLSALKQNISYEKYEVTRVNGKKLCHKDFLNYAIKLFHMEEKKAIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>EAQ72852.1 pyrophosphatase ppaX [Campylobacter jejuni subsp. jejuni 81-176]

MNKTILFDLDGTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>EAQ72851.1 DNA topoisomerase I [Campylobacter jejuni subsp. jejuni 81-176]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKNAIENALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTIANKDRAKLILEACKNEAYTISDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIAAKFLDKDELKLYTLIYNRFLACQMNPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNFKIGENLKIQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSDVAFNVTEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKSESKNESENTAAKAKANGTGITCP

SCQKGEIVERFSKRGKFYGCSAYPKCNFISKYKPSEEKCEECGETLVIKELKKGIFLECLKCKIKKEMKD

>EAQ72850.1 DNA-binding response regulator [Campylobacter jejuni subsp. jejuni 81-176]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIVSSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>EAQ72849.1 HrgA protein [Campylobacter jejuni subsp. jejuni 81-176]

MSSKLSYKELTLEILKQSDRPLSVNEIWQKALEQGLDKKLSSIRQTPIATLGARIYVDIKELQHNSLFIK

ASQKPTTFWLKERENELLKLDNKNEITNEKQEKNKFHERDLHPLLVKFLYENLDFNLNCKTIYHEQSKKG

KGGEDKWNYPDIVGVYFPYDDYEKETITLLENIKQNSYKLFSFELKIALNFSNLKECYFQALSNSSWANE

GYLVVLQEIDSEVLSELRRLNQSFGIGVIKLDIQTLNMLINKNPNFKEFIDDINKQIKVGKEAKIQANFD

EIKSDEEMEKYLKEKCILEK

>EAQ72848.1 ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLSIEIG

NELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDFI

TGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSNK

IIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRMGEEKLDQLEYDKWYCSAYVGSIASQISDGL

PGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQIY

LIFAGENLIVALFAALFGFIFGTAFSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQL

SAAGVLYGR

>EAQ72847.1 Ribbon-helix-helix protein, copG family [Campylobacter jejuni subsp. jejuni 81-176]

MKRNVKTYSFRMPLELKERLDNLSKNLSKPKSTIVKEAIEAYLNEVEDFSFAVNALEELKDGDYQKASKK

IDKIVKNLKQTK

>EAQ72846.1 ferrous iron uptake protein [Campylobacter jejuni subsp. jejuni 81-176]

MDYIESGFNALGEFVKNNISNTFIASALADGIIAGVGAVILFLPNIMILFLGIALLETTGYMSRVAFLLD

GILHKFGLHGKSFIPLITGFGCSVPAFMATRTLKNKRDRLLTLFVINFMSCGARLPVYVLFIGAFFPSEK

AGNYLFGIYILGAILGLCAAKFLRMTAFRGLDEPFVMEMPKYRMPNWYLVWFMVYNKAKMYLKKAGTFIL

LASLLIWFASNFPKSEENLNDFNAQERAIEQSYLGQFGKSIEPIFQPLELDWKLSVSLISGLAAKEVMIS

TMGVLYSLGKDVDETNNDLKGIIAKNIPIPSAVAFILFVMIYNPCFAATIVFSKESGKLKYTLFLFLFTC

TSAYIVAFIGLHIAKILLN

>EAQ72845.1 PseA [Campylobacter jejuni subsp. jejuni 81-176]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNQNINWQEREKEFFELIKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLDNLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELQRVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLEFSGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>EAQ72844.1 A/G-specific adenine glycosylase [Campylobacter jejuni subsp. jejuni 81-176]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFEAKLPKEVEDLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNLNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFHTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDKLYKGMYNFPFFKEGEYKLSK

DMGFVGEFKHSYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>EAQ72843.1 xanthine/uracil permease family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>EAQ72842.1 GlnD family protein [Campylobacter jejuni subsp. jejuni 81-176]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>EAQ72841.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYV

YLNILSDFLNYSQRIYNIKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLD

LKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEY

KNKKGK

>EAQ72840.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEKCPYSHENIIFHKKFIGNINNENTITLAQALK

DNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQVIFEFHGCNPEEQDGVEKRISLLKKLNEYFIP

IHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGLHYRKECGNLQNLDFPVWPSNPEIPLRF

>EAQ72839.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGTVLPLLRYIIGRDLEQFDFIFNDPNTLIEMFTKTYWTREDENSPYFFANENYMIRSLLN

SSHLIIQVNVNKNIVLVSYHSSKDEFNTSKDKQTLFLAYKELGYDATLHLIKDESEIDGRFIKDLNHGMR

ITDRALFRKELPLMLEKLQKRKSFMQENSISYPCGNKVFTFKDVGDKFVLCIK

>EAQ72838.1 conserved hypothetical protein TIGR00423 [Campylobacter jejuni subsp. jejuni 81-176]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>EAQ72837.1 thiamine-monophosphate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MNKEDFIIKAFLNEKNGDDGAVIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNAVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINDKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGNLKPNHVFIKPKLRASFFYEVAPLISCAMDISDGLSKDLSRLLALNKCG

ISWFKKLDDYTLYSGEEYEILFAFDEKERQNIKTIAKKHGVKLNIFGKAVKGKYEFRGREHHF

>EAQ72836.1 non-canonical purine NTP pyrophosphatase, rdgB/HAM1 family [Campylobacter jejuni subsp. jejuni 81-176]

MKIILATSNKHKVLELKEILKDFEIYAFDEVLMPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFKQSKAYYVAAIAMVGLMGEFSTHGTM

HGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILNKG

>EAQ72834.1 major facilitator family transporter [Campylobacter jejuni subsp. jejuni 81-176]

MQNYKKALFALALSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSQNFYLTAFARFVAGTQHGVFFVIATLAVSAIVPNDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFKVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLTMHSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGIVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSLKKI

>EAQ72833.1 HsdR [Campylobacter jejuni subsp. jejuni 81-176]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKIACYHQYYAVNKAISR

TITASSKDGDKKGGVVWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQ

EPKQANDKEHLKELLRVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKS

KSGDVLGQKIVYGFAKYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYE

SRLAKIELSEEGKRLVNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMI

VSISRSVAIKLYDEIIKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDEL

KLVIVVDMWLTGFDVPSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSE

SGGKGDIITTQEDAVKVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFA

ALDKAYTIAMPHEKALSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDAS

GIKKPDISILSDEFLLEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLIS

SSEALDELINMSKSIVSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSI

DWMIKENVRARLRVAVKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>EAQ72832.1 X-Pro dipeptidyl-peptidase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>EAQ72831.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176]

MTGISVFDHRLLADSWSTQEMRAIFCEQNRIQKWLDVEAALAKAQAKLKIIPKKAADEIAKKAHYKFMDM

DFIFAEFKKTKHPLVPTVRGLEKACDNNLGEYVHFGVTTQDIIDTGLVLQFKEAMTLIKSELKAIAKALA

KLAKTHKNTAMMGRTLALQALPITFGHKVAIWLSELERHFERILELEKRLYVGSIVGAVGTKASLSDECN

EVEKLTLENLGLDVPNISWQPARDRFIELGFVLGNINTTFNKIAHEILILSHNEIDEVAEPFGKGQVGSS

TMPHKRNPAVSENAVTVSNAFKANLAILSDIERHEHERDGQVWKMEWKLLPEMFLMLSVVLANMKFALSD

LEVKKDKMLKNLNTLNGFVLAERVMFALSDHYGKQHAHEIVYENAMLGIEKQKTFKEVLLADKRVSKVLK

EKEIDALLDATSYVGYAPKLVDEFLAKIKNSAILK

>EAQ72830.1 deoxycytidine triphosphate deaminase [Campylobacter jejuni subsp. jejuni 81-176]

MGLKADNWIRKMALERKMIEPFCEANIGKGVVSYGLSSYGYDIRVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>EAQ72829.1 cytochrome c oxidase, cbb3-type, subunit III [Campylobacter jejuni subsp. jejuni 81-176]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWAIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTANENLV

AKGKEAYATCAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>EAQ72827.1 ABC transporter ATP-binding protein yojI [Campylobacter jejuni subsp. jejuni 81-176]

MPFIIELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVTLLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDTLIDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>EAQ72826.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENLE

QMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQLS

GGEQQRVCIARALINNPELLLADEPTGNLDEANEQIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLIL

QHGVLK

>EAQ72825.1 sodium/proline symporter [Campylobacter jejuni subsp. jejuni 81-176]

MEVVQINTPIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLLMGLPGA

LYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAVVILIFF

TFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIVPLVMLY

HLGGFGEAMNIVREIKPQALSMGEGVGIVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMATFIGIAW

MAVCLLSACMIGILGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQLLVSSS

TIAEDFYKKIFREDAPSHIVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSVMLFSLF

WSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLVASAVIIIASLFTNVRSGTKAAYEKMLKEL

>EAQ72824.1 putative sugar-1-phosphate nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNAIILAAGFGSRLMPLTKDQPKCMVEYKNKKIIDYEIEALKSAGINEIAVVGGYLNDVLKNYLNKYDIE

HFFINSKYDKTNMVYTFFCAKDFMLKCIEEKQDLIISYADIIYFQDCVQKLINAKEELAIVVDKSWRKLW

SKRFANPLEDAETLKMTNGYIIELGKKANAHDEIEAQYIGLFKFSYQFLSEVIAFYEMLDRDILYDNKNF

ENMYMTSFLQALIEKYNNAKAVEIDGNWCEIDFMSDLEVQIEK

>EAQ72823.1 Flagellar basal body-associated protein FliL [Campylobacter jejuni subsp. jejuni 81-176]

MDEELENEETKKKKGGSLVIIIVILLFVLLLSIMGVIAWLISSSSSDESEVKEAPKEEAKADKPKVSAPT

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNSELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>EAQ72822.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLKQLFYILTFIFMLCGCSLRHETINKNENIILKDEGIDSNIFFKKTGKILKIRNANAPLYLNSRAIVYI

DNGFSNKYAHYFWGDLPSNLYSFLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>EAQ72821.1 potassium uptake protein, TrkH family [Campylobacter jejuni subsp. jejuni 81-176]

MKQFGLDRRTFKILLAGYIIIALFGALLLHSSWAHTTPIDFLDAFFTSTSAVSMTGLVVKNTAVDFTLAG

QIIILALVQIGGLGYMGIGLFVYILIRKKVGFSARNLLKESLFYPSMDGLFKFFKKVLLFIFTIELIGAI

LLTMRFALEMNFKKALWFGIFHSISAFNNSGFTIFEHGLIAYKHDIAINLIITSLIIIGGLGYFVLVELY

FFQRKKLQNLSLHTKMVVVASIFLIFSSTLIIFAFEYSNPQTIGHFSFFDKILSSYFIAINYRTAGFSTL

DMGHLHDASLFFGSLFMVIGGAPGGTAGGMKVTTVMVLLLYAYWSIRDGRVRIFGHEIPRETISKAFIIA

VGSAVYIVIAVILLSLLESKFDFIALLFETSSAFATVGISVGNGGTLSLCALFSDPSKVIIIIMMLSGRI

GVFAFLLSVFKQDKAIHLKFPEGKVNL

>EAQ72820.1 putative glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGVYSII

>EAQ72819.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKVDNFLNTYSMNSALLDRAAKARSLESSIKINDNDIVTKTKEDEALKEQTDAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFLKERG

>EAQ72818.1 HrEpiB [Campylobacter jejuni subsp. jejuni 81-176]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>EAQ72817.1 chaperonin GroEL [Campylobacter jejuni subsp. jejuni 81-176]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>EAQ72816.1 tRNA (guanine-N(7)-)-methyltransferase (tRNA(m7G46)-methyltransferase) [Campylobacter jejuni subsp. jejuni 81-176]

MPNFKSKKIKEINLPYSKDDVEFLWLAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKVQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWDKKPHRRVIGK

DFCKECARVLTQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECKNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

PEHCYLHLDKTIDFVFKEPFKIQENIKAINELKEILKVQFKI

>EAQ72814.1 imidazoleglycerol phosphate synthase, cyclase subunit [Campylobacter jejuni subsp. jejuni 81-176]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKYSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKVPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>EAQ72813.1 enterochelin uptake ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKLKNITKFYDNKAIISDLSLDFHKGKITSIIGANGAGKSTLLALASRLIKPSSGEIYIDGMNLKDYKE

QILAQKISILKQQNNINLRLKVEELVAFGRFPHSQGRLNANDKIKINEALEYMGLSNLRNEFLDALSGGQ

KQRAFIAMIIAQDTEFIMFDEPLNNLDMKHSVQIMQLMKNLVKDFNKSIAVVLHDINFASIYSDEIIALK

DGKLLKQGSKDEIINQENLKQIYDMDIPVSQIDGKKICIYF

>EAQ72811.1 ankyrin repeat protein [Campylobacter jejuni subsp. jejuni 81-176]

MTTLSLEEEKRFEELCKMAFNFARNNEYENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNGLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>EAQ72810.1 acetyltransferase, gnat family [Campylobacter jejuni subsp. jejuni 81-176]

MIKLKNFTELNSQEIELIFKWRNHPDINQFMKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAKPNLKGVGQILMNEIIKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDK

DFYHICLKQSDCKALPS

>EAQ72809.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLQFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVVSLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDVIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>EAQ72808.1 putative membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MQSFLNTFKEFLYLFTELSVLFIAISFLVSIINQKYEGIF

>EAQ72807.1 ABC transporter, permease [Campylobacter jejuni subsp. jejuni 81-176]

MNANFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKAIDTAGVRFFLALENDLKDKNI

KITKEGLNSSFQTLFELCEKNYQRLSKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLAKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>EAQ72806.1 flagellar biosynthetic protein FliQ [Campylobacter jejuni subsp. jejuni 81-176]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>EAQ72805.1 biotin synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>EAQ72804.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKKFILLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEA

EVNATLAKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLE

SRKISGVLSKMDPKKASELTLLLKNLDNNASN

>EAQ72803.1 IspD/ispF bifunctional enzyme [Campylobacter jejuni subsp. jejuni 81-176]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>EAQ72802.1 CtsF [Campylobacter jejuni subsp. jejuni 81-176]

MKFYEVEFLKNNQNYTKTIKAENLNTAQAKALSKNWKIIDIKEIQKSNFQRLKDENFILFFKELALLCEV

GLSVQEAIRELYFMHSCKIMKKILDNLILAQNLNQAFENANFGLNRAELALIKTAEKTGKISEVFSQISK

LREKSLESQKQLKKAFRYPTLVFLSIIGAFLFLMLFVVPNFKDLFENLGVSLPFITHVMLEIYNFLDDYG

IFCIFLFVIFIVMLILAYKNFHSFAFSCDFLFLKVPLISRLIIYNQNYYFFMVFSLLLKNGISISKAFDL

AIIGLENKFLIFQYKKLFSFIDSGLELSQAFKKIDIFDSLVFSMLSVAMKSGRLEVLSEEIAKYYQQKSE

NLMDRFLVFLEPMMTLFVAFLVLFLALGIFLPMWELSSGVNF

>EAQ72801.1 putative helix-turn-helix containsing protein [Campylobacter jejuni subsp. jejuni 81-176]

MKVLNFFYENHPKFEVSYERKNQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTNIKDLNINGFEELELDYFDFEEFISVSKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQISISKIFIELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDNFFEQGVKFEVISFDKFSLGF

>EAQ72800.1 ribosomal protein L23 [Campylobacter jejuni subsp. jejuni 81-176]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>EAQ72799.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>EAQ72798.1 phosphoribosylamine--glycine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIKETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGAEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIEDPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLEDGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>EAQ72797.1 ribosomal protein L6 [Campylobacter jejuni subsp. jejuni 81-176]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>EAQ72796.1 transcriptional regulator, MarR family [Campylobacter jejuni subsp. jejuni 81-176]

MTKENSPCNFEECGFNYTLALINGKYKMSILYCLFRYEIVRYNELKRFLSSISFKTLTNTLRELENDGLI

IRKEYAQIPPKVEYSLSKRGQSLIPILQAMSKWGKKDKKGKKCLN

>EAQ72795.1 glucosamine--fructose-6-phosphate aminotransferase, isomerizing [Campylobacter jejuni subsp. jejuni 81-176]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCTDFESQGYGFAI

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVVYENDILKSLCFSKLSGDKAYAKKDGFRFFMEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQADEITLCACGTSYHAAMASAYLFERIAKVKAKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYLHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>EAQ72794.1 multidrug resistance protein mdtG [Campylobacter jejuni subsp. jejuni 81-176]

MENFNRTLLVCWFGVFTTSMGLSQIAPILPFYIKELGHVDTSEIAFYSGLAFGITPLFMAVFSPLWAFLG

AKYGYKNMLLRASFGMSVLTLWLSFAHSALEVVFVRGLTGIISGFTSAAVVFIAVIAPKEKVAYALGTLS

TASISGSLLGPLFGGFVAEFFSISAVFDVVAFLIACSFVTIYFFIHGRKIQKEAKKNTQKVKENKTLIIV

LFITTFVIQFGTFGVMPILSIYVEQIHQGGNLALWAGIVVAANGISNLFFAPKLGKIADKIGPSKIIFGA

LIFCGICFYLQAVASNVYTLIFVRLLIGVGLGGLLPCVNALLKKSVSAKNLSVIFGFNQTCQFLGNFCGA

FGGGLMASHFSVEFVFTFVCLIFIINAFIFLAFEKKYIFSNQGL

>EAQ72793.1 19 kDa periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>EAQ72792.1 phospholipase A [Campylobacter jejuni subsp. jejuni 81-176]

MRKIALFLNLCVFIWASDLQQALEYEKQGDYKKAMEIYKKLALKNSSVLISQEQNNSSQTTQTQNSITIK

KEEKQDFSRLALANYLGENESFNPLGISSYKMNYFLPFAYSFNSLGTNNNKSEAKFQLSVKKRLFENLLG

LDEKYYIAYTQTSWWQIYEHSSPFRETNYQPEFFIDFPLYLKDYEFFNNLRVGILHESNGKGDENLQSRS

WNRIYVSTAILYNKFLFVPRLWYRIPESKKDDDNPAILHYMGNFDVNLAYLGDDYFINLMLRNNLKFHDN

KGAIQVDLGYDIFNNGIYWYLQYFNGYGESLIDYNKHLQRLSTGFLISY

>EAQ72791.1 nadp-dependent malic enzyme [Campylobacter jejuni subsp. jejuni 81-176]

MNLKEEALKYHLGGKIDIVPSKPMATSYDLSLAYSPGVAEPCLEIAKDNELAYTYTNKANLVAIVSDGSA

VLGLGNIGAQASKPVMEGKACLFKKFANVNAYDIEINVHSIEEIVNFCKALAPTVGGINLEDIAAPKCFE

IEAALQDLGIPVMHDDQHGTAIISTAGLMNAMEISGKKFKDIKVVVSGAGAAGIASAKMYRNLGVENIIL

VDSKGVISKDRNDLTPQKLEFAVDSKEKTLKEVLKGADVFLGLSAPKILDDEMVLSMAKDPVIFALANPI

PEVMPEDVARLRKDAIVGTGRSDYPNQINNVLGFPFIFRGALDVRASKITENMKVAAAKALADLAKLPVS

DAVKKAYNLSTLEFGRDYVIPKPFDERVKAAVSTAVAAAAVKDGVAKVKNFDEKAYFESLK

>EAQ72790.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKQRLDEVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITAKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINDGTNNAYGDKKTNPESIF

KINV

>EAQ72789.1 imidazole glycerol phosphate synthase, glutamine amidotransferase subunit [Campylobacter jejuni subsp. jejuni 81-176]

MIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALKEQVL

VQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQGINNK

SDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>EAQ72788.1 imidazole glycerol phosphate synthase subunit hisF [Campylobacter jejuni subsp. jejuni 81-176]

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>EAQ72787.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>EAQ72786.1 LamB/YcsF [Campylobacter jejuni subsp. jejuni 81-176]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>EAQ72785.1 UDP-N-acetylmuramoylalanyl-D-glutamate--2,6-diaminopimelate ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKLKLENSFITDSTLECEKECFFLQTTQNAKFHARALEKGAKIIDVNECKKLLKIDEKIQIIGITGTNGK

TTTAAAIYSILLDLGYKCGLCGTRGAFINDEQIDEKSLTTSPILKTLEYLQIATQKKCDFFIMEVSSHAL

VQNRIEGLNFVAKIFTNITQDHLDFHGTFENYKKAKELFFTDESLKFINKDALAIKFNVRNAFTYGIENP

ALYQIKAYSLEEGISAIVTNKNQTFHIDSPLLGLFNLYNLLVASACVNELIKPDLKDLEKAISGFGGVCG

RVEQVAKGVIVDFAHTPDGIEKVLDTLKNKQLIVVFGAGGDRDKTKRPLMGKIVEHFAKIAIITSDNPRS

EEPKTIMEEILSGFAKKEKVLMIEDRKEAIKKALELKENDDLVVILGKGDETTQEIKGIKYPFSDKVVVN

EILKNQG

>EAQ72784.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKTRILAIFFIFTSLLYADENPFKTDQNITLVAPPEFQKEEVKFNSSARILKSITFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDISVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVYKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHKGYYRLVIYLDGTYNYNIQK

DATGYMINLL

>EAQ72783.1 glycyl-tRNA synthetase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSELLIEIGTEELPAIPLLKELANIEKKWKNILEEYRLVSDFKFYYTPRRLVFFHENFAEKQEDSFAEFI

GAPKNVAYKDGVLTPAGQSFLQKAGISENELTFKEIKGKEVLYHQKAIKGLQSQEILGEMIEKFLKSLSF

GKSMRWGANSFEFIRAIRSIACILNDELVNFQSYGVKSAKKTFIHRSVSYDLQDFNNAKEYFELLEKNYI

ILDPIKRKEKILEQFKLIESQKNIQIGEDEELLAEVVAITEYPNALLGSFEEEFLEIPSEVIITSMRENQ

RYFAVFNDKGLSNHFIVVSNAVCKDYSKIIHGNERVLRARLSDAMFFYQNDLQNGLKPEKLAKMTYLEGL

GTMQDKSLREIKIAEILCQMLHNDKIENISTALKYAKADLATQMVYEFTDLQGIMGSYYAQKMGLDYEIC

LAIKEQYLPNSEQAPLPSTEFSSIVALANKLDTLIGLFSIGKIPSGTKDPYALRRAANGIIKIALNLNKE

FDIQILLEKLSSHYKSFDMQILKDFIFERLYTFYTVNASFVKAVLSSQNTDLIHINQSVNALIELSKKDN

FNENFATFKRLANIATKNPHKVDESLFVQEAESKLYKAFQEKTKANSLQEKLENLFALKPFIDEFFNQVM

INAEDEKLKNNRQALVYEIYAEFLKIADLKELSL

>EAQ72782.1 tRNA(Ile)-lysidine synthase (tRNA(Ile)-lysidinesynthetase) (tRNA(Ile)-2-lysyl-cytidine synthase) [Campylobacter jejuni subsp. jejuni 81-176]

MQIKDEILALLKRGKNLLAFSYGSDSSVLFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKHAPKFQSNFEKKARDFRYDFFEKICLEQGYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQECE

KRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLD

EDRKKLYDFENIKEIQGLLICPKNESLIARAVKMKGLLLSTAQRKELLKGDCVLGGKIALAYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPRLLRAYLYNHKIDISSLSF

>EAQ72781.1 formate dehydrogenase iron-sulfur subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSEKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>EAQ72779.1 GDP-L-fucose synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGGI

LANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAIA

KISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKFD

SIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGPH

KNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQNI

RQ

>EAQ72778.1 peptide chain release factor 2 [Campylobacter jejuni subsp. jejuni 81-176]

MDNYEFSELLKTLKNKVGNIASIIKPENIQTRLKEIEELENSPSFWSDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDANELFDLANSENDTETLEALFNDASKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANTGEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>EAQ72777.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>EAQ72775.1 major facilitator superfamily protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKSKFGTKEIKILGLSSLGGTLEFYDFIIFVFFAEYIANVFFPKDMSEFWALLNTYGAFAAGYLARPLG

GIVMAHFGDKFGRNNMFMLSILLMVLPTFVLAFIPGYETLGFLAPVLLILIRIFQGIAIGGELPGAWVFV

REHCQEKQKAFFLSCLNSAMALGILLGSIVFLIINAFFSIEEIAAYAWRIAFFVGGIFGIISIYLRRFLQ

ETPVFKQMKKESSLSSFPLRDLFKEKDIVKNLFSSMMMTWVLTGCVIVLVLLMPKFMPSILNLSGVEGSY

LQVLGILGIALGGAFMGYLVDKFGLFKICIFFSLTFVFFSFLYFYALYELKNLVLVCILYSIVCFLGGIN

VFAPILMSEVFRAKIRFSGISFSYNIAYAISGGITPQLVFWLNTLASKNENPFLYGMSIYMIFLALLAIC

AVFIVKDKIKF

>EAQ72774.1 xanthine guanine phosphoribosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDDTKKLDTIE

IFNIPDLSKYKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDF

YWDINLD

>EAQ72773.1 acetyl-CoA carboxylase, biotin carboxyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176]

MTKEEIKELVNLFAEANISKIKIKEQDGFEIELERDMCCDVPAPVCPPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>EAQ72772.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIHSSLKNATIMVELDTSCVILRSDEAKTIEVNLI

>EAQ72771.1 ribosomal protein L24 [Campylobacter jejuni subsp. jejuni 81-176]

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>EAQ72770.1 ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MVDKFFLNELFKSISFSYQRLFIIVLSVFIGALTCSAFLNIYFDIDTKLSKELKAYGANVMISPKRDENF

ISNAEYEKIKEILKARALTPFLYDFLNLGSTSGVVLGTDFRALKITKPFLEVKEGSFSLNDFDENSAFLG

VNLAKQLGLKTGNELQIYNPNNGKSIKLTIKGILSSNDEFDSIVLAPLSVVQNLSDRAGINYANAVVYGN

FDEVKAKTQAINNEFIDAKPISSVSLSEGLVLGKIKALMFLIILVVLIIVTTSVNTTLSSIIFSRKKEIA

LRLALGAKKSEIFKLFASECFIVSFFASLIGAFCGIFLANVFGYLIFNSSIDFRFIAVFIALIISLIFAF

LAAFFPIKRALKINVCENLKGE

>EAQ72769.1 helix-turn-helix containing protein [Campylobacter jejuni subsp. jejuni 81-176]

MDEGQKQQFIKLTYFLGEVLGEQYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELMQNKKYLE

KDFLCDYKALVGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGDILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSIAQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>EAQ72768.1 phosphoribosylformylglycinamidine cyclo-ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEESEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIIGEICINEGIVLE

>EAQ72767.1 mulitcopper oxidase domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MNRRNFLKFNALTLASMGVAYANPMHDMHSMHKNHSINHDLDTSFINFAPKNLKLLDPKQFPQGEILKAL

PLLKNESKEKNIFRATIEIKENHIELIKGKKTLFYTYNGLVPAPKIEVFEGDKLEILVKNKLKEATTIHW

HGVPVPPDQDGSPHDPILAGEERIYRFEIPQDSAGTYWYHPHPHYTTSKQVFMGLAGAFVIKAKKDALSH

LKERDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPKIKLATNERIRIYNATAARYLNLRIQ

GAKFILVGTDGGLIEKAIYKEEFFLSPASRVEVLIDAPKDGEFRLESAYYDRDKMMVKEEPNTLFLANIN

LKKENVELPKNLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALASMFLINGKSYDLKRIDLS

SKLGVVEDWIVINKSHMDHPFHIHGTQFELISSKLNGKVQKAEFRALRDTINVRPNEELRLRMKQDFKGL

RMYHCHILEHEDLGMMGNLEVKE

>EAQ72766.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNYKKLGIEHFYKKDFKTAKMYFSMAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILSTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIINSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>EAQ72765.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKAFTILELVFVIVILGILAAVALPKMSSSKDEAEVSKSLNNLKTLINDISIYTLKNDHLNSIKTMSNV

SGIENIDLSNFNGTKEVNFRVGDDKKCLKLVFINKVDFILMGISSNEASKNAIINAANQSHEDLENVNFT

SSSSNKACVILSKNENFKNLASKTYLLIGGM

>EAQ72764.1 ribosomal protein S4 [Campylobacter jejuni subsp. jejuni 81-176]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>EAQ72763.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176]

MQTNEIFKKNLEAMQGSTYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLK

LYQEQYTNYPFLFFYGLGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLD

YNNNIAELIFGLTEISLFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQA

IWNLPEMFKHYSYKELLDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPD

YVLSLERIPLTSEFFNNDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYI

GGGMSVAHSAYELAILLKCENIILIGQDLAYSKEGKSHTDDYINLALHEKDFERNKGHFTTIAYGGEGEV

ESSEVWTLFRKIFENYAINNQKYIKTYNCTEGGARIKGTIEKPFAEICKEILTKDIKKPLKKLKKKTKKE

QFDKMLKSYRKIKTNIQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEI

LGPTLHHEESLIAPIYTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRS

LI

>EAQ72762.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKIILVLSILSSFAFANSCANYEQELKKCNSLKNSHERKMCRLGLFAKCKKG

>EAQ72761.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>EAQ72760.1 ribosomal protein S3 [Campylobacter jejuni subsp. jejuni 81-176]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>EAQ72759.1 nadh dehydrogenase i chain i [Campylobacter jejuni subsp. jejuni 81-176]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>EAQ72758.1 nadh-quinone oxidoreductase chain 6 [Campylobacter jejuni subsp. jejuni 81-176]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>EAQ72757.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKERKICIKNMQNTKAGENPILPLLNASDCMQEAYAKALLELTQRAKKDIKTKEVLEQIFKNKVDKYEN

LLTQSLNTNKDLQDFIDSLAKEDLIDSRAKFKLWNLN

>EAQ72756.1 ribosomal protein L22 [Campylobacter jejuni subsp. jejuni 81-176]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKRFRPRARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKK

ATAKKES

>EAQ72755.1 putative iojap homolog [Campylobacter jejuni subsp. jejuni 81-176]

MQERIDLIVKILDEKKAENIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLENLKKGRV

>EAQ72754.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>EAQ72753.1 glyoxalase II [Campylobacter jejuni subsp. jejuni 81-176]

MFNFITTLLKTNLYFLEEKTTSKSSNQTHIISLKQSDDEFLNLLFSFLVPQSDEDKNFIGKTRTKIKRNE

HNIALIKNPNFNALIDTGFLDTIDTLKEKLHIHKTDFKDITHIILTHAHPDHIGALMSEENLFPKAQILI

DKKEYDFWIKSDRQEIKNTLLKLKNIEFINHSKDLIFQNSGIKAIPAYGHTPGQNAIIIDDKIVFWGDLL

HLYDIQIPKPKIAIKFDIDQNEAIQTREKLLKQFKERKLKVIGTHVPFIEPKFLD

>EAQ72752.1 carbamoyl-phosphate synthase, small subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNASFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>EAQ72751.1 phosphatidate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSHK

ALLFGILALLLVVGSLVYKKASLKPALIYIYPSLPILALWQVYLDQGMFALFWLIIIVAACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFWLSLLCSFFVAIFAVIGDLLESYFKREAGV

KDSGDLIPGHGGVLDRIDAVIIAAFVMVAFL

>EAQ72750.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>EAQ72748.1 hemin transport system ATP-binding protein hmuV [Campylobacter jejuni subsp. jejuni 81-176]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLSPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKEFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKLVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYKNSKPYILALKEKK

>EAQ72746.1 phosphoglycerate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>EAQ72745.1 enoyl-[acyl-carrier-protein] reductase (nadh) [Campylobacter jejuni subsp. jejuni 81-176]

MIMKGKKGLIVGVANNKSIAYGIAKACFDQGAELAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKDKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>EAQ72744.1 flavodoxin [Campylobacter jejuni subsp. jejuni 81-176]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKMNSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTVAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFEASDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>EAQ72742.1 polysialic acid transport protein kpsD precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>EAQ72740.1 ribosomal protein S17 [Campylobacter jejuni subsp. jejuni 81-176]

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>EAQ72739.1 type I restriction-modification system specificity subunit [Campylobacter jejuni subsp. jejuni 81-176]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>EAQ72738.1 outer membrane fibronectin-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLCLGLASVLFSADNNVKFEITPTLNYNYFEGNLDMDNRYAPGIRLGYHFDDFWLDQLEFGLEHYS

DVKYTNTNKTTDITRTYLSAIKGIDVGEKFYFYGLAGGGYEDFSNAAYDNKSGGFGHYGAGVKFRLSDSL

ALRLETRDQINFNHANHNWVSTLGISFGFGGKKEKAVEEVADTRPAPQAKCPVEPREGALLDENGCEKTI

SLEGHFGFDKTTINPTFQEKIKEIAKVLDENERYDTILEGHTDNIGSRAYNQKLSERRAKSVANELEKYG

VEKSRIKTVGYGQDNPRSSNDTKEGRADNRRVDAKFILR

>EAQ72737.1 peptide ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKFLIILAPLIFLFLCALFAPFLAPFDILSTHLENLYQAPNFTYILGTDFLGRDLFSRLLFALRNSLII

GVGGSLLSIIFALCYLFLARCFFYVFWMRILEFFLALPAFLLMMFFQSMITSDVFLMIFLIALIHWCFIA

RIIESELKRLENLDFYKANIVLGRTKFRAFFKDLIPALKTLIFTLFIFNIVHAIATEATLSFFGLGLGFE

IPTLGTLLSESSKAVFIGAWWIILFPLLSLLLLFLPLLWLGNFLQKIWGIRS

>EAQ72736.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MINPVQQSYVANTTLNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIDTKATAAAIADSLI

>EAQ72735.1 non-heme iron protein, hemerythrin family [Campylobacter jejuni subsp. jejuni 81-176]

MLPKWDNSYSVHNAKIDEQHKKLFKLAAKVEVVSDRSVSKNEVKELLAEFFNYMKDHFNDEEKYMQLIGY

PNLEEHRKIHKEIIQTMINLIKDIKSTNDLKEKLYIVAKKWLLEHILYEDMKVEKWRSSSLSTDDGGDIS

FEAAEDEDNEHPQFYLYTCNCPGKIHDVPYSIHQKIELQGHKFTCKTCKQAIKFYKKYS

>EAQ72734.1 DNA-binding response regulator [Campylobacter jejuni subsp. jejuni 81-176]

MINVLMIEDDPDFAQLLSEYLAQFNIKITNFENPKSALNVGIQGYDCLILDLTLPGIDGLEVCREIRQKS

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHTNNENINSAFKIDERRH

EITYEDKVLTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>EAQ72733.1 haemin uptake system outer membrane receptor [Campylobacter jejuni subsp. jejuni 81-176]

MHPNKKAFKLSLFALLLITNLNAQESNKAINLQKVVVSTTGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGHAINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGGLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWEFNLEAFWQNQKINYLKDEISMKGTTAYQNGSGFEDTLTGISLKNKLNYANNSYFIFGY

EFANHDAKRTSIIHYDVNAGRFQMSHTMTTLMDMDKQSHSIFALDSHEFNDIFSISGGARYEYSLYDTNR

NYTSNMIIPGRPNIKTELFSTDDTSHNFAFEITPNFKYSDTGKLYIKYERGFVSPSPAQFVNKDKNLQKY

YSANLNPEIFDTFELGIDDFWWDFYGFNLTLFYTLSKDEISYLGNPHSTSGSWWKYYNIDQTRRLGVELS

LSQNFLDDDLIFRESLTYLDAKISKGVNDGMRIPYVSKIKATAGFEYAWNKNFSNFIDLTYFSRAKDGGA

IDENTGKMSKNSWIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLVGNGRNYYVEFKY

AF

>EAQ72732.1 nadh-quinone oxidoreductase chain k [Campylobacter jejuni subsp. jejuni 81-176]

MIEKYFFVAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>EAQ72731.1 lipoprotein NlpC [Campylobacter jejuni subsp. jejuni 81-176]

MRHIFFIIAIIFFISGCSFYQNLNYTRPIYNTNKETKLKTIANEWKKTPYVLGGTTKKGADCSGFTQSAL

AQLNIRIPRTTKTQLGSGRKVSKSKLQTGDLVFFKTGRGPNGMHVGIYMSKGKFIHLSTKGGVKEVELNS

SYWKARYIGARRY

>EAQ72730.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. jejuni 81-176]

MRKNILIFFCFFLFVDISLANAINEKTKSLEENKRIQEQLNKKLEDLASDILNGEKSLKDLSLQIESLNS

QTSKLEASAKAQNQELNTLTSQNEDLLKSKSNMEGKLISLMAKDFAYDLPIPQGYIESEESFMAFEILGS

LNKVLNEEIFKISKDYEGVSRLIDDKQAQIKKINESLKDYNAQLAKLQSLKQKQISEINKQKTDRAIYAK

KLDDLQAQQEELRKTLNQLKIINDTEDANSNKNDTKIVKNNQKIRQLGSSYQGSSVKRYTGKKTIAPLDS

FTVKQKFGNYVDPVYNLKIFNENVVLRSNKSDAVVKNVLDGKIVFAKDTSMLARVVIVEHDNGIHTIYAH

LDKIAPNIKVGKNIKKGAVVGRIKNDLTFEVTQKNFHINPLELISLN

>EAQ72728.1 major outer membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGVLRYRYDTGNFDKNFVNNSNLNNSKQDHKYRAQV

NFSAAIADNFKAFVQFDYNAADGGYGANGIKNDQKGLFVRQLYLTYTNEDVATSVIAGKQQLNTIWTDNG

VDGLVGTGIKVVNNSIDGLTLAAFAVDSFMAEEQGADLLGKSTISTTQNAVPFQADSLGNLYGAAAVGSY

DLAGGQFNPQLWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKRHANGNLFALKGS

IEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNET

VRVGADFVYGGTKTEATNHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA

LYKF

>EAQ72727.1 imidazole glycerol phosphate synthase, glutamine amidotransferase subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKIIIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHMGWNQVHSSHALFKGLEGAYFYFVH

SYCAGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGENLISNFIKDIG

>EAQ72726.1 conserved hypothetical protein TIGR00103 [Campylobacter jejuni subsp. jejuni 81-176]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMVAQNRSSMANDVLGGFGGMKL

>EAQ72725.1 UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter jejuni subsp. jejuni 81-176]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>EAQ72724.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQARKEKS

>EAQ72723.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLETKKSFWPYGILLSLLAIIIACIVTIFIASHHPVYEDDFYFDSYQNVENNYNQIQKQQVNFDKFFKVN

FQNDKITFIGKRKIPSYEVDQNSYVANFKISALQNINSNDLKVQVLLTRPFTKNFDQKLEGQVKNGILSI

ALPKLDKGRWELKLKFYANQETVGFFSYELNAQ

>EAQ72722.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKLAIDIFINFLQNPPNHFLLEKLKKEEFWQNWFLKNNSKLQCTALKLLSSSNEDDKLIASDFTSLFLS

DVDYVKAPPFASFYLDENKEIYSDNSDKVKQIFAQNNFFSFFNEEPADSLINELLFISFLIKKQDDITLQ

KFLKEEFFIWFNMWSFDVINKAKTHFYKALTMLMQDFFNQLNTKF

>EAQ72721.1 D-glycero-D-manno-heptose 7-phosphate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>EAQ72720.1 recA protein [Campylobacter jejuni subsp. jejuni 81-176]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>EAQ72719.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKITYSLNLQGEACPYPAIATLDVLPKLKSGEILEVLCDCPQSINSIPQDVKNRGFKVLEIDQSGPTLRF

LIQKP

>EAQ72718.1 formyl transferase domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MVEESIDTGAILTQKEIKLDDNFTALSLLDTQHKLAIASFKEALKNLENKIFKIQTLGGGYHKKLALPNE

GYLDLTWDKEKISRFLRAMDCGALIGVPKARLKILGEEKEILFYEINELDLILNLSDNTILKITKE

>EAQ72717.1 citrate synthase I [Campylobacter jejuni subsp. jejuni 81-176]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYMEMAARIVAKIPTIAATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWIEQKEQESLKIVRPRQLYLGETS

KI

>EAQ72716.1 hydrogenase-2 large chain precursor [Campylobacter jejuni subsp. jejuni 81-176]

MSQKIIVDPITRIEGHLRVEVVVDDNNVVKEAYAGSTLWRGIETIVKGRDPRDAGFMTQRICGVCTFSHY

KAGIVAVENALGITPPLNALLTRTLMNAALFLHDHIVHFYQLHGLDWADVVSALSADVKKASDEAFKYTP

NPYATGADKLLEVQQRLKTFVDKGNLGPFANAYYGHPTYRLTPEQNLIVLSHYLECLRIQRIIAQCMAIF

GAKNPHPQSLTVGGVTCVMDLLDPARMGEYMVKFQEVQDFVNRAYYPDLVMAGKAYAHEASVLNDIGVNN

LYTFKEFQIGRDEWLFESGIIKNGDLSKVYEVEEDKITEEATHSWYADNEPLHPYDGKTNPNYTGLVDGE

SVDHHGNNVHSKVFDTKGKYSWIKAPRYEGNPMQVGPLANIVVNYAKGNPNVVPVVDEFLKETGLPLNAV

FSTLGRTAARCIEAKIVANNALKAFNNLVENLKVDQSTCAPYVIDNSKEYKGRYMGHVPRGTLSHWCRIK

NGVIENWQAVVPSTWNASPKDANGVGGSYEQCLIGLKIADVKQPLEIIRKIHSYDPCIACAVHVMDTKGN

NLSEYKVNVNL

>EAQ72715.1 ribosomal protein S13p/S18e [Campylobacter jejuni subsp. jejuni 81-176]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>EAQ72714.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIFGKIDYINLLPLHIYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNTSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYAKTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>EAQ72713.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MCFSTLFAQDNFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRHIKITAIMLDKVKIYDRWYKKGDMIDD

AIIYEINTKEIKFQYDNLEIAIQINKNDKININ

>EAQ72712.1 2,3,4,5-tetrahydropyridine-2-carboxylate N-succinyltransferase DapD [Campylobacter jejuni subsp. jejuni 81-176]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDDEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLSH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISVGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>EAQ72711.1 adenylyl-sulfate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>EAQ72710.1 hydrogenase, (NiFe)/(NiFeSe) small subunit family [Campylobacter jejuni subsp. jejuni 81-176]

MAKLSNEELKNILEDRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDTFFL

TIGAQGESGYEILEKLAAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFDDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKTSWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEEQIKILEQ

IDFEFESNIKLILQNIAKNKLGALLVENYKKSFEKNYTFIEQNFDENPMPSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASPYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNITK

ISSLKAS

>EAQ72709.1 histidine biosynthesis bifunctional protein hisIE [Campylobacter jejuni subsp. jejuni 81-176]

MQNFKELNEKIAWQKVDHLLPVIIQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDISCFEKISKNADFVFLARLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>EAQ72708.1 selenocysteine-specific translation elongation factor [Campylobacter jejuni subsp. jejuni 81-176]

MKSVIIGTAGHIDHGKTSLIKALNGFEGDSLKEEQERQITINLSFSNLKLKDKNISFIDVPGHKDLVKTM

VSGAFGFSVCLFVVDINEGLKEQSLEHLEILKILDIKNIILVLSKCDLCENIEQKSVEILEELKNLDYPI

LKVFHTSIKNNQGIEELKNYLYTIENKENDEELIFHYYIDRVFSLKGIGTVVTGSLNEGSITLNEKIICL

DTQKELIVKNIQNHDTNLEQIKACNRVALSLNCDYKELKKGYLLSKKGCFKAFKECDALVKAKNLQNSKM

IFCVGSRQIECKINILKKLENDEFFVHFSFDKNVFLSFDEAFILLQNNRVIGGGKVLNPLSEPLKKEQKN

KFLMFLKNKDFKAAFSFLKDAHKYGFGLLSSYQRFKLSHQKALKLAKELNQVFVDEKNLNVYHLQSLEEI

KNFIKFILEKNPYAMLSAHSLALRITWASENFCELGLKEMSNLLDFQNGIYFKKGIDFEKLQEKNNNQMY

EILKKQGIKPEAPYNLYDFLELDRKSGDNILKKLTQKGLVVRLSHNLFIEKQALEKLMQECLNLLKNQSL

DVQSMKEYFNLSRKYAIAYLEYLDKFPQVSKEAEKRFLTNI

>EAQ72707.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSEFLTHPFEPFFDKDSKILILGSFPSIKSRQDGFYYQHPRNRFWPILETLFDVKLENIAEQQAFLRKKH

IALWDVLQSCKIKNSDDKTISYAKANDLNLILSQTKIQAIFTTGQSAYRFFVKFHPRLEAIALPSTSPAN

LNFSFEQLLQNYEIIKKFTK

>EAQ72706.1 chaperone protein dnaJ [Campylobacter jejuni subsp. jejuni 81-176]

MNSLYETLGVSKNASADEIKKAYRRLARKYHPDINKEKGAEEKFKEINAAYEILSDEKKRAQYDQYGDSM

FGGQSFHDFSRNTGGVNLDDILKDLFGGGFGGRSRGGFNGFSSKGFSSGFGGFGGFEEEILDSNLELHIP

FEKAVKGGEHSFNFQGETIKFKIPHGIKEGEKLRIRSKGKQSRNGARGDLIIIVKIEESPIYTREDDDLY

QKVDISLKTALFGGKINIKTLKEGKEEATINITPNSKNNQKIRLKGYGVQNRKSNIYGDMYLNLNVVLPN

LDTLDEKFIELLKEKLP

>EAQ72705.1 ribosomal protein S9 [Campylobacter jejuni subsp. jejuni 81-176]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>EAQ72704.1 KpsF [Campylobacter jejuni subsp. jejuni 81-176]

MNTLEIAKEVFEKEAQAILDLAKNLDENFNQAVNLMLNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKKNSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMA

SEAEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>EAQ72703.1 putative membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MILAGIIFIFNLILAYLSIDISKLDSVAEQLKIGMFSSIFVLSLTLFIFAFRQNRNINKIYQKIFYMQND

FLNFQKKIDVDSVLDLLKEKFETTGQNLTKTSHEKDRYLHLLEENLYQLGNISNAMRCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKIFNKNVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLITLLRKYLPKA

>EAQ72702.1 putative methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPDLARVSSGTQNVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>EAQ72701.1 conserved hypothetical protein TIGR00370 [Campylobacter jejuni subsp. jejuni 81-176]

MFSVHFSGSKALLLRFEQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLAEQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFDIQEQVAKKVYQKEIYEYKNH

>EAQ72700.1 DNA-binding response regulator [Campylobacter jejuni subsp. jejuni 81-176]

MSQECKELIILVVEDEIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSAYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGKEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>EAQ72699.1 chorismate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>EAQ72698.1 nadh dehydrogenase i chain n [Campylobacter jejuni subsp. jejuni 81-176]

MLNNFLNLELLNISLSYPFLFLITTAIVLLLCSGFWKFHRSFYIGISSLSLIVSAFLILNNANAQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMVSSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGAGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFAALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFMKNDRVHNIKFSFIQNFILAFCVCVSTFVILLML

>EAQ72697.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIYDNALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEVKYLIIDKNIHSYKDSENIKYFLNFLSVKYGLKILDSDEEECDFK

KAKLNTLKELDNYDGLVLFRANLQDKNLHCSRQFLQIAKCKDQSEVEILAKDFSFKTKLCLDENLQGTIA

FLNYENNGFDFTPIRIKEAK

>EAQ72696.1 ribosomal protein S8 [Campylobacter jejuni subsp. jejuni 81-176]

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>EAQ72695.1 conserved protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFVTFGLKLSLIYVVFLIFLIFIISFVFSKFKEDSFLKHIPKNTKSSIFTQSAHNPSNFIFKQKSCCAN

TQDKSKNITINYKELFKESLKNYKKLLPYIVVAVFIGAFIHGFIPQEILQKYLNGNEILSIALAAFLGIF

LYLRVETIIPIGLALLQMGISQGVIMSFLIAGAGCSLPELVLLKQMFKMKFLFLFVMIILGVAISFGIFI

NLI

>EAQ72694.1 diaminopimelate epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>EAQ72693.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MQERIKELELRYKYFLLKKYLKYLLLIILISVIAFCFFVLMQKYNKQKNIYLQAIEHKKHLEQKILQAQI

LQEKNKISREKLYKELEEVKAVQENTHISKIEIDSKILNISDLKKSFYQNPSYEKALNLAKKYFDIKAYQ

KTIFWALKANELDKQKQDSWLIFAQAKRALGEEKEAQSALDAYINYYGLMELDGK

>EAQ72692.1 Rod shape-determining protein rodA [Campylobacter jejuni subsp. jejuni 81-176]

MFRLDRRILTHFDYMQPILFLPIILISFFLIFEANPFLAEKQFVYACVGLFAFMVFFFFPIRKFIWIIPV

AYWINIFLLLSVDIFGVEKLGAKRWLEIPFTHFTIQPSEIFKPSFILMLAYLIYQNPPPKNGYKLKQFIK

LSFYIILPFLLIAKEPDLGSAMVLLLVGFGVLFIMGVHYKIWLSIVIAISVSSPIIYTHLLKPYQKQRIH

DFISEKPSYQVAQSMIAIGNGGLTGKSQDEATQTHFKFLPISTSDFIFAYMIERFGFIGGLTLIIFYILL

IFHLLSLNYKLKDDYFARVAINCVALFIFIYAAVNISMTIGFAPVVGIPLPFFSYGGSSFTIFMIFFGIL

QHLITFRYFWTDIKAK

>EAQ72691.1 flagellin A [Campylobacter jejuni subsp. jejuni 81-176]

MGFRINTNVAALNAKANSDLNAKSLDASLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAISNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQEFAINGVTIGKIEYKDGDGNGSLISAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSIQNQVTSTINNITVTQVNVKAAESQIRDVDFASESANYSKANILAQSGSYA

MAQANSSQQNVLRLLQ

>EAQ72690.1 lipoprotein, VacJ family [Campylobacter jejuni subsp. jejuni 81-176]

MKIKFISFILIFFAIFAFAKEQNSDDFEQEYQNYQVNDPLSGYNKAMTSFNVALYDYGLRPVLKGYNAIT

PEFIRLGVRNFFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFGGLMDVASKMSLKKHPADLGTV

LAHWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSK

>EAQ72689.1 probable molybdopterin-guanine dinucleotide biosynthesis protein A [Campylobacter jejuni subsp. jejuni 81-176]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>EAQ72688.1 holo-(acyl-carrier-protein) synthase [Campylobacter jejuni subsp. jejuni 81-176]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDEKNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>EAQ72686.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSDLDIFKKHLGEIQGVNEFKANQICSQINDANDFIGALQVLDMSLKKIEKSILERIDENSDDMQKRTL

DATASQLIQNCSFMGTALFGNIFNVYVGKKLFEFEIANPLLILQTSNYEGVLAYIQDKRDEIKIILSELA

TAITLGETMDNAGIYNSTMDFKNLFK

>EAQ72685.1 MmgE/PrpD family protein [Campylobacter jejuni subsp. jejuni 81-176]

MFYSEILADFIFNLKYENIPNAVVQRAKELMLDSLGTAIAASKEECVLNAFKAFENLSTEKNTPIWINDQ

KLDPIYAAMLDGIASHALDFDDTHTEAILHASAILTPLCLSYGFHVSKDAKKIIKAFIIGWEIAARVGIA

SKGTFHKRGFHTTAIAGIFGSVSASAILLDLNKEQIINALGLAGSFASGVNEFLSNGSNSKVLHIANAIK

NGIMVAHFAKNNMSGPLSIFEGRDNIFKCFGIEEECDKTELNKALGEIWQTMQVSIKPYPSCHFAHGLID

CAIALKNDGLKADEIKSIHCFVDEVPISFICDPLEAKYTPNSAYEAKFSMPFLMALGFFDGKITLNSYEN

LKREEVLEFAKKISYEKRKSQGFPKYFPGHLEASLQDGHIIQKDVFINKGNFDNPLSFEELKAKFLANAQ

IYLDNAKANKILDQIINLENLNHFSF

>EAQ72684.1 sensory box sensor histidine kinase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKDFFKDQFFKALEKNTIFSRADVQGNLIFVSDKLCQISGYSKKELIGKKHSIFKHPDVEECYIEELLKK

LSYKKPYQVIFKNIDKLGKTFYLETLLIPILDKNNELIEIVAFSHDVSNSFKLNEELALNHAKLRELSIN

LENTVKNHQQEFIQLGKKFEKKMQIALEKNEKDIKIAYEEILKSSLEQMISDIAHQWRQPLNELGIAMFQ

MKQNLKDEKGFAEIYSQSKDMIKNMSETIDVFRTLFNKGVEQCVFIKETLNKALEIAFETIEKNHVNINI

VSKSDYEVLAYENGLIRVFLNLILNSIEAFKNKKRKIITINFSKFGKNYLKITIKDNAGGIDKENLDKIF

QPYFTTKHPSQGIGVGLYISRQIIESFQGKIKVKNGKDGACFEVFLKLKERVE

>EAQ72683.1 pyridoxal phosphate biosynthetic protein PdxJ [Campylobacter jejuni subsp. jejuni 81-176]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>EAQ72681.1 tyrosyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MDIKKILAEVKRGCAELIDEERIENLIKNYYEKGENFFIKAGFDPTAPDLHLGHSVVLTKMAFLQKHGAI

VQFLIGDFTGQIGDPSGKSATRKKLDKEQVLINAKTYETQVFKVLDKEKTQIKFNSTWLNELGAAGIVEL

TSTFSVARMLERDDFTKRFKEQSPISICEFLYPLLQGYDSVALKSDIEMGGTDQKFNLLMGRQLQRVYNI

GKEQAVIMMPLLEGLDGVNKMSKSLNNYIGVTEKANDMYAKILSISDELMFRYYELLSQKSLEEIAQIKK

DIEQGNLHPKKAKENLALEITEHFHSKEEANNAKSEFDRIHSQNALPSDMAEFEIQGKIWLAKALVECGL

ESSTSAARRSISANAVSVNSQKVSDEQMHLEQGEYILQIGKRKFAKLKVKE

>EAQ72680.1 glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVVNQTYKNLQVVLVNDGSTDENSLNIAKEYTLKDERFILFDKENG

GQSTARNVGIEFFSKEYHFKNITQELKENSLVEFKLSNEDNPYNIYKIYKSSNFFKNKDELLNFRAPDID

YIIFLDSDDYWELNCIEECVPRMDGVEVVWFDFEIFLDGIDGKNVWNYSDHKTDLEYLRYTENQYTNFND

IIARITKEYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQN

SSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINK

YFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKKILFIFNIIKAL

YDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKR

TKR

>EAQ72679.1 phosphopyruvate hydratase [Campylobacter jejuni subsp. jejuni 81-176]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>EAQ72678.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLELRIFRFDKTKDYEAYYKPYIYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTYMVVNKQIIPLFT

PLEKIAKEFDFSLCIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILH

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLKAKFISYENSIKNNGFSLLNLNPTLSY

KIAADIVLDAYDSGADFMVVKEEKDFYLFDTCAKKLMQTSGREFEDFYILSRFEFLALIEGIQAPSLKNH

TLKVSLI

>EAQ72677.1 flagellar protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKVLFRSDSSSQIGFGHIKRDLVLAKQYSDVSFACLPLEGSLIDEIPYPVYELDSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNPNLKKLQKFAKLHNNI

RLFIDHENIAKLMNESNKLIISASSLVNEALLLKANFKAICYVKNQESTATWLAKKGYEVEYKY

>EAQ72676.1 ribosomal protein L15 [Campylobacter jejuni subsp. jejuni 81-176]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>EAQ72675.1 modulator of drug activity B [Campylobacter jejuni subsp. jejuni 81-176]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKIF

>EAQ72674.1 peptide ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLIILGKSGAGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKSYELSGGEATRVGLIRALVLNPKLLILDEITSAFDIKISKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>EAQ72673.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>EAQ72672.1 anaerobic dimethyl sulfoxide reductase chain A precursor [Campylobacter jejuni subsp. jejuni 81-176]

MFGGLTLSPISLSANLLKTPPLISKWAGCNVNCGTKCPVKVHTQDGIIKYVSTDNEGDDSFDNRQARACI

RGRSSRYKVYNANRLKRPLKRVGKRGEGKFMPISWEQAFDEISAKMQEIKEKYGNEAFYINYATGTTGTI

INRCTQGPWARLLSLYGGYLNYHNSYSTAQISNAMNFFYGGSPASDIYTLRSAKLAIFFGANHVETRMGG

GGVGYAYQKALEESGCKIIHIDPRCNDSMIGHCDEWIPIAPGTDAALIAALTYVMIKEDLLDRTFLDKYT

IGFSENTLPQDAAKNSSYESYVLGLNDGVEKTPDWASKITKIPARRIVQLAREIATIKPCFIEQGWGVQR

HSNGEQNARAIATLACITGNIGIEGTNTGCRTGSSKTYDIMGMPFKNPIKDSIPCFLFTDAIYRGKEMTD

ISDGVRGTTQLKQNIKFIFNTAGNCLTNQHSTIKEVHDILSDENLCECIVDVNVTRTPSNNYADYILPDA

TMLEQEDFIRPSAGYYSNKPYIIYCQKAIEPVGEAKPIYEMCLELAKRLGIEKEFSEGRTQKDWLKYLYE

ESMKKNPLLPSFEEMCEKGLVKFEPVKPVVALQSFIKDPINNPLKTPSGKIEIYSTKLAQMQKTWKLKEG

QQIVPIPVFESQREGILDPLKQKYPSQFFGYHYKGRTHSSFWEIPQIREANPQEIWINTIDAEQRSIKTG

DVVQVRNDLGIIQGIAKVTPKIIPGCAVTPQGAWAKYENGIDVGTCVNSLASIVPTAISKGNGQHSILVE

IAKV

>EAQ72671.1 HAD-superfamily hydrolase, subfamily IA, variant 1 family protein [Campylobacter jejuni subsp. jejuni 81-176]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSREIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFVKHYEQSVVLFEGVKELLEFLKNKNCFLAIATNAPQSSLSSILKKHQIIPYFDKILGVSLGIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLQKYL

>EAQ72670.1 hypothetical protein CJJ81176\_1537 [Campylobacter jejuni subsp. jejuni 81-176]

MEFICVKNPKNTRNKFENLNSEFPLFKLGLKDNDESMTEEKTLKARILKLCDI

>EAQ72669.1 peptide chain release factor 1 [Campylobacter jejuni subsp. jejuni 81-176]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>EAQ72668.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDQSFLKEKIEFLI

SQGQSLIILDEVGMYDYAMLESIRIYSDSISFVLSSHKKLNMLKKEHFKSRLSACFKLKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>EAQ72667.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176]

MKFNLNQKELFNKNIEALDNIPLKESLKEIKSSKFKLILGKDNLDINLQNTSDNTFLYENVIDELNTMLN

TYNDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWTMFHILDFSNELQKNNLIIINTNI

LSEFDLLNFYKKANSIFLQFSRIYFLELISNYYERYNEEILKLNDTILSTIKISIIQYGNDSIDNLMGIK

HFIYNLSKLLTHPHSEIFLKKRYKLSDTAIIVSTGPSLTKQLPLLKQYANKATIFCADSAYPILAKHNIK

PDYVCMLERDDIVSKCFDNDFKEFDKGILFILASVVHKEVIEFLERNNREYMLVPRAYDFFYYLNLAKYF

QPIDGMVSVAHMNYWLAKFLSHKNIIFIGQDLAYSKDQSSHAKDFIHEKLHEGHFQKDENLFTSIAYGGK

GEVESSYFWKLFREIFEKWISHDNNFINIYNCTEGGARIKGTIEKPFLWACENLLGKDLNKPFPKLNPLN

INKQNELMLKAYNKIYKSIYHCKDFNKKLLQEYNEIKELYLTLENLQIEESKELLNFIIQKIDTIKYQID

DAKNMQDLYEILGPLLVQFELNLARIYVLNPKTPEDSFNKSLIWIKEHLEWIEMIYGHIQAQENALFENI

IPLEQKLKERKMQKYLRRIKNANK

>EAQ72666.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVALTLACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAIGIVSTFGYLPEVFAPVLAGDLLDKYQGVKG

FHIYFSIMIAMAIMGANFCLFWIKKYNKKRKKI

>EAQ72665.1 Pyridoxamine 5'-phosphate oxidase family [Campylobacter jejuni subsp. jejuni 81-176]

MNFESIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNTNGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KVNPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVTHVGASGNPHKFPHKH

>EAQ72664.1 molybdopterin biosynthesis enzyme [Campylobacter jejuni subsp. jejuni 81-176]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>EAQ72663.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKAKLTLLALLGATVLLAKDMVVPASELPNNAKEFISKNFKTAQIGLVKKDIDSYDVILNDGTEIDFMIN

GDWKEVDGKYKALPHTILPSVMKKVSATQPNAQILEIDKEINGYKFKFNNNMKVYTDMQGNVLGQKLD

>EAQ72662.1 hypothetical protein CJJ81176\_1324 [Campylobacter jejuni subsp. jejuni 81-176]

MIIYNGIILHTFFFENIRIICTNNKAIFKIFTKITSCLKKSLAIFWHSLVTFPVPMI

>EAQ72661.1 UTP-glucose-1-phosphate uridylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQISGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRPLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEENLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTKAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFYEKSKC

>EAQ72660.1 ribosomal protein S11 [Campylobacter jejuni subsp. jejuni 81-176]

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>EAQ72659.1 nadh dehydrogenase i chain c [Campylobacter jejuni subsp. jejuni 81-176]

MRKYSDKKNAQTQNYYKDRFYHAPHTVKSDVNESVFKEDFEVLKTQVEILNSFVELDFWVIEIKKEDNVK

TLQMLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRIKTFVGVKERLQSVAHVFKGANWSER

EIYDMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFAD

DKDTLNFARLYHEVPKGGQKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>EAQ72657.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDDELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNAANADPEKLKARQER

LTKLQKEAEYYRTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIVTGLNLCATIMDFKIWHLSLKS

SGIKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>EAQ72656.1 ribosomal protein L29 [Campylobacter jejuni subsp. jejuni 81-176]

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>EAQ72654.1 ATP-sulfurylase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSARKNKNITIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLMLDEKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIEKIKENFQ

QIKNNLNAQKITAIVSSFDPLHRAHERMFRWTIDKADLVVIFLVESFDVNGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIYQMSYMV

>EAQ72653.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176]

MTILEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNIDENLNIFDKTHNVFMYENLEEEINFFYQSILEK

TPRYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSMIDLSEELCSGKIYLVDIKEERVNLQL

RILFDQNDMFLWLNIYEMFINHKFYEKYYYEEILNTDKIIYENINLVIRNLDPDSKISLSCYENFYKNIP

LMLKNIPFKRIIDERKGLFESCIVVCAGPSLQKQIPLLKQYQENFVIFCVDGAYPLLVKNNIIPDYVLNL

DFEEYPLKFFKEVNPENKTLFILSASTHPSVVDYLYKKQIPLSIALNDNLPYQNLHIDEFGYLEFGTHVG

HACYALAIALKFKNIIIIGQDLSYDKQGNSHFDSFDLGSDIDATLNIPTLKTIAYGGLGEVLTHLAWDDY

KRKLEDLFARNLELNFFNATEGGARIEFAKELDFKSCCKKFANLNNKSNKYLPKTLTTNRGAKILNKILA

TFKREKQNTLICLEHAIRLNDVLKIILASDRKFPIDFLKNTYESIAKFEIFLEENSFLNDGVLKGVIFHK

GKLLSEVIVSKIEDEREYLLIYLTFYKQWLEIFICRFQLKCDIYNFLV

>EAQ72652.1 triosephosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MIFAANLKCNHTRASFKIYAEILNKTIGVKCDDIIVFPPSVAFLEKENNFIQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEEFIKAKFDFAKEHGYKIVFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQSTDIAKVLEFLASLTKAPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>EAQ72651.1 MGC82361 protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLEFSKETQHFLTNYCKDNNLSEKEVLELALSYLEHKIRIDGYKKDIELYKQGKLKTLDFDETFNDIRK

DLE

>EAQ72650.1 Protein of unknown function (DUF507) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>EAQ72649.1 arsenical resistance operon repressor [Campylobacter jejuni subsp. jejuni 81-176]

MYVRRQGTWAYYGINNELLKLHLDLFENIKNLELKNAIKKNENIITQICP

>EAQ72648.1 ceuC [Campylobacter jejuni subsp. jejuni 81-176]

MRKKMLILSFLTLGMIGIFILAGLNGFDEYALKSRFLQIAAIIIVAICIAVSTVIFQTLCNNKILTPAII

GLDSLYMLLQSALIFSFGAANLSVYKNDINFLITLVCMVVFSLGLYKILFSSDRSIYLIMLLGLVFGTLF

STLSSFFEVLIDPDEFMVIQGRMFASFDNIAFDVLILAYIISFLSFIWIFRYMKFLDPLNLGKDLAINLG

INYQKISKQLMIIIAILTSISTALVGPITFLGLLVVNITYELFKTAKHSILLSACILISILALLGGVFFV

SRVFDYNATISVVINFLGGIYFIYLVLKGNKL

>EAQ72647.1 molybdopterin converting factor, subunit 2 [Campylobacter jejuni subsp. jejuni 81-176]

MEHFTLYQGSLDIPKIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGISLLFAHSIGDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYAKERSTKL

CGAGLLKG

>EAQ72645.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKSLNIGLKLIFSVAAVVVIGLVILISLITKQVSQNITKNTEDILASITKEYATQTQGIFGEMIALNKS

ISGTLTEMFRSTSKEDLDIDNITNIITNTFDNSAYSNFTYLYLIDPPEYFKEESKFFNTQSGKFVMLYAD

EEKDNKGGIKAIQASDEIANLQVVQDILKKAKYGENKVYIGRPIKMNLEGQDFDAVNVAMPIFDRKNQVV

GVIGMTLDFSDIATYLLDPKGQKYDGELRVLLNSDGLMAIHPNKNLVLKNLKDVNPNKGAQETYKAISEG

KNGVFDYIASDGDDSYAAINSFKVQDSSWAVLVTAPKYSVFKPLKKLQLIILGASFIFIFVVLGVVYYCV

RKIVASRLPVILSSLESFFRFLNHEKIEPKAIEIRANDELGAMGRIINENIEKIQISLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDVLQSKIGSNMNEINRVFDSYKALDFSTEVFNAKGE

VEITTNILGKEIKKMLLASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLETVTKENVEVANVTNNITNEVNQIAAAILEDVSKKRF

>EAQ72644.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MNSIKIKLSLIANLIAIFALIVLGIVSFYFTKTSLYESTLKNQTDLLKVTQSTVEDFRSTNQSFTRALEK

DIANLPYQSLITEENIINNVGPILKYYRHSINALNVYLGLNNGKVLLSQKSNDAKMPELRDDLDIKTKDW

YQEALKTNDIFVTPAYLDTVLKQYVITYSKAIYKDGKIIGVLGVDIPSEDLQNLVAKTPGNTFLFDQKNK

IFAATNKELLNPSIDHSPVLNAYKLNGDNNFFSYKLNNEERLGACTKVFAYTACITESADIINKPIYKAA

FIQALFKPLLSLL

>EAQ72643.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIDTSTSLTHSLTNDVDKKELSVLKKEDQDKIPVQDLSSLNSDSVKVVFENKQGELIALNLSNENYSSL

QKNFSSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGSLNSNLNNKQQSVKLNFNTSTLQQSMQNLG

FKTSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPTMREILSDIKEASGGGANAMKTIDPQKINK

KDDRENNIKEKEDEDLLQKAQEKGLSALSADEQAKLEASNPEEFEKLKQKSLQELSQNLSKDFKDKIENQ

EAQIVDKRV

>EAQ72642.1 acyl carrier protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MTKTEFLEELKEAMHRDEELNEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSNLINLA

KLD

>EAQ72641.1 capsule polysaccharide export protein KpsC [Campylobacter jejuni subsp. jejuni 81-176]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRSKNQDAYIIFKPHPDVLSGNRVGLKDETRILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCKRRTRKLSLEELVAGALIT

YPRYINPKTKTLCEIEVCLDIMLNLQKAYFSKKYIKLAIDFKTFMLRKIRRFYEFLAKK

>EAQ72640.1 iron permease, family [Campylobacter jejuni subsp. jejuni 81-176]

MKIFKIIFLIISIFLSSSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQINALIDSLYYDLDEVAPILQNGYRLKAEASDTNYDKAKA

EKSSLEANAKREADAEALIAQMMGVDKKDLAQSSLTTQASTPANNDTSKLTDDNAGTDLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNYQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKGLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALSIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGIAMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSAKTLWITVFLAVY

REGAETVLFYQALLFDAKTSTDFGAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLTMLIIGILITKQISKKGVKS

>EAQ72639.1 inner membrane protein yedE [Campylobacter jejuni subsp. jejuni 81-176]

MNSFKQKYLINFWDNPRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFIGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMVLGIYLGVKICNTSFFKPKAKLERVNKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRDNAIKGALIGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVFAGGCECGWTYRAFEGQSHFIIVGIANIIGTMILALSYD

FLPKAFKEGIKINLLTEFGNLNGFFINLILFILMFVFVVFYKKHFFKNQLKG

>EAQ72637.1 acetyl-CoA carboxylase, biotin carboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPSQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAEDRNKAIAKMKVALDELLISGIKTTKDF

HLSMMENPDFINNNYDTNYLARH

>EAQ72635.1 uridylate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALESSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>EAQ72634.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>EAQ72633.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFDLGLFTKIHTKDLLIPLDTHAHKISLTLGLLKRKIYDYKSVLELTQNLKKLDANDPIKYDFALYRLG

QSKERQI

>EAQ72632.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>EAQ72631.1 HsdM [Campylobacter jejuni subsp. jejuni 81-176]

MYYYELIPPYKLTKNKPLEYAHFKEFLKCYKEKKNHC

>EAQ72630.1 serine protease, subtilase family [Campylobacter jejuni subsp. jejuni 81-176]

MKKFFCLTLVCKLFALSEFELHHIDKVHKLGYSGDTIIIGVADDAFNQDHISLKDKILKSTYPTDTAGKQ

LIPDLKKSTHGSHVAGIAVGAKIGDSKPYGVAYGAKFYGAGVFPNGSYTQIPDIYNFFKDVSIINNSWGI

NFYPYFNLKASNSGLVDCTQTNQGTSYNICNTPLEYVMKADKVANDMMRLSKDKGVLNVFAAGNEGILSP

ALHAILPSYDESLRAWLAVGALDANEITLESDGTLIIKSQGLADFSNGFKGATNFSLVAAGVNINNVDSS

TNDKFTKKSGTSMAAPMVSGTAALVKQNFPFLDGKQIADILLSTANKNYKAPKFTVKQVTDGTNQPKFLI

VYISQDPPGIEDEIKRDLKQLYNGIQVQVNGQWIDYSDYIWDNRDSAQSQKLNTSTISSINGVVRVEKEE

LFGQGILDAQKALKGLSILDANRLSDQDVLKYEQEPNTAYYTINTAGYDAEFSNDISQRKWDESTHLSSA

INKPTHLANLNIGLSKEGEGILIISGQNTYEGATLIKQGELKLKGKVKNNAYVEQKAILSGNGIVGQNLN

NKGIVRPGNEDLNDLTVQGTYTQEGVDSKLQLDFGNYKNSKLIAKTYDIKSGNLEYIPLPKYYILNKPVK

INLGDLEKSLSSFNHVLIQNTYALNFDFVLSDDLVSINKTLIKPNLKPNAYEIPNTSLGNALRQLRSRAD

LSQTYQEFFASLDNGIDVKTKLNRIEGSGYLSTFSNHNQSNLMQNNMLFTLHPLNINNFAQNNNILLAST

YLPRIFSNEEYFWHLTPSYKYYKDKDFSGQKTGANISLGENFSSGFLAYALSLSSAKFNFNNGSDLKSYN

MDLLLNYNHDLDFIKILSGLGIGVGFNTLNRFVVEQPIEGKYKTLQTSAQLGVTKDIILGQDFIFNPLMY

FTHSFFYQEDFKENKSPFAKNYESLKHHSINANLGFNLAKNIEQDDYQASFSTFVIFEKRIYGRTLENKA

SFVDFPIAFIQKYKLKDNILSQGFNSEFLYKNNVFWQFMLMNRFSHNAYELHLMSSVGKRF

>EAQ72629.1 chaperone protein DnaJ [Campylobacter jejuni subsp. jejuni 81-176]

MEISYYELLEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGEGFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCSDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNGTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

ESIKVPTIRGEATLNLPKGAKDGQRFVLEKEGVKDVHSSRMGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKITNWFKS

>EAQ72628.1 glyceraldehyde-3-phosphate dehydrogenase, type I [Campylobacter jejuni subsp. jejuni 81-176]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKHGAQIVLECTGAHLTMAKCQEFIDMGVQKVIMSAPAKDDTPTYVLGVNSELYK

GESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGA

AKAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVSKDEINEAFRKAAATNLKGILMVDDDERVS

SDFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYIANKA

>EAQ72627.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>EAQ72626.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLAFFKGLGIGFLCLLLFVAGVVFNVEFLGKKDSNHDLYFSRNIEVSNTLKPDILYANINFWANENLSSK

ITLDNSEKAEITNTFNQILERSKKENFCSGGSFSLEPNFSYKDGIQTPKGQRFDANLECEFKENQLADFN

KLLNDINSIIAKNNFISVSTPAIQTKFSKDTLNNNKENLYKELLKTSYEYEKTYSLDLNKTCVLKNLQVN

TNANITPRMLNAKSDNIELSSPIISEKEQILSAKALFICK

>EAQ72624.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNETHEIKEEIKEKAEQ

EEKKKKHNQEAKTSDDEKNEEDESKDPNFKDAQSIHRLDISI

>EAQ72623.1 CMP-N-acetylneuraminic acid synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>EAQ72621.1 50S ribosomal protein L5 [Campylobacter jejuni subsp. jejuni 81-176]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>EAQ72620.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRYCFILFLSLVLSSNLLANNFSQKKVIKIEKSADSFEVIDLNQNVANPNLNQQKALFDSSTLIEKKSQI

TKDKDIDFAIVLTSRKNFGYFLDGFRVSDKEFSTLFAKNLIQSLKLNWVNSAANGIYQSPKTLSYFSPND

AKLINVSPFLTQEKDKAKMYAKFTDYVVVVNLQDFYVNITNYFITTSKEGVANVNFKIISTSNGKILVAK

NAELNLTLKNQDAKQNYQDIVNQMPKMLASVIDNEIKKLKLTIN

>EAQ72619.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTKNEEKALRVKYLRNLEKFFNGAISALKKEDFDKTKFEERMLKNAKFFEKNPAVNLNSTYAKNLEFFVN

ACLDFSKEKSELLNLANALDKQKKQGEKKEKHKNYLKDYE

>EAQ72618.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILQDGFFLAIFFFVLLPSRVFALDAVLFNENILSQKVSNEINLIGKELYQKSNIFIGVMVGDKTEIE

TLLNKQKELPQSYILLLLSKNSHKVDIVGSKGTLALIDKEAVLSPYPGTGSILPILATNKGDIYNAAILN

GYADIVDRVAKSLGLQLEHSIGNANRDTINILRILIYGFICFALLYYAQRRIKRKKNVRN

>EAQ72617.1 predicted allophanate hydrolase subunit 2 [Campylobacter jejuni subsp. jejuni 81-176]

MSIKIIETSINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYEFLDENY

FVLSGAEFEAKLDNQKIKTCKVYQANKGDILELDLAKIGFRGYLCVAGGFEVKSFLNSKSSDAKMGAGVF

EGRALQKDDILNTHNTFIPFNLEARECENPLFKSPKEPIIRVILGTNEDAFTQKGIETFLNTTYKVGLKS

DRMAIYAESSESIEHKNSADIISDPAVFGSIQVPKSGIPIILMAGRQSTGGYTKIATVIENDLSLLAQAK

LGSSFKFQSISMQEALELYKQREMKFKAMDQKINLDFENLI

>EAQ72616.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLTTSS

NSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAGEHG

RGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIA

NESAIISSTVSDIANNILEDVKKKRF

>EAQ72615.1 HspR [Campylobacter jejuni subsp. jejuni 81-176]

MEQHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRSELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>EAQ72614.1 Protein of unknown function (DUF1090) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MKKILILLTLCAFAFGASECDRKIDRINKEISFSKAHNDTARTLSLELALKQVQNDCTKDPMFYDKKLEA

KKLKEQEVEKIEKELDALKEQKDYMSKVEYKAKKKALKEQKEKIKKEIEEYIDNL

>EAQ72613.1 ATP-binding protein bexA [Campylobacter jejuni subsp. jejuni 81-176]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>EAQ72612.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVSDVSMGNANLMTAVNTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>EAQ72611.1 CysQ [Campylobacter jejuni subsp. jejuni 81-176]

MLNLDKFLEIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCIMISLVHDNRPVLSLIQNPLKGDIFYAHAKTKVYKNDKPL

QIDQQEYEKNKYKALLSVNHLSKEDEDFAKEHQLEAINIGSGLKFCAILEARAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYNPLNYKSSPFICVSSRNFLQDFL

>EAQ72610.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLETCGDYEQALRYKFHLSYMLGEVLIKADK

TWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKIISKNKQAFLKELPRIQNILKIHQDYQPIL

DNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLDPKKLNDENEKINYKNIPAELAWEMNLPL

PDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYLDNFEHSYDCIHILFLDRNDFNKSFKYIN

LLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIPIQKILDRVQYPFFEQITLEHMLNYWINH

GVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFKLNNIDNLEIMQNIIFGPYRYILPLIINF

SFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSISELDFEYLNNPLIKQINDFQKDFLDVLN

KKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIKQYRPDIVASWKYYQEFEQMCKELDGDIQ

EKDL

>EAQ72609.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIDFLAIISVAFLSSFGHCYSMCGGFNLLFINLNSKSNNLFLLTFIYNLFRIFAYIVLGIIFGTFGNIL

AINAKVQSLSFFILGIFMMILGFALIFRGNMLSFIENNVFFDSFVKKIIKKSKNFKGLKSAIFLGFSNGF

VPCGLVYFFIANAMSKQNIFEGILVMMIFGISTLPAILFFSKISQFFSDFLKNLFNYLSYGVIVCYGINL

AYIGFKAFQ

>EAQ72607.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARI

>EAQ72606.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>EAQ72605.1 nicotinate (nicotinamide) nucleotide adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKN

>EAQ72604.1 hydrogenase maturation protease HydD [Campylobacter jejuni subsp. jejuni 81-176]

MKFLVLGIGNIMFADEGLGVHLCKQLEKNYKFTHSEFTLDFVDGGTLALQLSYIIARYDRLIVLDCIEAQ

GASIGDVFSFPYDAMPNKISWSGSAHEIEMLQTLQYMELAGDLPKTHILACVPKRIEAMSFKLSDELIQG

AKIMEKTLLDFLSKEGFTYEKIADFSLQELADISYKNY

>EAQ72603.1 tetratricopeptide repeat domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFFFVEYRDPLVGLIILTILVFVVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIALEKCKDKQEREFIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIEDNPMLG

RLVFEKYHMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>EAQ72602.1 general stress protein 20U [Campylobacter jejuni subsp. jejuni 81-176]

MSVTKQLLQMQADAHHLWVKFHNYHWNVKGLQFFSIHEYTEKAYEEMAELFDSCAERVLQLGEKAITCQK

VLMENAKSPKVAKDCFTPLEVIELIKQDYEYLLAEFKKLNEAAEKESDTTTAAFAQENIAKYEKSLWMIG

ATLQGACKM

>EAQ72601.1 RloH [Campylobacter jejuni subsp. jejuni 81-176]

MNKYKFVKFQVKNFRSLLDITLNIDNNNINTICGENNIGKTNFLRALNLFFNHNNGVEYNQNEDRPYHIQ

KGSTGGRKTELIGYFTKNNVTHILKVEFHKDKIVYILNGKMVEWKVARDIVESFKLLFIEASNVNMPSVI

SAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDIEKDINIYLKQMLDFDNTLKDKEIKIRFAEF

EKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQYITDKITTDIIWAIDEPEAFLQPKLQKKIM

EIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKEEKIYARKKGRVFQEINTKPIYIGTAFEKLS

VIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILNLSMPNIIHSGGATKIAGFLEYFNNQCSYTS

FKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKRYGESIQENNRDIWEIEDFMPIKIIVDAVNI

ILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRNEEKERFILNTESRKKEICQNAFRAREKYTK

NDLEDYHVDFMNELIDSFNKVDLIKKDN

>EAQ72600.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNFIHLKAKLDFLANQKNTNHSLFETPDPLQIAKIHNDEFIALICALFAYGNAKNIVNFLKKLDFSLLN

LQEKQIKKELKNLKYRFQNEKDIQEIFITLSRLKNEISLYELFYQAYQERENTTDAILAFMQKIKTLNSY

SSYGYDFFFGKIWQNTPTSPLKRYNMYLRWMVRKDEL

>EAQ72599.1 histidine biosynthesis bifunctional protein hisB [Campylobacter jejuni subsp. jejuni 81-176]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>EAQ72598.1 peptide ABC transporter, periplasmic peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>EAQ72597.1 putative membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MEMILFVLVMILLVLLFVVLFRQYKSPKIEEKSTQSFSDIMQLKSIGELSVFQVFSKEIVTKKDSAFNGI

WKNLLGWSLSERQIALIFEFEITFLYDLRDKNFDILPLGDDAYKIIMPECRYKHSIIDMKFYDEKNAKFL

PFLLPDSINSTGISFSESDKNKLIKEAKDEVKDLSLNLIQNLESKIHKSAKDTLEAIAKGFGAKRVEFEF

KDNTQKLDVS

>EAQ72596.1 fumarate hydratase, class II [Campylobacter jejuni subsp. jejuni 81-176]

MEYRVEHDTMGEVKVPNDKYWGAQTERSFENFKIGCEKMPKVLIYAFANLKKSLALVNNKLGKLDDAKKN

AIVQACDEIIAGKFDDNFPLAIWQTGSGTQSNMNMNEVIANRATEIMGGDFRKEKLVHPNDHVNMSQSSN

DTFPTAMSIVAVEQVEKKLIPALDELIATFEKKVKEFDGIIKIGRTHLQDATPLTLAQEFSGYLSMLLHS

KEQIIASLPTLRELAIGGTAVGTGLNAHPELSQKVSEELTQLIGTKFISSPNKFHALTSHDAINFTHGAM

KGLAANLMKIANDIRWLASGPRCGLGELIIPENEPGSSIMPGKVNPTQCEAVTMVAVQVMGNDAAIGFAA

SQGNFELNVFKPVIIYNFLQSLDLLADSMHSFNIHCAVGIEPNRAKIDHNLHNSLMLVTALNPHIGYENA

AKVAKNAHKKGISLKESAMELGLVSEEDFNKFVDPTKMIGPKA

>EAQ72595.1 RDD family, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKENLQDRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDRLIQAKDLFETTQIIGNFYLGFILLHF

SYQAIFTYLYGASLGKILCKIIILDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>EAQ72594.1 glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSW

RNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFSDLTIIKNNLTKDQIYLNQILENKDKIL

TTQTNQIYNLNTTLENKNQLLIAKQNLINFQNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFII

LSIVISHKQEQKAYKFKVKKNPNLALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRL

KIKKLKREQ

>EAQ72593.1 cytochrome c oxidase, cbb3-type, subunit II [Campylobacter jejuni subsp. jejuni 81-176]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETAYAEALTVKKVFNVPYDAENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>EAQ72592.1 formate dehydrogenase, cytochrome b subunit [Campylobacter jejuni subsp. jejuni 81-176]

MRKVFVTLLLSVVSLFAYGSERMGQDTQIWDFHRITNIPNYDTFGKLWTTLQGEYIATIALIAVIAVLSA

FALHYMVIGPKQFSHDGKKIYAFTLFERLFHFIAAISWVILVPTGFVMMFGEVFGGGVFVRVCKNLHAFA

TILFIISIIPMFLCWIKRMLPASYDIRWMMIVGGYLSKIKRPVPAGKFNFGQKSWYYIAVFGGFLMIITG

GFMYFLDFNSTAIQGLFGLTQIELLRISAIVHNFLGIVCAVFFGVHIYMAVFAIKGSIHSMISGYKEEEE

VYILHSYWYKELSNKKQIEPSFSYDPNVKI

>EAQ72591.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>EAQ72590.1 formate dehydrogenase family accessory protein FdhD [Campylobacter jejuni subsp. jejuni 81-176]

MDPLFTTQILKYKGNESFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIETKDDGMSVHIKAKIDKENLAKLNAEGVVISGCGRAHTANIDPEAIEASKISSDAKFSKGEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHG

>EAQ72589.1 anaerobic dimethyl sulfoxide reductase chain B [Campylobacter jejuni subsp. jejuni 81-176]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>EAQ72588.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKRVRTKIRANFRRRVKRTLKGSLKEKLAGTILLCAIVPLAVLGYLFIVIIGTFFNTARARQGVRALDHF

VNASLFNGYAWESVSSHAWRERNRKKWARIVIKITDFFQKDHCKRANKREQPVVDFILSRNLDKQTIGK

>EAQ72585.1 pyruvate:ferredoxin (flavodoxin) oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MGKIMKTMDGNEAAAYAAYAFTEVAGIYPITPSSPMADYTDMWAAAGKKNLFGVPVKIVEMQSEAGAAGS

VHGSLQAGALTTTYTASQGLLLKIPNMYKIAGQLLPCVIHVAARSLAVQALSIFGDHQDIYAARQIGFAM

LCSHSVQETMDLAGVAHLAAIKGRVPFLHFFDGFRTSHEIQKVEVMDYAHFDRLLNREALLEFRNNALNP

ENPKTRGTAQNDDIYFQTREVSNRFYDALPDVVNEYMQEISKITGREYKPFTYYGHKEPERVIVAMGSVT

QALEEVVDYLNAKGEKVGILKVYLYRPFSLKYFFDVMPKSVKKIAVLDRTKEPGSLGEPLYLDVKSAFYG

RENAPVIVGGRYGLSSKDVDPAQMIAVFENLKLDNPKDGFTVGIVDDVTHTSLSTGEKISLGDESTIECL

FYGLGADGTVGANKNSIKIIGDKTDFYAQAYFAYDSKKSGGYTRSHLRFSKKPIRSTYLVSTPHFIACSV

AAYLEIYDVLAGIRKGGTFLLNSIWNAEETIRQLPDAVKKTLAEKEVNFYIINATKLARDIGLGNRTNTI

MQSAFFKLAKIIPYEDAQKYMKELAYKSYSKKGDAIVEMNYKAIDVGADGLVKVEVDPNWKNLELKEKEQ

TNAYKGTEFVEKIVKPMNAAKGDDLPVSAFLGYEDGSFEHGTTEYEKRGVGVMVPRWIEANCIQCNQCAS

VCPHAVIRPFLINDEEMANAPRGVKDHALEAKGTKGEKLSFKIQVSPLDCTGCELCVHECPTKEKSLVMV

PLQEEMDFGEQENADYLFKEITYKDDILNKETTKGAQFAQPLFEFHGACPGCGETPYITLITRLFGERMI

VANATGCSSIYGGSAPSTPYRKSVKNGHGPAWGNSLFEDNAEFGLGMKIATENTRHRIEHIMNESMQEVP

NALSALFKDWIANKDNGAMSVEIKDKMIPILEQNKNIKAVQDILELKQYLSKKSHWIFGGDGWAYDIGYG

GLDHVLASGENVNILVLDTEVYSNTGGQSSKSSRTGAVAQFAAAGKPIQKKDLGQIAMTYGYIFVAQVNS

TANYAHLIKAITAAEAYDGPSLVICYSPCIAHGIKGGLGYSGEQGELATKCGYWPLYTFDPRLEEQGKNP

LTLTGKEPDWDLYEQFLMNEVRYNSLKKANPEHAAELFERNKKDAQRRYRQLKRIAMADYSNEVES

>EAQ72584.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTFSYSFCKNEIYDKNKSKC

TVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILTRNNAKIVYLGADWAHTF

IHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIAKLLEESGSLKKKSFGGT

NISAIDTNDFKKIIIQALNTDKYILVRKD

>EAQ72583.1 had-superfamily phosphatase, subfamily iiic [Campylobacter jejuni subsp. jejuni 81-176]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>EAQ72582.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDDGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISMAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSRRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>EAQ72581.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLSFAFFASLASANTINAIAVVVDKEPITTYDIDQTMKALKIDRNKALGVLINEKMEISQMKQLGI

VVNDLELDDAINKMLAQNKTTLNAFKANLKSKNRSYEQFRTNFKKDLEKRKLYEKIASMAKTDFSDDGAK

KFFEQNKDKFTFYTQINANIYLSNNPQTLENIKNTKKTILKPQNASLNTSNADPRLLGLLSQIPVGGFSP

VLNGKNGYELYEVKSKDGTQTPEYEQVKNEVLNAYVSEQRQNFIQDYFDKLRSKINIEYLR

>EAQ72580.1 ribosomal protein L17 [Campylobacter jejuni subsp. jejuni 81-176]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>EAQ72579.1 nadh-quinone oxidoreductase chain m [Campylobacter jejuni subsp. jejuni 81-176]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGVSFDYNLSFKILKFFSFHVGV

DSIALVLILLSSLMIFLSFLFLKLEQKALISCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFRAGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNASAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPILVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYRAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYMFAVFRKIF

FMQKQSFIEGFSLLFREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>EAQ72578.1 putative methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKGNKVQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKV

VSVEPNDAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYF

SCMWNHRDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINA

WKSVKNPYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>EAQ72577.1 L-serine ammonia-lyase [Campylobacter jejuni subsp. jejuni 81-176]

MSNLSIFKIGVGPSSSHTLGPMLAGNLFCKKVAKKLDEIDRVEVTLYGSLSLTGKGHLSDKAVIWGLNGL

EAKNLSAAIQDEVNKNAIENAQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGGLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNKKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANAFKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMVSL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>EAQ72576.1 selenide, water dikinase [Campylobacter jejuni subsp. jejuni 81-176]

MQKTPALLSDIGNNEDASVYQISPDLALVQTLDFITPIVDSAYHFGAIAAANALSDVFAMGAEVINALNI

VGFDTCNHDLNILKELLEGANDKVKECNALVVGGHTIESTELFFGLSVTGKVHPSKFIANNTSKIGDCII

LTKPLGIGILSTALKAQMLNQKHLDIMLKNMMELNYKASQIALKFHPSAMSDVTGFGLLGHLKEMLNKNI

SFEIFESELPFLDGVKEYFNMGLIPAGAYKNLEFIKELTPDLNEEKLLLCDPQTSGGLLISISEKDSLEC

LKKLEDENIQAKIIAKVVNKQENDIIIS

>EAQ72575.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQTFLVDENSRLDVFLAKKLNQSRNQVALLIEKDCVQVNDKIQDKNSFKLKNGDIISIASLKLCNEIKPQ

FEVDFDIDVLYEDEDLLVLNKPSNLVVHGASSVKNATLVDWLIEKKYTLSNLGGEIRAGLVHRLDKDTSG

AILIAKNNFTHQKLSEQLADKSMGRIYLALIDLPLKEDKIIVEKFLMRSPSNAIKKIAIDKENKFSKNAK

SAFINIVKTENLTLMAAKLFTGRTHQIRAHLASLNRHILGDSLYGYKGKYDCRIMLHAYFLYFIHPKTKE

QIFVKAPLMEDFKNIMFKQINLGENDEKISLGFLLEFFNSFA

>EAQ72574.1 putative cryptic C4-dicarboxylate transporter dcuD [Campylobacter jejuni subsp. jejuni 81-176]

MLGIVFSLFSVFLLVFMLYKKINAHMALLLSGLLLLSLAAIFGLSPHIVAKGSLNLGFFDIFQVFNQTMS

STLAGLGLTLMTIAGFSAYMDHVGASYALFKVFEKPLKAVKSPYVLLIVAYFIVQLLVLFIPSHAGLALL

LMVTMYPILVRSGVSKLSALSVIAICQYIDHGPGSGNVIMASKVAEVDPAIYFFHYQLPTTLPIIIAVGI

AIYLCNKFFDKKDNFVFNAQEIEKELNENEGKEKELKKPPRIYAILPIIPLVLILGFSSVLDSILVLMGI

SSAEEVKAAASTAIKMNVPVAMVISTFVAIIFEMIRYKSIVETLNSIMIFFKGMGHLFVITVSLIVCGQV

FASGLLSVGFVDTLIEFCKNAGFGVLAIIIAVSILLAVCAFLMGSGNAAFFSFAPLIPNIAKHFGVETIT

MIAPIQIMTGFGRCVSPIAPAILAISAIAKVSPFAVVKRTAIPMLVAAIVNVIMTYIYL

>EAQ72573.1 putative fibronectin/fibrinogen-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKYTELLQLQTFFSQFKKIDFIKRINDNILELSFDRERFIFDLTRAMSVIYTAKFNAKNYNAPFDFMLKK

YFSNAFIKEVKVLEGNRILCFSVKANKAYKSYESKIYFEFTGKNTNVILTDEKDLIIEALRHIDKSYRVI

KPNVILESLKPYKMDENFEEIKDFADYFSRKFTSIYESKIKQIKNLKLAQVDKKIQNLQELFSSLDEENS

LLLKALEYRKRADVLFANLSVLKDYEREFKLDDFEGKELEFKLEFSPKQSANLYYKNAKKLEQKAKNLNI

QRQNLKEKLDFTLSLKELLLQAKSEIELEILLPKKNSKKNQDHKQEDLVANFYFNEFKICVGKNEKGNEF

LLKNAKKDDLWLHVRNIPSAHTLIISNKQKISLDVIEFAARLCVSFSKLKKGSYWVDYTLKNFVKVQQKA

FVNYTNFKSINITKD

>EAQ72572.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MVSLGALSFDELIYKDEVKPSFDCSKVKDDGKSDDELMICNEIGVRNEFENKKLALVDNIYSSLY

>EAQ72571.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFLLKESKHEKSENLKWSDFLSLIKNPALWLVVAITFCTYFFNMSFYYFTPYASNVIGTSAVFAAILAVL

TSYIRPIVSIVGGFVADGFGKAKVMLVGFVTMGLGVVLLMFSAYWGVLYKWWL

>EAQ72570.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQDFVYIKNDVLIPLPDAIEILDQANDKEALICNDKNQKAQIYAPEINFYLKNSQDEILEQSKNVLTLYE

ARASVYDLGLDLEQSKEVQNRLIVADGDAQTVEFLKEHEFKVIALSSAEILAVFGSVGELCAVVKNQGEE

VEIDFDFLLFKAEDLSVVRKDFTRQSGCYNLLNFENLEVLLEFLQSKSPKYHYKTYISYNASVCQYHERR

SEHCAKCAEICPTVAILKDDENKHLEFSQVDCLGCGGCISVCPSGSLDYAPMPRESFFTLCEFYKDKKIL

IIPKKMSLENLNLALPKDVLPFMIEGEKWLSSMHFLTLLQNSGANLVFYTDFVSRGSNEAIVLLNTFFER

KFQKKAIFVAKDEKELQNVLKEQEFIQDLKYDFHNNTLTTRENFAKRMQEMIKNEDFGSMESGEWLRYGK

VEINPNTCTLCLSCVGACNVGALIADKQENALKFNASLCTTCGYCELSCAEKDTLKLFRSGMEFRASYFE

YQTMAKDELFACIECGKEFATKKAVEKIANLMKPKFGNDENKIKTLYCCADCKAKVMIKAMGFAGQN

>EAQ72569.1 nadh-quinone oxidoreductase, g subunit [Campylobacter jejuni subsp. jejuni 81-176]

MTVKINGIDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKHWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKESMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISNQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGMLLRYDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFIPHIHKNGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESINEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIIEVQRSVFAKNLGIDEDKLEDLLLKKANFTLVVGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDNNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINKGFSPIDFDHLDNFYTNAGDCKRGYELNLECFKQV

AKKEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASAINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>EAQ72567.1 DNA-binding response regulator [Campylobacter jejuni subsp. jejuni 81-176]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNAQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELAELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSELSLRAYVKNLRKILGKEKI

INQRGRGYCYG

>EAQ72566.1 dephospho-CoA kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKILENFTHPKIRAKILEQMQILDKENKAFFVEIPLFFESGAYENLGKVIVIYTPKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>EAQ72565.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>EAQ72564.1 endoribonuclease L-PSP, putative [Campylobacter jejuni subsp. jejuni 81-176]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVAFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>EAQ72563.1 serine transporter [Campylobacter jejuni subsp. jejuni 81-176]

MNTPKWTSHDTRWVLSLFGTAIGAGVLLLPISAGLGGLIPLLVILVLAFPMTYLAHRNLCRFVLSSSNPK

DDITFVAESYFGKGGGFLITLLYFFAILPILLVYSANLTTTLLEFLINQFNFNADLTHAARWWVSFLIVG

VLVLISILGENVVTKAMSFLVFPFIIFLFIFSLLLIPQWNSSLFTNVDFSVISTSNFWVTLWLVIPVMVF

SFNHSPIISSLACYCKKEYGDYAEPRARKIISLAIILMVFVVMFFVFSCALTFTPEDFASAKDQNINILT

FIANKFPEVSLLAYVGPIVALVAISKSFLGHYLGSQEGLNGILYKASNGKIQGKFAQTLTAIITFAIAWL

VAYKNPSVIGIIEAIGGPVLAILLFLMPLYCIYRFDILARFRNKFLDLFILVMGIVAISAAIHDLL

>EAQ72562.1 oxidoreductase, 2-nitropropane dioxygenase family [Campylobacter jejuni subsp. jejuni 81-176]

MNLQPLQIGKHTIKYPIFQGGMGLGISWDRLASAVSLNGGLGIISSVGTGYYEERKYASKELNAKPYGSE

NFYSRKGLQALINNARKVCGDVPLGCNILCASNDYARIARDACEVGFNVIVSGAGLPTNLPEFTADFPDV

ALVPIISSAKALKIICKRWQSRYNRLPDAVVLEGPKSGGHQGFTYEQCLDPNYQLEKLIAPVVEEVKNWG

SFPVIAAGGIWDKKDIENAISLGASGVQMGTRFIGTFECDASEEFKSVLLASKEEDIELIKSPVGYPARG

VRTNLLNLVDKRMGPKINCISNCVAPCGRGKEATKVGYCIADRLFDAWSGKKETGLFFTGANGYRLDKLI

SVKELMEKLVNGE

>EAQ72561.1 ATP-dependent DNA helicase, UvrD/REP family [Campylobacter jejuni subsp. jejuni 81-176]

MSQFEPFLALEASAGSGKTFALSVRFVALILKGARINEILALTFTKKAANEMQKRIIETFLNLEKENKTS

ECNELCKLLGKDKEELISLRDAKKEEFLRTELKISTFDAFFGKILRVFALNLGLSSDFTMSEERLDVREI

FLKLLKKDELKDLAYYINLVDEKENFFNELEKFYENAYFQNRPKILNPTKAYINKAYSELRSYCLGLTHV

KNYKNLCDNFKSEVLDLSVFMQSSFMTKFESTKYLQDLESTNLHFSAKRMELINALNTYAIELENYKIAN

LMNLLNHYSEAKNIFHKDKNTLNFQDVSKKVYELITSEFKDMIYFRLDGFISHLLIDEFQDTSVIQYQIL

RPLIAELVSGEGAKKNRTFFYVGDKKQSIYRFRKGKKELFDLLKQEFSQIKSDSLNTNYRSKELLVDFVN

ETFKEKIKDYKEQFALESKKGGFVRIVESKEQKVKNQAQEIKEKTLETLFEQINFLRSKNISYDDICILC

WKNSDADMVLDFLREQKIPAFTQSNVLLENKASVRLVLEYAKYCIFGDEFYLVFLKELLGFEPRKIALDF

SKNAMENVLFLIKELKLDLNDIALIQFIEYAKTKENFLKLLFEPCALKIVSEQNMGISIMSVHKSKGLEF

DHVILLDSLSKNNSNNEDIMLEYDINQGWQLHIKDKIRELTKEPIYTLFKENITRANYEDDINKLYVAFT

RAKESLIIIKRNEESVNGNYPSYFKGGFLNIHSQERGFLESKEQILSVKKESIQTLQKFEKISPQEVQSE

EKLDSKELYFGNTFHFFMQNLKLPKGENFQILTQRCKSKFRHFLDESDFEKLFKRIEILLKNTQFQNLIG

DGKLLKEQALSFNGEIKQLDLLALKDEEAFIIDYKTGLAMQDKHKEQVRTYKIAISEILKKDKVHAFIVY

CLENEIQILEI

>EAQ72560.1 geranyltranstransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKKLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPTNNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNKKLAQMIQNLIIQY

L

>EAQ72559.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDISKNNILKLKKLIQHLSNSYY

NCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLVCGDIRELFYMELNNKVAGV

VTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNKCIDAFNIYDHGGLADQSYL

NIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSEFEEAMKNKKIVHFCAAKPW

WNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTIEWILKNGDKNSSNVLYSSY

DIDNIKKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>EAQ72558.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIVSKTYEIDSCDDVELGIKRESKLEFKLCFDDEKEIKALVFIIPGLGGDVDENYREHLAEFVAGEFNVA

VASVNYHCIGNRPQTGSTFYLDDIDKLILKVSCEAADIKLPYDVDNIQDYKQMSEIFHFVNNQIIEGKQK

GNFTPNYFLNLHVSLQPAKNEYQNFGIMQAQDLLNVALYLKKNAPFDTMGGGIPVIMIGSSHGGYLAHLA

AKIVPWLIDGVIDNSSYAKFLWHLIGFGKEIDFMQYSEFSTFDFFHHIKTHCSTKTFWTSNSSSNNFFSM

PRRMIRYILEPKHLEIQANYPKPCYTSYHSFYDKEIAPPDEKLELYKYLEQFGFDADLYMIKNPDQVDGR

FIKSLEHGMGMSIKTLISKELPLMLEKIKQNLKKDCKEKYISYPCEDLLYQFSEKDDKILLKIDKI

>EAQ72557.1 cytochrome P450 family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSECPFFPKPYKNKASTLLTFLLKRRSWLDGLYERSYKMQTGYVKMPNFDLYVINDTKEVKRMMVDEVRE

FPKSAFLHELLSPLLGESIFTTNGEVWKKQRELLRPSFEMTRINKVFNLMSEAVADMMDRFSKYPNHAVI

EVDEAMTFITADVIFRTIMSSKLNEEKGKKILNAFVTFQEQSVHTAMRRMFRFPKWLSYVLGDRKRAKAG

DVIRQVLSDIIKPRYDMADNAEFEDILGSLLLVVDADTNKRFSFEEILDQVAMLFLAGHETTASSLTWTL

YLLSLYPKEQEKAYEEITQVLQGGAIEISHLRQFKYLINIFKESLRLYPPVGFFAREAKKDTQVRDKLIK

KGSGVVIAPWLIHRHEEFWTNPHGFNPSRFEGEYKKDAYLPFGVGERICIGQGFAMQEAILILANILKTY

KLELEEGFVPDVVGRLTVRSANGMRIKFSKREL

>EAQ72556.1 ribosomal protein L16 [Campylobacter jejuni subsp. jejuni 81-176]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>EAQ72555.1 ribosomal protein S19 [Campylobacter jejuni subsp. jejuni 81-176]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>EAQ72551.1 ribosomal protein S14p/S29e [Campylobacter jejuni subsp. jejuni 81-176]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>EAQ72550.1 flagellar hook-associated protein FlgK [Campylobacter jejuni subsp. jejuni 81-176]

MGIFGTLYTGVTGLKASEVQIATTGNNISNANATFYTRQRVVQTTNGYITTGGVQVGTGTAIESIVRLHD

EYSYYKLKGASNQLEYTKYMASTLQEIAQRFPDLQNTGILKDLENYNKAWNDFASNPNENATKIALVKAS

QTLTESVNNTFATLDKIQKKVNDDIKNTVDEINRIGEEIATINKQIYGQEALPTEHANELRDRRDELELT

LSKLVSAVASKNEINQDNRLDTTITDPGHQYNLSIEGFSIVDGINFHPLKLDYDDKNKSYSIYYETPDEK

VRDLTAKISGGQLGAQLDLRGRNYSKSEGKYEDGIIQGYMDSLDTFAKTMINETNNLYASSAKSSVTSDY

LSGLKGDIPLVNYDRTIQPGSFDIVIYDDKGDKKLTKTITIDVNTTMNDIMRQINANTDDNNNKNSNDDV

DDHINTSFSYDAKTGDGLFQINAKSGFKVAIEDKGTNFAGAFSIGGFFSGTDASNMKVKDSILNDPSTVR

ASLSGVDSGNDMANKIIQLQYEKVNFYNEDGTIDNLTMEEYYRKLTGKIASDGENNNVVNSSNETLYNSV

YSEYQSKSGVNTNEELAALIQYQSSYGAAAKIVSTVDQMLDTLLGLKS

>EAQ72549.1 catalase [Campylobacter jejuni subsp. jejuni 81-176]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIKITADLSA

YTKAKIFQKGEVTPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSFVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKEDKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRALKHFEKISPDYAKGIKKALEK

>EAQ72548.1 enterochelin uptake permease [Campylobacter jejuni subsp. jejuni 81-176]

MFFKHILSLKVLIALLLFFGMISLFIGVISINVKDILNLNSTQLEIITLTRIPRLIAILLTGMSLSICGL

IMQQLTQNKFVSPTTAGTMDCAKFGILISLIFFAGASFFTQAIIASVFALLGSFIFIQILRKIKLKDVIF

VPLIGLMFGGIISAITTFFAYALNYIQNIQGWLQGSMANVMQGNYELLYISLPLFILAYFLAHKITIVGM

GEDIALNLGISYNGILFLGLMIVSIITSLVIVSVGIIPFLGLIIPNLVALYLGDNLRKNLIYIALCGALF

LLVCDIISRLVIFPFEMPLSITTGVLGSLIFIFLLLKRKAYA

>EAQ72546.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGHGTGEKAFQEMLSRCNVKILEKNIWYDNGLD

RYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHVPAICLVRDPIKIMTSVYNYKILKNKDNLTF

SNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNINKHIRFTYIARTHLKNLKNISHVYYIDVSEI

SNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIFDIKKPIIYKHYFNNKFIEIYLYGSYNMINK

NFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLLYEIKLNINIFLDKINNMINMFKKESIKDND

ILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKEIKT

>EAQ72545.1 general secretory pathway protein D [Campylobacter jejuni subsp. jejuni 81-176]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIQESLDELAKYCSFSIIVKDKIAKEKLEILQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGINTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEAKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLNENHSSGINWQNFNIGLNSQVNNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>EAQ72544.1 nitrite reductase (cytochrome; ammonia-forming) [Campylobacter jejuni subsp. jejuni 81-176]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDEANKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKTTEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGKKVKVMGET

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSVAHDQRTAEYAIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFEDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>EAQ72543.1 flavohemoprotein [Campylobacter jejuni subsp. jejuni 81-176]

MTKEQIQIIKDCVPILQKNGEDLTNEFYKIMFNDYPEVKPMFNMEKQISGEQPKALAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEHYPIVGACLLKAIKNLLNPDEATLKAWEVAYGKIAEFYIDIEKKLYDK

>EAQ72541.1 deoxyuridine triphosphatase domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>EAQ72540.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKLRIFSSSRQIREYYNQKKQQNALLDSAIHIGEFLDKVCLSNFHKASSYESLLLMQEACLKSKDLEKKL

GISVEFFAFLKNNEYLFSFFKELSLEKKSIEDLKNNDYYATYNEHLEILDEVYKNYLALLEKNSFYDDLS

LPKNYTLNKDFLDEYEAIVYDLQGFLSTFEENLLSEISQIKEVVLSFKTSKFNLEYLLKLDFLKIFDLKI

NTHYEINLSKQEILKEEIFKTKNSKMKLKSFELRALQCAFVMDEISHFVRKGLKPENIAVITPDESFCEF

LRLFDKDNMLNFASGISIKESLFYQKFQALYESASSASFVYKNQEDYFEDTQMIFDYHNTLLHSLKLDFI

EFKKYFDEKCDFEYFEKLLALFLENEKQELIYLIRKELYFIKDLLKNQSLTLKELIHLFFMQISQLSLSD

VGGGKVTVMGLLESRGLCFDGVILVDFNEEFIPKRSVNELFLNNEVRKKAGLISYDRRENLQRFYYESLM

KNALEVSICFVENEEKSKSRFLDELDFDFFYETHIHQKAYLNALKLDYEGIKPNLTPIKAPILKHNPFEF

PLSFSRFNLLENQKRTYYYRYILNLAEPRVLSEESKAKNQGNFIHKMLEIYYKNYANNDFDIKVFANLLD

KEYQKYNISELDLEVFKLKFIQFAKNEKEHFSKGFYVAHTELELNNILKLGTDSIKLKGTIDRIDSSKEG

NLIIDYKSGKVPSNSYQLAFYQALYDENASVGFYDLNSMQILHQKAKSLDELRERLKDLVLMSKEEIEFE

NEQDEYCPYKLIYKKELK

>EAQ72537.1 mannosyl-glycoprotein endo-beta-N-acetylglucosamidase domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKPIIIFLSLFLIPLFADDLKSGFGEEYYKLDIDQKRQIFFIKMNEMFDQSFKKIEQERAFIEAFFKDAY

KTGFRTSNQINLEKLITIKNKYRIENLYDFAEYKKRIQKIPKSMGIAQALVESATGTSRFAREANNLFGE

WTWGEKGLIPDLRHPDKKHKIKIFDSLQDSVDSYVLNLNRHFAYEKFRDARAKFESEGKEITGLEAIKTL

DSYSERKGYYINLITKIIKRYNLEKYDTNSNNT

>EAQ72536.1 ribosomal protein S20 [Campylobacter jejuni subsp. jejuni 81-176]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>EAQ72535.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKISLECKDLIIEKTLELFLKDHLVMKKNCDFIISDEKIYTAKPLFIISKNSPFLSIPFSKEALFESLNE

FDNALKAAALQLALEQKRLLEEKIDAIALEFKKDYENKIDLAIKDLKNKLVKALNDE

>EAQ72534.1 multidrug-efflux transporter [Campylobacter jejuni subsp. jejuni 81-176]

MLNNVLPLSFIVGTRFFGLFIVLPVLSLYALKLEGANEFLVGLLVGVYALTQMILQMPFGILSDKIGRKK

TMLIGLIIFIIGSLICSFAENIYTMLLGRMLQGAGAIGAVATAMISDFITEENRGKAMAVMGSFIGLSFA

ASMVISPLMSAKWGLSSLFDLSAALSLLCIILLYTVVPKENKITHENEKTPFFHLIKQKNLALMNLTNFM

QKMLMSIAFLSIPIILVKHLGFASDKLWIVYSASMVAGFIAMGFAGSLGEKRGLAKQILLLGIVFFILSY

LFFAFSNSMDFFITAVVIFFIGFNLHEPIMQSCASKFCKVHEKGAALGLFNAFGYGGSFTGGIIGGIFLH

LDALNLLAIILVILALIWLVALFFLKNPADFKNLYLPLETPLNFSTFGENLGVVDIYKNSKNLVVKFDSK

LTNKEELEGKIKI

>EAQ72533.1 transketolase [Campylobacter jejuni subsp. jejuni 81-176]

MDIQILQEQANTLRFLSADMVQKANSGHPGAPLGLADILSVLSYHLKHNPKNPTWLNRDRLVFSGGHASA

LLYSFLHLSGYDLSLEDLKNFRQLHSKTPGHPEISTLGVEIATGPLGQGVANAVGFAMAAKKAQNLLGSD

LIDHKIYCLCGDGDLQEGISYEACSLAGLHKLDNFILIYDSNNISIEGDVGLAFNENVKMRFEAQGFEVL

SINGHDYEEINKALEQAKKSTKPCLIIAKTTIAKGAGELEGSHKSHGAPLGEEVIKKAKEQAGFDPNISF

HIPQASKIRFESAVELGDLEEAKWKDKLEKSGKKELLERLLNPDFSKIAYPDFKGKDFATRDSNGEILNV

LAKNLEGFLGGSADLGPSNKTELHGMGDFIEGKNIHFGIREHAMAAINNAFARYGIFLPFSATFFIFSEY

LKPAARIAALMKIKHFFIFTHDSIGVGEDGPTHQPIEQLSTFRAMPNFLTFRPADGVENVKAWQIALNAD

IPSTFVLSRQKLKALNEPIFGDVKNGAYLLKESKDAKFTLLASGSEVWLCLESANELEKQGFACNVVSMP

CFELFEKQDKAYQERLLKGEVIGVEAAHSNELYKFCHKVYGVESFGESGKDKDVFEHFGFSVSKLVNFIL

SK

>EAQ72532.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176]

MKKNLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVVKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>EAQ72531.1 ribosomal protein S5 [Campylobacter jejuni subsp. jejuni 81-176]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>EAQ72530.1 YwnB [Campylobacter jejuni subsp. jejuni 81-176]

MKIAILCASGKVGKEISKEALKRNLEPVCFVRNSSKMNEFLPQAKIVQRDLFELDSKDLIDFDIIIDAFG

EWENLSLHKKHIECLSVILQGSKAKLFVVGGAGSLYMDENHTTRLMDMPDFPKEYLDIAKASAEVLEFLR

NEKGFKWVYVSPSAIFSPDLPKNNHYKIIGEKFEVNANNESKISYSDYASAMIDIVLNSCYENTRIGVIS

L

>EAQ72529.1 predicted Transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176]

MKIDCRNLSCPQPIVETKNALEKLQENEILEIVLNSIISKNNVVKFLNSLNLTPVVDENAQEFCIKVQKK

NFDSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLSTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>EAQ72528.1 predicted diverged CheY-domain [Campylobacter jejuni subsp. jejuni 81-176]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>EAQ72527.1 phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MTQIIPALDLIDGEVVRLVKGDYEQKKVYKYNPLEKFKEYEKAGAKELHLVDLTGAKDPSKRQLALIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKNATLCLEILKEFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPNICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSIEEGIRCLAN

>EAQ72526.1 acetate--CoA ligase [Campylobacter jejuni subsp. jejuni 81-176]

MLNQNNQELFKPSKEFSRNARIKNLCEYYDLCDEAKEDFEGFWKRQAFEKIEWFSPFSRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKAANLLKKFGVKKGDRVVIYM

PMIPETAIVMLACARIGAIHSVVFGGFSPEALRDRIIDAGAKLVVTADGAFRRGKPYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYIKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

ISKFYTSPTAIRMLHADAPNEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGGTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKDEGEDGLLCITKPWPSMIRGIWGNDERYIESYFS

QAKKDGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIGTAEIESAIAKHPSVAESAVVSILDTIKG

ESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGPIAKIEKILYTPGLPKTRSGKIMRRILRTIARGE

EIKQDISTLEDSKVVETIVKLAKAEFE

>EAQ72525.1 major facilitator superfamily protein [Campylobacter jejuni subsp. jejuni 81-176]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>EAQ72523.1 toluene tolerance protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLILALFFNAFALQLDEISSTMQKNIDASLKLLQDSKEDKKQAADGIFKLFDSIIDYKLMAKLSLS

KNYSKLNPKEQEKFTTAFEASLKKSFTDKLSLYKDQVLKVKNGELKNEKRYFLTTSMVVDGEEKNIIFKF

YNDNNNWLIYDVDVLGVSIVQTYRSQFRDILANQGFDALLQKLESIVIE

>EAQ72522.1 Na+/H+ antiporter NhaA [Campylobacter jejuni subsp. jejuni 81-176]

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>EAQ72521.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIFLTILFFITSIFALDLDFSVGENGKSLDDNNTVLIFGGIQGDEPGGFHAASLLLSDYNITKGKIIVA

PNLAFDSIIKRSRGNNGDLNRKFASISPKDPDYKTVQRIKELILLPEVSMVINLHDGWGFYKPTYIDAMQ

NPKRWGNSSVIDTSEINASKYPDLENIATQTVNSVNSSLADPKHAYHLKNTKTQELGDMEMLKALTYFVI

SNHKAAFANEASKNLPVNLRAYYHLLAIENYLKTAGIEFSRDFELTPQGVDKAINKELEVKLFNDRILLS

LKNPRKVINYVPFPVNKELNYNTSNELTAVIAEGNSFYIQYGNRFQTRLYPEYLEFSDAFNEVTFQVDGN

ETTVPFGTKVKVKENFLIPKIANVRVNIIGFDHGKDESGILVHKKNMQTQYSLDMAGKIYRVEFYELRGA

NLQQLLEANTNSKLIKNAKNLDLNTLKMARSKDKFLGSILVEFE

>EAQ72520.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>EAQ72519.1 adenylosuccinate synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>EAQ72518.1 tRNA pseudouridine synthase D [Campylobacter jejuni subsp. jejuni 81-176]

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>EAQ72517.1 MerR family transcription regulator [Campylobacter jejuni subsp. jejuni 81-176]

MAYTIKKVEKETKISAHTLRFWAKKGLFPFVQKDENSVKYFSKSDIEWVKWIEWLRISGMPIEQVKHYIK

LCSLGIKTAKERQEMLKQTKKKLQNQIKTLKESEKVLSKKIKIYEEMLANEVDGFNPESKDYQPCDKLHK

FKG

>EAQ72515.1 capsule polysaccharide export protein KpsS [Campylobacter jejuni subsp. jejuni 81-176]

MRFNTKIKKEFSGKNVLLLQGPVGNFFHHLAIRMEKKQTKVFKLNFNGGDFFFYPSGTRCKCDEKDLENF

YRDFFQSKKIDAILMYNDCRIIHAKAIKVAKELGIEIWIFEEGYLRPYCITLEKDGVNANSSLPRDKNFY

LSQNIFTKESIKEIPGGFKFMAFDAFLYWLFAFILAPFFNNKLHHRTLYPFEFLFWFRSLYRKYLYKITE

KKLNEKIYNLEKKYFLAILQVYSDTQIKYHYKKSIEHFIEETILSFANHARAKSYLVFKHHPMDRGYKNY

SKLINDLSQKYHVEGRVLYVHDTHLPVLLRKALGCITINSTVGLSAILEGCPTKVCGNAFYDFEGLSYPK

KLQFFWREAHAYKPNPVLVCNFKKYLLQTNQFNGNFYKNFFLDK

>EAQ72514.1 DNA-directed RNA polymerase, omega subunit [Campylobacter jejuni subsp. jejuni 81-176]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>EAQ72513.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFSDFFHAWLHESYYKNAVSIGKNGDFFTAVSVGNLFGTLLAKHFLNLIDKKILQPPLELVEIGANEGY

LSRDFLAALLELRPEIFSQISFFVIEPHEKLKNLQKKTLEGVEFTHKNSLKECHFKNAFFFCNELFDSFT

CELINHDKIAFVENFKLIFKNMDENLITKCKALNLTKGELSLELEKFFKDLDQACERFIFAGFDYGTFNA

QNFSLRIYQKHEVFSPFEVSLKDFFGKSDLTYNVNFTHLQKLIKEYDFKPLAFKKQSLALMDFGFEDLLE

YTKNKNIKTYESFLSQAKILFFNFDEKFHFFEFQKN

>EAQ72512.1 nadh-quinone oxidoreductase chain a [Campylobacter jejuni subsp. jejuni 81-176]

MSHIDASHPYFGIFLMLVLASVIFFGLVFLASKIGNNFAAKNRKKLGLGIYECGPIPVKQANKINSQFFI

IALIFILLDIEVVFLFPWALIFKDLGWFGFLEVFVFIVLLGVGFLYAYKKGAFAWQSIK

>EAQ72511.1 putative acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFQAIKNMIE

QAFI

>EAQ72510.1 3-oxoacyl-[acyl-carrier-protein] synthase III [Campylobacter jejuni subsp. jejuni 81-176]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHAANT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLICGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFELGSDGKYFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVDEKDIAFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>EAQ72509.1 HsdS [Campylobacter jejuni subsp. jejuni 81-176]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>EAQ72508.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKITIAHSPDADDIFMYMAIKFGWIGNDFAYENTALDIQTLNEFALKNEFDATAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKDTHLKRNFKVALSGANTTNALIFRMKYPEARIIYKNFLDIENVVLSGEVDA

GVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALRRSLPLSDAIKIERDLTNAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIHVNDYLIPSEY

EEARNS

>EAQ72507.1 oxidoreductase, zinc-binding dehydrogenase family [Campylobacter jejuni subsp. jejuni 81-176]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGECDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNNIVVSEKFAVCVPKDAPMEKVAPLLCAGITTYSPLKFSNIKEGSSVAVAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSCDKNAVKERFDLIISTIPTPYNPAIYLDLLKFGGEMAIVGLPP

HEVAPSISVITFVHKAGKKVYGSLIGGIAETQEMLDFSLKHGIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>EAQ72506.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>EAQ72504.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. jejuni 81-176]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRILFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENTGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIATLCLPKKSELN

>EAQ72503.1 excinuclease ABC, C subunit [Campylobacter jejuni subsp. jejuni 81-176]

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>EAQ72502.1 dihydroorotate oxidase [Campylobacter jejuni subsp. jejuni 81-176]

MAYEMIKPLLFKLNPEHVHTLVEYSLRALSASFPGSLSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKNLRELQNDDFLNTLLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGADGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISEAVGVN

LK

>EAQ72501.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLEDDFIKERQNIRQKMLKFSRAINQGKPLDDDLRDEISSDDILRRRFKKKTPNKFLEELDEEYESKHTK

KSNIYLKEDLINVKLEEKQSLAKKIFSKMKERRKEENKKTKKNFLFSRKKANEIKNIQTKTQIQTKSNQA

TTQTKQEKKELTNSIEKIQKTETKIQKPLIIEKKLDVKNQPNIKKSLENLQKKITPQENKQELPKPSNQA

QEKQQNDEDAQKAKNILLEGFSNATKEDRNLNFNHLLFAALLVSFALFLFAPQIYIRNQIYYLSREIATL

RTEESVLNEENKDLKRRLENMRFQNQILDYLE

>EAQ72500.1 site-specific recombinase, phage integrase family [Campylobacter jejuni subsp. jejuni 81-176]

MKYPLDCEENFEKSFLFWLAKYVKFKLNSLSNKELKNPQALAEVNFTLTKGVKNIDELDALAKKARNAGL

SGVNTYFNPLKKVFEYLNFYKLYSLKQIDEELIVEVLASITGALSDASKKNYRIAVINFFDFLDKQNEED

EKAHIFDINLKNWAGIAGSKGVKLPEFMSEEELKKFLDAIENADFKNNTIRNKLIIKIIIFTGIRVSEAI

NIKMGDISEENDLYIIRIRAKGNKYRVVMIKKELIYDLLKNVSINYMSKDALLFVNKKGTPLTQSYVSRI

VEQLLFRAGIRKQKNGAHMLRHTFATLLYKKQKDLVLVQEALGHASLNTSRIYTHFDNDKLKLAAQVAKE

LSDS

>EAQ72499.1 methylase of polypeptide chain release factor [Campylobacter jejuni subsp. jejuni 81-176]

MTIKNALMEAKSSLKGYENEAVFILCEYLKKDKAWLFLNQDIQIDHEPYFELIRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIVLAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIKENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKLTNMRYDKK

>EAQ72498.1 16S rRNA processing protein RimM [Campylobacter jejuni subsp. jejuni 81-176]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELINLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVIDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>EAQ72497.1 phenylalanyl-tRNA synthetase, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MIITKSWLNDWLELEEISSDKIAKTLNSIGIEVDRVGALKAPDKVVVGYVKEKIKHENSDKLSICQVDIG

SETLQIVCGAANVDAGQFVAVATKDAIMPNGMEIKEAKLRGVDSCGMLCSSLELGFEKINEGIMLLDESI

GKLELGRALNTYEIFNDELIEVELTPNRGDCLSIYGIARDLATALNLNLKEPKPFKESENVLGIGRILRL

AAEKELNGLYNYRAIELKEEIQTNLLLSLRLAQIEGLGKNSIENLLNYATHSTGVLFNAYDLSSFSEKDE

EFTINLSKQVHGETKVSCKDKLLSFSGIFQNNESRCKDDSKIIIIEANYTDPLVIADAKIYHKDQDEKML

YRSFRGSEPKLNLGMDFLLSIFEQIPNLVIYSSSQQILTDKELPIIPISIESIGDIIGQNVDKDEVLKIL

KKLGFELILSGEGLINVKAPLHRPDIKNLSDICEEVVRIIGIDNIASKGLEFIEKNRLNSAYKNYIEFLN

LRKRAVASGYFESLHYVLDNEEELKRLGFDSVKLKLINPITAELNTLRTTLLNHLLNAASLNAKNSKKII

KLFELGAVFNVNNQELNRIAFIHSGLKEEAKISNKAKPESVQFYDFLLDIKNIIGDFKLKSSKYNILSPY

EQADIYLSDIKVGFIGRLHLKIENERDLPKTYICELDLDLIRQDFKIAKPYSKFPAITRDLSVLIPKGFE

YNQIKNCIEELNLEILENFRLVDIYSDENLKEFYSITISFSFRDINKTLEDNQVNECMDKILNTLKNLGL

DLR

>EAQ72496.1 peptidase, U32 family [Campylobacter jejuni subsp. jejuni 81-176]

MIIPEIVAPAGNFTKLKIALAYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSFQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHVFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTSIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFIEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>EAQ72495.1 integral membrane protein MviN [Campylobacter jejuni subsp. jejuni 81-176]

MKSLVFKNFIINALGILFSRILGLARDVLIALFLGAGLYSDIFFVALKMPAFFRRIFAEGAFGQSFLPNF

VKAKKKGAFCVSVMMQFSLIVFLFCLLVSFFSSFFTKLFAFGFNADTIALAAPLVAINFWYLFFIFLVTF

LGAILNYRQKFFITSFSAALFNLSIVIAAFFVDKNAPQNTLYYFSYATVLSGVAQLILHLLVLKNNPVIR

AMTLSIKFKKAKAKLQGFYGNFFHGVLGSSATQFSSLLDTTIASFLMSGSISYLYYANRVFQLPLALFAI

ALTQVSFPKILKHLKSDQENLALKFMQRALALLSILLIASSIVGSVFALEISKLLFERGNFTHEDSVITA

YVLIAYLIGLLPFGLQKLFSLWLYAKFKQKTAAWIAVKSLIISALCSMAFIFLIKDESLKVIAVALSSSI

SAFYLLGANIKEFGFKKFFALISIKICLLVIVALIVFTILLILIKPYILSFFIGIFTSFKGVF

>EAQ72494.1 para-aminobenzoate/anthranilate synthase glutamine amidotransferasecomponent II [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEIFGGKVSKMQNPMHGKISKLYFKKDPIFKGIKQEIEICLYHSLHISSMPE

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>EAQ72493.1 Mur ligase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHTPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFTILALRFSFLFNLFSLPFALLSLKIYEFFTNLY

YKKQAKAKLRANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINNNLSQDTQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILSTKLEALNSKRLEKAFLHSSTQKEG

DKLISLYDEKLSLIHSSLEGLEFKVDIENKSYDFKSQILGDFNAQNLCVCILCAHYLGIKLEKIQKQVLN

INSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYKLCKSYKGRKVLVSPGIVEVSEEENIKLAKIINECF

DLAIISAQINAEIFKKELKIKTIILKEKSQLVQTLAKETKHGDLILFSNDAPSFM

>EAQ72492.1 threonine dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MLELNKIYKAKQQISGFVNKTPFIYSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSTEQKQHG

VIAASAGNHAQGVAISAKKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNL

SFIHPFEDEFVMAGQGTLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMY

ESFHAKKIKNAKSVRTIADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAA

SVATLLHQKINTQNHKKIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIA

NANIVKIDYDRFSTKLDYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>EAQ72491.1 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>EAQ72490.1 S-adenosyl-methyltransferase MraW [Campylobacter jejuni subsp. jejuni 81-176]

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDFHN

RITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINTYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITKKA

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>EAQ72489.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176]

MNKFSIVLTLLLYGSCALALDPNLEKTKSATGIDLPTAKWNLPKALNEDGTIDETKMPKNSEYSKMVILG

NKILNETSKYVGPQAKDPKKRFAGNNLSCSSCHANGGSVQNQSGFVGIWARFPQYNARGDKVITLADRIN

GCFERSMNGKRMPSDAPEMKAMLTYMQWLSQGVPVGAKIEG

>EAQ72488.1 ribosomal protein L19 [Campylobacter jejuni subsp. jejuni 81-176]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>EAQ72487.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIFFPREVAIPPEENMPENVKEIYEEA

SLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIKEIINIGNFYQEQKESLEEAMNSIR

LIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERLNKLKSAIGEKQ

>EAQ72486.1 K+-transporting ATPase, B subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSKKQNKLITKEILNNAIKGAFLKFDPRFMVKNPVMFMVEVGLILTLILSIFPTLFNGNSDERIYNILIT

FILFITLLFANFAESIAEGRGKAQAATLRQSKKDSKARRIKSDGSEEMLNSSELKIGDIVLVKAGELIPN

DGEIIEGAASVDESAITGESAPVMREAGGDFSSVTGGTTVLTDFLKIKILVGAGESFLDKMINLVEGAAR

QKTPNEIALNTLLIVLSLSFLVVVVSLYPFMQFLGVSLPISWLVALLVCLIPTTIGGLLSAIGIAGMDRV

TRFNVIALSGKAVESCGDVDTMILDKTGTITFGNRLANEFYEVQGISKEEMIKACVLSSLKDETPEGKSI

VALAQKMGYELEGNDIKEFIEFSAQNRMSGVDLQDNTKIRKGAFDAIRAYISEMNGKIPSDLETKVMEIS

NLGGTPLVVCKNEKILGVIYLKDTVKPGLKERFDELRKMGIKTLMCTGDNPLTAATIAKEAGLDGFIAEC

KPEDKIEAIKKEQAQGKIVAMTGDGTNDAPALAQADVGIAMNSGTQAAKEAANMIDLDSNPTKILEVVEI

GKGLLITRGSLTTFSMANDIAKYFTILPAMFSVVLPQMQILNIMHLATPQSAILSALIFNAIIIPLLIPI

AMRGVKFKPMKSEHLLLRNLSIYGLGGMIAPFIGIKIIDIPTAWILRILGV

>EAQ72485.1 type I site-specific deoxyribonuclease chain R [Campylobacter jejuni subsp. jejuni 81-176]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>EAQ72484.1 putative type I restriction enzyme MjaXP M protein [Campylobacter jejuni subsp. jejuni 81-176]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>EAQ72483.1 aminotransferase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MQISDLKKELILKKGILHFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQTYEQARKDIKKS

LSLDENFALIACGTGSSSAIKKFQELIGIYIPPLVKERYFTQIDKNTLPLVIVGPYEHHSNELSFREGLC

ECIRIPLDKNGEIDFDFLEKTLQKNKKRKIIASFSLASNVTGILSDYKRISEMVRKFKGIVAFDASSFIP

YKNISCQYYDALFISSHKLIGGIGGSGLLAIKKDLCGNKPSFAAGGTVGYVSRTSQCYLCNEEALEEGGT

PGILQLIRASLAFKIKDSIGVKNIEKKEEILKDYFFEKLKTIPNLILYAKNLKTRLPIFAFNIKGISPFD

IAYELSKKYHIETRAGCACAGPYGHDLLGLKDNQKLKTKPGWLRISLHYTHEKENIDYFFNALNKTIVKL

SH

>EAQ72482.1 3-deoxy-D-manno-octulosonate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKDHESG

TDRINEACKKLALKDDEIIINVQADEPFIECENLLKFKEFASSCLDKKAFMASCYKKITQEEAMDPNLVK

VLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAIENGKK

IKMLEISTTSMGIDTKEDYERALKIYLEK

>EAQ72481.1 haemagglutination domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKMSKHIVLSFAVSSLLFSQAYALPQGGKFTHGTSGTIHTSGNTVTITGKGQNHVIQWGGGFNIAQGES

VNFTTSGKNYLNIAYQKDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFF

KARS

>EAQ72480.1 thiol peroxidase [Campylobacter jejuni subsp. jejuni 81-176]

MSTVNFKGNPVKLKGNSVEVGADAPKVNLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>EAQ72479.1 integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MGVFLVLLGGIFWAISGVLAEYLFKNNYSVDWICFYRLLSTGLILIFLSFKAQKILVFTNLKESLSICMF

GFFGLLLTQFGYFKAIYYTDAGTATMIQYCAPLIIMLYLCFKNKKFPKLIEIFALILIIFALFLLATKGD

IEAVVLNYWGIFWAVIGAFGVAFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYAFNLK

AFFSMGGIVFIGTIGAFCLYLKGVEYIGALRASMIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSV

ILNAKKTKVS

>EAQ72478.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKIIFILAFAFVIVILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCTYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>EAQ72476.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIYHLSHTDLDGYACQFIVNFYFKNVRFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLELSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKESQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISCFVVEKLSELKENFSIEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>EAQ72475.1 flagellar L-ring protein FlgH [Campylobacter jejuni subsp. jejuni 81-176]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>EAQ72474.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIRNFFIGMSFLGILFLAFYALYDKKKESVFSLNTCQPLTCNLNLQDCVFSFNKKNIEVSAYPKPIKIFN

KTTIKIKNFPHYSNLKIKIYSLNSYIGNIIPKFNIVNGDILINFIGRSITDDSRFRVEFLNNNAPTGFFF

DFDVTMQKNFQTGNTH

>EAQ72473.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKKPNKDFKIQDVKLVQFSQENKDCLELLIEAGQVRILNSYN

SCQKLSKDESFQKFLNEDFLKLYKNNGYLINENLQNLKNTMQDIMIYYKLRYSFSKDVKDMSKNKNLDIL

NIDEKDGGTLLYKINNQACVGIELTRHDSRMAMKIYGIENLDKECKLFIQSPSFKDLSYTKKDFKWYYLE

>EAQ72472.1 periplasmic nitrate reductase, diheme cytochrome c subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKKKLVLLGSAAVVFFAACAMNSGVSSEQIGLRKASLENENKVNLVEANFTTLQPGESTRFERSYENAPP

LIPHAIEDLLPITKDNNMCLSCHDKAIAADAGATPLPASHYYDFRHNKATGDMISDSRFNCTQCHVPQSD

AKPLVGNSFKPEFKNEQLKSRSNLIDVINEGVK

>EAQ72471.1 FlhB domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMANKTPKN

>EAQ72470.1 UDP-N-acetylglucosamine pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>EAQ72469.1 Uncharacterised P-loop hydrolase UPF0079 [Campylobacter jejuni subsp. jejuni 81-176]

MKEFILAKDEIKTMLQIMPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISTIQIKISIKDDKRKYEIYE

>EAQ72468.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQINNSLNSLSQYVKVNSNEENQNSKNQEQNALAQDPAVEVNISKEAKEKSNTSNQNNSQAPAQALNAQN

NTQQDSSSNSEDKLTELTQKLAEIQAKIVELTAKMSKANEDQIKSIESQIATLNAQASTIQAQIQELQSQ

QA

>EAQ72467.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVAPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIALKQASELKTLLKSVYEKRTFRHLSDIKPYQSSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYVDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDVKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLTFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSSMLALVVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKNVNLQNHQKRNYQLGLFADLEELASETRFKFESEFDAHPILKLSKINDLCARNLE

KIYLFLKKAMEIKHSLTLVNLICENSFYREICEELATKRATNKAGQVDLLRKSENLEKIETKFNVLKELA

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGELTID

>EAQ72466.1 potassium-transporting ATPase C chain [Campylobacter jejuni subsp. jejuni 81-176]

MLRTLLSFFVVMLILCTLIYPFALNTVAKFIFPYQSSGSLVDKEGRPTLDISKAVGSKLLGQDFNKPYFL

HSRASVSNYNTSDTNESSVSSGGFNYAMSNPALKERVQKDLQKFLDENPQITKEQIPLDLLSASGSGLDP

HISLQAALVQIPRISQSSKITKEELEKIIQENTESKFLGIFGEEKVNVLAVNIAIAKAMKKE

>EAQ72465.1 flagellar basal-body rod protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIAGFKRIFKETQDELPIENHTRDASRFVNT

TIDGIPQVSQEYTDFSLGFLKATNNPLDLAMTREDAFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

DLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLATVK

>EAQ72464.1 aconitate hydratase 2 [Campylobacter jejuni subsp. jejuni 81-176]

MSFMQEYNKLVEERAALGIPPLPLNANQTRELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKGKISAPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDSAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIKCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQAGSLEK

IKELKKSGREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNALLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVRPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDTVGTGGDSHTRFPI

GISFPAGSGLVAFAAVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIIDINLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTNEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>EAQ72463.1 dihydrodipicolinate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>EAQ72462.1 magnesium and cobalt transport protein CorA [Campylobacter jejuni subsp. jejuni 81-176]

MLYIYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSAAEIAFISSEFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLVRDLKNNEEDRNLIKLRTEIVTFATAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLNILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLIGTVYGMNFKFMPELELHYAYPIVLGVMVISIILPLVVFKKKGWL

>EAQ72461.1 amino acid-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILIFISFFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGL

IPALKTAKIDLIMSSMTITDERKKVVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHL

YAVKNLKNATINLFDKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQK

GNAELKKELDEFIAESKKDGLFDSLGEKYLKDVKDTFKKNNLEFFF

>EAQ72460.1 Archaea bacterial proteins of unknown function [Campylobacter jejuni subsp. jejuni 81-176]

MLYKRKNIKFKNFVDLHKNLSLSKLFDFYSVFEGFEKLNILNFEDDVFTNIERILLDDYLKIKSYFALDE

TSSYALTLLAKNNRKRFSINRKIQHFKALSTLKYLLETGIIKLEYSKEAKKIKDKRQKIKKELRSYVVQD

KIIFSNHFTRFFFYFLKPNEKLILQNRYKEVLECIKEKFELYQSFCFEQLSRELLEKKFNINGVQSYWDK

NLELDLYYQDENLCFVGEVKFKNKKICKNILNLLKSKAKSLNLAPNYYIIISKNGFSKEFDKICEQNLLL

LDLNDFKILLEE

>EAQ72459.1 histidyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MINALKGMKDLLDKDAYCYEKVIKTCEEVAKNYGFTFINTPHLELCTLFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLKCMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGVGFAMGIERIIAILEQKEEKVQREGIYLCAMDEIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEAQNESLFYKNLAKKEEKMIKISDLKKVL

>EAQ72458.1 RrF2 family protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>EAQ72457.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFDTPQIIKNAAINAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

EGLEENGFKITAEQLKKAITAKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTQITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGECDKDIEKMRQAFEKRRNLALDILKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYATSDELIKKGLERIANFIKNYK

>EAQ72456.1 chaperone protein DnaK [Campylobacter jejuni subsp. jejuni 81-176]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>EAQ72455.1 glycyl-tRNA synthetase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>EAQ72454.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MSFSKESSRLFGFVAGIKFPKMIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLHIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSIEELLKDSFEKDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSATYTSGALYSVNEKHLERISNLYVKNERVSLKCQNEKGIFWLVFVGAQNVGKMRFNFDASIQTNAK

ISHNFTRKYENLNLKKGEELGNFELGSTIVLISQKGLLTFNLKAGQGIKFGEKIAD

>EAQ72453.1 C4-dicarboxylate membrane transporter [Campylobacter jejuni subsp. jejuni 81-176]

MDFLTSLSEGGQFAIQIIIVLICLFYGAKKGGIALGLLGGIGILMLVFAFHIKPGKPAIDVMLTILAVVV

ASATLQASGGLDVMLQIAERILRRNPKFLTILAPFVTCFLTILCGTGHVVYTIMPIIYDIAIKNGIRPER

PMAAASISSQMGIIASPVSVAVVSLTALLLNANHKLAGFDGYINLLQITIPSTLFGVLCIGIFSWFRGKD

LDKDEVFQEKLKDPEFKKYVYGDSKTLLGVKLPKSNWVAMWIFLGAIALVALLGVFDFLRPNWGQVVKNG

IPQVDALGNPKMDVLSMVSVIQMFMLLAGSLIIIFTKTDAKKIGSNEIFKSGMIALVAVFGISWMADTMF

AVHTPMMKVALGDIVKEHPWTYAVMLLLISKFVNSQAAAISAFVPLALGIGVEPGVIVAFAAACYGYYIL

PTYPSDLATIQFDRSGTTHIGKFVINHSFILPGLIGVITSCIAGYFIAMAAGYL

>EAQ72452.1 acetate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>EAQ72450.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVENFLREYAKLIADYPEQIDTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>EAQ72449.1 CoA-binding domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MNEKETISYIINTSKNIAIFALSPDKTKASYRVAEFLQRKNYKIFPIYPKEEFILNEKVYRNLDQIEEKI

DTLILFRKGKVALEILPKLVEKNIKNLWLQLGISNETAKKECKKLDINFIQNRCIMLEYPYFKTKEK

>EAQ72448.1 hypothetical RNA pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKTLTKIVIQTGRTHQIRVHAKFIKHGVVGDEKYAK

ISSDRMYLHSYEIKIFDYYFKAELDNSFAKVGFEIKNLDF

>EAQ72447.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINRTLKDAELKIGKINTDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILENKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>EAQ72446.1 DNA translocase ftsK [Campylobacter jejuni subsp. jejuni 81-176]

MLAPGMGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYR

EFGYILEIVYGFFSIILGRTGSGIFALLLLLFSLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVF

GGENEKEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQ

ILDETIEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIK

QIDTNKNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKK

LEEYDAINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKN

INEIVIEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLD

FLANPKEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLT

MALMAKSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKL

PHLLIAGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALS

NMVAEMERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARA

SGIHLIVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRL

HAPFASEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYL

QRRLKIGYNRSANIIEQLTQNGILSEPDAKGQREIL

>EAQ72444.1 NapD [Campylobacter jejuni subsp. jejuni 81-176]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSYKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGAIETIEKNENAENVRYYGSVFNQFS

>EAQ72443.1 Holliday junction DNA helicase RuvA [Campylobacter jejuni subsp. jejuni 81-176]

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDVNSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTKTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLG

>EAQ72442.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELPPMEFVCEELDTPQDLEDKISMAKFEE

EQKIQNNIEISTQENKEFKKEEPFLQSEILNPSVMTEVQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKK

>EAQ72441.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MNKIEVFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKTLVEHNYLALNEAKIENSHLKEIET

KLTKQIKTEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGNFK

DLLNFIQNLENLPIALKIDKIKLYNTQGLKLKLDLMFKFVNL

>EAQ72440.1 argininosuccinate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>EAQ72439.1 hypothetical protein CJJ81176\_0762 [Campylobacter jejuni subsp. jejuni 81-176]

MQIYAKAGDGVGGWFGNDYNNYEFNAAGGFLGGFLILELEM

>EAQ72437.1 FolD bifunctional protein [Campylobacter jejuni subsp. jejuni 81-176]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>EAQ72436.1 30S ribosomal protein S1 [Campylobacter jejuni subsp. jejuni 81-176]

MSEVNKKVQGGVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQGDN

SKLLFNVGDSIKVAVMGSRGGRSLLSHKKALRKEKVIEFIKNYQENQDDIFTVKVVGKNKGGLIVVDEND

VEFFLPKSQYGFKETNNIIGKTFKVKIIKIDKDEQSIIVSRKKTLDDERRKRKELINNIAQQEDLIEGIV

KKITTYGMFVDVGGVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSIKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPNE

RRLRVSLRNLLSRPFDGFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDDIEAAIVFIDEKKNRIRLSVKNLVRMKEREVLNEINNDDKVTLGDIIKDQLA

>EAQ72435.1 Protein of unknown function (DUF474) family [Campylobacter jejuni subsp. jejuni 81-176]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGVVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>EAQ72434.1 molybdopterin-guanine dinucleotide biosynthesis protein B [Campylobacter jejuni subsp. jejuni 81-176]

MKQLIMAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDFNGKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLAPNFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLTWL

DLNDIQAICRYILKNAKNLQGEL

>EAQ72433.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMIPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKYENIIMYRPKHKADDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYTTIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILSRY

>EAQ72432.1 ABC transporter ATP-binding protein uup [Campylobacter jejuni subsp. jejuni 81-176]

MALIDLIEASKKFGDKIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGTLPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEEPNNKDYLKKIDTLMTLIDSKDAWNIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCILLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRRGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRAALNFNGEKTINRKKMLFELKNISKNINDKNLFKDF

STRILQGERIAIVGRNGCGKSTLLKILLGQIKQDSGEIKRGELKIGYFDQARSLVNSDKSLLEIFCPNGG

DRVEVRGKNMHVYGYLKNFLFPKEFLDKSVALLSGGEKNRVALALLFTKEYDVLILDEPTNDLDIATINI

LEEYLLSFEGAILLVSHDRYFVDKIATKLYAFEGDGYINILHTLYTEYLENEKEIEELDNFALELQTQEQ

NNNQKEKSSKKLSYKENEILKNYPEKIDFLEQKIAKLNQDLSDPNVYQEIGINKLYQELEVMQKELEILE

NEYFLVLEKSENL

>EAQ72431.1 cell division protein FtsA [Campylobacter jejuni subsp. jejuni 81-176]

MNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHYDK

VVVSISGAYTKSVDSIGVVNIPNHEIGIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDDPL

GMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAICD

MVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLSYAALSQQPNTLIQIPSMGDERKVNEVS

LDIISNVIYARAEETLMILAKILSDNRYANAIGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARKDL

ITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDAESEIKSDFF

DENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>EAQ72430.1 alanine racemase [Campylobacter jejuni subsp. jejuni 81-176]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>EAQ72429.1 MoeA [Campylobacter jejuni subsp. jejuni 81-176]

MKNIFETLKDLENQISCLDESELISLEKAKDRILAKDLYARKNLPSFDNAALDGYAFNYTDINEALEIKG

TIFAGDKNFYTVAKNECYKIMTGAKMPKNADTILMLEDECIEENKLIIKKVPKQYNAYRYKGEELKKGEI

LLQKGTKLNDKHIALLASQGLYKIEVIRKIRIGIFSSGNELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDEFKSTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYRKGENF

VLILPGNPMAAYLSCFIFAKKIINLLSGNLDNPLTFYGKMGMDLKLKSGRNNLILGNLEKGIFTPFNENK

FGSGMILPLIKSEFLLISEENTGELKKGDEITLLKI

>EAQ72428.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFHSGLMMTQIFIKMGYLLIFVSVVNFLYE

IYSLIKDEMKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>EAQ72426.1 heat-inducible transcription repressor HrcA [Campylobacter jejuni subsp. jejuni 81-176]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>EAQ72425.1 primosomal protein N' [Campylobacter jejuni subsp. jejuni 81-176]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLKSKKNLKAIVLKECQKPDFKTIEIKEITKYF

LTPLQLELANFIVYYYASKLGFVLGFFETSPKYECQKMFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLEQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLECFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELSITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNILKCHYCNYTSLIEQNCPSCKGEMLEARKIGTAELLELLQNALPLAKIAKFDSDEITSV

KKLNTILKNFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIENYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQKSAQKLCEKFASQFRNI

KQVELVGYGICGVEMLYGKYRFYLLLRSENHKALVAIENYILQFKNASVDIDPIDFV

>EAQ72424.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKYITISILSILLLILLAVVFTLLWQFKANVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PAAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>EAQ72423.1 major antigenic peptide [Campylobacter jejuni subsp. jejuni 81-176]

MKKILILSLAAASFLNAEILVYGPGGPAPVLKELALKFEEKTKEKVIVTAGPTPAWIDKAKENADLIFSG

NTSMMDDFAKKIPSLSLENLSVLNVRPSGIIVRPNNPKNIKNFEDILKDGINVMVVDGAGQVGLYEDMAL

KSAKRENLVKLRKNIKIYAKNSKAAVDEWNNNPNIDALIIWSHWAKALGDDKALFIKDKNAVIYRAAEIA

PTKKGLENKKALEFVDFIKSKEAQKVWKKYTWKEVK

>EAQ72422.1 ferredoxin-type protein NapG [Campylobacter jejuni subsp. jejuni 81-176]

MKGRREFFVSAFKAACLCTGGGFLANLALKADDNYALRPPGAEDEARFLSKCIRCGLCVKACPYDTLKLA

SLLDSPKNGTPFFKAREIPCYLCKDIPCIRECPTDALDKKHLEQGIESLKMGIAIVDSASCVAHWGIQCD

ACYRACPLIDRALKLELKRNERTAKHAFLLPSVDHEVCVGCGLCELACITEKPAIRVLPREYVLGKAGSH

YVKGWDEKDEGRIKNADTSKHFDAKKATNYLNDGEL

>EAQ72421.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLAIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISQSADRLNELSVKMNNAALNDSQKGMLRTEATRIQESINNSFNNATYNGKNVFQTMNFVV

GSGTETTNLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSGINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNDFNANYLKENAAAFVAAQSNMQLQSKIANLLQ

>EAQ72420.1 conserved hypothetical protein TIGR00486 [Campylobacter jejuni subsp. jejuni 81-176]

MKLSEIYNFLDQLSPFDIQESWDNSGILLGDRDSEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKTYPRAFIKEMICKNISLISMHTNYDLSHLNIYFTEEILGFKISFKDEFLIYVENSISFEALCDW

VKKKLNLQILRVSNCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>EAQ72419.1 serine O-acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNFWGIIKEDFSQPKAQDPAFNSCIELFFNYPGVWAVVNYRFAHFFYIRNFKRIARMISGISQFLTGVDL

HPGAELGRRVFIDHANGVVIGQTAIIEDDVLIYQGVTLGGTSLEKGTKRHPTIKKGVIIGSGAKVLGNIT

IGENAKIGSNAVVVKDVGANLTAVGIPAYIIEERKNKNIRAIDANCDDKLEKLEKKILELENLILKQLES

QK

>EAQ72418.1 spermidine/putrescine import ATP-binding protein potA [Campylobacter jejuni subsp. jejuni 81-176]

MAYLKIKNFKKAYGDKIIFEDINFSAKKGEFITLLGPSGCGKSTLLRCIAGLSQINGGKISLNDKDLTKL

SPQKRNIGMVFQNYALFPNLNVFENVAFGLKIKKMDKKDIEKRVKKMLKLVELEEYAKTYPHKLSGGQMQ

RVALARSLVTKPDLLLLDEPLSALDAKIRKHLRVQIKEIQKELELTTIFVTHDQEEALELSDRIILMNEG

KIIQNSNANNLYLLPESHFVASFIGNYNILSPKELDSLGLKHDFKKDIALRPETIEISNEGLEAKIKEKS

LLGNIIRYRVRVQEIEFKVDTLNFSTHSTYEAGDKIALKFNLSLAKELK

>EAQ72417.1 sensor protein kdpD [Campylobacter jejuni subsp. jejuni 81-176]

MQRQSPEQILKKLEVKAKEEEKNKLAKLKIFLGYAAGSGKTYAMLSEARTLRDNGVDVVLGYIEPHDRPE

TMALTQGFESIANLEIPYKNIVLKEFDLDATLKRKPALVLVDELAHTNAKGLRNEKRFQDIEELLKAGID

VYTTLNIQHLESLNDLVANISKIEVKERIPDRIFDEADQVELVDIEPNKLLKRMQDGKIYKEKQAKLALE

NFFRQERLIALREIALRRLASRVNLRASEQRLINDDLAYHTGEHILVCINASNAKVIRAAARLALAFHAK

LSALYIKNPNIKEEKALEENIELAKSFDAEIISVYDDIARQIAEYSSLSNVSKIVLGKNKDKKKFKEEIF

EAVAKKAPNIDLYLVNENQISTPKIRSKKGFDFLGFLKITGVLLLATFIAFVFHKFNTQPSNIVMIFILA

VFASSFISDNKIFAFYSSLVSVLIYNFFFLEPIFSLKVHDSGNIITFTTMFIVGFLTAVFTRRLKLQSKE

LTKRAYRTAILLENSEKLARVKSKQELWEQLGNQALKLLNLPIIIYPINKNNILSKPLLFFNDDKQMLKN

CFSADEIAIAQWVATNKERAGVCTNTLPNANAMYLPIEDGEKTKGVIGIVLKEKRPLQDFQYEILSALLN

EVGVRTRDIFLL

>EAQ72416.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDELEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>EAQ72415.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKGYPMDVIFALLLLLAFGSLWFFIRFCEIQTRTRG

>EAQ72414.1 methylated-DNA--protein-cysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MFKVYYKMPLCYLSLHSDGKFLTRVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLRKFSIPVLIQGADFE

SKVYKALMKIPYGKMVTYKDIAQKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>EAQ72413.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGAKLSFKAENQANLEEICQENFKYTHFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIHAGFADTLLMRAAAVALKERKKLILGVREMPFSTLNLEHMLKLSQ

IGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHNLYEKWQNF

>EAQ72412.1 rRNA methylase, SpoU family [Campylobacter jejuni subsp. jejuni 81-176]

MFNIVLVHPRIPQNTGSIGRMCFNAGFKLHIVKPTVFDISQKAVRRAGLDYWDKLEPIIWENLEEFLNEN

MIYKNRFFFATTKSQKAYFDAKFQKNDFLFFGSESYGLPMELMQLNWENAITIPMKSYGRSLNLATSVGI

ISYEALRQNFSNFVS

>EAQ72411.1 molybdopterin biosynthesis mog protein [Campylobacter jejuni subsp. jejuni 81-176]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKCDLI

VTSGGTGPALRDVTPEATEAVCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIK

ECLEPVFPAIPYCIDLIEGAYIEANDEVIKVFRPKKKCQN

>EAQ72410.1 tRNA (guanine-N1)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKFSFVSLFPNLMEFYFQDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLMQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLLEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>EAQ72409.1 nadp-dependent l-serine/l-allo-threonine dehydrogenase ydfg [Campylobacter jejuni subsp. jejuni 81-176]

MKTVFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNAHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMIDTNIKGFLYVAKAVIPILRKQKNAYIFNLGSVAGRN

PYFGGNVYCGTKAFVGQFSLALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKADAVYENTQFISAN

DIAKVVMSIINLPSHINVNEIELMPVTQTWNGFYIERDE

>EAQ72408.1 cysteine synthase A [Campylobacter jejuni subsp. jejuni 81-176]

MIKDALDSKKINQDTTIVEATSGNTGISLAMICADLGLKFIAVMPESMSLERRKMITLFGARLELTPANL

GMKGAVDKANEILLNTPNSFMVSQFENISNKNAHCKNTALEILRDLDNELDIFVAGFGTGGTISGVGEIL

KEKLEKVHIVGVEPLNSPLLSKGEAGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGL

MVGISSGANVFAASMLAKKFPDKRILTMLNDTAERYLSTDLFA

>EAQ72406.1 glutamine transport ATP-binding protein glnQ [Campylobacter jejuni subsp. jejuni 81-176]

MIEVKNLQKKYGELEVLKNINTTISKGDVIAIIGPSGGGKSTFLRCINRLELADSGEILINKQNILDKEI

DINKIRQKVSMVFQHFNLFANKNVMENLCLTPIKTGILSQEEAIKKAKILLAKVGLADKENIMPHKLSGG

QKQRIAIARSLMMNPDVILFDEPTSALDPEMIGEVLSIMKDVAKEGLTMLVVTHEMGFARNIANRIFFMD

KGKIAVDASPKEVFENLSNERLREFLNKVLNH

>EAQ72405.1 GTP-binding protein Era [Campylobacter jejuni subsp. jejuni 81-176]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>EAQ72404.1 lipid export ABC transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLKVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLAVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDALCKLNLKSARIDALTSPLMDMIGSVGVAVVIIVGGREVINGSMSVG

SFISFVSALFAIYTPLKRLSSLYGKLQGAVAASERTFYLLDLEPQIKGGSKELKNIEKISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGTSGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHAKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANACEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLIFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>EAQ72403.1 methionyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MRYITTPIYYVNDVPHLGHAYTTIIADTLARFYRLQGHETRFLTGTDEHGQKIEEAAKLRNSTPQEYADK

ISFEFKKLWDDFEITYDIYARTTDTRHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINDC

SCPDCGKQTRILKEESYFFKLSKYQDKILQWYEEKDPILPKNKKNELINFVQSGLKDLSITRTSFDWGIK

LPQEINDDKHIIYVWLDALFIYISSLDFQSKGENAKFWPAHVHLVGKDILRFHAIYWPAFLMSVDLPLPE

FIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGNDGDFSENMLINRINAELSNEF

GNLLNRIIGMSTKYSQGNISKEGVLKFYNVELNQAKEHLNLAVEFLENLQCNRYLEELFKALSVANLAIS

KYEPWNLIKENKHEQANALVALCANILAKTSLLLSPTLPKSCQKVALALNFEISSTNYAKIILDNELLDF

KANPCEALFPKVEKALLKQEIKEEPKKEKSPKIKIDDFAKIEIKVAKVLDCQNIKGSEKLLKFQLELDDK

EIRQVLSGIAKHYKASDLIGKQVCIISNLKKAKIFGHESDGMILSAKSGDKLVLITPEQLVQNGSLVG

>EAQ72402.1 ArsC family [Campylobacter jejuni subsp. jejuni 81-176]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

NLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>EAQ72401.1 para-aminobenzoate synthase component I [Campylobacter jejuni subsp. jejuni 81-176]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLTDYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFKFHSKMNSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKTKLFEIQSHPTLHQMTSSVQGKLKKNISLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHKLFKDFYNILNQKSSYKEYQNFTLF

KLDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGRYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTFYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>EAQ72400.1 ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MNENLSLKAKIYHYAVLFLVFLFLALPLMATFLYSISTSWGVSVLPDDLTLKWYQELFHDERFLLALWHS

LLVCVGSILLSVILVFPLVFVLNYYFLKLKAFVNILIIMPFAVPPIVSCVGLLQLYADNIGGTAWILIFT

YFTIALPFIYRALDNAMSNVNLNELIASNAMLGGSLMGAIFKLVLPNLRNGILVAVFLSFSFLIGEFLYA

NILVGSAYETLQVYLYNIKNQSGHYSSALVIVYFVLIFITTFIASLIKE

>EAQ72399.1 ATP-dependent protease hslV [Campylobacter jejuni subsp. jejuni 81-176]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>EAQ72398.1 flagellar basal-body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176]

MMRSLHTAATGMVAQQTQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTEGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>EAQ72397.1 hypothetical metallophosphoesterase [Campylobacter jejuni subsp. jejuni 81-176]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVLFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLAWDFIKLILALIGKRDKKYNLILRLIFELSLIVLSVFLIYISINNALKIPEVKSV

DVEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLKNYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLLRKHTNMKILVNQNLDLGFINIAGLGDLAGLNKGLYAPDLARIKVD

LNTSKASILLTHQPKTALLYDLSDFDLVLSGHTHGGQIFPFMFLVKLQQGFVHGLYNLGEKTKLYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>EAQ72396.1 lipoprotein, nlpa family [Campylobacter jejuni subsp. jejuni 81-176]

MNIKKIFLSVLFTISLSFGADKTIIIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLNSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKKLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFMEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYKGSVIPTF

>EAQ72395.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKVILVVLDGLNCKSASINMGYLNALCKENLGKFYSLECELPSMSRPLYECLLTGVKPVLSGIINNKLS

FSKQTSIFDLCKEQGLKAGGAAYHWVFELYNKKEFIPSLHRHIEDENLTLPYGHFYYEDDYLDSHLFADG

EHLRNKYNLDFTLIHSMNIDDAGHKFGSHSIEYANKTKKVDNLISEYLPTWLEQGINVIITSDHGMTEGK

SHGGLSEDEILVPFFTFGSAFSYENAKIKQDEICGSVCEILGLKHDKRYNDEILKAKK

>EAQ72394.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNLSIQEKKDLDNCVFQNLGRQDTFALSAIFKNFYLKIKAFIYSK

>EAQ72393.1 DNA polymerase III alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSQFTHLHLHTEYSLLDGANKLKELALTLKEQGATSVAMTDHGNMFGAIDFYQTMKAQGLKPIIGMEAYL

HNHDELDDKSSRQRFHLCLYAKNEIGYQNLMYLSSQSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGE

VNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFKDDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIA

TNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRHSVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCN

LDLNLGNPTPPNFKFTREYAKDHNIILPEETKEFSFDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRL

EVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGPGRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPE

RVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQVITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPE

ELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARALEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKND

ERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNAIKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLG

IFQIESGGMQSLNARLKPERFEDIIAVLALYRPGPMESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYG

VIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDPEKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFA

GYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALLTSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIRE

FSALEQDGKDAIIYGLGAIKSVGIPAVENLLEARQDGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDE

FGFTRKALFDNMENLSEASRKMAEVRKNAASSLFGEEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIY

VSGHPLDRFYEQINAIDYVKSLDFESLKNNGEILSIGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVF

ESNVEEIENIIKDENLKNNAYGFVLGFKAEGGEKPSFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEE

NHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIARNAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDS

IVEEISNKYA

>EAQ72392.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>EAQ72390.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSSAKSQTAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYKLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>EAQ72389.1 thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. jejuni 81-176]

MKFPVKLARSIVVCAFLAGISASALSEGKEYVILKNPIANADNSLIEIFSYRCTHCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMGDYGKQANEIFAFAAFKDGVNKADPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMNVSKADFENFLKTPEAAELLKSYEIANPISQNYGTPAFVVNGKYQIVPSAIKSPEALI

EITKELSKQK

>EAQ72388.1 RNA polymerase sigma-54 factor [Campylobacter jejuni subsp. jejuni 81-176]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQDSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKIIECLNEEGYFEYDEEFLKEYSLEEIERVRA

RFKFLDPVGVGAKDYKEAFLFALENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALTVLKRFSTPPF

LEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDALAMRKATLYK

IGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAFALDEEGETS

NVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKLYELEG

>EAQ72387.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MITQIIILYFHKVKLIKNSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFSISS

KTSSPNYDISSEFKNSIYTLKYKQADISNNTAYGYSVDKDGYMGSDFNKAAGLPEDFKIHKSTLDEIERK

AENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTETDINSMPKGISELSSD

KTIGIMPKNYDKLTITNYYNTQEQYNEAEQLGMFGHINIGLQPLNFTPQSMQTQNLDKDTAIDTFNPDMS

VYPQNEDGSYSKEALFMSFLKSTGVSPREGSATLNPIAKSYAEAMAKESFDGSLTSLDDIMTGKVDFASL

LKGYAQDGWLDADIYAMEKGVAWQNTSIGYGGAWFDREFNQAKANGWKASNESINSFVNNIMDRLNNLIG

QTRV

>EAQ72386.1 isoleucyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>EAQ72385.1 transthyretin (formerly prealbumin) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEEFTEENGRIGD

LLPYEKAENRAFGIYKLKFFTKDYYTSHKINTFYPFVEVSFELSKDQKHYHVPITLSPFGYSTYRGS

>EAQ72384.1 3-deoxy-D-manno-octulosonic-acid transferase [Campylobacter jejuni subsp. jejuni 81-176]

MIFFYYFLTWAAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFEYAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKTKIILLNAR

ISDKSYHSYQRFSFFYKKIFSYIDEVFAQSELDKVRLESLGAKNVKIFKNIKANLEIKNNKIYTKPKEKL

IIFASTHKDEEELLLDHFKLEENEKLIIAPRHPERFKEVENLLLNKGLEFEKFSSLKDENKKFAKKILLL

DALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDNVLISGKFIHNQKALFEEVENVYFCENLKDLN

DKIHYLNLKVKISKKENLDLIIQTIQKGIDARKSL

>EAQ72383.1 glycerophosphoryl diester phosphodiesterase [Campylobacter jejuni subsp. jejuni 81-176]

MKKVILTSAMLCSVLFGVQEYEANLAGHIIIDSKSTVKPPKDAPDFFKTYGKFANITREEKIGTFKSKGN

RETDFYLPFKNQPIQGHSGIKYIPKKDVFWVISDNGLGKKYNSYDSMLYAHEFKFDFKNSKYELLKTVFF

KDSDKKYPYPITTETTKERYLSGADFDTESIQVINDEFYIGDEFGPYLLHFDKNGNLKEVFDVYVEGKKL

ISPDNPSLKFSDKPDGENEKFNIKRSKGFEAMASSKDGSKLYLLLEGSIYNNNAYENEKGKEYLRIIEFD

VKNKKFTGKTYKYFLEDKSHSIGDFNMIDDKYGIIIERDQKEGTKDKACKEGEDTKHCFNNVAQFKRIYK

VKLDDKTHEAQKISYIDLLNIKDRNKISKKPLANDKFVFPFETIEGVDIVDDSHIVVENDNNFPYSSSRE

PNKTDDNEFILLEVKDFLKSK

>EAQ72382.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MINTQLASQIANTQKNDLKVDNSASKDKTNLKDNPKEALAQALKQNLGLSKDASSEEILAKFVQNETGTK

LKELVNKLLDQINAQKNPDSPVLKQGKNLNLAPNFANELKTLSTELAKSDTFTQVLDRLNQILKPASEIK

NNNLAPLFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLSPKDTLKELKN

IINSSKIENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNK

PENLMIKDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENMKEEKLNHNTKNQDEEK

HIKASKEETLTDDTKTDIKQDLKNEENSHAKETDIKEDENLDSDIKTHEEDTQDTKNDIQNNETENKPDN

DIKNFTPNQEKIKDEKQEKSKENIKENPKFYETKTENKTSINTNTNTSNPNTNNTQNLNNSQNIQSNNNQ

TMQNIFKNQEFIKQNIIKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLKELEPYTQNAKLNQAELKNL

EHKLNLSTKDLAQIKPKTEQDIAESLHHDVKSTLLQISNLAKNEGNEAIYNQANRLLAQIEINQLMSLAN

DSINTYLPFSWDDLNDSKIMFRRGKKDKFFAQIKLEFAKLGDLEILISLNNEKYIDINIMAENIEFRKTI

YENAHELKRNINKAGLLSANFFVGDIIRSKFDTRNMKNLDLEMGMDKKV

>EAQ72381.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLYAQRTGISKEDELFNNLTADFKLSKPFDYQIAFFKHNEIYHCFLAPVYKLKKSRFCFPEPLIFQALFD

ERFIEESDYCVLNLYDQTLYLYFYQEGKFINLKKIENFNPSNMDLFFKQNRFIELLKHYESKLLLYQDLD

TIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISFKIILIFIFSFSLSMMIL

LFKDFIEYKQNKEIQNKNFIIQEEISKLKQDKQKLLTNIQDLNFTLSNKISSTQQQFHILSTITKEINLD

KNKAIILNQIISWLNSNELKITNLEFKQTKIILSFIDENHFKRALENLNSAFKILDKNEETLNIILEVIH

E

>EAQ72380.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIVLMFFLFSISLFGADFITLKEYSKMLYENPRGISCKECHGADGSEQILGYYMKNGIKTAYKVPSIQN

LSFENFKNSLNQSKDAKSIMPNYSLTNDEIVTLYNYIKQFSKEEK

>EAQ72377.1 tetraacyldisaccharide-1-P 4'-kinase [Campylobacter jejuni subsp. jejuni 81-176]

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>EAQ72376.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKFKEFSLRFLFKVSEQPVLIRDLLEANALFNDGMLVDPSKLNFNFKILNSYIYFGVFCAVILLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDIFKVYTRKIISKKIIQKAWALHFPYFAYEKYSTMAGEFYKE

ALKEEIPKANLEQYVLDKIIHSK

>EAQ72375.1 D-alanine--D-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKFAILFGGNSYEHEISIVSAVVLKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIK

QGGFFSKGFLKENKLECECVINLIHGRDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMVRKGQNSKEKLSFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCMINDEFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEIYLNEINPNPGSLANYLFKDFSTTLNALADQISLEKMIKISYNFLHSINGQKGKL

>EAQ72374.1 CjaC [Campylobacter jejuni subsp. jejuni 81-176]

MKKILSIALVALVGLFLGACSDSKNKESNASVELKVGTAPNYKPFNYKENSKLTGFDTDLVEEIAKKNGI

KIVWVETNFDGLIPALKAGKIDMIASAMSATDERRQSVDFTKPYYMSKNLYLKLKNNDSLQTKNDLEGKK

IGVQLGTLQENTAKAIKNAQVQSNKDLNIAVLALKNNKIDAIVADQDTAKGFLAENPELVSFYQETDGGE

GFSFAFDKNKQKDIIEIFNKGIDEAKTDGFYNTLIKKYELE

>EAQ72373.1 excinuclease ABC, B subunit [Campylobacter jejuni subsp. jejuni 81-176]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNMPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGETRLKQAIKDIKAELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDIPYTLFDYFAIKDRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEFLFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKITKS

MQEAMDTTNERRKLQMAYNKKYNITPTSVKRHIEESLKNEEDLGEIYRKGKKLEKMPASERAKLVKELRK

QMLEAAKALEFEKAAAIRDEINKLRDL

>EAQ72372.1 flagellar biosynthetic protein FliP [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>EAQ72371.1 peptidase, M48 family [Campylobacter jejuni subsp. jejuni 81-176]

MTLIAILCLYTALLSWISYAQIRFLEREKDKQAQILSEKDYQNAADIAIENEKFKLFSNFYNLIISIAWI

GFGFLYLKELLILNNTRFENTLFLLSFLIITSILNLPLSIYESFIKDKAHGFSNMTVKLFIKDTMKSLIL

TLIFGFLILYALLFCYDFFGTFWWIAAFIFAFCIIVIINLIYPTLIAPIFNKMEKLDDENLLKKISSLMK

QCGFSANGVYVIDASKRDKRLNAYFGGLFKSKRVVLFDTLLKALNERELLAVLGHELGHFVHKDIIKALF

NGAITMFLLFFVFANLPEFVYLESHLEGVNGGVFALLFIFANIFSFLISPMLNALSRKNEFAADQHGAKV

TSKEDMKNALIALARENKAFIKTSKIYTFFYLSHPSISDRIKALS

>EAQ72370.1 periplasmic nitrate reductase, large subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNRRDFIKNTAIASAASVAGLSVPSSMLGAQEDWKWDKAVCRFCGTGCGIMIARKDGKIVATKGDPAAPV

NRGLNCIKGYFNAKIMYGEDRLVMPLLRMNEKGEFDKKGKFQQVSWQRAFDEMEKQFKKAYNELGVTGIG

IFGSGQYTIQEGYAALKLAKAGFRTNNIDPNARHCMASAVVGFMQTFGVDEPSGCYDDIELTDTIITWGA

NMAEMHPILWSRVSDRKLSNLDKVKVVNLSTFSNRTSNIADIEIIFKPNTDLAIWNYIAREIVYNHPEAM

DMKFIKDHCVFATGYADIGYGMRNNPNHPKFKESEKDTVEKENVITLDDEEAASLSYLGVKAGDKFEMKH

QGVADKNWEISFEEFKKGLAPYTLEYTAKVAKGDDNESLEDFKKKLQELANLYIEKNRKVVSFWTMGFNQ

HTRGSWVNEQAYMVHFLLGKQAKPGSGAFSLTGQPSACGTAREVGTFSHRLPADMVVANPKHREISEKIW

KVPAKTINPKPGSPYLNIMRDLEDGKIKFAWVQVNNPWQNTANANHWIAAAREMDNFIVVSDCYPGISAK

VADLILPSAMIYEKWGAYGNAERRTQHWKQQVLPVGAAMSDTWQILEFAKRFKLKEVWKEQKVDNKLTLP

SVLEEAKAMGYSEDDTLFDVLFANKEAKSFNPNDAIAKGFDNTDVKGDERKIQGSDGKEFTGYGFFVQKY

LWEEYRKFGLGHGHDLADFDTYHKVRGLRWPVVNGKETQWRFNTKFDYYAKKAAPNSDFAFYGDFNKMLT

NGDLIAPKDEKEHSIKNKAKIFFRPFMKAPERPSKEYPFWLATGRVLEHWHSGTMTMRVPELYRAVPEAL

CYMSEKDGEKLGLNQGDLVWVESRRGKVKARVDMRGRNKPPVGLVYVPWFDENVYINKVTLDATCPLSKQ

TDFKKCAVKIYKA

>EAQ72369.1 Protein of unknown function (DUF461) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLLGALFAVNLWAVNDIEVKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSTELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKIIELKNIDSKEF

>EAQ72367.1 K+-transporting ATPase, A subunit [Campylobacter jejuni subsp. jejuni 81-176]

MLEILITLIIAFILALIFGNYLYKIASCNKTIFDFIFNPIDNLIYKICAIDRKNMTWQKYSLHLIAFNAL

VAIFSFVIFYLQDKLFLNPNSINSMKGDLNLNTVISFITNTNLQHYSGESALSLLSQNTGILLAMFVSSA

SGYSACMAFCRALCGMQMGNFYEDFTRIITRLMLPLSFILAVIFISEGVVQNYHANFSVLTLENKFQSIA

TGPVAALESIKHLGTNGGGFFGANSSMPFENPTSLTNFLQILSMMLIPSACVVAFGLMVYHRKERQGFAL

MGKEGGVIFGAMGIIFIISLLLIYFSEKMSNPNLDSLGLNANLGNLEGKEIRFGTDGSSLFSAVTTAFTT

GSVNNMHDSLNPLSISATLLNMMLNVAFGGEGVGLMNMIIYVLLTVFICALMIGRTPEFLGKKIESAQMK

LIALVILIHPLLILVLSALAVVFAKDSISNPSFHGLAQILYEFSSSAANNGSGLEGLKDDNLFWNLSTAF

AMFCGRYLVLIAQLAIAGSLLAKNTQENTANSLKTDNLTFMFVLVCIIYIFAALTFFPVLTLSSVAEYLS

LWH

>EAQ72366.1 cysteinyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKPRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>EAQ72365.1 ribosomal protein S16 [Campylobacter jejuni subsp. jejuni 81-176]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>EAQ72364.1 pantetheine-phosphate adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>EAQ72363.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNQNNNKTLKNELEDLQYELSIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>EAQ72362.1 putative restriction [Campylobacter jejuni subsp. jejuni 81-176]

MNYYQELKKYLNNNLFTSYSLEIDFPKIYNFNANQKAFRDILTKITKIYNKNKFIKQNEHQFEDEFISKV

LEILGWCFVRQDEKIIQGKLEKPDFLLFSNDKLKSKYENLDKETKKSSNDFTIILESKAYNIEIDNKKVK

DNPHFQILRYLGNLKKNYGFLTNGRFWRFYDNSILNSNKVFYEINLEKIIEDQNIEAFAYFYSVFSAFNF

TEKEDHLEITLQNNKLSKIKIEDDLKSIIYGTNGNESLFEFIGSRIYNKTKADLKLIYENSLYFIFRLLF

IAYFEDKFEIILEKHKYFKSKISLRTLLENLQEDENSSGGFGELENIFNIYNKGKGNFDMPVFNGGLFDE

SKTALLSTPKIFNDKDLKFILNQLLNFKDKNLSFKRDYKTLSVEHLGTIYEGLLSYFFEIANEDIYYVSY

KEKSKEIECYFDNYDFKILEKSKKVEKYTFYKKGQIYLKNTSNSRKASASFYTPQSIANFLIQSALKDKL

NNENILKFKILDNACGSGHFLVGVLNAITHIVLSDFDHFTNLKELYEEEKENILNHIKDFVQDYEVDESD

ILKRLLLKRIIYGVDLNPFSIELTKLSLWIDSFIFTTPLSFIEHHIKCGNALINSNLSDFKDLIKQNSSN

LFTNSITQEFEILQEVFEKLDNLKDTNEEQIKQSKQIYQNEITPKLNKLNLYLNYINTLHFVNKEELQIL

KALSQDDIQNLSQNEQAKAIISKYQKEFNFFNYELEFPEIVENQVFKGFDIIIGNPPWDKTKFSDDDFFP

QYKSDYRSLIASKKKEIQDNLLAKDYIKQNYEKQKAYINDLSEYYKKAYPLNKGSGDGNLFRLFVEKNLS

LLKKDGNLAYVLPSALMFEDGSLTLRKEILENKTLEYFYSFENNKAIFIDVHRSYKFALIQVKNTQANHA

HKIKTMFYKTDMNSLKNKDEILTLSLKDIKKLSPTHLALMELKDKQALEILRKCYNAFQNLSFDYIDFRR

ELDMTNDKDLFIEEFREGLLPLFEGKMIHQFDANFSQATYFLEKAKFDERLKSKELSRAKKTTGKELNPK

LIKYDREFFRLGYRAVARDTDERTLIASLLPKNCGFGHSMFANAPKQYIVKDDEICMDIVPYERILFVLA

LFNSLVVDFIIRNMVQINVSKTYLERIPLPQPSDEEIQNNEIYKTLAKNALLLQLYNDKNHHFDELKQKF

DIKNEEIPKTKKAYDILKTKNDLLVKKLYGLSDDEFSYMISTFKVLNEKQSEYITLIKTI

>EAQ72361.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MEHKKALFCIFAIIHLFFWIIFSSLNHFKLDTFLSYEIASFSVLLIIFTSYLNYKKVIIKKSKNYEKDFN

FISSLFIKKKQNLSKIIHFKVLKDDLKPNIKEKIHFFTMFFTLFKLMAYVILVAGFLFLHRQDKLDIFAY

ICGISSLLVCVFIFILYIKKYESKKNY

>EAQ72360.1 arylsulfate sulfotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKIVCDDDYSKCPGYENDNGGFDFTWTQHTGWRIDSKSNKRYIYIS

VFDNGDARGAEQPAFASQKYSRAVIYKIDQQNKTVEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYS

ATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSVQIQFSGSGTGYQAMPFSVDQAFNPKK

>EAQ72358.1 yggt family protein [Campylobacter jejuni subsp. jejuni 81-176]

MVIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGNIDLA

PLIIVLALQFLGIFLGNILRSIL

>EAQ72357.1 undecaprenyl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MNELKHLAVVMDGNRRWARAKGFLAKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDRCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCVNLAISYGARDEIIRA

AKRVIEKKLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRII

KEFRNRERTFGK

>EAQ72356.1 SCO1/SenC family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIILFIVIVAIILGVIFFIKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSL

VGKALKQINNPKAHLLFISLDLNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLN

DSFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>EAQ72355.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MLKTKNIFIVFFVVLALIFGFIFYTFTNSYLNFLLTKQYEQKIKSLDDVLKFSLLEHLNDANIKDFAKDT

RADFIILNNDMKISSVKNPDFFSNLKEGEILNFNSKKILTKSFIYKGYKYIIIVYPRFLDLELFWIKIAI

GFGVCLLFVFILMLLLGRRIEKNFNKILDFLDSISDHKVVILEKGMFKEFNLLNEKLLKTKDKILKNTQK

NKKQSDKITLKNTQLASVISAISHELKNPLSVIDLSLEILKDEKLEDKKLKKELLEKISRQSIKLNALTH

KLNFVFNLNSEALQMQEFDLFFLCEKITKNPGFERVVLQGKNTKVKADEFLIEQVIINLLSNALKYSQKE

VILTARDQKIIVQDFGKGIEEDKIKLITKKFYKIDVKSDNSFGLGLFLVKKILNIHKSYLEISSTLGYGS

SFSFKLSQG

>EAQ72354.1 2-hydroxy-6-oxohepta-2,4-dienoate hydrolase [Campylobacter jejuni subsp. jejuni 81-176]

MAQTQLSYKNKTYQISYEILGDLTLPQILILHGWGANKELMKQSFYPFLKDFCQIYMDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNVCFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLSPMMYETFKNVVDEDFGEIFAKQKAKSLVFWGKSDEATPLYCGEKMHQLL

KNSTFYPLEGDHFFFLKYSAFIAQKIKEI

>EAQ72353.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDEE

INEFKRWLIKI

>EAQ72351.1 ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MNEENISIISAFFGRIFQFFNEFSWQDIKEVSLSSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLAIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGISIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>EAQ72350.1 amino acid carrier protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLDIMLDFANKASDIIANKIVPNTDIIMVVLLIVCGLYYSFLTRFVQFRMLSSVFKILTEKNEGHTKEH

ISPFQALMISTASRVGIGNIAGISLALATGGAGALFWMWVMAFFGGASAFAESTLAQVYKSKDDTGGFKG

GPAYYIKKALGSHFFGAFFAFILIITYAYGFNGLQSQTMTSSFKVYYDMFNPNAAVDFASSSWPMIIGIV

LTIFGAWMFFSHHTKIGKISSLIVPFMALAYVLLAVIAVLMNFDKIPSVVHMILQSAFDFKAIFGGFAGS

ALVIGIKRGLFSNEAGMGSAPNAAAAALTSHPAKQGVIQAFSVLIDVVVCTSSGFLVLFSMAYLGLGESK

IDGGMPLVQEAMREYYGSFGIHFITIAIVLFAITSLIGNYYYAQANVKYLTNSKFAMNLFRITAVAMIFI

GSQMNLKLAWNLADLTMAFMATTNIISLLLLGGIVNKVLKDFNTQQKSGIDPKFNASKLGIKNAECWD

>EAQ72349.1 ABC transporter, periplasmic substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKKFFLSLGLVALLFSNSQAIDENLIKAAQAEGRVNSLAMPDTWANWKDTWADLKNLYGIEHSDTDMSS

AQEIAKFKAEKKNASGDIGDVGASFGEIAVKQGVAQPFKTSYWDQIPTWAKDKDGNWLLAYTGTIAFIVN

KDVVKDIPKTWQDLLKGNYKITVGDVSVAAQAVSAVLAANYALGGDEKDLSPALAFFNTLAKQGRLVNND

VSIANLEKGEVEVGLVWDFNGLGYRDKVGKDRYEVLIPADGSVISGYTTIINKYAKHPNTAKLAREFILS

DKGQINLAKGYARPIRIDHIILPDDIKAKLLPSEQYKNARAIKDQKAWEKSTKELPQLWQEKVIVDMK

>EAQ72348.1 small hydrophobic protein [Campylobacter jejuni subsp. jejuni 81-176]

MELDQILLYAFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWTLNFIFLLALLSVFLGWKLKLD

>EAQ72347.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQADISNTSTNTAYGYSVDKDGYMGSDFNKAAGLPEDF

KIHKSTLDEIERKAENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTEADI

NSMPKGYAINGIKSMDFNDPSNRMNITHLRDFSNSLISNVYKTPEQAKEADEIWLDSGCMIKGLSSETLG

LSLEEIKNVSKGEDWQFNPDMSVYPQNEDGSYSKETLFMSFLKSQGGQPVESPKTTLNPKVEAYNRAMAK

ESFSGPAINIDSIMTGKSDFKSFFRYWAERGIAEGDLYMYENNIPKESAMGNWALDAEIKQALANGWKAK

PSTINSYADSIMDRLNNLLGQTRV

>EAQ72346.1 fructose-1,6-bisphosphatase [Campylobacter jejuni subsp. jejuni 81-176]

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>EAQ72345.1 cell division protein FtsZ [Campylobacter jejuni subsp. jejuni 81-176]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKVSGG

YDEEIMAQIETPTFLRRQMD

>EAQ72344.1 arginine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MDYGIDIWGNENFIIKNGKVCINHEKKPAIIDIVKELRDDGYKGPLLLRFPHLIQKQIENIYGNFNKARK

EFGYKGGFNAVYPLKVNQYPGFVKNLVKLGKDYNYGLEAGSKAELLLAMAYNNEGAPITVNGFKDRELIN

IGFIAAEMGHNITLTIEGLNELEAIIDIAKERFKPKPNIGLRVRLHSAGVGIWAKSGGINSKFGLTSTEL

IEAVNLLKENKLLEQFTMIHFHLGSQITEIHPLKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYSQ

FKNEKSRNYTLREYANDVVFILKNIAEQKKDLEPDIFIESGRFVAANHAVLIAPVLELFSQEYAENKLIL

KKQNPKLIDELYDLYKSIKPSNALEYLHDSIDHLESILTLFDLGYVDLQDRSNAEILTHLITKKAILLLG

DKQNPADLLAIQDEVQERYLVNFSLFQSIPDFWGLEQNFPIMPLDRLDEEPTRSASIWDITCDSDGEISY

SKDQPLFLHDVDVEKENYFLGFFLVGAYQEVLGMKHNLFTHPTEAIISINEKGYEVEGIIEAQSILDALE

DLDYDIHAIMDILNERISNSKLVNDKQKKHILGELYLFLNDNGYLKSIGV

>EAQ72342.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNNKKEITQAVKKGAYAIITENDITIEDKD

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHSLKDANFTLLSRSSFFFTTLICENLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>EAQ72341.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINEAMVGFLENQGGVVSKDYNNGY

VSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDTKTWTYTDSKGVVGKDEASEI

TQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMDKIKTGEGYFASFKEELQKYQE

ALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFADLSGNEGFRYKLENEILNSQGFSIE

GKDVDGKVYTGNFNFKGKLASLPEKPNISIYEPDKQGGEDPDKPSVLPPEIPEKVVEAPIKIQTEVDAKK

KKKMMIKWK

>EAQ72340.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKNYTLNTNTYTEQKSYTNNYDNSYSPSIQTNNSSSDI

NINNNTIQKQETNPLDENQSLNNDTFNTSISENNQSLNNDTNTSNNINTNENKQILDTDKEKLKQENKQA

KIEALKKEISKQQKILERERAVKKELQSNKSNKNKYLNTAREYLSIGKNSRLEPELSTENMKVYVLDGKF

LSQYRINLLKDMLSVIQDNAKDYYLSVFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISLDRLSPYLNNP

KELNEHVAREEILERLKLQIKKDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>EAQ72339.1 cytochrome c family protein [Campylobacter jejuni subsp. jejuni 81-176]

MDKCAVCHQENGLGLKNEDSAGAYYLYPPLWGDDSYNTGAGMYRLIKAASYIKENMPQGAPDLSLEDAYD

VAAYMNSQARPIKANRDKDFPDRKVKPLDMDVGPYDDSFSTTQHRYGPYTNMIKK

>EAQ72338.1 NapL [Campylobacter jejuni subsp. jejuni 81-176]

MKKFLFILSLFCVLSYAYELKLNANITALKLDKQNLYIGTDKGEILQYNIKDKSLKELLSLPKIKNYYGD

DFAKIYNIDIFKHTLLILSEGDFGAKNLSFYKENLQIKKLEENSIIKAFFINENTYLLISIGSEIELIDK

SLKNIKKFNFSHSSLNDAVLNEDKGRLVAGFESGEVELFDLKNWKMLKNYDKMHKDNIYQVDFKNNIILS

CGTDRRIGVVKNEEQNFLQKDFLIYTCALSPNGEFAVYSDNEAGVSEVFSTSDFKPVKTFNNENLMSEFI

IFLNNKDFIVSGFGDSIMFRSIDE

>EAQ72336.1 oxidoreductase, short chain dehydrogenase/reductase family [Campylobacter jejuni subsp. jejuni 81-176]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNAQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDVDFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRVNVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>EAQ72334.1 signal recognition particle protein [Campylobacter jejuni subsp. jejuni 81-176]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDVKQNGIGQKQFLNA

IKVNLENILSVNGKNQGFVFASKPPTVVLMAGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKVVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEVLGISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAIIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>EAQ72333.1 4-hydroxy-3-methylbut-2-enyl diphosphate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIQALSNEKKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEVVIFGDENHPEVKGVKSYVSTKAYVVLDK

KELQNIKLPNKIAVVSQTTKKPEHFMEIVNFLILKTKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIKNFKIN

>EAQ72332.1 formyltetrahydrofolate deformylase [Campylobacter jejuni subsp. jejuni 81-176]

MISVLKICTKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMLGQEAL

IELCEKRKKDIVVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGANPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVLPVNHEFTWQDMQQAGRNIEKDVLSKALDLVFEDRIFIHNNKTIIF

>EAQ72331.1 thymidylate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>EAQ72330.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MVFLIPLLIIIGVIFGIDYVYFKNQDLKVQVKKEQKELNSSLEKEKKEYIEKLFKTK

>EAQ72329.1 phosphopantothenoylcysteine decarboxylase/phosphopantothenate--cysteine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MKTILLAISGSIAFYKSYELISLFKKEDFRVKVLLSNGLLKFASKMSFEALVDEVLCEENESWQNSNNHI

AFSKDVDLVLFAPASVNSINKLAFGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LIIEPICKVLACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGSTRERIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLNHDFLIMTAAVSDFIPQSVKGKIK

KNEHLQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQKNYFGSD

QNELYFITLNNENKSTLQSKEKLAFELVKWCEKL

>EAQ72327.1 type I restriction modification DNA specificity domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNFKDSGIEWLGEIPEHWKLIKCKNFFVLKSIPIGDLWNKTKLLSLTLNGVIERDINNPEGKFPSDFST

YQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYTIFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLR

NTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKNFIEKKEKLITLLKEQKQAFINKATTKGLDKNVN

FKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGNDKYYKGGQIVWINSGDLNDGFLKDSKRKITQDA

LDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVNQACCVLEKSAWYNTFYLFYLFNRYKKELISMGS

GGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCKKIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIG

KS

>EAQ72326.1 lipoprotein, nlpa family [Campylobacter jejuni subsp. jejuni 81-176]

MKIKSLFIASILTLSLNANALETITVAATPVPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGVKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDIIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDPKIKALTQVLQSDKIKQFIIEKYNGSVLPAF

>EAQ72325.1 hypothetical protein CJJ81176\_0770 [Campylobacter jejuni subsp. jejuni 81-176]

MNLRIKLNLFISLLFSLFSFFFCFSLFFSYLLSLISFYIEYLKNNVKSKF

>EAQ72324.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTQEELDALMNGDVDLDSETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEVLELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>EAQ72323.1 NAD+ synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFALLMPTQISNKANLEDAL

RLCADLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSALKNSLVIGTSNKSELLLGY

GTIYGDLACAFNPIGSLYKSEIYALAKYLNLHENFIKKAPSADLWENQSDEADLGFSYAKIDEGLKALET

NDEKLLRTLDPSLIAMLKNRMQKNAFKGKMPEILEI

>EAQ72322.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>EAQ72321.1 phosphoribosylaminoimidazole carboxylase, catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNFVSILMGSKSDYETMKEAVKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMSGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRLEKEKKLVSDSKEVEVLL

>EAQ72320.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIIQWSRAEFSPKEVKINVLIDNEKGKEIQILLAKDSVMKEHKAPFAIHIQVLSGKIWFEVEKEKFELN

ALDMISLEANVAHSLGGLENSIIRLSLNKSDSIQRVNAVLKKP

>EAQ72319.1 ribosomal protein L9 [Campylobacter jejuni subsp. jejuni 81-176]

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>EAQ72318.1 threonine synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKDEILALFDLKNSDEKVFEARNIKKEILDWMQK

>EAQ72317.1 HIT family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKTKKENPQALF

>EAQ72316.1 heat shock protein HslVU, ATPase subunit HslU [Campylobacter jejuni subsp. jejuni 81-176]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRAENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKALYEILTRPKNSLLKQ

YSQLLKTENLELEFDDEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>EAQ72315.1 phenylalanyl-tRNA synthetase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>EAQ72314.1 conserved hypothetical protein TIGR00044 [Campylobacter jejuni subsp. jejuni 81-176]

MTLEQILEKTKNVRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKENLDEKKLDIKWHFIGTLQS

NKINLLIKQKPILWHSCNGIKIAKAMDKRLDYKLNTLLEINSANENSKSGLDPNQAVEEYLQIQEECSNL

NLCGVMSIGSHSQDKESIIKSFETTFKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>EAQ72313.1 ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MKEKFLAFLSILPFFIVFTFFMIAPLIWIVFNAFYVEEDEIYSLANFIHIFESKFYLQSIINSLQISFIS

SIFGLLIGLLASYSLFILAPSKICNFLFSLNTMISNFSGVPLAFAFIIVLGSNGVVNVFLKNLGIEPFVS

VYANFGVNIVYVYFQIPLAILLLLPAFKSLENSHLNACKMLGGGNFLYWLKIALPLLAPALFGVFVILFA

NAFGAYATIYALSSGNFNVAPVRIAALIAGDINLDPYMASALSIIITIIMLVVTFMANFLSKKYNFKVL

>EAQ72312.1 co-chaperone GrpE [Campylobacter jejuni subsp. jejuni 81-176]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>EAQ72311.1 tRNA (uracil-5-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>EAQ72310.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKRLALLITLSSLMLHASDLVKIYLNQGLDAVGVAIEKELTQKDFWLSEIGDKNISLGYYDDNVAIVLT

NKTDKILRVYSYEDGKIRKDFEQKEIITGLMGDKKIEGDLKTPVGFYELGRKFNPGDPYYGPFAFATTYP

NLLDKVQGKTGGGIWIHGYPLDGSRLDEFKTRGCIALFNNNLEKFAQVVQDKKVFVMTEEKEKIRAKKDQ

IASLLADLFTWKLAWTNSDTNTYLSFYDEQEFKRFDKMKFEQFASMKKSIFSRKEDKKIKFSDINISPYP

NLENETMYRISFYEDYYTKNYQFRGDKILYVKIDSKGKMKILAEQ

>EAQ72309.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVITDKLNQIFNIPSKDEELKMLASSYFMQDALSIAKIDYDKKNIKINEEDL

KKLWDEHKEDYKTKKIYEISTYFLSVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDY

ALMQLKNVANAKFLDLKNGKDNFQKDQNISESDVYYPIDLLNKAKNGDVLRPAPYNNGYIIVKLNKVDPI

RNKTFEEAREEVLPMYLSEQARKNLEEKAKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLM

NVFNTDQNSSYVIINDNKAILYKINKQKLDMNSDKFEQYKTMLEQNLRNLKANELKQELVDELKKIYPIK

IYYKGN

>EAQ72308.1 ribosomal protein S15 [Campylobacter jejuni subsp. jejuni 81-176]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>EAQ72307.1 putative outer-membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKILVVLVLLQVFSHAEELNNNKIRELIESSPEANEPQNKNLKNTLKNQKSPVNFKEQNTTNITNSQTD

QNEAKVFVREYVLHIDNKDLTFKKLRISEKEIQDAIAEYRNQELSLQNLKDITNIIAYYCQVSGYPSATA

YIPPQDLSSNKVQINIAFGTLGKVIIKNNSGVRDYALESKLNKNLKGKVITTKNVENEIYKINEIYGIQT

NANLQSGDGYGESDVIIEVNKGDSATLTLYSNNYGTKETGRFRAGMSQSLNNIARQGDNLNFYLQDSDEN

QIDYGINYSTFIGNLKITPFATQGHYVLGGIYRNLGFYGDSMNVGVNFSYPVFLYTEYSLYLVSGFTHKK

IKDYYLDGLVSNEKTSNSVNLGIEGTYKGLENNVLSYTLNFTYGNVENDGDSSGFNGVNLGNFGKMNLNL

SNEYQFQERLTHIFQLNYQKVVGGAVLDSSESVSLGGPYGVRAYLEGEGSADNVVSGTLGIRFQTPLEGL

YLTPFYDIGYSWYENKEY

>EAQ72306.1 signal peptidase I [Campylobacter jejuni subsp. jejuni 81-176]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSGSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKEHFVKRCVGTGGDRIVYANKTLYVRMHEGDEFMKEHYPN

DLVTLGGQIYVKEPYKQKGIHYDPKKDIESDILRFLSIGDFAMSPAYIKELGNHIGFSGGNAYVFDVPEN

EYFMMGDNRDYSYDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDEDK

LS

>EAQ72305.1 peptidase, A24 family [Campylobacter jejuni subsp. jejuni 81-176]

MIFFIIILGACLGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCQTCKCHLPI

SLLINEILGIILLILAYSLSQNFYDFLFLSLFLFNLFLLSLIDIKLKAVPQILLWSAFLFAFFYAFRESE

ILHFLIFKEFSGGFLLNAFSFGGFVFLLKSLVFFLMNFRKKDEILENLGDADIIIMSCIGGILGFEYGFL

VLLIASILTLPFFIFFKIKAIKEQELAMIPFLNIAFVAVLFYKNLGLF

>EAQ72304.1 Na+/H+ antiporter family protein [Campylobacter jejuni subsp. jejuni 81-176]

MNKFLVLLFLPLVAFANSSEAAANANLFGAFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFFVVMTAIMGREFGSMYKAEVRARTTGQIAPLPKS

GTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAILGFYFNGLSTLEGEELAKASANPLSFETFRAA

FGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVETWIYGWKTMIFTIVLLLFAWSLSSIVKDLGTS

LFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMGILMPLAVPLAHEIAKINGMDANAMHHYMVIN

ISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQIPYALFICGISLIAGYIPVSLGISVWFVLPL

NFILIALLLRLIGKKVP

>EAQ72303.1 flagellin family protein [Campylobacter jejuni subsp. jejuni 81-176]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGAGTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLTQNPDKTK

YLTGDSKWQQLIGQGYVKDNSLDADKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPEDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQADDKTELNNIIQAAQNEGITME

DVTNRVMTAALGNPNNGDITNLNNPVTIQINGQNFEIDLKQTDFIKSKMTDTDGNAANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSYPDPNNP

GQTISFPIMHTNPATGNSGVVTGSNDITYGQINDIIGMFAADKIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIEISLSDSQSGQFPAPPFTTTSTVQNGPNFSFSANNSLTIDEPN

VDIIKDLDSMIDAVLKGNMRADSESENPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIEGVNTRTSF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>EAQ72302.1 peptidase, M16 family [Campylobacter jejuni subsp. jejuni 81-176]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELMENLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWSIEDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKTIPKIHTKEPKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKLNLINDYYAYVNDCIDDNLFIFICNCNPNVNAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDSNG

>EAQ72301.1 metallo-beta-lactamase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKKHVKKPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDDFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIVGKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQVHLPSWLRYF

>EAQ72300.1 UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>EAQ72299.1 D-3-phosphoglycerate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKKKIIVCDAILDKGVDILRKAEDIELIEAAKVPKDELMQMLSDVEVAITRSSTDVDVNFLNHAKKLKAL

VRAGVGVDNVDIPECSKRGVIVMNVPTANTIAAVELTMAHLLTSARSFVNAHNFLKIERKWEREKWYGIE

LMNKTLGVIGFGNIGSRVAIRAKAFGMKILAYDPYISASKITDLDMEQAKNLDEILEKSDFITIHTPKTK

ETNGMIGKQEIAKMKDGIRLINCARGGLYTEEALYEGLKSGKIAWLGIDVFDKEPATNHPLLDFENISVT

SHLGANTLESQDNIAREACEQALSAARGVAYPNALNLPIKTEDLPPFVAPYIELVSKMAFLAVQIDKNPI

KSIKLEAEGIIGEYANSMLTFAAVGALGGILGEKINYVNAEFVAKEKGVELSCETLPNSGYNNKLSVKII

TENSNISVSGTVFNENEQRIVGLNGFKTDFKPKGKMVIFKNKDIPGVIAKISSVLAAKNINIADFRLGRD

GFGYALAVVLIDEKVQKEVLDELKQLEACVFVQYVEI

>EAQ72298.1 conserved protein [Campylobacter jejuni subsp. jejuni 81-176]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>EAQ72297.1 3-deoxy-7-phosphoheptulonate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIVLTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAYYQSATTLNLLRGFAKGGLADLHEVHRWNLGFLKKSELHKQYTDISEKISQALAFM

EACGINTSNTPSLREVSVYTSHEALLLPYEEALTRVDSLSGEIYDCSAHMLWIGERTRALDEAHVHFLRG

VKNPLGVKIGPSASADDIIALANVLNPNNEEGRLNIIIRMGADKIINNLPKIFSKLKSEGLNLVYSIDPM

HGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHLEMTGKDVTECTGGASNVTAQSLEDRYETQ

CDPRLNADQALELAFLIADLVKKARK

>EAQ72296.1 invasion phenotype protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNLLLYIKNNLTPTLAQILLQALKNSNNEKFFTFVLENIETICTWLNSNEFRDRYLSTKHPYPPLINPN

FIEIDSSRHCAELAWDLNLPLPKHYKFIYISPHGVGAAAFLRYLNQCCDVTCFASWVLPPDSKERYCINY

MCLNDNTIAQYAINISEINLPYFDKYLSLLDFNSKIICGVRDPIGLLKHSWGRDWSKVLRNYPPEFNLTY

DWRYYINYLTHQNHKIKIDINELQQGVFIISYLLKYFNKDNVYYLDMEEIRQSKAFDTMNLLAINFNFTP

PHKDKLDLFKIKEFRGYIRYLFPITLYANSKDINNTFYLNTPKNNKNFNIDRTSSIPIILDRKHINHEKI

DVIQEIIKNDLCNDMGVYIDKNDFKQLEQNNLLFSTIKHYLYDFLYQIKITIDETESKMMKEKDVIDYFI

KNKSLIYTFFNIFENELNHLKQTHPHIIDSWKYYKEFEKIYKDK

>EAQ72295.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MALDEKIIAYTENPARELLSVASRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNIPLNKTIQITVAQGIDPIESQDESLILAYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVKDAVNSGVGIECEELNVVGSVGSNTQLNAAKMKIE

GTTHSKAKIQAKQAYIKTHRGFVEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDSNYDEEFAILGEQISKLNHKMNKIRQYILSSKNGILSVEKKITEL

KNQGQNVPIQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYEEKDIAWLSASKE

>EAQ72293.1 major facilitator family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSPKKIIKSMTALFAGMAFLFAGNALMVSSIGVILKENGESSLAVGVVSSCFFVGALVGTISAHKIISRI

GHIRSFGLFGAIFGISAMLHTVSENLIFWAILRFFIGICYYGLLMVIESWLNEKSKNTIRSRILGFYEIV

FYLAFGIGVLIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFI

AGMLINGFFSMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMLI

FIFFKLHLYMQYFLGITLGIGIFCLYALALARANDVLVNKNKGVELGRGVLFCYSLGSLFGPLILGFLMQ

YFEIKGFIWFYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>EAQ72292.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKIKNLKKYYGKELVINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQ

KKSKELRVLRKDIGMIFQNFALMERKNVFENVAMPLRTHYTQCKFHAKLFNKEYMSEKEIAQKVNSLLEI

VGLDHKNKSYPRELSGGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLV

THEMDVVKDIAQKALLLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVI

THMARTLNIDFNIVWGKIEKLNGKALGNLVININENDKDKVLDYIEKSGVLWEVAS

>EAQ72290.1 ferredoxin-type protein napH [Campylobacter jejuni subsp. jejuni 81-176]

MKYLIARRIVQLGILALFSFKATDFILQGNLSSSRLFNTIPLSDPFAVLQIILASWSIDLVALIGALIIF

FIYGLLLGRIFCSWVCPVNLITDFAAFVRNKLTLNNKFLILPKNLRYFVLVLVLVLSFVFSLPVFESFSY

IGMIHRGIIFATSSWIFVAFILFCIDTFLSPRAICSHFCPLGAFYAFISRFALLKIKHDSDKCTKCYECI

RICPEKQVLWMVGKESTSVKSGECIRCARCIEVCNDDALNFNIFDLRNK

>EAQ72289.1 HAD-superfamily subfamily IB hydrolase, TIGR01490 [Campylobacter jejuni subsp. jejuni 81-176]

MKLVLFDLDDTLIQGDSAKLWLKFCVEKGFLPQEYLEKIVFYQKQYQEKKLDMDEFMTFFLQSVKGKNED

RISSLVDEFIKIYIKPYEKAKELIIKYQDQRCIIISATAEFLVRKIASFLGVRESIAIKCERVGDKFSGK

AYGIYSFKEGKVLRLKEYLGKDYEKWMKDSYFFSDSINDLPLLESVSKAFVCNGDEKILKIAKERKYEIL

TF

>EAQ72288.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MGVENIYTLPLNGAPYISGSVAFDGEAKDNKLILESNTKIDLHNFQYFSDEEGKDIYDERITRLMGAFGI

NSNLQNNKVLIDSANIVLHGPDGEYTARSTFEILGALADVNNLKKYNVSKNSVIIKNLNLDLMVNSQNKI

TFYDAVLFGEIYGGRTLQGNAEKNSIEVYHFNSLDHLDKNIKTHASLNLYGGYSNDGEANGNKIVFRLKK

PLKISDNFYGKNYYNLYGGFATEGANFNIIDIQNDLTYEKVPQNYSDKFTVYAARTLSGKANNNTLSIKD

SVISLPLYAFITSETTLDGIDYIADESNNNEVNFENIKSSKNLSLMINAKNVSNNKINYNLIQSLTEASS

LGKGSKIILKATQNANNNLIKLKDCSSAAVESSCIIKADKESAFNKIIINNTVFSTASDKRQGYVGLIAG

VSANSHDNIMELVNLNIDEYKNQDAIFLAPSGTSDISNFKSYNNTLYLGGELNFFKDVNIDLLSGSVFHE

VNKKGKIITQILPHQEDFSKNNRLIIDTQDVKSEVVNNFENFTFILPNKIKNPILTIEKLINLPSNGSME

ILTKNKPTKGKYILIQSDVGIYDGVNRLLNQQELENLLEKMKNNKNKFNYNKIEKLAKSTLKNVNFSFEV

SDDAKIIYINIL

>EAQ72287.1 lipoprotein, nlpa family [Campylobacter jejuni subsp. jejuni 81-176]

MNLFKIIILACILNLSSLFAQNITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKVIDEILRSDKFKAIINEHYKDILIPAF

>EAQ72286.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRNEMKKYFNIFKIFTNKTNAKFGLGVCSVVLSSSVCFAAVQATSKDGKIFYISEHSFKDNQVYDPQAEI

FKKINGKNFYASKSKYPISNLTMIYNNPKSGNKNLSKLEILTPDTSKEEIITAFSTLGTVSSDTQAVPSS

FIPFIVTAYAQNTNATNNKLILENGELSSVYFCKPSIGDCGVPNNSQKGDRFKYLITAAFTDRRGGDLTI

KPF

>EAQ72285.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFFKKKISQKQKEKPKIPINDVILDDRLCKFKNKVQKISKDEASASLLARQLSRLIRANKF

>EAQ72284.1 Prokaryotic N-terminal methylation motif family [Campylobacter jejuni subsp. jejuni 81-176]

MNKAFTLLELVFVILILGIFSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDTPIYSDFKSWIKIGKNHYRFALNAKEMVEFIYDSKEGLLKCIGSSR

CKDLI

>EAQ72283.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>EAQ72282.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>EAQ72281.1 valyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMRTLGITPAWSRL

RFTMDEGLVNAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSDEFLV

VATTRPETFFGDTAVMVHPDDERYTKFVDKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLDFISVFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFIEKIEEHNNQIGYCYRCNNIVEP

YISKQWFVKKEIAQESIEKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSEKDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTELKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNDKKIKDEIKAYMNFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENVDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>EAQ72280.1 lytic murein transglycosylase [Campylobacter jejuni subsp. jejuni 81-176]

MIKKILVFLFIFSSLNATQYSIEKLKKEENSLAKDYYIYRLLEKNKISKKDAQDLNSHIFRYIGKIKSEL

EKIIPLKPYINPKYAKCYTYTANTILDANLTCQSVRLNSLVFIASLNSKDRTTLAQTFKNQRPDLTNLLL

AFNTSDPMSYIVQKEDINGFFKLYNYSKKYDLDLNTSLVNKLPNHIGFKDFAQNIIIKKENPKFRHSMLE

INPENVSEDSAFYLGVNALTYDKTELAYDFFKKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKTLSQSSSL

NIYSLYAKELTNTPFPKIESLNPSKKKNNFNMQDPFAWQKINKQIRDANASQLDVLAKEFDTQETLPIYA

YILERKNNFKKHYFIMPYYDNIKDYNKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLANHIGEK

ELKIPNFDQDFMFKPEIAYYFGNYHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGKFEPFLS

MELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>EAQ72279.1 flagella basal body P-ring formation protein FlgA [Campylobacter jejuni subsp. jejuni 81-176]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKTTSLPKDFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKNVFFRYFIQANLEVLKSERAIKRGDKLGAFDYKSVLIDFDKVPLNALTLDDVDN

LVAKSNINKNAILRANMFKTTALIRRNDPIIGVLSEANVDVLIELVALQSANMGERIRAKNKEGKVMQGI

VVGKNRMIIQ

>EAQ72278.1 glutamate-1-semialdehyde-2,1-aminomutase [Campylobacter jejuni subsp. jejuni 81-176]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>EAQ72277.1 amino acid ABC tansporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. jejuni 81-176]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FSLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>EAQ72276.1 4-methyl-5(B-hydroxyethyl)-thiazole monophosphate biosynthesis enzyme [Campylobacter jejuni subsp. jejuni 81-176]

MSKKVLIPLAQGFEEAEFIGIADVLKRARELNPDLEVVIASLNSELLVKGANGISIKADCSIEDVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>EAQ72275.1 glutamine synthetase, type I [Campylobacter jejuni subsp. jejuni 81-176]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNSGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKMVAHLNGKTATFMPKPLYGDNGNGMHVHMSL

WKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFTNPSSNSYKRIVPGFEAPCILTYSCQNRSASC

RVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGIKNKTIPVGPMDENLFDLTLDEIREKGIEQLP

HTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVWPVEARPTAYEFKTCYSC

>EAQ72274.1 disulfide bond formation protein B [Campylobacter jejuni subsp. jejuni 81-176]

MKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGMIALIN

PTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPSWFLPI

GECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFIVLFAM

FIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>EAQ72273.1 L-lactate dehydrogenase B [Campylobacter jejuni subsp. jejuni 81-176]

MAKIGIVGLGYVGAASAYSIVTQGICSELYLYDIKQDLALAHARDLEDMSAIHFSYTKIFHVSNLENLAS

CDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIVATNPNDTITYYTQVLSQLPKNH

VFGSGTNLDSSRLKKFLAKDLNINSKDIFACMIGEHGDSQFAALSNASVLGQNLLDFYKQKLGKDLDIQE

LEKAVISEGYFIYERKGRTEFGIGTSCANLAKAILEDRKSLHPVSVVFDDIAFSMPAIIGKDGIEKVFEL

KFNEKEKIKLENSKQQIKNAIQSVKDKI

>EAQ72272.1 high affinity branched-chain amino acid ABC transporter, periplasmic amino acid-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>EAQ72271.1 oxygen-independent coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176]

MRDYKAFVKYSKAGPRYTSYPTAVEFNANFKYEEYIEILKKQDRSLSLYFHLPFCRSACYFCGCNVIYTA

KEESKERYLTYIFKELDILSTILDTKREVVQMHFGGGTPTFFSAKQLQNLILKIRSVFGNFSKDAEISCE

IDPRFLNGEQATVLTQNGFNRISFGVQDFDEKVQKEIHRIQPFELTQNALNLVRSKGIKSVNMDLIYGLP

YQNLQSFTQTLEKVMLLNPDRLAIFNYAHVPWLKKNMRKFDENTLPSPDVKLEILEFCEKFLSKNGYKMI

GMDHFAKENDELFKALENGTLHRNFQGYTTKGGADLVGVGLTSIGEGQRHYAQNFKDMSSYEAALDRGVL

PFERGVALSDDDELRKAVIMELMANFKLDIKSIEKEFCIDFQEYFKEDLKALEEYKDFINFDENFIKVNE

TGVLLIRNIAMCFDAYMKNISEDKKVFSKTV

>EAQ72270.1 ribosomal protein S2 [Campylobacter jejuni subsp. jejuni 81-176]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>EAQ72269.1 glucose-inhibited division protein A [Campylobacter jejuni subsp. jejuni 81-176]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>EAQ72268.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MVKNGLLLTIFLSVIGVLGVIFIHIFVGAIIFVLIAVLMIYLLRQHKDEQIMIDKLLVLCRELKEGNFDN

RIIYVKTKSKKLAEIADNLNNTIDGLEAYLREINTSISCSQKGEFYRKALPEGLKGIFAHNIEFINKALA

NIEVTARSTFKNALSRTLMDLSLGNQNKDMSQISSSLNQDISMMKNVYDTVDAISHTATENGSEVDSLQS

AMGSLMDVVNSSKETVQTFVANSQNITSVVEVIRDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVRK

LAERTQRSTSEISIAIQTMQQDFVNIQSGSEQVFNIVSESEERINKFSQAFKRLEENSSALGVNFGSFAK

RLILSVVKIDHILYKSNIYLNLNGAQNFNLESVDPISNLCQDERAQGVINELSSETELNLAKEFIKDNAK

KAIEESSQDYIDQKAYDAIVNDIKSLEQRSAEILAKLKI

>EAQ72267.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKSLLFHFRRIGVEFIIFSVYAVFSISWAATGSLMPLISNDLALNTQQATLITSMIVVAKIFGASFTAF

LVYKFGLKKGYFLGCILMSSGIFLSFVDSYSGILVIRFLTGLGSACALVCLVPIAQQWFEKKLCIL

>EAQ72266.1 CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNLPNILAIFRMVLAPLLFFLLIHKFENIHQSWINYFAALTFSLAALSDFFDGYIARTWKQTTKLGGILD

PLADKMLVLAAFLGLLLTGKANEWVIYIILVREFFITGFRVVMISENLNVNASFAGKLKTAFQMTAIGFL

IMEWIGGEILLYIALILTLYSGFEYIYTYIKAQKKGEK

>EAQ72265.1 conserved hypothetical protein TIGR01033 [Campylobacter jejuni subsp. jejuni 81-176]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>EAQ72264.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKILLLNENPVVSRLVSLSAKKMSYDFEELNAYSENLGNYDVIVVDSDTPAPLKILKEKCDRLIFLAPRN

QNVEDIDAQILQKPFLPTDFLNLLNNKDANKHTSIDLPMLSNDENPYADISLDLDNLNLDDLPDENSLDI

NSEGMEDLSFDDDAQDDNANKTLETQNLEHETIKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEP

SLDELDDKNDEDLEIKEDDKNEEIEKQELLDDSKTNTLEMQEELSESQDDNSNKTLETQNLEHDNLEQET

IKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEPSLDELDDKNDEDLEDNKELQANISDFDDLPEV

EEQEKEMDFDDLPEDAEFLGQAKYNEESEENLEEFAPVVEEDIQDEIDDFASNLSTQDQIKEELAQLDEL

DYGIDSDNSSKVLEDFKDEPILDDKELGTNEEEVVVPNLNISDFDTLKESDIQEALGEEILEKNEEPIVS

DVTKDDNSEEIVNELSQSIAGAITSSIKDDTLKAALKGMNMNININISFKED

>EAQ72263.1 PglA [Campylobacter jejuni subsp. jejuni 81-176]

MRIGFLSHAGASIYHFRMPIIKALKDRKDEVFVIVPQDEYTQKLRDLGLKVIVYELSRASLNPFVVLKNF

FYLAKVLKNLNLDLIQSAAHKSNTFGILAAKWAKIPYRFALVEGLGSFYIDQGFKANLVRFVINNLYKLG

FKFAHQFIFVNESNAEFMRNLGFKESKICVIKSVGINLKKFFPIYVESEKKELFWKKLNIDKKPIVLMIA

RALWHKGVKEFYESATMLKDKANFVLVGGRDENPSCASLEFLNSGVVHYLGARSDIVELLQNCDIFVLPS

YKEGFPVSVLEAKACGKAIVVSDCEGCVEAISNAYDGLWAKTKNAKDLSEKISLLLEDEKLRLNLAKNAA

QDALQYDENNIAQRYLKLYDRVIKNV

>EAQ72262.1 protein-export membrane protein SecF [Campylobacter jejuni subsp. jejuni 81-176]

MQFFSEKKIYDFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPTLLWFKFSVLEFRNKEIEKAKRKQDKERNRAMYEKGTV

>EAQ72261.1 putative outer membrane component of efflux system [Campylobacter jejuni subsp. jejuni 81-176]

MLEKYLKSAIFLALYPLAMLASNLHEFIALSQNNESYLIKQMQSEQANLDKEQAFRNYLPSLSLNSAYVA

NNKDRFIIDPQESLFAKVSLNFLLFDGGAREANLRALESREKLSFLDKEQNKNYLALNAITLYFNTLSLE

KILLANQQKVSFLKSTFKRLQKFYDAGLSSKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSDTDF

KVQGNAFLENPQQEKSQNYEVMIAKEQINLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFANL

ADQFLEKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARFSERKNKEELNYLDKSLKVLQEQ

ILALNLSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNS

KVKE

>EAQ72260.1 signal recognition particle-docking protein FtsY [Campylobacter jejuni subsp. jejuni 81-176]

MFNFFKKGLAKTLENIVGVKGENKKITKDLLEEILLEADVSYEIVEEIIYYLPPQNEVKKEDLKRVMGSY

FLYEKKETNQEKPFVELILGVNGAGKTTSIAKLAYLYKNQNQKVILGACDTFRAGAIEQLKLWAQKVDVD

IVLTAQGHDPSAVAFDTISKAKAKDFDRVIIDTAGRLQNQKNLAHELEKIVRISNKALEGAPHRKILVLD

GTQGNAGILQAKAFNELVKLDGVIITKLDGTAKGGALFSIARELELPIFYVGVGEQMTDLQEFNANAYLD

TLLDPIFE

>EAQ72258.1 transcription termination factor Rho [Campylobacter jejuni subsp. jejuni 81-176]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPREFRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRVLDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNIADRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>EAQ72256.1 ribosomal protein S6 [Campylobacter jejuni subsp. jejuni 81-176]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>EAQ72255.1 5,10-methylenetetrahydrofolate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MCSFSFEVFPPRKDENIKNLHAILDDLGQLSPNFISVTFGAGGSINSQNTLEVASLIQEEYQIPSIVHLP

CIHSSKEKITQILQKCKEKNLNQILALRGDICENLEKSKDFSYASDLISFIKKQEYFEIYAACYPEKHNE

SKNFIEDIHYLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFVKILEKYENNALALEDAGIAYACDQIVDLITSGVDGIHLYTMNKSKAAIKIYEAVKHLLKEEL

HA

>EAQ72254.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. jejuni 81-176]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPISDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEVTLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYRAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVVKIAKSELSGKAKE

NFKHIIAGYEQVVKEALVSNQPNPPKEEDFENYIEF

>EAQ72253.1 acetyl-CoA carboxylase, biotin carboxylase [Campylobacter jejuni subsp. jejuni 81-176]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVARIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIHKMGNKNIARKLMAKNGIPIVPGTEKLNS

YSMEEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKVIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>EAQ72252.1 atpase ec atp-dependent zn proteases [Campylobacter jejuni subsp. jejuni 81-176]

MKNKKIILASFMVLCMLLGILYFKNEPKYIDENLYQSLLSQNLIQKAVIDKDEIWLKAEGENYIIIKDGI

DIKTLLSKVPVEVKKDNTLWVFFVLLIFIIALFISLGYFARKKELAKYPISNKNQNHTQAQNSNINLESS

HIKPVISNITFNDVAGVDEVKMELSELVDFLQNPKKYKEFGVKMPKGVLMVGPPGVGKTLIAKAVAGEAG

VPFFYQSGSSFVEIYVGMGAKRVRELFSKAKMMAPSIVFIDEIDAVGKARGEMSNVERDSTLNQLLTQMD

GFEDNSGVIVIAATNKIELMDPALLRSGRFDRRIFLSLPDFKDRLKILEIYMKDKNNNVNLNKIAKASVG

FSGAGLETLVNEAAINALRRNSALVEESDFYAVLNKVLLGKKKILSFNDEEKKIQATYQAAKALSAYYFD

IGFDKITLIEDRFKEYEHNIKSKSELINRIKVYLAGSRAMRLIYNESYTNSQDDFLKIKELLDYMLSFDM

LKEPNLNEQKKEMDEFLNSMKDKILKLSELLLEKEKIEHDDVKNIMQV

>EAQ72251.1 UDP-glucose--lipooligosaccharide glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>EAQ72250.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNPWAFIRVKNEVITLKASLESILPAIQRGVIGYNDCTDGSEEIILEFCKQYPSFIPIKYPYEIQIQNPK

SEENKLYSYYNYVASFIPKDEWLIKIDVDHIYDAKKLYKSFYIPKNKYDVVSYSRVDIHYFNDNFFLCKD

NNGNILKEPGDCLLINNYNLKWKEVLIDRINNNWKKATKQSFSSNIHSLEQLKYKHRILFHTELNNYHFP

FLKKHRAQDIYKYNWISIEEFKKFYLQNINHKIEPSMISKETLKKIFLTLF

>EAQ72248.1 ADP-L-glycero-D-manno-heptose-6-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVGK

DEEPKNPYAFSKLMMDKLAKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPRLFEGS

DQIYRDFTYIKDVINANLIALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>EAQ72247.1 hd/hdig/kh domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKFDDLSKKEQKLQQEEEKLKEDKEYLCKSQKHIQNLQSDVDKLKNKYQEKLDDVLKI

LEHSTGLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGETIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCKRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRVIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAVEYAK

>EAQ72245.1 ATP synthase F0, A subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>EAQ72244.1 sialic acid synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>EAQ72243.1 thiamine biosynthesis protein ThiS [Campylobacter jejuni subsp. jejuni 81-176]

MIINGQKLELKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>EAQ72242.1 NAD(P)H-flavin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176]

MNFKELISKRRACKLFNDKKINEKDLHFILESGVLAPSSHGFEPWKFVVLEQKEHNLKLSTLCYNQQNVA

SASHNIIFLARKDLQSKDEFAQKQVRRFSGSSEENFQKILEIYTHKTNAMNDNELYHYAQLQCYLAMMQM

SLAAMSLGIDSCMIGGFEKARVDNFLNLTYPFETAVILSLGYKAHEPKYSTQRLNFNEVVEFYKEK

>EAQ72241.1 succinyl-diaminopimelate desuccinylase [Campylobacter jejuni subsp. jejuni 81-176]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>EAQ72240.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKKDNFEEYAQLEEYASAEDISRVRAELLTCPELNTSLAGTIIEIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFFYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>EAQ72239.1 mechanosensitive ion channel family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIILTFFVVFAFGDVNRTIINNINEKINTLNTVISASIWNIRYENFIKYQDINDELIILNLNLKKTS

DIHQQEELKRKIANLEEQLSLLKEYKDLNFAQSLSAPDNIETLSKLTNPLAIIGAFSHIKKLKGEKEEYI

FKFNDFKNLVDKIREKNSELKELVELKPSVENIEALKASDKKLEEFEQALNFASVSYSVYEKKIDEELSR

VSAEIKVQSLRAVNILVAIVIVIAIAFMLKFIAKKYIKDSERYYTATKIINFININIIFLILLFAYIENI

TYLVTILGFASAGLAIAMKDMFMSMLGWCVIIFGGSFRVGDRVKVFQNDTTYIGDIIDISFLRITLYEEL

TLETYNKNRRSGRIIFIPNNYVFTNLLANYTHHGMKTVLDGIDISVTFDSNLDKAQEIVENIVTRHAKGY

TELARKNIARLQHEYSIKNPKVEPRFFMFFEHWGMRISAWYMTNAYAALVLRSTISKEIIKEFNKHKDIK

IAYPSQNLYLGNLNQNHFEQHHENMHFHARNKD

>EAQ72238.1 hydrolase, carbon-nitrogen family [Campylobacter jejuni subsp. jejuni 81-176]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVSVEAKSYKKLCLKVTPNGVKSYEQQILMPYEHWNEEKFFSNKTPSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMAKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>EAQ72236.1 leucyl/phenylalanyl-tRNA--protein transferase [Campylobacter jejuni subsp. jejuni 81-176]

MESSNLYSKLLNAPKNAPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCILIPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDTRSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVSIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>EAQ72235.1 ubiquinol-cytochrome c reductase, iron-sulfur subunit [Campylobacter jejuni subsp. jejuni 81-176]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNAAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEEGPEYKKMIAEA

>EAQ72234.1 prepilin-type N-terminal cleavage/methylation domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTALHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISTNFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLNQQGLISKNISSFNLQNNKLKICLKRQT

KYCLEKRILL

>EAQ72233.1 phosphohistidine phosphatase SixA [Campylobacter jejuni subsp. jejuni 81-176]

MKKIYIIRHAKASKSGDIDDFERKLTKSGKEDLKKLFKNLALHEIHPDLVLSSPAVRTAKTAKKIAKFYN

FDKNKICFDERLYLCNVENLLKILQDIDDEFNEVFLVGHNPGLMELGELLSSLCLASFPTSSILCLEFDI

KEFKNLKKHSGKLVFFEHVRKLKEEKDLGF

>EAQ72232.1 putative epimerase/dehydratase WbiI [Campylobacter jejuni subsp. jejuni 81-176]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>EAQ72231.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>EAQ72230.1 arginyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>EAQ72229.1 trkA domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRGKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGVMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGEASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNTTDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGRNLSTNLNRHYYKMRQNYQLFIPVE

>EAQ72228.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDAFNLKRVDVSTYQAASGAGKEGMQELVEAMQSFFAFKLDEFKSQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEIDVKKAKEILEKAPSVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>EAQ72227.1 heavy metal translocating P-type ATPase [Campylobacter jejuni subsp. jejuni 81-176]

MKCEHCKLDYKQAQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFITK

TKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIGYK

ASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPVLF

YTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYIYSLWAMFFRVGEVYFDSVAMIICFVFIGKYLEMFSK

KRALDTIDGLNDFLQNEVLVFDGKEFAPKEVQKVCLGDRILLKTGDKILIDGICKSGEMSVDTSSLNGEN

IPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIQLLELASSKKAKLESLVNSLSAYFSRTVLLI

AFICFAFWFFYKEESFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSKCD

CVVFDKTGILTKIELELKEVFLDKALDLNELYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSIQA

KGLSAELNEGLLLGGSSKFLQEKGIVAKEFDNTHFIFAKEGKILAFFEFDSVLREDAKELITYLKKEKKE

LMILSGDHQKAVEKIARKLEIQNYQASCLPEDKMKTIEKLSKNYKVLFVGDGVNDALALKYASVSMTLRE

GSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMSFS

SIIVVLNALRIKE

>EAQ72226.1 NAD-dependent deacetylase [Campylobacter jejuni subsp. jejuni 81-176]

MKNIMILSGAGLSAPSGLKTFRDNDGLWEEYDVMEVCSATGFRKNPKKVLDFYDARRAQLQNVKPNHAHE

KIAQLKEKWGKNLFVITQNVDDLLERAGCKDVVHLHGFLPELRCLKCEGIFNIGYEKIIDKQCPKCKSKD

LRHNIVMFEEQAPAYATLYSLLNQTSLFISVGTSGAVLPVGRYASMCEKSILNIYEKDANLERYFDKIYT

EDIISAIDKIALDIENFMKDGNV

>EAQ72225.1 ubiquinol--cytochrome c reductase, cytochrome c1 subunit [Campylobacter jejuni subsp. jejuni 81-176]

MREIKIFLVVVVFTTLVYWGVEPYAHSVMKPHVTPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFVKGDAKKGKEFFENNCFACHGIKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPALALKVDHKFGDAFIMTAYNKDTSGESEEATNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQRVALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>EAQ72224.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKYVLSLALLGSLLGASELKYQEFDGFKSPESIFVDKNYVYISNVGEKLEPLAKDNDGFISKLDKNGKV

LEHKFLTHLNAPKGMMEIGKTLYVVDIDVLRGFDLKTKKEIFNLPIKGAIFLNDIEKLDDNTLLVSDTGT

GLILKVDLKTKQYDELLKLDLAKFGGPNGLYLDRKKHKLFIAGYHPDGVSGGVVMAYDLNTKELSIIKNE

KESYDGIVPYKDGLLVSSWGNNLNGYIYNLDNVKSVKLELPLMKGPADIFIEGNILWIPKMAEGKIFKVE

LNK

>EAQ72223.1 glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>EAQ72222.1 endonuclease III [Campylobacter jejuni subsp. jejuni 81-176]

MTGARIFTKLLNLDLNYHDFDWLENQGLSEFELLISVILTQNTNWKNVLKALENLKKENIVSLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDSILNYLCKREI

LVVDNYSLRLAFCLGYEFENYEELREFFQSGIESEQENLCKILGRKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>EAQ72221.1 SsrA-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKNEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>EAQ72220.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. jejuni 81-176]

MVKNKFTITITDINGSRHFYLNQIIKKIVFYTIAFIVLFLVFSGFYIKYLDSKLSDISEKREELLKKSKE

LELSNSQMQKSIEEKTQQYAAIEDKIASFEEALGLEVENNLTISARLDNLQLTNEQQLGILGQIPNGWPI

ENKGITGNFGWREHPLLKRREFHPGIDLRAEIGTPIYAPASGVVEFSGYSDNGYSYNVILLHNFGFKTVF

AHMMRKEVVKAGQFVSKGQLIGYSGNTGLSTGPHLHYEVRFINKTLEPLYFLNLQRKNMNDFFNQERRVP

WQSLIKAVSAQHPALAQKQQ

>EAQ72219.1 ATP-dependent Clp protease adaptor protein ClpS [Campylobacter jejuni subsp. jejuni 81-176]

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>EAQ72218.1 4-diphosphocytidyl-2-C-methyl-D-erythritol kinase (CMK)(4-(cytidine-5'-diphospho)-2-C-methyl-D-erythritol kinase) [Campylobacter jejuni subsp. jejuni 81-176]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>EAQ72217.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQAPRQESRYNDSAYHQHND

YYKKKKKESWLGELFDF

>EAQ72216.1 predicted AAA ATPase superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MDWNKTYAAIYRARKDYLKPIFEIDPITLKDLVGMESQKKALYENTLNFIQDKGANHALLWGSKGTGKSS

LIKAIFNEFKDQGLRLVELNKEDLFALVDIIDEIRLENFKFILFCDDFSFEKGDDSYKFLKPLLEGSIEK

APNNVIIYASSNRRHLLSESIADNLDTQIAHTELHLSDAAEERLSLSDRFGLWLSFYQGNLEEYLKMIDF

YFKDYSCDKELLHAKAKEFATLRASRSGRTAKQFYLAFKENFK

>EAQ72215.1 putative arginyl-tRNA--protein transferase [Campylobacter jejuni subsp. jejuni 81-176]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>EAQ72213.1 cell division protein FtsW [Campylobacter jejuni subsp. jejuni 81-176]

MVADKRLFYLSCILITIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNTEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGVICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>EAQ72212.1 competence/damage-inducible domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKHLLYLIGDELTINEKFKNYIYRTYEEKFKEINEIRIQNKTDKDLPFLLENLLNQYDFITLFTSPLHYA

TVAKILATLNDDNLILKDDTLVPDKAEFSKNSFVCNFSNSKINVVKINPSEKLPDLLGHIKLNFAYFCIF

GMDDESAILLLQTLTKSYEISIKSTKFLDNLVLIKATCANFGKLDGFLNSVKNLFGQKVFLGKDPIHFIS

SKLLEKKLKISFAESCTGGLCASTLTKISGVSEIFEGSIVSYSNRIKHEWLGISESVLENNGEYSERCVY

FMLKGIFKTANPDFALAISGVVGEKDEGKIKSGTIYIGAMFRDGTFIQETLYLDGDREFMQEQAVLATFC

LLLKLKPEIFEI

>EAQ72211.1 aminoacyl-histidine dipeptidase [Campylobacter jejuni subsp. jejuni 81-176]

MQNVIENFKQLCKIPHCSYETEQMKEFLSSYAKDKGFKVSVDKAGNIHAIKGKPKICLQSHYDMVCMGDA

PNLEVYEENGFLRAKNSSLGADNGIGIAIMMSAMAEFENLECLFTNDEEVGLMGVNSLEHTLESKMLLNL

DHESDDEIMIGCAGGVDIEASLSFNTLRKKGKIYELCAQNFKGGHSGINIIRNEKSSIKEMAKFIQENEG

EIISFEGGERINSIPKHAKALVHFKNEVKSNNWIKCEFKEEGEFEICDQSKKLLSLINSFTHGVRAYDEN

LGMVQTSINLATLRMENQQIKFALFARSNILDGLKQVEFETLEFFKAFDFKVRSFNFYPPWEGKPNTLSD

MVFKALKKVSPNAKVSAIHAGLECGIIEKKQELLCASIGPNIHNPHSTDEHCEIASVEKISKVVFEVLKD

NA

>EAQ72210.1 Protein of unknown function (DUF455) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MQKEFFQELQDILYEKNITIKFHSFQNFYEDFKSRKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFLN

STHALAKIIHSVAHIEFNAINLALDASYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGIVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNRYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQKECEVIEKFYS

>EAQ72209.1 glycolate oxidase, subunit GlcD [Campylobacter jejuni subsp. jejuni 81-176]

MKKEFEQYFKRFLGEENAYFDEIHKRAYSYDATKKHYLPDGVLFPRNEEDIAQILKFCNENNIIVIPRGS

GSGFTGGALAVNGGVVLAFEKHMNKILEIDLENLVAVVQPGVINIHLQKEVAKYGLFYPPDPASMEYSSL

GGNVSENAGGMRAAKYGITKDYVMALRAVLPSGEIIRAGKRTIKDVAGYNLAGILIASEGSLAVLSELTL

KLIPLPKFKKTAFAIFPSVKSAMNAVYKSLASGVSPVSMEFLDNLSIRAVESKFNKGLPIEAGAILIADV

DGNVKEAIDEDLRNLEYYFLEAGASEFKIAKDEQETADIWFARRNCSQSIAMYGTLKLNEDITVPRSKLP

TLLEGIDEISKKYGFKIPCFGHTGDGNVHTNVMVPDKNDKEQVKKGYEAVEEIFKLTVKLGGTLSGEHGI

GLSKAPFMNLAFSEAEMNLMRNIKKAFDPNNILNPFKMGL

>EAQ72208.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKAFILIESISAITIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIILQTSALKPI

VLQEQFVNDGIFQFQKLYFQDQNYSVYFKE

>EAQ72207.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKIISLYKRYSISKKLVLDNEHFIKENKNIYGKKHKGFFDFDEKAKDVKSPLNPWGFIRVKNEALTLR

VSLESILPALQRGIIAYNDCDDGSEELILEFCKQYPNFIAKKYPYKVDLENPKNEENKLYSYYNWAASFI

PLDEWFIKIDVDHYYDAKKLYKSFYRIDQENKALCYPRINFIILNGNIYVQNSGNYGFIGGGDQLLIKRR

NSSFIERRVSKKSQWIDPKGLIEELYSEQQVLSQGVKILQAPLLQWHFPALKYRRNDYQQYLDILSLEEF

QAFHRKSKEAKKIDFAMLKRPVIEQILKKFQGEIK

>EAQ72206.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>EAQ72205.1 RNA polymerase sigma factor rpoD [Campylobacter jejuni subsp. jejuni 81-176]

MNAKTQEAELEELFQENAKDYITYEKLVKYLTKQPSASTAKKVQALMKKHKVQLFSAAEIAQMKNIEDAK

RLQEEKQKLQDTSLENEFDLANENDLLEWSRSDSPVRMYLREMGQIALLNKDEEIEISKKIELGEDIIID

AFCSVPYLIDFILDYKEPLINRERRVKELFKSFDDEEKSDDKLDELDIDEDEENETELESDEENTKKNSK

KEDERTLKVIEKFKALEKAKKDWLKTSKDKESGDELLDKLSIAFKKNILKEKLMDLGPTSKLISEIVKSM

ETALKSDEEFDKELKRLEYRLPMFSDELKKRHADILKDITKLSKEEITERALETTMVSTYMEIKKLFQTK

EASEKSFDLEKSRLKEILEQIKRGKKISDEAKGRMAKSNLRLVVSIAKRYTNRGLPFLDLIQEGNIGLMK

AVDKFEYKRGYKFSTYATWWIRQAISRAIADQARTIRIPIHMIETINQINKIIREHLQKDGKEPDVSVIA

KEVGLSVDKVKQVIKITKEPISLEAPIGNEDDGKFGDFVEDRNSLSPMDHILKDDLKEQIDEVLDQLNDR

EKAVIRMRFGLMDDESDRTLEEIGKELNVTRERVRQIESSAIKKLKHPKVGRKLKNYIEGWK

>EAQ72204.1 cytochrome oxidase maturation protein, cbb3-type [Campylobacter jejuni subsp. jejuni 81-176]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALDKKRLS

>EAQ72203.1 wlaF [Campylobacter jejuni subsp. jejuni 81-176]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>EAQ72202.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKEKVFFKTFGCRTNIYDTELLKSYVKDYEIINDENKAQIIVVNSCTVTNGADSGIKSYVNTMQKKGIKV

ILTGCGAVSKGKELLDKKQVFGVLGASNKDKINEFLGAKTSFYELGNLNFIDKDIVCEYENHTKAFVKIQ

EGCDFACSYCIIPSVRGKSRSVDEKALLKQVEILGANGYSEIVLTGTNIGSYGLKNGTSLGKLLQKMGQI

SGIKRIRLGSLEPAQLDESFLEILDEAWLERHLHIALQHTSEKMLRIMRRRSHTDNDLKLFNTIASKGYA

LGTDFIVAHPGESEELWQEALRNFKEFPLTHIHAFIFSPRNNTHSATMKDVINGTLAKERLNTLKSIVEK

NNYEFRKKNQVSLEVLVENQKDGFFEGYDQFFNKIKIKSNKDIAKEWIVISEYEVQEKSNFVNLKG

>EAQ72200.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176]

MYVIAFGMLFIFDSKISIIISAFIMGFPWGGVFGIALLFIAQKSSNAQIAARLSALAQGFGYLIAAQGQW

IIGFLHDKFENFSFAILMLVFVGILVNIFGYLSYKSQIIK

>EAQ72198.1 single-strand binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNAPQQGGFGNNSFSNNNYSGNYENQSYDPYMSE

NQNFNKAKANPAPQRNQNPQHEEKLKEIDIDAYDSDDTNLPF

>EAQ72197.1 tRNA pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176]

MNKIFAAFKPRGLSSNAFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYTKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKEIKNIKEFDLANLQQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YIDLKPNFIKELNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>EAQ72196.1 surface-exposed lipoprotein [Campylobacter jejuni subsp. jejuni 81-176]

MKKGIFLSIGIAVLFSACGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNADGDFIACL

SPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFEDFKLGEK

VVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLNINLKEDL

LNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVFSSYIATA

KENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKLSINNQDA

TEALKIILPFIMFSMLMGGASF

>EAQ72195.1 C4-dicarboxylate transport protein [Campylobacter jejuni subsp. jejuni 81-176]

METLSQTLAERKPPLYKRIIKSLGFWVIIGIIAGIVLGYIDKELAIASKPGVDYFIGALKVLIGPIIFVT

LVLGIISLESLKKVGSIGAKAVIYFEVVSTLALAIGIFMANVMQPGHGMNLNPSQLDTKSVQKYISQTTE

VSASSEIMHILKDAMPTDIITPFTEGKTIQVLVIAIITALIISLMRTEDKQAIQRVFEVVQNFVFKILQI

IMYFSPIAAFSAMAVLIAQYGIGSLINLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVL

IVFATSSSESALAPLMRKLEKAGLSKATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEIS

ILIVLMIASKGAVGVTGSGFIVLGSTLAALGNMEISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNL

CGNSVAALIVAIWDKQIDWEKFRYAMDNPEKFHNAGMN

>EAQ72194.1 Protein of unknown function, DUF583 superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MAIFNKGGISPTSSSSSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGRFNGTSKIKEDTIKLIENNNEE

>EAQ72192.1 UDP-N-acetylmuramate--alanine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIETI

RTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLATN

LKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>EAQ72191.1 AcrB/AcrD/AcrF family protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKLAINRPITVLMFFLALMIFGLISAFSMSVNLFPNVSIPLIKITSKINGDLNFVESKVTKEIENALSE

IDGVKTITSAAYDNFSVSVVEFKLGKNLEVAANDVRDKIGTLSLPSKPEIEKISSDSGSAISLFLYSKDK

IQLMREINDKIKPFLQRVEGVGKIEAKGFLEPQIRIELKPNELRKYNLNALDVANIIKSQNFKQALGELN

NNQDNYIIKGYFEATNLEELSNLRIKTGVFLSDIANISSLYEDEKQSALYEGKEGVLLELGKITNYNTLE

MIKNVKNALPILEKQIPKDISINMLYDKSLNIHKHLSQVIFDMVLGIFLTLVIVFLFLRNLSATLIACIA

IPTSIISTFFIIDLLGYDLNRLTFIALTLSIGIFIDDAIVVIENIAKKLKTYPPLQAAFLGINEIGFSVL

SISIVLLCVFIPISYMNSISGLFFNALGISVASGIVISFLVSVFLIPSIGARFLNPKENKFYEKTEAFFE

KIEQKYENLLYKILQNKVKFILATLVFIGLSFALATRIGLDFLPMEDDSEIQVLLESKKDLSLEAMKEKS

LNLLEKIKNDSNVKYAFLLVGYDDAKDATKAKIYVKLKNLDERNLRQTAIVSLYRQKFQDESLKIKILEL

PKIEGAGIDDPVQFLILGDDLNTLKEAASQAKEILGTNARIVDISDNANATKDEVALHINKEKAKLLDVN

PQYIAGVLGYSFSQLSVGSMDRGNSKDDIILSFAPEFKKDIEALKRISIKNNQGINLELSSVVDFIYSKD

LKTINRYNKNRSVKITAGVNDLSLGAVQKLLLDNMDKILNNNPSLSYAFSGFINLLGETVQGFAMAVALA

FVLIYLVLAALYESFILPLIIMITMPLAFGGASIGLFITGHNFSLFVLIAIILLFGMVGKNAILLVDVAN

KKCHEGLDPDKALLIAGKSRLRAILMTTFAMIFAMLPLALSRGAGYEANSPMAIAIIFGLISSTLLTLLV

VPALFKFCFKLDSKLRKIYEREKLN

>EAQ72190.1 hippuricase [Campylobacter jejuni subsp. jejuni 81-176]

MNLIPEILDLQGEFEKIRHQIHENPELGFDELYTAKLVAQKLKEFGYEVYEEIGKTGVVGVLKKGNSNKK

IGLRADMDALPLQECTNLPYKSKKENVMHACGHDGHATSLLLAAKYLASQNFNGTLNLYFQPAEEGLGGA

KAMIEDGLFEKFDSDYVFGWHNMPFGSDKKFYLKKGAMMASSDSYSIEVIGRGGHGSAPEKAKDPIYAAS

LLVVALQSIVSRNVDPQNSAVVSIGAFNAGHAFNIIPDIATIKMSVRALDNETRKLTEEKIYKICKGIAQ

ANDIEIKINKNVVAPVTMNNDEAVDFASEVAKELFGEKNCEFNHRPLMASEDFGFFCEMKKCAYAFLENE

NDIYLHNSSYVFNDKLLARAASYYAKLVLKYLK

>EAQ72189.1 uroporphyrinogen-III synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKIYLLNETPFKGVENLILNEIIFYDFSIDLSLYDALICTSKNALKALQNAKITLNFKLNLYAVGQSTAQ

YAKNLGFKKIKIPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNVGVDLDEVIVYENVFKKG

DKKLTHPAIFIFTSPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>EAQ72188.1 translation elongation factor Ts [Campylobacter jejuni subsp. jejuni 81-176]

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQSNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSTEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKAQGKPEKIWDNII

PGKINSFIADNSQLDSKLTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>EAQ72186.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MIPNTNEIAKQTLIALKERKLKPTPENYTEIFEELSLKYGITSSNKAKLDKYKTLLLPIYQQELNSKTIR

SLEELISFLISVLNRQSGKQFSEFFDFLYTISKTLQISKDKKIRDLAKVTSIRISKTMDSESIYLLTKKW

KELERNYDENDLEEQARKYGISKYDDYDSVIKKLLVKLEERSYEHFSELLCLGLNPSLVEDLKIQGFIQN

LTQKPFVIGEENFKNELMEFINHRIMVDNMYVQKNLNFFNDNLKKIYELLVLLNKSNEKNMDFINTLKPD

ENGEVKLSFEDLKLKFKQLGEKITSLNNQIEFTQSLEEREAWSVLKELDKMDENFNKYKVNYSLALFSIV

NYRFIMEKYGMGSLNEIFVRFKKILKDSCSEFDELWMIDEKSYLIVSPGKSKDEITQLVNTNLKTIENFR

FIYKQDIITPKIHVAYLDKQSKPSINILDELIKQIAAVNEQYNES

>EAQ72185.1 PglE [Campylobacter jejuni subsp. jejuni 81-176]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELENSRSNR

WLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>EAQ72184.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEISEKEKEELATLLNSLINAKDKALLSN

>EAQ72183.1 acetyltransferase, gnat family [Campylobacter jejuni subsp. jejuni 81-176]

MKEIKLKEDLEKIYPLIKQLRNNLSLKDFLDKIQLATQTQHYKLFAYENEGSYKAACGVMPFNVLYHNHC

LYICDFVVDEALRGKGIGQAFLKKIQIWAKDQGYEELELSSSFFRTQAHEFYIQKMGFEKSGFVFKKNIK

L

>EAQ72182.1 cell division protein FtsH [Campylobacter jejuni subsp. jejuni 81-176]

MNNNTPNNKGNLQGNNFFNKNPIFIFAIFAIVMIIIFKGFFDGNGSFGGALNGNEVNKNVPYSELKKLIE

SGQINQVSIGQTTIKAISSSHNTVYTAKKVNDPELVSLLDSKNIAYGAYSETNWFTDILFSWVLPVFIFF

GIWMFLASRMQKNMGSSILGIGSSKKLVNSEKPKVKFSDVAGVEEAKEEVKEIVDFLKYPERYIKLGAKI

PKGLLLVGPPGTGKTLLAKAVAGEADVPFFSVSGSSFIEMFVGVGASRVRDLFENAKKEAPAIVFIDEID

AIGKSRAASGMMGGNDEREQTLNQLLAEMDGFGTESSPVIVLAATNRPEVLDAALLRPGRFDRQVLVDKP

DFKGRCDILKVHMKDVKISPKVKVEDIARLTAGLAGADLANIINEAALLAGRDSKKYVEQNDLVEAVERA

IAGLEKKSRRINEKEKKIVTYHECGHALIAETTKGAKRVSKVSVIPRGLAALGYTLNTPEENKFLMQKHE

LIAEVDVLLGGRAAEEVFIGEISTGASNDLERATDIIKAMISMYGMSEIAGLMVLEKQRNTFLSGGQTIK

DYSEKMAESLDDYVKKTLDERYKDVKDTLNTYKGAIETMVAALYEEETIEGNKVREIIKEFEDQNSLPTR

LQELEEVKTEVKVEE

>EAQ72181.1 cytochrome c family protein [Campylobacter jejuni subsp. jejuni 81-176]

MIIRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDM

SPEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHN

IFLK

>EAQ72180.1 DNA polymerase III, gamma/tau subunits [Campylobacter jejuni subsp. jejuni 81-176]

MLQALAIKYRPKTFDELIGQKTVSVSLKYALNHNRLAHAYLFSGLRGSGKTSSARIFSRALVCEQGPSDT

PCGTCKHCLAALEGKHIDIIEMDAASNRGLEDIQALIEQTKYTPSMARFKIFIIDEVHMLTPQAANALLK

TLEEPPSYVKFILATTDPLKLPATVLSRTQHFRFKQIPQSEILNHLKEILLKENVKFEEEALKFIARSGN

GSLRDTLTLLDQAIIFCQNEISISKITDMLGFLDPQKIKAFYQAILTKDKEKVFAYLEELQDYEASNVID

EMLFYLKESFFAKSTEFSILIYERFFRILSKAKNMLCDDDGFTLCVMAFMMMEASHLKEIDAQIQEIKQE

NTTNITPRITPAPIIPNLEKKIEKNAYEILLDSIYDRDFDLAECFKQSTKFISFENNTLNISSNAQGQNR

DTLNKGFKLIQELFKTKFGENAKINVQKALTIDENKLQSLTQELPNNENKNIDIQSSINMLKEGAKKFDP

QEDLKEALKDCFGEPSIEN

>EAQ72179.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFSQISDACVKCGKCIPVCTIHEENRDEITSPRGFLDLLAAYKEGSLELDKEAKKVFESCFLCTNCVEV

CPSKLRVDNAIEEVRYDIAKKFGIAWYKKLIFFFLRRRKILDLVAKLGYVFQSCAFKIQNENENTGMKAR

FSMPFVKKGRLLTSFNKKSFLNSNPKFINNDGEKTIGFFVGCLANYFYIDTANAVLKIAKELKINVDLMK

EQVCCGAPQFFTGDFKSVEVLAKKNIEYFEKKLEKLDAIIVPEATCSAMLKIDYEHFFIMQNDLDWAKRA

KCVSSKIYMASEYFYKFTSLEEILKTKNKFNYSITYHDPCHARKMQGVFKEPRELLKTNYHFVEMSNSNT

CCGFGGVSMQTDYYDRALSVGLKKAQMIDESKASVVSAECSACRMQISNALEQNSSKVVFVSPLELIVKA

L

>EAQ72178.1 5-methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>EAQ72177.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176]

MGLIIDIIKDKYYLNSTVAGILTSLPLIAFGSISFIVGYFSPIRAIVFGIFLIFLGEIIRSYFGIYGLFL

GMLAMGCGIAIANVLLPSFIKEKFPKKMASIMGIYSLVLSISSIMGIALAIPLLSVFDLAGAMFFWVIFS

FVALVVYYPQAKNGRFFRI

>EAQ72176.1 peptidase [Campylobacter jejuni subsp. jejuni 81-176]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYTLDANEFLQALKDYENLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIMLYLSNTGANAFSRLFDESMSALKIPFEGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFNLVSQFYKRKKQILGYELKDYD

RYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFVL

LNYTNKRRDLFTLAHELGHTIHQKLSYHVSYLNQNTPLTTAETASVFAEMLVFDFIKDKLKKEELLSLYA

NKIEDIFATFYRQINFTCFERRLHAQENELSTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIHS

PFYCYAYAYAQLLVLALYGLYKSKKCENFKELYIKMLSLGGSVSPKELVGMFGFDIEDENFWEIGIKEIQ

KLINEFMELQSC

>EAQ72175.1 UDP-glucose 4-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETSPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>EAQ72174.1 queuine tRNA-ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>EAQ72173.1 Thiazole biosynthesis protein ThiG [Campylobacter jejuni subsp. jejuni 81-176]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>EAQ72172.1 ATP-dependent DNA helicase pcrA [Campylobacter jejuni subsp. jejuni 81-176]

MNLFEDLNDSQKQAVSHIDGAMLILAGAGSGKTKTITTRLAYLIGEVGIPSHNTLTLTFTNKAANVMRHR

ALNFLQGNHNPLLCTFHKFGLLFLKLHFERLERKNSFIVIDTDDTKKIIKDLIHDKNKDNVYDIIQYISY

CKNEGKRVSNVFEDLNLLKEHNFEKYQNEYKFANYYRAYEEYLLKQNFVDFDDLLLLSNLILENDINFAK

EQSLLYNYITVDEYQDTNTLQYKILKNLCCMHENITVVGDDDQSIYSWRGAKIENILNFQNDFKNVKLVK

LEQNYRSVGTILQAANNLISHNEQRLGKTLICTKDTGENIKILKNENEKDEGLYIAQEVKKLLNSGVEAK

EIAILFRVNALSRAIEEAFMKKQISYKLLSGMRFYERLEIKDLISYLRLILNPSDDLSFKRIINRPKRSI

GEKALKNLEEYAKKRQISLFDALCESDGGVGILTTKKAQNEANIFIQNIHTLKSYDNAKKVFDNIEELFK

IKDYFSEQDDGDERIRNLDEFYANLREKLKEDPEASLEDLLSEISLLSDQDNLDEECVCLMSIHASKGLE

FDYVFIIGFDEGFFPLNSEENLEEERRLAYVAITRAKKLLTISVANSRFYHGSRANINPSRFLEESKLIN

EKSKNQNIQKTSFCKGDLVKHKIFGIGRVVEVNKSGKEEKLNINFGGIMRVIMASFVEKAV

>EAQ72171.1 alpha-2,3-sialyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>EAQ72170.1 phosphate transporter family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKDNLIAFVIFIISTIAFVIWGFGYISQHQLILFILASIFGIFMAFNIGGNDVANSFGTSVGAKTVTIK

QALIIAAVFELSGAIFAGAEVTKTIRSGIVIFPNSLDPMLFVIIMLAALLSSGVWIFIATKKGLPVSTTH

SIVGGIVGASIMMGLLKFDGIQTLSMVKWSEILRIAISWVASPLLGGIVAYIIYSYIDKKILKPSEKLND

DLKNIKKERKKFKEEYFLNLKTKSQEEQIKELSAIALDEEEQENNFYRNKMKEFKDQEKDIDIYSILKTH

MPIIACIAAAIISAMFLFKGLNNVSTLDILQNFWIIGIIGTISYVITFAIVKIVKKTELNKTTDRIFSWF

QIFTASSFAFSHGANDIANAIGPFAAILDVLKNGTINATSPVPFAALAMFGVALVVGLWFLGKEVITTVG

SKLATIRPTTGFSAELGASIVILLATQFGIPVSSTHILIGAILGIGVYNKNANWIMMKPIGLAWIITLPA

AGIMAALVFLGFKLSLGI

>EAQ72169.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSVRVKDTNGKLKNLATLLNKGACALELDSSLD

ANTLKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

IFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFDEAAFGIHSVCEFISLCYTFLIKEGFLNWQELCRFTSKNPSEFLGLNSGVIEVGKE

ANLVLFDENEEIFAPKSSLYSEDKLFGKIKMHIIKGKNILEK

>EAQ72168.1 isoleucyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MDYKETLFLPSTTFAMRANLAELEPQRFKKWFEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKDLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDVKACEKLGVSKASAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

SGCYDETLRAKGLLPSHLLEEFIGLHIFKANEKILELLGEKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIGSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFDFVAAIFEKHGADAWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNAVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIASEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVKEFSFIDKWILSRATKVF

KASKEAFFAYEFAKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALMAKELLNLLAPN

LSYSVDEALEHANVLIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDILKKDKIIKSTLELN

LNISFNKFPNEELADWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKLQSKNEETPCLRCEE

VLKGVQC

>EAQ72166.1 beta-1,3-galactosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MAEDVLLYYPMLSQAQKIAYMNCNLYHYVPNNNSICNTKNEVLVKNNIQELQLVLNYLRQNYILNKYCSV

LYVLIKYLLYIQIYKIKRTKLMVTLLAKINILTLKILFKYKKFLKQC

>EAQ72165.1 thiamine-phosphate pyrophosphorylase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MWDKKIIAISDRKCVQIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLTKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKMGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINVVGVCMREILMKEKDLKKYLLECRQNLR

>EAQ72164.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>EAQ72163.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKIHNENLFSHLGFKDIEKCVFMDQIHSHKVIIYEKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHENGIIAALHSGRKGSFENILKECVDQITMQNSHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFKEFVQDNKLDLKALVKFQAQNLGIENIKDCGICSFDDESFFSYR

RDKTPKRFVSVVYLKD

>EAQ72162.1 lipopolysaccharide heptosyltransferase I [Campylobacter jejuni subsp. jejuni 81-176]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FMLNTDFNAKNLAFKQDVFSVDENLKQLLNNKLKLDKNEKNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQTKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFNLEELMAFTKMMDLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDTGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>EAQ72161.1 GTP cyclohydrolase II [Campylobacter jejuni subsp. jejuni 81-176]

MKIKISEIANLPSKWGNFQIQSFKENDKEHLCIFKNTPKDTLNLRIHSECLTGDALGSLKCDCGEQLEFS

LKYIEKNGGMVIYLRQEGRGIGLFNKVNAYALQDKGFDTIKANHQLGFKADERTYEIVEFILKHYEISKV

NLLTNNPEKLDSIKEKIITRIPILIEPNRFNVEYLNIKQTQMGHLK

>EAQ72160.1 apolipoprotein N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKLKLNFLPYFSFIPKKLNTNSIIFKIIKVFFIAILLSNSIYLSFFENIFTQTISPFLAIWGLVLLLKSK

NSKQYFWIGFFVGILWFWWIGLSSIYFNLNYLVPIIPIIIGFIYGLLFRLCYLLKFDFLRLCGIFCISFI

HPLGFDWLNWGIFTVYGFFDPSYRGIICIFLIAYFIYEGYISRYYKIAIVLILFFSGFQYNEKQAQTLNL

NYKLINTNISQDQKFLQENLKSNSDILIQDILQAINEKKELVILPETAFAFDLKNTKYELMLKELSYKIT

IITGAFHVEKEHTYNSTYIFKKGNVYILNKHFLVPFGEEIPFFKDLTKKYFLKNIEEFSKGPIQSKYKLD

NQIITNAICYEATKEQNYQNSQIIIALSNNAWFNNSSEYKLQQLLMKFYASKYGVSVYHATNGKENIVIL

PKKLLSKDWKNLSKEIFNDKK

>EAQ72159.1 membrane fusion protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFLLLVFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVSKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSRMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYNNIMAKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVRLGDDFFYKIDQNGTELKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>EAQ72158.1 sodium/dicarboxylate symporter [Campylobacter jejuni subsp. jejuni 81-176]

MFSKIIQSYAKGNLIVQICIGIVLGILIGISSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGAKIKNIIILYIVGTFLASACAVLANFFFPVKLVLDGVQTATNSSPTHMSEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGIALKHCSNEAKQVFIDINEGVLKIVKFIVKLAPFGIFGLVANSVAQTGAQGL

LSYVKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAACGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>EAQ72157.1 aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>EAQ72156.1 lipopolysaccharide heptosyltransferase II [Campylobacter jejuni subsp. jejuni 81-176]

MKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTALFKEFPNSKIIIENKQSRYKQALSLRK

ELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLSIKAHFKDLKLPFKLK

FQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSHEILIFGAGKAEQELCNEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENAKLVHLDL

ACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>EAQ72155.1 50 kDa outer membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKTKFSLILSACLLSSSLFAKNADDEITKLQKQLAQIQAELAQIRKEREAQAKQNEAVKAELADLNDRAD

ETEFQAALSKVKFGLEFSTAVSNTNYKVSGQDYSANNKWMNELHLNMNADINDKTKFYGRLSMAKNWSQM

DWSGSPYDLDAGRNTRSSGPVLYVDRAYLDYYITPEWIATIGRQPGTDGPGSNLRNNALRQSTYPALAIN

ALGDAAVITYKPESLQDHKVAIRAAYGKTYQWDEEGKVRDWMSDQKDADANLYYAAVEGELPIEGMGDNL

IIFNVAHMTDFALPLPSIPSILNQGVYNLGDLTLANIHFENYNAFGTNFNYFVSLGYSNGANAHTLSANP

VAQSQLEFNEKDGYAVHVGGRYDFTKALKVGYEFFWGSRYWYTMSRPSINDPLNIRMTRGTAHDFYVIYQ

LDRYQFLRLSYTNIQNIWGNRGIPFGGAKKDKARADNIMLMYNVKF

>EAQ72154.1 ornithine carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKHFLTLRDFSKEEILSLVNHASELKKEPKKLLQDKTLAMIFEKNSTRTRMAFELAITELGGKALFLSSN

DLQLSRGEPVKDTARVIGAMVDFVMMRVNKHETLLEFARYSKAPVINALSELYHPTQVLGDLLTIKEWNK

MQNGIAKVAFIGDSNNMCNSWLIAAAILGFEFSIAIPKNYKISPEIWEFAMKQALISGAKISLSHDKFEA

LKDKDVVITDTWVSMGEENEKERKIKEFEGFMIDEKAMSVANKDAILLHCLPAYRGYEVSEEIFEKHADV

IFEEARNRLYVVKALLCFLDNQRGRE

>EAQ72153.1 nitroreductase [Campylobacter jejuni subsp. jejuni 81-176]

MKKELEIFSTRYSCRNFKNEKLKKEDLNSILEIARLSPSSLGLEPWKFIVVQDEKRKEELSKICNQQKHV

KDCAALIIIISRLDFLDYFEEKLRKRDMSETEMQKRLDTYMPFLKSLNQEQKISYAREQAHIALASILYS

ANALNIASCTIGGFDKEKLDSYLSLDIQKERSSLVVALGYCNDKKNPQKNRFSFDEVVKFI

>EAQ72152.1 rhomboid family protein [Campylobacter jejuni subsp. jejuni 81-176]

MLTIFLIFLNILCYFLISYDYYNILGLNILFFNGAYWQLLSSMFLHGNLTHLILNMIVLFQFGRILETYL

GALRFIFIYFIGGLLCSLLSVFYVYFDFKYFGENINVIGASGAICVLMGFYAVLDKNSTKGLIVAILLMS

FAPLLMGVNVAWYGHIFGFMCGYILAKIKEVK

>EAQ72151.1 thermonuclease family protein [Campylobacter jejuni subsp. jejuni 81-176]

MRINYKKIFNLRKLLSDPKKLFSVLIFTLVVVFIQNYIAQNSSFEGKVVRIIDGDTIEVNHENKLARIRF

FGIDAPELKQSFGKQSKEALSRILSGKQVEIIYKNKDTYGRIVAIVKLNDVDINRFLVSKGYAWADTYYS

NAYIKEQENAKKNHLGLWKESNPIEPYKWRKHNKF

>EAQ72149.1 oxidoreductase, 2OG-Fe(II) oxygenase family [Campylobacter jejuni subsp. jejuni 81-176]

MNLPILDLQAYEKDKSTFLKNLREIASKIGFFYLINTSIDKNLNEKLFKLGKEFFNLSRSSKELISMVHS

PQFRGYTSEGFEYTAGTKDYREQLDIGTERDALNWNLNSPLWQRLEGPNLWPSEIPELKKTFLTWHKQTK

KACLKLLKAFAQVLDLPSNAFDKLYGENSYEHCKIIHYPKSSKNITQGVGSHKDGGLITFVFQEKQSGLE

AFIDGKWLSIPPLENSVVVNIGEFLELATNGYLKATIHRVNLSPKERFSIAYFLGVQLDKDIPIFKLNPE

LAKESKGVDTDPKNPLLRNVASNYFKRMIRSHPDVASIYHSDLIEKFSFA

>EAQ72148.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MEKPDIQRLTNFLIVYTKTLLGAGTYTARVAKCVGRIAEVYGYEININFFFHHITLNVVDMDDNSIQRTY

VIPNHHAHVNFKLIFDLSALSWAMYDHKYDLEKAKVVFEQISQQKKHSYLLNLLFVSMANSAFCRLFGGD

FGAGNLVFFATFVGLLLRYILTKAKIDLRIQYILCSFISSWFVFFGLDMGYTNTSDVALGSSILYLIPGV

FFINSVIDILKDHILMGLSRIISVAILICCIALGIYMTLSISDFGILR

>EAQ72147.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILVSVLSSCLLASALSAVSFKEDSLKVSFEGYKTKDMIGTKGEFKNVEYNFSKNIKDLASYLKGAKA

TIKPSNAFMGEGNDIITNNITKVFFPALLGDTDIKVVFQDVIAGENKGVISAKITMDKKSTIVPLTYTIK

DNKFEAKGQLDLHTFKNGSKALKALSDVAAGHGGISWPLVDISFNANLAE

>EAQ72146.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLCPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>EAQ72145.1 chemotaxis protein cheY [Campylobacter jejuni subsp. jejuni 81-176]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>EAQ72144.1 DnaJ domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLIFEQNNMLKPMLFIKIDFVAGRILMKLSSNEKLFITYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>EAQ72143.1 thiredoxin [Campylobacter jejuni subsp. jejuni 81-176]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGGSISVKKENTVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LAKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>EAQ72142.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>EAQ72141.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFYGVIAFVVVLLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLQGALSPFKLGFDLDYLISLKQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGRGYLLGSNVLLNAR

MYNYSPVALNLDAQNLKIEEILHLLSYPSYAKGFLNAQAKISAQNLKPDGNIIIKLDTSYINYEAIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDMSKNILSTDFNLNIPSLAKLEKLTKT

RLNGSLGVIGETSVVNNALSSLNAQVIGLGGEVKASLKNNKIFADINEASLEKLLALAGYGALVSGNLNA

KLLNADLDFSNFDLEAKINNAKINTNELKKIAKIGLPNTIFSLDAKANAKNSNISYNALLASNLLNIKKL

QGTYNLKNSELNTDLNAFIDDLSQFSAIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVIAGMPNYASGVVNAKVNLDNIDFNNLNGKANLEAKGILNAATLSKILNKNFPN

NISYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDISKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKNLNFVVNSPNLFEGRLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKTDVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDITNDVYRTANAKALIKKENIKLDLNMQADRSYILVQSGA

LNSKSGALNLPFDIKLDRANFKGSITGTTENPKVNLNAGSVLNSIKNVVGGGVSDGAKSTGDKVDKAVNK

LLNKIF

>EAQ72140.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKGIFLLVFLSVFFSACSTKNDEGLYNLSASEWYKQIIKDLQDKDLEKADDHYNGMASEHVADPLLETT

LIILAQAHMDEEEYKLAEFYLDEYNKKFGNSRNADYIRYLKIKAKFDAFAVPNRNQALMLESQKEIDTFL

KDYPYTEYEPLVQTMLTKFNLAVFYLNSTIENLYQRIGHDESAQIYKQRLQESEFYQQSIIKPELPWYRS

IFERF

>EAQ72139.1 PglG [Campylobacter jejuni subsp. jejuni 81-176]

MYIKDIHRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQDEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMVYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>EAQ72138.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDFLDSLKSIKKEMQANTNTSKLAKKSSKSGASVKNLEKLAKDIREKNQETNIDKEMQEIFLKQEKLQDE

FSEFIKNTDIKKI

>EAQ72137.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKILFASLLPIIALADCASLMAKYEAPEPESKTMKQVERWINKKVSDPADAAVLKECMIARAADNPNQV

SVAGK

>EAQ72136.1 DedA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGVLSSQGKMDLSFCITLAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKIALAMIKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFIKFFIINTLASLAWAIVLG

FTAYTFGYVIEAIFDKLSLYPYAAPLFLLFLAGIIWLYLSKFSKK

>EAQ72134.1 DNA repair protein RadA [Campylobacter jejuni subsp. jejuni 81-176]

MAKNKALFECQACGNQQSKWLGKCPDCGAWDSFVELKAERIKVLKELAQVSMKTSEAVCIEDVELEHFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQGKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTAKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLGIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

IPSKPLEDIGLKCFVAKELSQVLEWM

>EAQ72133.1 WaaV [Campylobacter jejuni subsp. jejuni 81-176]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>EAQ72132.1 quaternary ammonium compound-resistance protein qacC [Campylobacter jejuni subsp. jejuni 81-176]

MYIFIIVLSALLDIVANLLLKKSDGFKNKIWGLAAIVNAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIIIVIIAVFLLNY

>EAQ72131.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MSHIFLVIFCAALALLLFLGMIAYLITSDGKKTIKKQKTSQKQHVTEKTKKFDTDLDKMIIAASDVKLTD

IELKELAKLYVQTHKLGSKTSKELDEATKKKLEFVSALAANINASAQTVSYLNKELKKISGSYKKEIDAY

EHMGLAKRKIKEDK

>EAQ72129.1 high affinity branched-chain amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MDSTLFLQQLVNGLSLGSMYALIAVGYTMVYGVLRLINFAHGDIMMVGAYAALFCMTNLNVPFLGALSLA

MIFAACVGIATDRIAYKPLRQAPRISLLITAIGISFFLQNLFNILFTSTPRTFTPPSYFEESVNFGGVIT

TYGSLMVPALTFVILIAVLWILYKSKYGIAIRALAFDIQTVNLMGIDANRIIAIVFALGSALAAVGGVFW

AANYYSVEPTMGTLIGLKAFAAAVLGGIGSVVGAVLGGLIIGFTEVVVVAFFPDLSGFKDAFAFIFLVFI

LLFRPTGILGINFEKSRF

>EAQ72128.1 Protein of unknown function (DUF535) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MNKKFSYPIPNFTDRRKSIIFWRYLRFQARKILYFPQVRLLEKTLNEEKNKHLKDFFSQRPYACYNAIRR

FCDKSFKANERVKTLIYDVDKGLTCFKFLPEEQMIFSFDEDFELFLGYNHNVYEEGFWAFSLKFKKYTIS

QCNFCFTLENNLLLSCIQGYKYKDFNILEINKILTKKCHGLRPVALLIECSKMLCEILKLQATLGVHEKN

QIRSQKGKEKGYFVDYQKIWLENGGELIKIDKHKYYKLHHSQKNLEEIPSQKRSMYKKRFAMLEEIKVNL

DKTLDIQD

>EAQ72127.1 DedA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MQEIISFVVETASAWGYLGIIILMTLESCFIPFPSEVVMIPAGYLAHKGELDITLCILSGTLGSVLGALI

NYYICFFWGKNFVLKWGKYFGINEAKFAKFEEFFNKHGEFSTFTCRLLPGIRQYISMPAGLVKMKLVNFI

LFTALGSAIWVAILVFLGYYIGQNEELIKTYLTQILIIIIVFVILASLIYIKIKKPFKKA

>EAQ72126.1 high affinity branched-chain amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MMVRIKVSHLIFLIASIVFIFVSPYIFGDYGLNIVNQIAIFIILAVSYNLINGVTGQFSLEPNGFVAIGA

YAAALVLLSADAKNDQFFLDGPSSFILAIHSNSFILALIVAGICSSLLALILAFAVFRVRGDYLAIVTLG

FGIIIKIAAINFPSITNGSRGLVDIPQFSTIYWTGGIAIVAVILILNIVYSKYGRAMKAIRDDEDAASAM

GINTFWIKTLAFSTSAFLEGVGGGLLACLLTTVSPTQFDFLLTFQLLIIIVLGGLGSTTGAIIGAILVIG

GSEWLRFLDELNIKIDSLNLDIQSMPGLRMVVFSIVLILVMLFARKGIMGYYELSDVIRGIKKRFKRSEK

>EAQ72125.1 outer membrane liproprotein mapA precursor [Campylobacter jejuni subsp. jejuni 81-176]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPGGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEEQKVLNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDAIGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>EAQ72124.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKKYTLMILLALGISGCFVNERGISNRFYDDCKEYYDGSGTYHKDCPKNWVDIKMTP

>EAQ72123.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MIEFILRDMFFAAVAGFGFAYACNPPLKTLILSALLAAIAHGLRFTLVEYFHFQTLAIATFVASFCIGCL

GIALAKIIKTPAEIIAFPALIPMIPGIYAYKAILYLISFIRSDDLKAKSEFLVQFFDYFFTTVSVTLALA

IGVSVTLLIFFEQSFMMTRHAKKH

>EAQ72121.1 membrane-associated zinc metalloprotease, putative [Campylobacter jejuni subsp. jejuni 81-176]

MRSLLLLIVILILGIKFYSIEFLATVLVISFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIGNIAPNSAAQEIGLQKNDTILEINGVKIQSFDEISKHLSLEPLKILIDREGKNLEFTLTPKIGQG

YNDFGQIVEKPQLGVSPNGTSTLVKHQGLESFKYAIQESFQASTLIIKGIIKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRRKVPQRAFEYLSYAGMAIL

LSLMLFATYNDISRIAGE

>EAQ72120.1 component of Sec-independent protein secretion pathway TatA [Campylobacter jejuni subsp. jejuni 81-176]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>EAQ72119.1 aerotaxis receptor [Campylobacter jejuni subsp. jejuni 81-176]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYTMGEVLNKPHNIVRHEEMPKTVFKYLWDYMKEGK

EIFAYVKNKTKDNNYYWVFANVTPSIDVNNNIIGYYSVRRMPNKSAISTIESLYSDLLRAEQQQGLNKGV

EMLKNFCKDADKTYNELIFSLQEAK

>EAQ72118.1 ABC-type transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKKLFFILSKEDKNFLFFLLIFSVFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHAIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLVSEIFVVLLLYALMLLINYKITLFLSVFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKLKTKEDGVLSLFKAQSEAFSKANITNESVTAVPRIYLEGIGFCVLVFIVVFLVL

KNESDISGILSTISIFVLALYRLMPSANRIITSYHDLLYYHSSLDIIYQNLRQEEENLGEEKLSFNQELK

ICNLSFGYEGKKYLFKNLNLNIKKGEKIAFIGESGCGKSTLVDLIIGLLKPKEGQILLDKQELNANNAKN

YRQKIGYIPQNIYLFNDSIAKNITFGDAVDEEKLNRVIKQANLEHFIKNLPQGVQTKVGDGGSNLSGGQK

QRIAIARALYLEPEILVLDEATSALDTQSEAKIMDEIYKISKDKTMIIIAHRLSTITQCDKVYRLEHGKL

KEEK

>EAQ72117.1 GTP-binding protein LepA [Campylobacter jejuni subsp. jejuni 81-176]

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>EAQ72116.1 3-dehydroquinate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDSILDFIEKIDEKSFLNATCENEIFTQI

IARSIELKSRVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQKIKDILLKFGLPISYKINNVDEFYEAFFMDKKSSNKKINFVLASPLGKGFIKGDISKEDIIATLREF

Q

>EAQ72115.1 phosphomethylpyrimidine kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFYAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>EAQ72114.1 copper-translocating P-type ATPase [Campylobacter jejuni subsp. jejuni 81-176]

MEELRIKIGKMTCVNCSNAIERACRKIDGVKDASVSYVNSSGVFLLENQEKRKDIIAKIQNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLKIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

AVVLNGALRIKANKKAMDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFVFWVLKADL

NTAFLHSCAVLLISCPCALGLATPIALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLN

IFKHNLSKDDFDKLCQIESLSSHPVAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAKFLHENE

IDTKESDVFFDTFKEYVRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIA

KELQIDEFYAQLKSEEKLQIIQKFKKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPIAAGFVPFITLSPHIAALAMCFSSITVVFNSLRLKRI

>EAQ72113.1 wlaH [Campylobacter jejuni subsp. jejuni 81-176]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>EAQ72112.1 leucyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEFFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVAQKKMPGYYVKITAYAEELLKDLEELKDK

WPNQVLTMQENWIGKSEGLEFSLNLDEESKQKTKESSLEVFTTRADTIYGVSYIALAPEHKIVQNLLSQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFILADYGSGAVMAVPAHDER

DFEFATKYNLAIKQVIQTQENLPYTQKSGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIVPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFILFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNVKKGELVELKQENLNKEEKYARLKVYEALKKSFEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFEISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>EAQ72111.1 bifunctional protein hldE [Campylobacter jejuni subsp. jejuni 81-176]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>EAQ72109.1 protein-export membrane protein SecD [Campylobacter jejuni subsp. jejuni 81-176]

MRNSKINYRLIIFIAVFIFGVAFSLPSFLQSERGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEAASYGLILVPDSRNPNLKYTLKSIPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>EAQ72108.1 ATP-dependent Clp protease ATP-binding subunit clpA [Campylobacter jejuni subsp. jejuni 81-176]

MKYQENLQKYLDNAKNLSLINHHEFVTCEHVLFALLKLSTDFKDIFEEFSDGDLELLETELKNYISQNNQ

VIKQEIEPTISVVLDEILLSSKNKNNEIKIIDFLEKLIQDSRSYSSYLLKKHNINLNKIQELQNHENIQN

LSNHTSDLTLLAQNGKIDPLIGRKFELERMMQILSRRKKNNPILIGEAGVGKTAIVEGLALAIAKKKVPK

NLQNAKIFSLDMASILAGTKYRGDFEKRIKEILNELEKIPNAILFIDEIHTIVGAGSTGESHTDFSNLLK

PALSNGTLKCIGATTFMEYKNTFDKNKPLSRRFAKINVDEPSQEESLQILKGLKNKYEEFHHIKLNDEIL

QYAVIWGKKFFNDKFLPDCAIDLIDELGASFALNPKAKKNVNLKDLENVLAKMTHHHKMFEFDQNKALMN

LKTNLKAKIFGQDEVIDSLVSSLKQSFAGFKNSNTPRGVFLFTGSSGVGKTELCKSLAEFLGLNLERFDM

SEYAEKHAISKLIGSPAGYIGFEEGGLLSNAIRKNPFSLVLFDEIEKAHPDLSNTFLQIFDNAELTDNSG

LKVDFKNTIIIMTSNLGLKESNELGFLSKNEEKSNRAIKDFFAPEFINRIDKILHFNDLNDTILVKIIEK

ELDEISKNLNNIKLSVDDKAKIYLAKKAYNKEFGVRLLKRIISEEIGEKISDEILFGKLKKGGIAKIKLG

KNGKLEFIF

>EAQ72107.1 acetoacetate metabolism regulatory protein atoC [Campylobacter jejuni subsp. jejuni 81-176]

MNLVIVEDDINMRKSLEIALAEYEEFNIKSYKSATEALKKIDDNTDLIITDINMPGIDGIEFVKACENKY

DFIIMTGNATLSRAIEAVRLGVKDFLTKPFDVDTLVEAIKRAKIIREKTANKKSKKNEKKEENKDFFSTS

PNLEKTLNLSQKAAKTDASVMFFGESGVGKEVFSRYIHTHSKRSNKPFVAINMAAIPANLIESELFGFEK

GAFTDANATKIGLFEMANEGTLFLDEIGEMPYEIQAKLLRALQEKEITRLGSTKSIKIDVRIISATNANL

DEKIKNGEFRSDLYYRLNTVPVNIPPLRERKEEILGIAQKVLEDTCKEYDFKEKQLSQEAKNALLEYDFP

GNIRELISVVQRACILSENDEISSEDLFLEARSIKKDVKNLEKELICEVLLSVDYDKDQASQILGMDIKI

LNEKIKKYQIKDR

>EAQ72106.1 DNA gyrase, A subunit [Campylobacter jejuni subsp. jejuni 81-176]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDSKDASLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARARAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSVGVRAINLDENDELVTAIIVQRDEDEIFATGGEENLENQEIENLDDENLENEESVSTQGKMLFAV

TKKGMCIKFPLAKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSISAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>EAQ72105.1 ribosomal protein S18 [Campylobacter jejuni subsp. jejuni 81-176]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>EAQ72104.1 thioredoxin domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILTLFLISLAFFLNACSKEEEIQNDFMFEEYHKGDKIVLNSVNGGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIIGLTHFEDVSDETVKKFADDYGAYYFLSNGGSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>EAQ72103.1 flagellar biosynthetic protein FliR [Campylobacter jejuni subsp. jejuni 81-176]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITSQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNMGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>EAQ72102.1 arsenical pump membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MLAFFIFLSTLVLLFWRPWNLPIWVFSSLGAFFVFIFQLVDFKDACFVFSLVWDSSLTLVGLIILSFSLE

ALGFFDFIASKILYFSREKNQEKIYISTKKMMLFLLIFVFFLSAFFANDGAILIITPIIIALFSTLKDCK

NHAFILSSFLLSLSFLCDASSNALVISNLTNIITANYFKIEFLEFAKNMFLPNFFVLLSTIVTVFVLYVR

VLPKRLEFKLIKKEQISLKLFFLCIVFLFLFVISFFIGEIFNIKISFFALLWAGIFWLIILKIQGKKSIK

ILFEAPYGVLLFSFGLYMVVFALHKIGVSEILVKSYAFLMQDKSGIFGVALISAFGSSVFNNLPMVLIGD

LALKEYFENFSFDSLMIYAHLLGVNIGPKLTPIGSLATLLWLGVLARKGINISFWQYCKFGFLITLPVLV

FSLFALIV

>EAQ72101.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MKEIVLSENALITSKTDLKGNIIYANNDFLKYAGYKVDELLYKSHNIVRHEDMPRTVFKCLWDYIQKGDE

IFAFVKNKAKDGNFYWVFANVSASFDTNGNIINYYSVRRAPNRKSLSIIEEVYKILLEKEQKSGINAGVS

ALMDIVSSYKMTYNELIFNLQENN

>EAQ72100.1 Protein of unknown function (DUF1698) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MQENLLEKQFLNHPLYTKIQELKALNLTCNFSLDDSVNLSTNSQAKDEILAITKELKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMNEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPSYSLKFDVIFCLGVIYHRSDPVKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>EAQ72099.1 pyrroline-5-carboxylate reductase [Campylobacter jejuni subsp. jejuni 81-176]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALAKEGFKTLLYKDFNIEGKDVILAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIIPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEIQMNAAMAISGCAPAFLALIAESIANAGVYEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSAK

>EAQ72098.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MRKILLQIFIFSVLFIVTFAINRILMQNSFIPTGLISDKNEIFLMYLLGVFHDIRFLSAAFLPFLLCGFL

SLIFSNIKINNKLVIYSKNFYFIFSSVYIIVLSCLCIGFSYVKYYYYEIYKTKFDIFMFTLKDDNTKTIL

SIIYHDYPILKILALMLIFGVFVFFLNLKILNLKLKPVNLRLFPLIALNLILIIVYVIALRGPFKHVAIN

VQNYSFSEYSVVNDTMLNPIMAFSWALKQYKEEAALKVITPLKAQELKEKLFDYLHQSPINLKAEKNHPS

VFVNLMESFGLNLADFTNTEHNFLGSLDKHFKQDFLFKRFLSSSNGTIPSFANLFFVSPFSNISTSKFQK

TYLDLTPIAVYKKAGYKVIFVSAGNGSWQNIKNYLSILGVDEIIDENILMKEYNGAKDSENGYGIADEFL

YKKVYDLLQKNPHKTLIIALTISNHPPYKIPQNDLPKLQNIPQTLLNMLPYEKDKQDNIIKAYTYANNEF

GKFLDKVKQSPFKNSVIIAATGDHRVREMSMDLNSQKAFAYSVPFYLYIPKDLQDNIYYDKDRVGSHKDI

FPTLYALSLNNVKYLSVGGRNMLARPSDEKLEFGINDAVWIDKKGIYSGGKGYYFESNDTLKDMNKAFNL

DGYTKDFDKFYRELNLYQLAERLGISK

>EAQ72097.1 DNA mismatch repair protein [Campylobacter jejuni subsp. jejuni 81-176]

MNDTKEELISKLDLNSYLEEFKALFARDKEIFLQGDSNLHFKRIHELCEVEFPTMPELSNLDKALVHLSK

QGILHLDEIFEFVKIFRYFEKLKKLKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDERLVDLNA

ALRLKNENIIVEFKKFCHTKALMPYLIDTQIHLISNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLSV

ENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQST

DLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGAFK

EFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLITNNLKII

ITTHHKHLVMLLAKNEQVELIAALYDEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGDD

KENLEELVGKNINLELELKAKLENVEKKEQKVDEILLSLKDQKEKNEQEFRTSLRNLEFKFHKAIEEAKK

TIQLKDTKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRVP

LKLLKKSTPTPKISPKTSISVAKPTNLSVSLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTGK

LAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>EAQ72096.1 D,D-heptose 1,7-bisphosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARSYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYHCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNANIGTLILVNEEKKEGDFFRQFKNLKEILSFFKEKDI

>EAQ72095.1 transcriptional regulator, AraC family [Campylobacter jejuni subsp. jejuni 81-176]

MNKILSLPEDLKQLKGVNYKKIKSCTFAKYTQTDTSHSTFVNVGSHLLTFVRKGYKILHTASKDYKINSY

ETLFLKAGSYTLSNVGLSKGVYEAYLFFFDNAFLIELIYKYKDFFKLDQKFQNYEIFWVKNDKILQGILE

SFSPHFEENTQILDPIVSLKFEEIFLHLLLNKNIYFISFLSGILKEFRLDLSQLFEYCGREFLSVNEMSN

FAKLDLATFSKEFKKCFGQSPKKWLDEKRLQKAKILLKFSKKNINEIANECAFSSVAWFIERFKEKYEQT

PKQYQKTKNLYFLSKN

>EAQ72094.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIYEYCESDVLNTYM

LFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>EAQ72093.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MELLRAENLSHSFDYPLFEGLNLTLNTKDCIAIQGSSGCGKSTLLHILSSLLIPKKGEVFFKGSSLYQID

ENERLKIRRYDFGIIFQTHYLFKGFSALENIELASVLSGQDLDEKILKRLGIDTLLHQKIGKLSGGQQQR

VSIARVLCKKPKIIFADEATGNLDFDNAKNVIELLISYVKENDAALFFVTHDSKLASFCDKTYTINANGI

C

>EAQ72092.1 putative membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKDFIAKDGYLSLIILSLIFIFMWIFYSFSILLLALIVICIFLFRTPKRELVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSAKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>EAQ72091.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MRGIFYIIALFSLLNGDELTEALAKNNNQNSWEHFDYKNTKEAPKIQEENVDFKSTFDSLLSKTLENNNG

IDKTDGNLDFQNENVQVKNLSSLYEGENNSLLFQKELFVAQNNYNYSGGLINRYEKDDFLFGVNGFIDKQ

KEQKDTKSFGTEFGYSKFIKAYSNYYIPNEAEKNLQLGMSFVIPTYTAFAFDISKDNDKTNYQVSYSPYS

VFSLNLLRRDYSARETVDDTVVQVGFSFNFNESFLKQFRKKDNTLEEVNRYDFLQRTH

>EAQ72090.1 wlaE [Campylobacter jejuni subsp. jejuni 81-176]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVHLILMNDKISYEIPECQIHFLECSKPSENPILKFLKL

PFLALKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTHLVINECTTPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTDLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>EAQ72089.1 cytochrome c biogenesis protein, CcmF/CycK/CcsA family [Campylobacter jejuni subsp. jejuni 81-176]

MKNIIKSIGDLRVSVVLFLLFALFCALATFIESAYGTPTAWAMVYDTFWFEYIQLLLGINLLCGMFRYKM

FGLKKLPLMIFHISFLFILVGSAMTRYAGFEGILPIREHTQNSLIESSKTSLRISAIKDGERYSAVNDRY

IGNLPFANSFKLKLNLGDDQAVLKYKDLILNAHYTYKENNNSDPLLVLMLSQKGSQGVDVKFEKGEVKNI

EGVNFAFMNDNVKAPFVKIDENLTLSSSENLHFLSMLDGQNLDLKIGEKANAKERRLYEIKDISFVVKAA

SLHAQEALEGSNRPQDESFWLWFKSAWLEVGRTMLISTFGEPQNWKNSLLLHFKDFALSNENKNLELTGS

NALKLELSYKNESKEFYIFEYNKPIMIELAGQKFFISWALSYEQLPFDIYLRDFVLDRYPGSMSPASYAS

EITVKNNNENFDYRIFMNNVLDYDGYRFYQSSYDQDEKGTVLSVNKDPGKIPTYIGYFLLCLGMFMNFLN

PHSRFRTLARLINKDTLKHTSVIISILLLSFGSEKTFAQDLNSTLPVVNTNHAKALATLIVQKSADGRMV

PFDTLSREILEKIHQSDSYKGQNSNAVMLSMLVDVDKWQMEPFILMPQNQAVRDAIANILEIPSAKYISY

KDFFDENNRYKLQKYVENANRKNPNARGVFDKEIIKLDERANVVNLVFSGELFKFIPVQNNPNNVWLAPF

SAVTTLKGDEGHIVLALIQNYFSAVENAFKDGNWTRADEGLKFIKEYQEKIGYKVMPSKTKVEMEIFSNK

AEIFVKLAPVYLIAGFLLLILVFSKMVVPNLKISFIFKVVYVLNVLAFVIHTVGLGLRAYLSGHAPWSNG

YESMVYIAWALSLSGIFFSRKSPIALSLTSILSGVVLMVAHLSEMNPQITNLVPVLNSYWLSIHVSVITA

SYGFLGLCALLGIFTLFLMCFLKKDGKYNLNILRNITEATRINEMAMIFGLCLLTVGNFLGAIWANESWG

RYWSWDSKETWALVSILVYAAILHLRMIPKYCNQFVFALWSMFAYWVIIMTYFGVNYFLTGLHSYAAGEA

AQIPNYVYWGFALMVVLALFARRKRNFVGKL

>EAQ72088.1 glutamyl-tRNA(Gln) amidotransferase subunit A [Campylobacter jejuni subsp. jejuni 81-176]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>EAQ72087.1 glutamine-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLSVLTTFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIALAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTQTPERAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQDYPNIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>EAQ72085.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKTHRYQNKTQTEITIK

>EAQ72083.1 ribosomal protein L11 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQKKYYELFFIVEERYKNLFLDFAFDLGIEAIEEKDNGVYIRSHESLEDLSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTYSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFYKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

G

>EAQ72082.1 aspartate carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>EAQ72081.1 methionine-R-sulfoxide reductase [Campylobacter jejuni subsp. jejuni 81-176]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIVCANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>EAQ72080.1 methyltransferase GidB [Campylobacter jejuni subsp. jejuni 81-176]

MIFKDYDFLQNYDLKNFEEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKAAFLRTLKIECELPNLHIYKEKVQEYKNTFKADIITSRALMDVK

PLLEICKNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRRYCILK

>EAQ72079.1 wlaD [Campylobacter jejuni subsp. jejuni 81-176]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQASGEFVTFLDDDDELLSGALSTLMQKASEGYAHVFGNCLMEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSVFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQDSVTL

GASKNAYRVYLGYLELAKILENELRMSKDKDYKKTCASYYKMAAYYAKLAKNYKALYKCLFKSLSIKINA

PALILLILSIIPNNMIEKLSKIRVALCKN

>EAQ72078.1 beta-1,3-galactosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MFKISIILPTYNVEQYIARAIESCINQTFKDIEIIVVDDCGNDNSINIAKEYSKKDKRIKIIHNEKNLGL

LRARYEGVKVANSPYIMFLDPDDYLELNACEECIKILDEQDEVDLVFFNAIVESNVISYKKFDFNSGFYS

KKEFVKKIIAKKNLYWTMWGETYKKEIVFRSFCEFKTRERC

>EAQ72077.1 transmembrane transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKKYKNIIYASLGGILEFYDFVLFAFFLDIFAKVFFPQNDAFWMQINAYIAFGAAYLARPFGSIVMAHF

ADRYGRKNIFYISMLLMVLPSFALAFLPSYESIGIFATLILFTIRILQGLAVGTEVSGAWIYVSEFVKGR

QIPLALGFISATLTIGLLLGNIATLGIRSYFTPEEVQSYAWRIPFIIGGFFGILALFLRNKLSETPEFIK

VQNEKKILNFPLFEALKTHKMSMLVCFLMTMVLTSGVATLMILPKYFESLLAMSKTSALWVQNFAILAVI

FGALFQGFLASKWGSYKICSIFSIAFIIFGMFFSFYDENFLFYFLLACFAQGIITFAPVFMTQIFKSELK

FSGLSFAYNISYAILGFLTPFIVNAFYKEYLGIYLAIVGFCSLLCVFLLKRVFARSKIKELSIVF

>EAQ72076.1 transcription-repair coupling factor [Campylobacter jejuni subsp. jejuni 81-176]

MQASFYEYLQNPKICELLLCKDEKQADLLAQVSRFKGLKTFVLPDFRAQFGDDLRAFSKELFDLCKILNA

YHKEEEKKILISPLNTVLKKLPSKKHLQNYHIDKKQNFDLKCFEDEISRLGYEFVDIVQDKGEISIRADI

IDIFCINEENPIRILLFGEEIESIRYFDLQSQKSIPNELEHFEICPFLKYFDKENYEIFKDKLEDFQSDT

LIHDINSLGFWCIDDFFNYLELDFLACEKFDINEYEKDISFVNAKILPQAKKFKELQSSYNKDFFEFHKN

KKITLLAKNEALFKALELEDTQNIHFVKSDLRLNLISPEELIISLNQKEKQKTRKKASLIIDELKNGDYI

VHEDYGVGKFLGLEMIVISGAKKEFVAIEYQNSDKLLLPVENLYLIDKYLGVSGSIPSLDKLGKTSFIKL

KEKLKTKLLAIASEIVIMAAKRSLVQAKKITVDLSRQADFITSAGFIYTSDQEKACHEILQDFQSGKVMD

RLLSGDVGFGKTEVAMNAIYPVVKSGFCAFLFAPTTLLSHQHYKTLKKRFDPFDIEVFKLDRFTSSAEKK

QVLQNLKENKACVVVGTHALLSVECENLALVIIDEEHKFGVKQKEKLKEITQNSHILSMSATPIPRSLNQ

ALSSIKSYSVLQTPPEDRMDVRTFVKENDDALLKEAIARELRRGGQIFYIHNHIASIEQCKKHLLELFST

LRILILHSKIDAKVQEEEMLKFENKEYDLLLSTSIVESGIDLPNANTIIVEKSDRFGMADLHQLRGRVGR

SDKQGYCYFLIEDKNAITKDALKRLVSLESNSFLGAGSVLAYHDLEIRGGGNLLGVDQSGHIEQIGYSLY

LKMLEDELNALSKNEVDQKENKLDLKLNVNAFLNSELISEDRLRLELYRRLSKCEQVHEVYEIEGEIEDR

FGKLDIYTKQFLSLIIIKILALNKFKSISNYEQNIQFTALNDEKELIKAKSKDDDDILEAILTHLRKA

>EAQ72075.1 cation efflux family protein [Campylobacter jejuni subsp. jejuni 81-176]

MYKFLSHEPLANKSCHHNHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IVLSILLLKWAIILLKQSANVLLESSPVDIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRVC

DLKEFEKLSQDLSHKLLHEFEIGHITIQPIRSENEI

>EAQ72074.1 cytochrome c-553 precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGLTEEDFKAIEAHIETLK

>EAQ72073.1 UPF0324 inner membrane protein yeiH [Campylobacter jejuni subsp. jejuni 81-176]

MKTSFLAHSVAIVRSNFKGLLFTACIVIFAMYLSSVQSIKDTTHLAATAFAIIVGVLLSPWFFKYQHHFQ

AGVHFSAKKLLRLGIVLYGFNITLTELLSVGLKGFLLSAIVIFFVFIIALFVGMKIFKLDKETSMLVGAG

SAICGAAAVLALESSLKSDPFKGILAVGTVVIFGLVFMFLYPIAFSLNLFPFFDQNAMGVFMGATLHEVA

NVAGAAEMAKDMAGFEQGASNVAVIIKMMRVILLVPFLLIVTYFFAKNQHSSSGKTAKSITIPYFAFAFL

GMIVLNTYLASKESILGIATSDIISLGKTLCTLCIVFAMAALGLQIDFKKFLKSGSRVFGLAFVLGLVLI

FGGYFLTLAFKGILW

>EAQ72072.1 glycerol-3-phosphate dehydrogenase [NAD(P)+] (NAD(P)H-dependent glycerol-3-phosphate dehydrogenase) (NAD(P)H-dependentdihydroxyacetone-phosphate reductase) [Campylobacter jejuni subsp. jejuni 81-176]

MRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGLS

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>EAQ72071.1 hypothetical protein CJJ81176\_1118 [Campylobacter jejuni subsp. jejuni 81-176]

MLETILKNENFIHTMQKHCYEVISHLIEENIEFSIVANTNFIDFNPELPKELDIKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNDDFDSFVKVDLGAITQIQVENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>EAQ72069.1 riboflavin synthase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFYISLPKEAMKFIAEKGSIGVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLARYIYAQLQGKNKGLSWEEVERISYLY

>EAQ72068.1 thiamine biosynthesis protein ThiF [Campylobacter jejuni subsp. jejuni 81-176]

MMRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNENDELFCIEKNTLPPKDALDAMM

RARHTPKLHDKLKNGRVAVCGLGGLGSHIAINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTE

ALKEQISEINPYISVEICTLKIDEDSLKSLFKDIDIVCEAFDSAIAKAMIAQNFHRFYKDSVLICASGLA

GYGDSNSIQTRKIAKNFYVCGDLVNGAKLGNGLMAPRVNICAGHQSNLVLELLANKE

>EAQ72067.1 lipid A biosynthesis acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARIAFHLNKKHRKIINTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFTTAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSQSRTQFDIELIDKKGGIRQMLSALKKERALGILTDQDCVENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPVYAYKEGGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKGAK

>EAQ72066.1 peptidyl-prolyl cis-trans isomerase B [Campylobacter jejuni subsp. jejuni 81-176]

MIKTIDTSKVNEYKFALIETEKGTMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGVGGPGYEIICECDDQEHKHERGTLSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>EAQ72065.1 carbon storage regulator [Campylobacter jejuni subsp. jejuni 81-176]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>EAQ72063.1 high affinity branched-chain amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MILELKHISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYAILEELGI

AEFAYEKAASLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>EAQ72062.1 delta-aminolevulinic acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MFKRFRRLRLNENLRAMVRENSLSVNDLIYPLFVVNGTGIKKEISSMPDVFQMSLDEILKECQNVVNLGI

KAIILFGVLENEKKDSCGSDALDDEGLVARSIREIKKNFPDLFIISDLCFCEYTDHGHCGIIDPKTKSVD

NDVTLEISAKQALVHARAGVDMIAPSGMMDGIITTLRKALDKEGFENLPIMAYSTKFASSYYGPFRDVAE

SAPSYGDRKSYQMDFANGKEALEESLEDEAQGADILMVKPALAYLDVVKEISLHSNLPLCVYNVSGEYAM

LKAAKNAGVIDYEKVLYETMIAFKRAGAKLIITYHAKELAKMLKGEK

>EAQ72061.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176]

MVDFFVFKKKTHKKINLFINLTTWKITLFMGFQSFLAYSLFFWYVQIVVEKGFDKEFSTSKVLFAQLVAA

PVSLFGPLLLGKLRQNFTYFLHSRFVQYVCDRFWYALYF

>EAQ72060.1 transporter, LysE family [Campylobacter jejuni subsp. jejuni 81-176]

MFDSFLSGVFLGFGVSVPFGPVNILILTYALKAFKNSIAVGLGAFSIDMLYLFLLQFGLLNFLGNVIFMR

SLAIFGFCFLTYMAYLMLRKKKESLNLEHKEFKESLLKSYIKGAFLNGSNPFVIGFWLSAASVVLSSDYA

YLMTLGLVVAILFWVSALAFVVARYSHVFSAKVVFIINIISAIIIEYFALNLLYKTFLG

>EAQ72059.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MQQKCFCISKMIRFSKIIILLTVASLAGIVVFGNVTDCNSNFQFVSHVMSMDTKPDYLGNAIVYRAITSP

VIHHIGYIAIILFETFITLTALKGAYDMFKARNLDAQSFHNAKIFGIVSLTCCCILWFFAFQVVAAEWFG

MWMSKVWNGLPDATRLVTYMFLALIFISLKNDD

>EAQ72058.1 quaternary ammonium compound-resistance protein qacC [Campylobacter jejuni subsp. jejuni 81-176]

MNIAKKELFVAWFFLITAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIVLSIVGIIMINIGEVKE

>EAQ72057.1 N-acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>EAQ72056.1 Protein of unknown function (DUF328) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MKILFSPSESKNENCVKNPINENSFIFKELFPYRIKALKHYEEFIKNASLQNLQELFGIKNENEIDKFKH

DLKQAPTQEAILLYTGVSYEYLNFKALDKKSQAYILENTLIFSNLFGVVRANDTLPFYKFKQGAKIGNFA

IEKFYKEHFSKALDAYLENEEILDLRAGFYDKFYTPKKKFYTYKFVKNGKVISHFAKAYRGILLSISAKN

QVKNNKELLANLPSNLKLKEIQIKGLKEEIVLEILD

>EAQ72055.1 inosine-5'-monophosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVVVLDSAHGHSKGIIDTVKAIKAKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGVGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>EAQ72054.1 ubiquinol--cytochrome c reductase, cytochrome b subunit [Campylobacter jejuni subsp. jejuni 81-176]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGPELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIIAIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWIGFYASIVFLLLLIVVLPVITIMERKGAKQ

>EAQ72053.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFNDEKIYKLQNEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQNLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSISILSKNTKEHLARVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQTK

>EAQ72052.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIKFLSIITILSLSLNADIIISADNLPSVSKEFLQHNFKAPIGIVQKDKNSYEVYLSDGTELEFDIDGT

WKEIENKAFPFDLDFLPQNLANIIKNEFPNIKAREIERKINHYKIKLDNDVKILIDFNGTILHKEIDD

>EAQ72051.1 ATP-dependent protease La [Campylobacter jejuni subsp. jejuni 81-176]

MQIEEIQNYPANLPVLVEDELFLYPFMITPIFINDSSNMKALDLAIKNDSMLFVAPSKLENGRNFDEIYN

CGVIGTIMRKVPLPDGRVKILFQGYAKGKIIEQISNKPLEAKIELIKEDFLEGTKKEALLEVLKEKVKNL

ANISHYFSPDLLRTIEEGFDASRICDLILNTVRIKKQVAYEFFVLTDLEQKLVKLIDLIAQEIEANKIQK

EIKNKVHSRIDKVNKEYFLKEQLRQIQKELGSDTQKEDEVREYQKRLELKKKFMHEDAYKEIKKQIEKFE

RIHQDNSEASMIQTYIETALDVPFEKISKKKLDIKEVSKQLNHDHYALNKPKERIEEYFAVRELLEKRKI

AEKDGAKVILCLYGPPGVGKTSLANSVSKALKRELIRIALGGLEDVNELRGHRRTYIGAMPGRITQGLIE

AKQINPVIVLDEIDKLNRSFRGDPSAVLLEILDPEQNSKFRDYYLNFNIDLSKVIFIATANDISNIPAPL

RDRMEFIELSSYTPSEKFHIMKKYLIPDELKKHGLKSNELFIDDETIELIISDYTRESGVRNLRRKVAEL

CRKSAKKLLLENIKKVIINTKNLNEFLDKKVFEIEKNNGENQVGQVNGLAWTSVGGDVLKVEAVKIKGKG

ELTLTGSLGDVMKESARIAFSMIKVLIDEGKIKIPKKIIIDPKVNVYDSYNIHIHVPDGATPKDGPSAGI

TISTAIASIFSDKKVKADVAMTGEIDLKGKVLPIGGLKEKLIAAYKADIKTALIPRKNYERDLKDIPSEV

RDNMEIIAVDTFSDVLEYTLV

>EAQ72050.1 undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>EAQ72049.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFGAKKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEIKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLCLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

SAEVAKAMS

>EAQ72048.1 branched-chain amino-acid ABC transport system periplasmic binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDVIKLITIDTKG

DKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLKSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYSNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQDQKQNYKTIINP

>EAQ72047.1 thiazole biosynthesis protein ThiH [Campylobacter jejuni subsp. jejuni 81-176]

MQDYMQYLPHMQEIKSEILNKVLSQVQSYDESQFSAKDVENALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLNEAEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEDEYKILHEKGCDYVTVFQETYNPLKYSKIHLAGEK

RIFPYRFNAQERALKAGMRGVAFAALLGIDDFRKDALATALHAHFLQQAYSHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDEQF

EISDDRSVDEILAMLKRSNLQAVMSDSIYVG

>EAQ72046.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176]

MKNKLDLSLYLVASQGNKSEECFLNTLENAIKGGVSIIQLREKELNAREFYKLGLKVQKLCKAYKIPFLI

NDRVDIALALDADGVHLGQEDLEVKLARKLLGDEKIIGLSLKKLEQLEFIQGANYLGCGAIKATPTKESS

LLSLELLSQICDKSPIGVVAIGGVDKAVLDELKGINLSGVAVVRAIMDAKDAFLAAKELKRKIYENLPLK

>EAQ72045.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MSRVFLYFLIILILALITFALREKLGKKTKPFFGILLVIFIVLAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>EAQ72043.1 ribonuclease BN [Campylobacter jejuni subsp. jejuni 81-176]

MKNFFTILLNLRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDV

VATYIDTFLKNSVNLGIVGLIAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLS

FYISGFIQQTLDDYKIGFNFFEILPFVIIWGLFFISYSSSVHKGTLKSLALVSFGAGTIWYIGKNLFVYY

VVYNKTYASVYGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKS

>EAQ72042.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEFLAFIFLIIIFLFVVFIIVTRYEKKIKLLNQNIQNMKEDIADLKETTQKNRSLIEKNRSNIENIIK

>EAQ72041.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKELEKYNTCLKRIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFDSPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIERVNQNERL

>EAQ72040.1 preprotein translocase, YajC subunit [Campylobacter jejuni subsp. jejuni 81-176]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNVTAKISREFIAKKIDA

>EAQ72039.1 transcriptional regulator, LysR family [Campylobacter jejuni subsp. jejuni 81-176]

MKIKDMEIFLDLLNTQSPTHTANNFSITQPNVSIVIKNLENKFDGILFERLGKKLLPTPKALELGKNWLK

IIQAYYQSLEKLNDESMLLGEIKIASTQSISEHFLAPILFDFKAEFKNIEIRSQTQNSKECLNLLKNGNI

EFAIIEAELDPALVEYENLEINFWQDDELIVATSDKKLNEKEFYIDELLEQKWILREVGSGLRDKFLNEI

GASSKKLNIFLELDRMAAIKELVLQKKAISIFSKKSIEKELKNSTLYEIKLKNIDLKRKFYTLKRKNYNF

NRALEKFEKIFKS

>EAQ72038.1 S-Ribosylhomocysteinase (LuxS) [Campylobacter jejuni subsp. jejuni 81-176]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>EAQ72037.1 cyclopocyclopropane fatty acid synthase [Campylobacter jejuni subsp. jejuni 81-176]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVSDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>EAQ72036.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFITGTRADYSKIKSLMYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYY

QTDKALATTIDGFSRYVNELKPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISK

LAHIHLVNDEFAKRRLMQLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEI

TSIKNQADNLVKALIQSNKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFII

GNSSCILKEALYLKTAGILVGSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLF

FEYLLSGEFFKLSTQKVFKDIKHA

>EAQ72035.1 Protein of unknown function, DUF400 family [Campylobacter jejuni subsp. jejuni 81-176]

MKKIYFMLAIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>EAQ72034.1 sporulation initiation inhibitor protein soj [Campylobacter jejuni subsp. jejuni 81-176]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>EAQ72033.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKNIVFFEVKGGSDKGEDGYRKDTMPMVNALKAKGWNAEVIFFEVGKKDEIYKYVKENFDGYVSRINPG

NLKEENEYFDMLRKLCADKLVGMPHPDAMIGYGAKDALTKLADTDLVPSDTYAYYDIKTFKENFPKSLAK

GERVLKQNRGSTGEGIWRVSVEGNVSGDSLPLNTKIKCTEAKDNHVEHRELGEFMDFCEQYIIGDNGMLV

DMTFLPRIKEGEIRLLMLYNTPVNVVHKKPAEDADAFSATLFSGAKYRYDKPEDWKTLVDMFLGELPKVR

EKLGNYDLPLIWTADFILDTDEKGNDKYVLGEINCSCVGFTSHLELADEVASNIINIVSKTKA

>EAQ72032.1 molybdopterin oxidoreductase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKQNDQKENRRDFLKNIGLGLFGISVLSNFSFENFLGSKALAKELPDFKIEGKKDLIYHGEKPLTAETEI

YALDSDFTKPENFFVRNNGLPPSLETIKERLHKGWTLEIDGESIINKKSYTIEDLKKKFKTYTYALTVEC

GGNGRSEVIPSTKGTQWGYGAVACGRWTGVRLKDILKDCGIKNDAVYIGYYGIDTKLNGEETSPISRGVP

ISKALQDETLIAWAYEGKDIPLVNGYPLRLVCGGYPASTSGKWLYKISVRNKIHDGEKMEGSYKVPVNPV

KPGDFNYKGEMKIIESMPIRSVITNIKNGSEIKANKKFEVRGKAWAGELEVSEVYVSNDYGVTWTKAKVE

KPLNRLAWQKWSAQISIPTKGYYEIWARAIDSQGNSQPMVLAQWNPGGYINNACHRVNVYGV

>EAQ72030.1 Cytolethal distending toxin A/C family [Campylobacter jejuni subsp. jejuni 81-176]

MKKIITLFFMFITLAFATPTGDLKDFTEMVSIRSLETGIFLSAFRDTSKDPIDQNWNIKEIVLSDELKQK

DKLADELPFGYVQFTNPKESDLCLAILEDGTFGAKSCQDDLKDGKLETVFSIMPTTTSAVQIRSLVLESD

ECIVTFFNPNIPIQKRFGIAPCTLDPIFFAEVNELMIITPPLTAATPLE

>EAQ72029.1 sodium/dicarboxylate symporter [Campylobacter jejuni subsp. jejuni 81-176]

MDKQFFQDFLMLSQAHTITTLAMLCVVFYALKKMRDIKINFSLRMLFALLMGLGFGFALQYLANFPDAKE

ASNILWYSETKHWFAFVSSVFVAFIKMLVVPLVSICIIKVIIEIDKNIKISSLLGISLFWILFSTAIAAT

LGIFLGYSFDLGSNFAIYEGNKQIREIQTFSNIILGLIPSNIIAAINKENIIAIVIFSFFIGISAKKISK

KEEYEQAFKSFHNFILTFYNIMMNMTATVIRFMPYAVVCMMANVLLSNGFEAIKTAGLFIMLIYIAMLIM

FGVHFLLLASQGLNPIKYAKKAFPVWLFAFSSRSSLGTLPMTTSTLQNKFGVNSAIANFVASIGTTTGLN

GCAGYFPALAAVFVAFATHTHIDFTFALMIVLVAVIGSLGIAGVPGSATMAASIMLAGIGFGNNFVMLSL

ILAIDPIIDMARTASNVSGAMTSALCTAKNLKALDKEIYNS

>EAQ72028.1 cytochrome d ubiquinol oxidase, subunit II [Campylobacter jejuni subsp. jejuni 81-176]

MFFGLELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFG

GAAFAAFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAV

SSFFSGSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKL

MINSILFLPFFLGFLAWIFLKDGFSVDTNGVVSMSANLYLYNFLNQMIFAVLLVIGVILVLLGMVQGTKG

CSKAIFTLGLGTVLTVFALLSSIGLGQSAFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYI

IYVWNAMDKVKITREEIANDDHAY

>EAQ72027.1 transglycosylase domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKNYNKVLKTKKTENFSNSKNYEEQVVNWQQYFPTYHFDYKKNRDIALEEYKFCCKILESEERIFDNLIK

YMLTFGTIIISLLSGASEKIKAIFKDVTENPNYIIWFIIALVLLFFIFMTKNFAEKQKSIIFAKRKIIIL

RRMLGMDYGTQEFLFKKGMLEGANMPFSIKLRFNYLYHIIPILCVTALLIIIHMFLGYSLMYAIVFNSII

IIALYLFYIYCILDINETILLVIIRILFSRLGINFVDNFEHVLYRAKLSAYECKRQKIDLDNLKKILVAI

EDQKFYQHKGVDFKALCRALLSRGRKIPFFNKISFIKNIPFTGGSTITQQLFRTLFIENMNKKRYRRKIA

EILLSYLWFNKILSKEEQLEIYLSAVRFDKKIFGIMQAIRHFYGGDKYIKNLSKAQSFFLIERVSVTSGT

MLPKVIDTIVRLEKEKILNKEDIEDIIKIYTKAQQDNKITVFFKNRNILEELSKKYKHQN

>EAQ72026.1 exbD\tolR family transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MPFDDEKPELNITPLVDIMLVLLAILMVTAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>EAQ72025.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNARMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>EAQ72024.1 peptidase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKILKILLFLPILALSTKAEWVVKSYQEIKNERVIRQTYEQSCGASSLATLLNILDDQKSLMNLNF

>EAQ72023.1 radical SAM enzyme, Cfr family [Campylobacter jejuni subsp. jejuni 81-176]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>EAQ72022.1 cytochrome c family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKQSLIKFILLAVFCFSTPFLLADGKIQIGIVEGVTPISMKDAEKLLGQKNVYFVDVNSKEEREVAGNIP

NAVLVDAQNWQNLLPDDFNATLIFYGSNRFTFDASNIANLSQKLGYTHVYVMLDGIESWVLSGRKVQKEQ

IEKWQNAKNLDDFKDSIHSRMYFGDVPSCRDCHGKGEDKKSIRYNNAANLDLINKNCASCHKDVDKEFKH

SIHQNISQIQLDKDGKKKKIPTCTTCHDIHNNDPLMNAMTLKQRSDFKCGECHQDKQDRYHDTFHGKAMV

LNSPGSAPKIAACYDCHGKHNILKVEDLNSTLSSLNRVQTCAQCHPNSNENFANFIAHADHSDGENYPLL

HGAYIFMTALVIGVFVFFGLHTLLWSIRLILARLSHPIEWKKAKENAHNDKILIKRFSTFHKIQHFFMAA

SFLGLAFSGLPQKFYTAPWAQTMIDLMGGPIGATIVHHISAIVMFIVFFSHIGEIILVNWKRRDLVRDPQ

TGKLDKMKILKALFGPDSLMPNWQDFKDMKAHFKWFFGMGERPQFDRWTYWEKFDYLAVFWGMFVIGLSG

LVLWFPTFFSAFLPGWMINLCSLVHSDEALLATGFIFAIHFFNTHFRADRFPMDMVIFSGTQSEAEIKQE

RNAYYQRLKESGRLESLYEKNSKFNSYKGIAKLAGYLMLITGMIFLFLMIYAFIVDLLK

>EAQ72021.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MFFAPLKGASLALQAYLGSLVILGLGLNCLQFIANSLLLGVSCNKILSNVI

>EAQ72020.1 dihydroxy-acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGVDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMVVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGEAVCFNSQDEAIKGI

IKGKVKKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSVGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEEEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>EAQ72019.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MINSLNSNLNYDYNTSNFKQDKNIDFKINKHGVAVITGEGALPYRGKKFEYNPKIFGLDESISKKDMQEF

NNFMKSNALKDPNKIEKSPLKDFNPAYTKWDPTTEKMMLGFFVSYSKMFHLGYDIIKKADEFYKEFDALI

SKDLSLNEFKTKYIDFKQRHDEFVKEYEMAMGDKMLLSSDNEIITQQSEKPFKAIQGESKNKETYKDDST

RNELVKKLLEGKFSTSKELELLFGMKFSDDDAGEFNKILSLNSTPKSIDIKA

>EAQ72018.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKIDEISSKSKANILEHLKKAYKETTFTRIESIDPVEHIQTTQDMLTEMKQKMSDNKYIVENATKDTLE

EKINEIVAKYGFKSMIYGADLNLNLEQIKAEKKICFDKEIENLRSEVFHSDFSIIHARAGVSSHGVALIP

SSKTQPRMLSLAPKLCIVLLKKENVVKSLSEALNLVKKENEILPTNILFIAGPSRTADIELITVFGVHGP

QIAHIIIY

>EAQ72017.1 flagellar hook protein [Campylobacter jejuni subsp. jejuni 81-176]

MMNSFYNGISGVKSNSFGIDITANNIANVNTTGFKYSDAQFKDIFYTTITTQSTNPAQGGYGSGAASSQV

VFEQGSPVASDGEFDVALQGKGFFGVLGADGNAYYTRNGSFRRDANGYLVDSYGNFVLGTMNPAFTGINY

SDRVAGLMGDYLNTGTPVNNGFTVNSNNSFSIGTTASQGAIKVPVNMYLPPQVTQNVKWSGSLNTNTTTE

VVKVDLDPSKFNITKTEDGKYVVSGSVSKEDVFSAKAGDRIILNFTDDNGVKTSFEATLDENLNFKSNEL

DLKGLDENSIKLDTAQISTEQQKANKDILESPIYNADGSKSTLRVTLERVLPQEGDNIQYKAIAQIYDSN

GNAVGNPTEGNMVFDKNGALLQNNITSIANPNGGTINIDLGSPYDANKPGSGYSGIYIKEGVEKNVVTQQ

DGVAEGFFEQYNISDDGSIVAQFSNGKNAIVGKLALYNFINEQGLVAMGDNIFAATANSGDASFIMKDGQ

VVNTAKFKGGFLEQSNVDLSAELSNLIVTQKAFDASSKSITTSDQMIQKAINMKR

>EAQ72016.1 amidohydrolase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MFIVAARYLFLCDEDFTILENQAFVFEDKILELGELDNLKKKYPKAKIIKTPKNSVILPAFINPHTHLEF

SANSTTLHFGEFLIWLKSVINSRSILNAQAKEELILQSIKKMQKSGIGTIGEISSFGSDLDPCLKASHKG

MRIVFFNEILGTNENQVEDKKQEFLKRFENSLKFKNDFFIPAISIHSPYSTHPSLAYFALDLAKKQNLLA

STHFLESKAENIWLRESKGGFKKWLENFTLHPKPLYTPKDFVKLFKGVRTLFTHCVYLKEYEWLDKNLHS

ITHCAFSNRLLSQKSLDLKTALKSGLNIHLGTDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMV

TLYPARALNLNLGELKKGKIADFSVFELGECDKKQAPLQFILNAKEVDKLFIKGKECKF

>EAQ72015.1 DNA polymerase III, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKLSINKNTLESAVILCNAYVEKKDSSTITSHLFFHADEDKLLIKASDYEIGINYKIKKIRVESSGFATA

NAKSIADVIKSLNNEEVVLETIDNFLFVRQKNTKYKLPMFNHEDFPNFPNTEGKNQFDIDSSDLSRSLKK

ILPSIDTNNPKYSLNGAFLDIKTDKINFVGTDTKRLAIYTLEKANNQEFSFSIPKKAIMEMQKLFYEKIE

IFYDQNMLIAKNENFEFFTKLINDKFPDYEKVIPKTFKQELSFSTEDFIDSLKKISVVTEKMRLHFNKDK

IIFEGISLDNMEAKTELEIQTGVSEEFNLTIKIKHLLDFLTSIEEEKFTLSVNEPNSAFIVKSQGLSMII

MPMIL

>EAQ72014.1 C4-dicarboxylate transporter [Campylobacter jejuni subsp. jejuni 81-176]

MPLMLYFLSPLEIKSTPNASTFAKDKLKELVKMKNSEKIMLSVFVSLLLLWAGALGLFFWNFS

>EAQ72013.1 cytochrome c family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKHILLLGLCLSLSLSAKSVSDYKVGEELSDKEGVEYFKELSKRPVQEWPNKNLSINDVPKGKQGDLIR

YGIELLSKTESTLGPYSKLKKTSNEVNCISCHMDNDGNGLPGTKKYVIPFLNVLNNYPRLDIETMKIISV

EDRIRGMGGTDSHRFPNDSKEMKAILAYFKWLKEAYGIKDGVKLEGDFFAKMNFPNRPADPVRGKKLFEE

NCVACHGERGLGVKNDNYEQGSGHLYPSLLIYPDGGHMAMIPFLARFLKSAMPFGASADNPILSDEDALD

IAAYVNTGFVRMPITTTENRAGLDTAYSKSPSLKPEYFASPQQNLDPKEYIKVKYGPWKNPNHFPGE

>EAQ72011.1 cytochrome c biogenesis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKKIFFSFWMSLILLFIYALSCAVATFVENDFGTNAAKALVYNALWFDILHLLLLINLIGIIFIHKLLQ

RKKYASLLLHSAFIVILLGAAITRYFGIEGGMHIREGQSSDIIVTRDEFIALMLYNDEGKVVEYQSFGVA

FNPLLHNSFEKKVSMQQNKTINLKLLDYEKAPNAMSNPIIKMQISFNNESKEILLTPNYNNENVLPFRLG

GEIFALNWGPEEIKLPFSLALKDFILDRYAGSMSPSSYASDIEVIDQDKSFEYKIFMNNVLDYGGYRFFQ

SSYDQDEQGTILSVNKDPGKIPTYIGYTLLTLGFLWILFAKNSRFQKLSNYLKNQKNLLLILFCLFAFNI

KSFADENTLKLIQNIKENSAKHSMLFGSLLVQDFDGRIKPIDTLAMNYIHKITKKNDFLGLNYNQIFLGM

MMYPQHFRQIKMISVKTAKLKEILGVDKNEKYLAYDDVFDGDFYKLSNYIEEANRKKPALRDQFDKDILA

LDEKINTAFYIYSGEIFRIFPDPSQKTYTWYSPATPMPFDLKDIENIQSLLAKYFFDFEQALSTKDFSKA

DESLERLKNFQNFYGSNLIPTPTQISLELFLNHYNIFDNLTPIYLLLGSMLFILLVYEILSLKKAPKMLK

NAIFILIALSVLAHALALIFRWYVGDHAPWSNAYESMVYIAFACAFAGLVFYKRSSLALCTASIMAGISL

FVAHLGFMDPQITNLVPVLKSYWLNIHVSIITASYGFLGLCFLLGVFSLILFMLRNPKKAQIDQSILNLH

CINEMAMIIGLALLTIGNFLGGVWANESWGRYWGWDSKETWALISIIVYTMILHLRFISKFNNPYAFASA

SVIGFYSILMTYFGVNFYLSGLHSYATGDPVPVPKFLYFFIAFTVILILGAFFKRKLKSPA

>EAQ72010.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKYFQKRYTLAFFIGILAGIFGAIVKWGWEVPFPPRNPNVFWPADALERVTPPKIFLEQLGLPTERCSF

WIFCLSFCPCYCNAFNCRSSTTL

>EAQ72009.1 tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKSLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGAHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYDHDKVIASGFIE

>EAQ72008.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MTSSVFAEDFLAKLTKGALSDTSPGVKELSLEEMKEVKGGYITYLKRLSDNEVIAFAKPDWNLELTLFQD

SNGDQYYWNREGLVRFGGMCGIETTNCLVNGKHSYINQKRLWETMSIVGDDPYRNFLGYTVKRNIGISNL

GKRFVYFSYGVAVINEQSGSWYRVKSSPVLNNYRVVKEISSNYKDFLERYLGGYSIK

>EAQ72007.1 glutamate synthase [nadph] large chain [Campylobacter jejuni subsp. jejuni 81-176]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLD

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>EAQ72006.1 ribosomal protein S10 [Campylobacter jejuni subsp. jejuni 81-176]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>EAQ72005.1 Cj81-42 [Campylobacter jejuni subsp. jejuni 81-176]

MENNINNILLKLDKNRHFCFLKDNINYENKKDIAIFRGAVYQKHRKEFFDSYFGRTFCDIGDTSKQPSQW

KKNFLNKKEQMKYKFIISLEGNDVASNLKWAMNSNSLVLAPKITCETWFMEGTLKQNYHFALIDNENLSA

VIEYFKSRPKDALEIINNAHQYIKKFLDKKKEFHIGILVLTKYFYYSRQLELNKKRDILELIK

>EAQ72004.1 CTP synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>EAQ72003.1 cysteine-rich domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MMKKVYFYATCLGSAAMQQSVLNAIKLLRREGIEVIFKKNQTCCAQPSFNSGYFDESREIALYNVDLFDK

DYPIVVPSGSCAGMMSHDYKELFKNRPEFSKIKTFSPRVIELSQYLDEVLKVDYEDKGAPIKVTWHSNCH

ALRVQKSIQASKNLIKKLKNVELVELQYEEECCGFGGTFSVKEPEISNAMVRSKIKDIQNSGAKYLISGD

GGCLLNIDGTMKRMGLDIKGIHLYDFLLKRLEGERL

>EAQ72002.1 dimethyladenosine transferase [Campylobacter jejuni subsp. jejuni 81-176]

MVKAKKQYGQNFLIDKSVLAKIIQAIPKEMNNIIEIGPGLGDLTQELLKISQVKAYEIDNDLIPILKKKF

QKELECGKFNLIHQDASEAFNPSLDEKPYFLVANLPYYVASHIILKALEDKNCLGLIVMVQKEMAEKFCA

KEGNGEFSSLGVLSAMICERKILFDVDPQCFNPPPKVISAVMSLIKTKDFNELCEIENFKNFLKDCFKAP

RKQLLGNLKTYKAKVLEVLSTLGLKENIRPHEICVDSYLKIYDKLKDKYGRKQRDK

>EAQ72001.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MDLKSLENNRLYILKRLGILKFLSIIEALLVGFLAFVFIRDALIAVILAVFVGVFFFRFTAKKLKLAQKE

LQINALNLFLRRFGAKFKKQSLSQKDFLKLGLTKDLKEFKSQNCFEFKDFKIYDIQFLDENKRFFCGILL

EILSANKNPSFENEEQIYIKLQDKNFTLNHVFSKENHYLIATLSNPFFIDIKKDLESNFKDLEENLNSIK

NKLFK

>EAQ72000.1 flagellar biosynthesis protein flhF [Campylobacter jejuni subsp. jejuni 81-176]

MGQLIHTFTVEDTEQIIPKVKEDYGNKALIITNKQIRPKTLNRSALYEVMVAIEESDYEEHLKKQGKSLP

AKKSSPKPSSTSLAEEKIRSQIPQEDEDVVLDFSNTRLNTNLNTVKNNDLTKKTYQDFPQNKINPHQNKT

LGFDDFKEKLSEVSNEISKVTNTPLENYTPNPNYNKKIENFEKQFEKQINKLNDKIDLLADMMWDDKAEA

RKNLMIPPEFASIYKQAKESGMLENHLEAIMKATIENMPAAMKTNKDAVQRYFHSLLRNILPCRVESDIK

KQKIMMLVGPTGVGKTTTLAKLAFRYAYGDKRYKTGIITLDTYRIGAVEQLFQYAKMMKLPIIDSIEPKD

LDEAIKSLNNCEVILVDTIGNSQYDQSKLAKTKEFLMHSNAEIDVNLVVSANTKHEDLMEIYKNFSFLNI

DTLIITKFDETKVFGNIFSLVYETNIPLSFFSIGQEVPDDLEVANSDFLVHCILEGFNKGKNNE

>EAQ71999.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILFIGSLVMASLLYAQGSQPVEITQQDINTQNEMSDASTKDITPKSIEDFFEEFADNFGIEYGITKD

GKTFYTGKSTVAVNDTDPQFAQALQNAYQKAMLNLQSEFIRDVFGRIATSRIQNYEADNSTNAKEFDELP

KGDKVDQILNKLTQLAGAQLDKALKDLGIDTNSLSEDRKKTLLKQEFLNKTMTNAIGSMSGLVPVQTIVT

QRRGEYDVGVIAVISNKTRQLAKDMALARQSAIKGKGKAISEYLPKDTKGFLNEYGIRLVYDENGAPIIL

SYGNWGYVADPSNAKKTNILEDRAKETALTMADAAIIEFINTNLSLKDERTTGDTYEEIIKQSINVNDSS

TQEQTQNITNIIDKVNSKIKASASGKIRGIRTLKKWSYTSENGIEHVGAVRFYSYENLANTNEALNSKSN

ATKNEAKKSSSIQRSSNVVNSMDDF

>EAQ71998.1 aspartate racemase [Campylobacter jejuni subsp. jejuni 81-176]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSAKILLYSVNFEEIENLQSQDKWQEAAQILTQCAKK

LELAGANFIIIATNTMHKVFNEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMTQDFYKKMLIE

ENISVITPSDEDIKIVNDIIFNELCKGKIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>EAQ71997.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILFILMFLLSACAPSYQINSNQNTVILGSNLPKSLVKQFQKRINSNGYLEFEVILRSTFAKDVIYK

VDWLDKDGFVLRDVLNEDYQALRIPAGQEVILRKLASDIRAKDFRLEIKAKN

>EAQ71996.1 peptidase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSGQELYTDMVSFADLNDAVKKLGFQSNSYQINRENLDKLVNIPMLVKIEDDPRFPHFVIIINHKGNYLQ

VLDPSHGEYISSKSQFFSIWDRYNKGGYALIVAPKKELKPFKLNTPKSLHFDFSPFSLF

>EAQ71995.1 chromosome partitioning protein, ParB family [Campylobacter jejuni subsp. jejuni 81-176]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLGQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKKLKQILNRFGFDCKNKNNDFVIHLENIDKIKKLIKMLEKL

>EAQ71994.1 3-dehydroquinate dehydratase, type II [Campylobacter jejuni subsp. jejuni 81-176]

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKSLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>EAQ71993.1 O-acetylhomoserine sulfhydrylase [Campylobacter jejuni subsp. jejuni 81-176]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRLSNPTSDVLGQRLAN

IEGGAFGIPVTSGMAACFYALINLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIAIADIEKISQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GTALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRVIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEAKDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGITKATIRLSIGLENSDDLIADLKQA

IES

>EAQ71992.1 acetyltransferase, gnat family [Campylobacter jejuni subsp. jejuni 81-176]

MQNTIIQKAIHKDLNSILEITKDALNAMKTMNFHQWDENYPNEIVFQEDIQAQELYVFKENDEILGFICI

NEKFEPEFYKQVIFNKNYDDKAFYLHRLAVKQNAKGKGVAQKLLNFCENFALENHKASLRADTHSKNFPM

NSLFKKLDFNFCGNFDIPNYQDPFLAYEKILNQKAF

>EAQ71991.1 DNA gyrase, B subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVIDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPIEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEANYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQAHAKDVKHLDV

>EAQ71990.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKNEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHITFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALAQGKMTKDLNAKSYLNTDEMGDCILE

ILKENDNG

>EAQ71989.1 Pyridine nucleotide-disulphide oxidoreductase, putative [Campylobacter jejuni subsp. jejuni 81-176]

MRKSIAIIGGSIAGLSAALFFASAKNKELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSDIKELEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>EAQ71988.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MERKIYNIKRGWLFKTKRDFAKRWNIEIEDRFYERCITLIGDIINPKQLSELEQKIFLIVGEIYKGEKKF

SGVISIFNHFNGLHDSYFAFHETALYSLLMQLKDVKFLEALENIINFCKKDKDDEFLLTFNDIVLMSNKP

FRLYYNDKYEFHPSNIEIFDQVLINDVLEFLKDYPKAKKQLSEALKIFITKENYRDVVDKTRLSLELFLT

QLLNNEKSLENQKDEILRYFGNLLDENFKKMFLEILNYYQRLNNNRAKHCKSNGQEFKDYEVEFLIYLVG

NFLQLFMTFNKFKK

>EAQ71986.1 thymidylate synthase, flavin-dependent [Campylobacter jejuni subsp. jejuni 81-176]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEHCLHKDIE

>EAQ71985.1 hypothetical protein CJJ81176\_0084 [Campylobacter jejuni subsp. jejuni 81-176]

MHFLEFFIAVIMAVILQVMPFIAIAIVALSGITTTQLKI

>EAQ71984.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLIDDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLSDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>EAQ71983.1 ribonucleoside-diphosphate reductase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFQKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLIKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVAIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIYWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>EAQ71981.1 glutamate synthase [nadph] small chain [Campylobacter jejuni subsp. jejuni 81-176]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>EAQ71979.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLISKGKVLTLLLGVGFALNVSSAENSNVLIQGEAAQDGDTKPRTLEGYVHQEDAFFKYLKEHHPMFK

YEKEGRIVGKYAISDREEEYVEFSNGPTFAQQNNLAHTSVTYRLGMESFLDFPNKFVGPKKCGECHPAQY

KAWERSRHAKTVRFPDEFEEVGNDLKKPMYNSQSTILPDGIYPDDVYAVIGTPRTKYGFIDRWLVRGTYH

VEDGNLSNMTGKIVAGGNQFSRLWSEFLTPEMTKKIAEFSPGFPTTMEQFGGNGSQVWGTNSYAAQYRKN

MLFQPASSYCETCHSFKFDFKSKEEFYKALGNTQELRKHTISKGISCEECHGAGAHLYGARGAGMPSNCE

RCHQRFSYNEEDAKKNPRKPFNAFFKSSCPACGTEGAQMYSSAHYDKGMRCSTCHDPHEVTFNDWKDGYT

KVGLKKTCTDCHDTQASFFKQGGIHSKDNCTACHMPNMMSCENFGAVQNPDKGGFDNVRASHIWKIKVDK

TAKTLNPPEGKERSPKTPGWTIARDDDGRFFLDLMWACGRTSFSDPNLMGPGASGCHSAVQSNLPKKLHF

TDQETIYDIVVGWQKPVKDGYENILKGVKEIDKAMAENPKLSVEKKSRVITLANQARAIAEKLQKDGSWG

VHGPVYSKKIVDEALVYIQEAKNILK

>EAQ71978.1 fumarylacetoacetate hydrolase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFVNFIQGQKHNLGVLNSSGKIVSFTDLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEIPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATAPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIAYVLEELSAGMLLKAGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKIKNINY

>EAQ71977.1 ribosomal protein L27 [Campylobacter jejuni subsp. jejuni 81-176]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>EAQ71976.1 CdtB [Campylobacter jejuni subsp. jejuni 81-176]

MKKIICLFLSFNLAFANLENFNVGTWNLQGSSAATESKWSVSVRQLVSGANPLDILMIQEAGTLPRTATP

TGRHVQQGGTPIDEYEWNLGTLSRPDRVFIYYSRVDVGANRVNLAIVSRMQAEEVIVLPPPTTVSRPIIG

IRNGNDAFFNIHALANGGTDVGAIITAVDAHFANMPQVNWMIAGDFNRDPSTITSTVDRELANRIRVVFP

TSATQASGGTLDYAITGNSNRQQTYTPPLLAAILMLASLRSHIVSDHFPVNFRKF

>EAQ71975.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSNLAPQNDVLNLTPSKTSNTSSSFSKTSKNKEHESSDSKNSTQDDTESFLNSLLNSIDETNEFLPDHMK

ISQKEVVNEAMNRLQKGAFDESDKISIFESASFMQILSLLDKLKTDTADVKLANLSTQLSSLIKTEANFN

ALKGASNLSELLDIAKDLGLNVKNIKVDRLLDLKATFPNLDKADFFKGAVDNVFKEIINNKISNVSKNLN

HNLENTTHTTSTHSTQKTNSKDSGSLLSQTLKNLDSILSSKESKHEKNDKVKSKIEEDTTDAKNTLKNLK

NDEFAKNLTEELNIKDKKNQDNLNKDNNLKDLNKESKDLNKDFNKELNKELNKNQEKNNLNQENIQDQNK

NLKNNDQNLNLDKNLNKEIVKDTQNLVSNLTQKDFNLNKEPKNNNKENKDIKQNFFDQKLNFENLNKTQV

VQNKENNANFNNNATNKETFTQEQTKTHSENVDKNSLDELNSLVKDLNKVTQNNARNITPKETLQYFSQD

LKEAVDQYKAPITKLSITLNPNNLGEVEVTLIQRGNNLHINFNSNTNAMNLFIQNQAEFKNSLVNMGFTG

LEMNFSDQGKREQNQNQGKNRSGYGFKDALDGKNESEKVNLELVLAKYF

>EAQ71974.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>EAQ71973.1 ATP synthase F1, epsilon subunit [Campylobacter jejuni subsp. jejuni 81-176]

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>EAQ71972.1 PspA [Campylobacter jejuni subsp. jejuni 81-176]

MQILKSFFKALGCGIKFINTYFKTFVLLLIVIWILMPSANSSSNLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKPVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERALD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPVWKEEDKIDKFLNRLEGQTSSLIS

KSLIEIVYKTNSSFISAR

>EAQ71971.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>EAQ71970.1 sodium/sulphate symporter [Campylobacter jejuni subsp. jejuni 81-176]

MFITATAPNPLVVDLIAQATNLEVHLTWGGVIGFRDVFTWYSCYAFDAFDALFSLSARN

>EAQ71969.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

RILPFVPEGLRAEFSYILGIREGRNGESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>EAQ71968.1 GTP-binding protein,/Obg family [Campylobacter jejuni subsp. jejuni 81-176]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKNFNN

LGSVLY

>EAQ71966.1 GTP-binding protein TypA [Campylobacter jejuni subsp. jejuni 81-176]

MENIRNIAVIAHVDHGKTTMVDELLKQSGTFSEREQISERVMDSNDIEKERGITILSKNTAINYKGTKIN

IIDTPGHADFGGEVERVLKMIDGVLLLVDAQEGVMPQTKFVVKKALSLGLKPIVVINKIDKPAADPERVI

NEIFDLFVALDANDEQLDFAIVYAAAKNGYAKLDLNDESDNMEPLFKTILERVPAPSGTNDNPLQLQVFT

LGYDNFVGKIGIARIFNGVVKKNQSVMLAKADGTKVNGRISKLIGFMGLEKMDIEEAGSGDIVAIAGFEA

LDVGDSVVDPNNPMPLDPLHIEEPTLSIVFSVNDGPLAGTEGKHVTSNKIAERLEAEMKTNIAMKYESTG

EGKFKVSGRGELQITILAENMRREGFEFCMGRPEVIVKVEDGVKTEPFEHLVIDVPEEFSGAVIEKLGKR

KAEMKTMAPTGDGQTRLEFEIPARGLIGFRSQFLTDTKGEGVMNHSFLEFRPFSGAVEKRNNGALISMEN

GVALGYSLFNLQERGVLFIEPQTKVYTGMIIGEHSRPNDLDVNPIKGKNLTNVRASGSDDAIKLVPPRKL

SLERALEWIEEDELVEVTPVNVRVRKRYLDPTQRKRMEKAKS

>EAQ71965.1 ATP synthase F0 sector B subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKASAAAALITAKKEAEILVQNIKKETQDELDLLQKHFEEQKDYEFRKMEKEL

VSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>EAQ71964.1 L-asparaginase II precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKLLLCVLVFLSIGACMAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANI

SGEQIANIDSSNMRDEIWLKLAKEINKLFAEGVDGVVITHGTDTMEETAYFLNLTIKSDKPVVLVGAMRP

STAISADGPKNLYNAVALAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIVDGKV

FFYNNVIKAHTKNAPFDVSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGIVVAGSGAGSIHEDQKNV

LKELMKKGLNVVVSSRVVAGRVAVSDSDEKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>EAQ71963.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>EAQ71962.1 purine nucleoside phosphorylase [Campylobacter jejuni subsp. jejuni 81-176]

MIVCAGGNENFSFAKAIGIGLVESAFHLGQLCFKEKPSKLIFIGTCGLYDKGEILEIYRSSYAFNVEFSK

ISHAFYTPAKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLNIDAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKYHYI

>EAQ71961.1 RNA polymerase sigma factor, sigma-F [Campylobacter jejuni subsp. jejuni 81-176]

MLKEPPKAYAQMLKKEQDELVLSYMPALRAMAFRLKERLPSSIDVNDLISIGVEEMIKLSRRYDKEQNDN

FWGFARKRVNGSMLDYLRSLDVMSRNNRKIIKDIDAIMDEYFLEHECEPDDEYLAKKLDLDVEKIKEVRT

AHAISYTLPIDEQIELYNEDNTLEKIEKEELLEKIHEVLDDLKERDQLIIQLYYYEELSLKEISEILQIS

ESRISQIHKKLLKKLRERLV

>EAQ71960.1 cytolethal distending toxin subunit A precursor [Campylobacter jejuni subsp. jejuni 81-176]

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKDNFDQQWFLTTPPFTAKPLYRQGEVR

>EAQ71959.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIIKILFLGLFLSLSLNAKVVTTTSTKSSTGEGTGLTREDAINNAIIEAIGKMSGVSINSLKKSNTSVS

TDNSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGKYTANVTIFKTTTTKKYQVPGLSADNRRSITV

FDSTLDAAKRGIGSALQQKIISDLLQSRKFNVLDRDSSGYYEMEKALIKSGDAASDEVYKLKNMLATDYI

LLFSISGLEGKQKTSNLTGKSKTEIEVIVDYRVLLFATRQIKFSNTLSMKVNLKDNSLSANETALKQIAN

RIAGDILNAIYPLKVASVENNEVIFSQSLNQGDVYECFALGKVIKDTYTKENTGRVESKTGSIEITRTSP

KFSYAKITEGSVKVGDICRPLSNTGSGNGYTIGRDANYQTQEGGGVNLGF

>EAQ71958.1 2-oxoglutarate/malate translocator [Campylobacter jejuni subsp. jejuni 81-176]

MALLGLSLVLISGVLTFGEVLAEKAAWNTLVWFSALVMMATLLGKLGVTQFLAEA

>EAQ71957.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MTNTQINDKILELANYLKIDNKCVAHNARLQSIQINGAVIKNFSFKLFNEYKLSFFNCKFLCEINEAPGF

FEIENPVYIYGCTFEENVISYNIKFKSNVVIAYCRFNKNFYFEANTFCNSSNFERNFYNYASFKKSHFEK

NVTFYNSTFKGLDFSQAIFNENLNIVNTKLNFTFSNLEEKIEQEYEEFNKNKKEEDQKSLDKFANDFRDS

FRTFKSALIKDNNALDASNFHKYELYCKEIELKQNWDKKGENVKNTTDLEKNVSRIRDFMDFLLLGFYRK

LCDHHTDFLKVFNNLILLIALYALFVFGFTWLHDDKLEDTRAILTLFGFFDKFRLYFDIISTIFVVFGCG

FFVCKLDSYEKKNNVSKKQNINFIYIIGDFLNLIKSLLFASFIPCVFYGLFSLFGFFLNLGKDFGYSLLI

NTLFVSLYICLVYTKSLFFGRYVVLIFSYIVFIIMLIKQPNVIHPLIGKIANESDKFFNYPSLIVLNILY

TILLALVLFSLQKTARKNSIVPS

>EAQ71956.1 gamma-glutamyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MRYLAIFAISITLSFGAANPPIQDRTGTGLVLSSHELANKIGKEVLDKGGNAIDAAIAVGYALAVVHPAA

GNIGGGGFAVIHLANGENTTLDFREMAPLKASRDMYLDSKGEIIKDASTIGYLAAGVPGTVKGMSAMLDR

YGTMKLKDLMAPAIKLAEKGYLINDRQEQTMLEAKDMFKEFPSSSKYFLKKDGSTYKSGDLFVQKDLAKT

LKLIAKEGPDAFYKGKIADLIAADMAKNKGIITKEDLAQYQAIWRKPVEGTYRGYDIISMSPPSSGGAHI

IEILNIMENANIENLGFASSKTLHIMAEAMRQAYADRSEYMGDPDFVKIPLDKLTSKEYAKEIYAKIPKD

KALPSSKVKPGLGQIHEGHNTTHYSVLDSKGNAVSITYTINASYGSGATVEGAGFLLNDEMDDFSIKPGV

PNLYGLVGGEANAIEPKKRPLSSMSPTIILKDGKVFMVVGSPGGSRIITTVLQVISNVIDHKMDISTAVE

SPRFHMQWLPDEIRTEPFGIIKDVQNNLEKMGYKITKEPYMGDVNAIMVDPKTGKIIGSMDTRKEF

>EAQ71955.1 flagellar hook protein FlgE [Campylobacter jejuni subsp. jejuni 81-176]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>EAQ71954.1 hmcD domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MFLTQTFIYTLTPKFDILISGGGSYARQEYTNFFTNAYSHKDRIGFDNLWLGFIYTGDSIADLIPQITFQ

TTVVQREKAINQTKNFYLKSQSLQASLRGYSDPVVYSIYTGFGYNQSRKFKTLKIEYGNSIYVGGDLSII

LSPKITLDLGAEQRFQMKQKINGYQNSEVRSIPTLSLGSTYSINSDTAVSVNASFGGSSASPDSIFGISL

WKKF

>EAQ71953.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MQNLNQNEQIKCPSCGSFIDISTALYAQILDKAKQEMLKQKKEFDDEVNAKRAEYTKALNDLKTQKIEQE

KLINEQVSQKLLLEKQKFEQELLAQKQNFQKEFSEKFNKEHENEMKIMQEELEKKSKELSEFLSIKAENE

RLKREQKENEERLKFQAKEEAFKEFKEQESKNLEFEREKMRLEFQKSTQEQDLKYKELETNFKSVAQKLE

DAQRRIEQGSQQLQGEAAELLIEEYIQSEYLSDEVKEVPKGVNGADCLHIVKDNFGNICGSILYESKRTK

EFNKEWLDKLKLDSIAAKSDIAVLITKTMPKDKEKTHFKEGILICTFNEFKGVLAVLRESIINAYKLKNA

LQNKDEKNHILYEYLNSKEFNTQITFILKTYQNMKEELEAEKRALQNIWKKRERAIENLSFNSTAIVSSL

NAIFSDLQGGNLIGEEGIKSLENLAKDED

>EAQ71952.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKKLILGFIILLFCACNDEKIDENILSKGTKTTEQYKQDANNLDLNSYKEIAEFFKDNQNIVFSDKPVL

IIFSANNCVYCDKLKHEIQNDKEVQNILKNTYNSYYINTSYHKIHNYDNKKTSTEELSREFNIDATPTLV

FFTPKHKTLLIYPGFMSAKRLALTMEILKDEKNQKLNEDELFKTLFLAYKEKNV

>EAQ71950.1 inner membrane protein yagU [Campylobacter jejuni subsp. jejuni 81-176]

MPLIAEVPPLCEIPFDEHLSEIFGHIVWLWGMEIVRRDIRNRITKEIEE

>EAQ71949.1 chromosomal replication initiator protein DnaA [Campylobacter jejuni subsp. jejuni 81-176]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

ASLKAKIEELKNKILVKSQS

>EAQ71948.1 flagellar motor switch protein FliM [Campylobacter jejuni subsp. jejuni 81-176]

MAEILSQEEIDALLEVVDDNTDTPIASNSKDEKDERNIVVYDFKRPNRVSKEQLRTIKGIHDKLARNLAS

QISSMMRSIVETKLHSVDQMTYGEFLMSLPSPTSFNVFSIKPLDGNCVLEINPSIAFPMIDRLLGGQGDS

YEASRELTDIELNLLDSILRIIMQRLKESWATVTEIYPSIEAKESSPNVVQIVSQNEIVIMVVMEIIIGN

SSGMVNICYPVVHLESILSRLANRDIMMGETSAKKSRNKELKTLIGRAEVVYEAILGKTLINVHEFLELK

QGDILRLDREADDKAIVSIDKKDVFLAQIGLHRFRKSIKILELIRTDKDEIKEILEKYEEERKAKASVYD

EPEEEDEEI

>EAQ71947.1 Na+/H+ antiporter family protein [Campylobacter jejuni subsp. jejuni 81-176]

MTLLTNPIIISVVLMTLLCLFRFNVLLSLLISALIAGVFSHLELVDTMNILISGMKENLKTALSYILLGA

IAAAISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLSLFNKLKIDRR

AVACALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSASLNDVTNTMYFAAICMIAGLFLALFVFYRK

PREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFVLMVILGGVEFSKVNEVFD

DGLKMMGFIAFVILVAAGYGEVLKESGSVVDLVNSVVPWMEQSKFLAVFFMLLIGLIITMGIGTSFGTIP

IIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFYNG

PLLILGSIIAMFL

>EAQ71945.1 GTP cyclohydrolase I family protein [Campylobacter jejuni subsp. jejuni 81-176]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>EAQ71944.1 biotin--acetyl-CoA-carboxylase ligase [Campylobacter jejuni subsp. jejuni 81-176]

MEKGLKVKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEED

LPKDLPLASVSIYFAYLLKELLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFSPQN

TALCDIEILLKDLVSEFLQKVEKKILWKNIFSKYMLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGD

KRVYSLR

>EAQ71943.1 L-lactate permease [Campylobacter jejuni subsp. jejuni 81-176]

MEQILTWQQIYDPFSNIWLSALVAFLPILCFLVCLVVLKLKGYQAGFLTVILATLVALFAYKMPWNLVGA

SFIQGFTNGMWPIAWIIIAAIFLYKLSIKSGSFEIIKKSVMSITPDHRIQVILIGFCFGSFLEGAIGFGG

PVAITAALLVGLGLRPLQAAGLCLIANTAPVAFGAVGIPIIAMANLVGIEQHSVSAMVGRMLVPLSLTIP

FFIVFLMDGFKGIKETFPAILVAALSFTTTQFLSSNHLGAELPDIISAVVSLAVTTVFLKFWKPKNIFRF

DNESNFTQDNTLSFNQILKAWSPFILLIVCIIIWTQPWFKALFDKDGILSYTSITLQFSNITTGILSPSI

TGIGEAKPLSLALGVDLINGKTVAQAGTAILLAAFLTIAILKIKAEDAAECFWVTLKEMAIPCITIGLVV

AFAFISKNSGMSTTLGLAFAHTGDAFSFFSPIIGWIGVFLTGSDTSANLLFGTLQQVSAQKLGISEALFL

AANSVGGVVGKMISPQSIAIACAAVGLVGKESDLFKFTLKYSVAFIILIGIWTCIIAFFLQGIIPEVIVK

>EAQ71942.1 ATP synthase F1, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>EAQ71941.1 3-isopropylmalate dehydratase, small subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>EAQ71940.1 lysine decarboxylase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MNEKISQDLEKFANIPNLKNAVTFFGSARLKEDNFYYQQAKILAQKCVQNGFCVISGGGGGIMRAANEGA

FSQKNNTNSMSSVGFNIFLPHEQKLNEFVEYNITFESLAIRKMALIEKSLAFVIFPGGFGTLDELCEILT

LKQLEFKKDVPIILFGSEFWRGFDEFVRNSLLKLEVISKGDELKYKITDDLDFIINTLKEI

>EAQ71939.1 flagellar biosynthesis protein FlhG [Campylobacter jejuni subsp. jejuni 81-176]

MNNQANKLRNLMSQNGTKKSQNTHFIAITSGKGGVGKSTISANLANVLANNGYKVGLFDADIGLANLDVI

LNVRIQKNLLHVLRGECSLEDILIEVKPNLWLIPGESGDEILKYNDKNIYERFLNQASILDELDFLIIDT

GAGIGGNILNFLEMADEVIVVTVPDPAAITDAYATIKTTSKTKENLLMLFNVVKNENEALKVFENIKKVA

DANIKNPLNLEFLGHLSASKDVSGSIKKRTLFSDENTASSDEIKALASKLLYRLERKVLDNVSNRSFSSF

FRKIIERF

>EAQ71938.1 exbB\tolQ family transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFEAIFHFFNNSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>EAQ71937.1 C4-dicarboxylate transporter [Campylobacter jejuni subsp. jejuni 81-176]

MGLGEISIMIFLSLAFLYTHYFFASTTAHISAMFFVFYSAGLALGAPPLLYAFIMIASGNVMMALTHYAT

GTAPVIFGTGYVTLKKWWSIGFVISMVDIVVMIAVGLFWWKILGFY

>EAQ71936.1 ribosomal large subunit pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176]

MRINKFISHNTRYSRREADELIKQGLVKINNKIALLSDEVKFDDKVFVKGKRVQKRTQFSVIIYHKQKGE

IVSKKDDRGRKTIYDTLPRQFSTWLSVGRLDYASEGLLLLTDSPVIANALMHSDLEREYYLKVKGTVSKQ

VIEAMQNGLEIKNEKKGAHAKTKITSMSFAPFIDFEIFGSSGGYTKLRVVINEGKNRELRRFFGHFDLEV

MDLKRVAFGALDLGMLKAGKHRYLENGEYEKLRDFLKFNEIRY

>EAQ71935.1 iron-sulfur cluster binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MSQKIPHEQIVQIKLNDKQMQENLMTAMHTLQKNRLNVIDARFKDWQGLRAKAKQAKNNALMSLEERLLE

FEKNATKNGIKVHWASSDEDACEIVYEIMKEKNITKLLKGKSMASEEIGLNHYLEKKGLKAIETDLGELI

LQLNEEPPLHIVVPAIHRNRHEIGEIFKEKLGANLENDEPESLNAVAREHLRKDFEGLKLGLSGVNFAMS

REGAFWLIENEGNGRMCTTAPDIHIALCGIEKVMESFEDAATMVSLLTPSATGQFIPTYNNIITGPRKNG

DLDGPKEVHVILFDHNRSKMLAHEDYYEALRCIRCGACMNFCPVYDQIGGHAYQTTYPGPIGEVISPNIF

GIDHTGDILNFCSLCGRCSEVCPVQIPLADLIRKLRCDKIGQGKNPPLGANNVHHNALEAFAFKQFKNIA

TNGDKWRFSLSKAHYFNWTVQNFASILPVIKKWYAFKELPQIKMDLYKEVQKLEGVSYE

>EAQ71934.1 putative iron-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MEVKWSRDFSIKNMQLDKQHELIFEITNLANDLALNIQDNNTQHKNDLKQILVKLFQYIKIHFKDEEKFM

ESIDFPLIEEHKKSHQILVEKTKELLEHSDNIVKMSQELSILTKDWILDHFANEDLWIANFTKKPYTFKK

SIIP

>EAQ71933.1 2-oxoglutarate/malate translocator [Campylobacter jejuni subsp. jejuni 81-176]

MARGVIKTGLGEHLAYHFISILGKKTLGIAYSIAFCETILAPVTPSNTARAGAIINPIVQVIARSFKSTP

EDGTQNKIGTYLSLVNYQEPILFHQLCLLQLQLQILWWLIL

>EAQ71932.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKTKILGTALIGALLFSGCAQTAYTDGKASQVKKGDALTLGLDRQDFESAAETMINSMLSDPAFANIKP

GTRKVIAIGRVVNDTPQRIDTEKLTAKITSALRKSGKFVLTSAVAAGGALDSMSEDVRELRDNDEFNQKT

IAKKGTLVSPDFSLAGKIRQDNVKLSNGKTQVEYFFLLRLTDLTSGLVYWEDEQTIDKTGSSKTVTW

>EAQ71931.1 protein of unknown function [Campylobacter jejuni subsp. jejuni 81-176]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMNNILDDECLRLFSQAEIIFYSFGQTNDSTAFKLGEVTESKDEFKNRIIDDCNKCIKRAGYYDI

NEFISEISEDNYEWGKYFHYLFLTYNNVGIEECMKLIDEKIYAFTIEHIIPQNIINNGLLKNYKFENEDD

FNKLKNTFGNLIPLEKILNSICSDRSLLDKKEYYKKSKLSCNLSFANDENFLNFEKKQIIKRNEDFTKWA

RKFFVDFLKITQK

>EAQ71930.1 type II restriction-modification enzyme [Campylobacter jejuni subsp. jejuni 81-176]

MKFEAINEKEFLNPYHRKKPILETELNEFIKTLKDYKINLENNLKNNEDSLVANALSKFFENLSFQCEVK

SIHKGNSGIDLALKKDGLTQVIIEAKLPNSREFFSPSKPNCKALHECILYYLRERKALNSSLKHIIITDF

YSFFIFKADLFEELFNKNKYFKEAFENFESKNSLFKGNTDEIYKEFEKILNGDSTLKGLFVDLKPILEQD

KLSFSKLKPLFKIFSKDCLLGEFNPNDANSLNNAFYKELLYILGLYESKQNSKLIITKSEESKEEQGTFY

TAINSKLKEENFETILKLLILWLNRILFLKLIESNLVRFNDDKNLKFLNFKKIPDFDKLSELFFEVLAKE

KSTRKKSEFAYLPYLNSSLFEKQSIENTLEISSLSNDLKLFYYKNTVLKDDKCKAKKGQVGLLEYLFEFL

DSFDFGSDDEQSEILSQKELISSSVLGNVFEKLNGYKEGSFYTPSFITSYMCKESITKVVLDKFNAQFDL

DAKDISELRRSLRKEDKKAQKELLNSIKICDPAVGSGHFLVSALNVMLSIYDELNLFDEEFYLEVQNDEI

LITGRKGEFIEYKRPKTPKDKAHLIQQELFHTKKDIIENNLFGVDINPNSCEITKLRLWIELLKHSFYQS

FDDETYHDLKTLPNIDINIKCGNSLVSYFETGKSLNHYPNIKERMGKYKRIVKDYKEGFYTDKSRINQEI

KNLKISFKNFCFADKFKKEMKGFNDKCEKYSKKYGNFLAVDDENLKFFVSANLTLFDFDEKEATKEFANL

KKEYDNIFNLESNHPFEWRFEFPEILDDDGNFKGFDLIIGNPPYIRQEELKELKPHLAKNYKVYKGTSDI

YTYFYELGFNVLKDRGGVLSYITSNKYTRAGYGEALREFLLKNVKFLEYTDLNGIKVFDSATVDTSILCF

EKSKSKDNKFKYLALSNEILKTCAYDIGLYKDFAEFSQNSLSKESFTFSDENTSALKAKIERIGTPLKEW

HGLNIYRGILTGYNEAFIITTEKRNEILANCKDEAEKERTAKLIRKMLRGRDIKRYSYEWAGLWVINTHN

GYKNQNGEKVEAINIENYPSLKKHFDEFYPQLEKRADKGLTPYNLRNCAYIEEFEKEKIVYPCIMAKEPC

FSYETSFAFAMAPANIITSNSDILKYILAFLNSDFIYLMLRKFYMGGGIEGELKTNNLEKLPIPKINSKN

QKLADELINLVDKILKAKEQDKNANTQELENKINSLVYKLYNLTEEEIKIIEGK

>EAQ71929.1 exsB protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>EAQ71928.1 uncharacterized conserved protein [Campylobacter jejuni subsp. jejuni 81-176]

MKTNNIFMALAIVLASLILAFGFNKALSDFKTLERSVSVKGLSQKEVEADTLILPIKFTRSNNNLTNLYE

ELEQDKENIIKFLKEQGVKEDEISYNSPNIIDRLSDPYGNDTQATYRYIGTANLLIYTQNVKLGKSILEN

ISSLAKFGIVTKIDNYDIEYLYTKLNDIKPQMIEEATLNARNAAIKFAQDSNSHLGKIKKASQGQFSISN

RDKNTPYIKTIRVVSTIEYYLKD

>EAQ71927.1 flagellar hook assembly protein [Campylobacter jejuni subsp. jejuni 81-176]

MISSSDWNLNTTATTSGTTSSGSTSGTTRTDSSSSSGIVSNPNATLDKDAFLKLLLIELQHQDPTDPMDS

DKMLTQTSQLSALEMQQNTNTTMQKMVETMQKLSDSFSTSMSTSALGAIGKMATVSDNKIKLTGADELIA

LKMYLPEDSDENGVTLEIYDSNNKLVFSEKSDAKSISQGLFTMEWPGRNNDGVYAGDGEYTVKMVYNNKN

GEKITANYGTYPIEGVVFKDGVAYAKMAGQEVPFDAIQEITDYKLGSSSSTGGSGSSGDSSGGSSDGDSS

GSGSTEDGDKEEKA

>EAQ71926.1 metallo-beta-lactamase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKKNR

NLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDAII

VDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGMIS

NKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPIDG

YPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFARTKGRVIMSTFSSNIHRVYQAIT

YGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIVTTGSQGETMSALYRMAT

DEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLTKP

KFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIADD

VVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINVKDEVLNDP

RFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>EAQ71925.1 homoserine O-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>EAQ71924.1 ribosomal protein L21 [Campylobacter jejuni subsp. jejuni 81-176]

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>EAQ71923.1 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176]

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>EAQ71922.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFQVKTLETFNPFESLNHEQANTEQILDFRVIDFKLLCSSVKPAKTKTYERKDFDLFYADDFFVKNYNT

IIQKFLIEIYPKKSFPFTVKLRSNSNLTHLKASINLTENFKYYPNLKFDILQNIYKIMIKQKFLILRLDK

NLFTKIDDFILSIQKNPSIKELELEIAKGVDKIEHKSDEIIYHRNVEEVCFSENANYDEGNYCKPIEKNE

LLFEYIYRILGKEGRNLRGEILHLNPIAFLNNPFIIKDESIYVEELEDRIKYFSANYGFLNKDHSGYSVI

NNLKLSQVGLKTTGSIKTNTNENINLEITNFDISDDAIKSGIVNVQASDIKVNGSIGATKLYGKNISIKG

LTHAKSEIFAQDVFVAIHKGTLQADTVYIKNLENGTIIAKNVFVENCMGGKIEAENIYICNLLTDNTLYP

RKNLIIANNIKFKNNIVVSPLVSIENNSDTECENLKNLSLKIKSKLDDTISKMQNYYDYLIKNQIKIIKL

QKTKNPSAIEMKFSNLYHDIIKKYNHLSILYKKLIKLKYQIDAKLNFLNEMVYNVKIYIKAKNIGKDNFL

KFYPKTNTNLELKHHINLKDYEKVLYLEKGQQVSYIKSSHNYSESDIEEIKIIFEKLEKDNS

>EAQ71921.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKPLNEEIFIEFKSDLAERKNEVLLQVLELLETFRSDKNEKMARISSELTEILENEENLEKILNAKNLE

ELLNILIALNEDKMIKVYEDSYLKEKFPNVMVDKFLK

>EAQ71920.1 ATP synthase F1, gamma subunit [Campylobacter jejuni subsp. jejuni 81-176]

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>EAQ71919.1 disulfide bond formation protein, DsbB family [Campylobacter jejuni subsp. jejuni 81-176]

MNEINKTKNFYTLMCLAGFLIILLPVGIANLIFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGK

YLAALLIMTAVGLYQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFE

AELNGEKFRKYTKFSFAAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSKEGWNGLWQ

NISFLGKRDVKAPDYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVA

SSKWDVAFLDNNFSVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQY

ADFVKGNDKFKGQGESLGRGRLDTVRAKFNHVASMTTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSG

EFTPKANLKEGKTLGDLYVTSMTFKDGEIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDG

KINILSYQDGANKLYTLN

>EAQ71918.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALKFNITIEYTKENQKLTRENSKSAGSFRDTKTYINLVVEKNTDSQICEKLLDDVEKYFIGGG

>EAQ71917.1 tetratricopeptide repeat domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIKVGLIFSGIVCLFLTACVNQVKQNTTFENALTQKYCGDDFFNQNLEKIKKNDDVIYTGLNAGLIARN

CGDFNKSNVFFDAAEESYKYDVDLENVGSKAAKFVGTTLLNDTIVDYDGSLYERIMVNIYKALNYMEEDD

YENARVEFNRALMRQDKAKEYFAKEIEKNRADLDKAKEDKNYDKNMNENSKVIEAQYDNLFKEFDTTKNF

INPYATYLASIFFFMDKDYRKATDLFREVAIIYPKNKTIKKEAKIFKEYATKIKVKKAKKYVFVVYENGF

GVVKDEFALTLPFIVDKKIISTNIALQTLKKREASFANLNINGQNTNDFVDLDNIVATEFKINMPAMIAK

ALAQTIIKTTLNVAVANNDSTGGWLSLATAVATAATNKADVRSWRGLPKSIAMATIENDGNLEIKDPQGN

ILFQKSLDKNKNALVIVRSFAPYLPASVAIMEK

>EAQ71916.1 2-isopropylmalate synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>EAQ71915.1 3-isopropylmalate dehydratase, large subunit [Campylobacter jejuni subsp. jejuni 81-176]

MAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>EAQ71914.1 hypothetical protein CJJ81176\_0061 [Campylobacter jejuni subsp. jejuni 81-176]

MNLRIKLNLFISLLFSLFSFFFCFSLFFSYLLSLISFYIEYLKNNVKSKF

>EAQ71913.1 drug resistance transporter, Bcr/CflA family [Campylobacter jejuni subsp. jejuni 81-176]

MQKHTKIHGFAKFKLIVILALMSSIAPLSTDMYLPALSHVEQSFQTNSFLTQLSIASFFIAFALGQLIYG

PLSDIFGRKIPALVGIFFFIVSSLFCVIIDDIYAFIALRFFEALGGCAGVVIARAIVNDLFEIKEAAGIF

ALMMVFSSLAPMLSPTFGGFLLEYFSWHSIFATLFALGILLFLMILFGLKESAPHLKNKKFSHHEAMKSY

KFVLSDKRFLVYILCASFALAAMFAYITGSSFVFTQFFGLSEQKFALLFGANALGFVICANINARLVLKY

ESEKILAKALMIMFISTVILLVNAFFHPNFLLFELSIFTSIAMLGFIAPNTTTLAMARFKEHSGTASAVL

GTVQFGFAGLISFVVGAINANTPIILAFVMCACVLVANMIYFLIKIKEKNENK

>EAQ71910.1 ATP synthase F1, beta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>EAQ71909.1 membrane protein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MRPENYVAFFTVCGFFIGLTFSIISIDEAFDILIFTCFITFMFYVFVHIAIMNFIDVKKISGRIFNKHDY

EKTSNNIINDLVIREKKMDIILEKLNEEREELKKNEFKERRRNAKRAA

>EAQ71908.1 ATP synthase F1, delta subunit [Campylobacter jejuni subsp. jejuni 81-176]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>EAQ71907.1 aspartate ammonia-lyase [Campylobacter jejuni subsp. jejuni 81-176]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKDVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMEAKK

>EAQ71905.1 ribonuclease HII [Campylobacter jejuni subsp. jejuni 81-176]

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKQLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDALGLSTCLKKGLKLIKKHFKTENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDRVMNFLAKDFPCYEFEKNKAYGTKAHKEFIAKFGICKLHRKSFKLL

>EAQ71903.1 single-stranded-DNA-specific exonuclease RecJ [Campylobacter jejuni subsp. jejuni 81-176]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIIRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMCKFLELLAIAIVADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLVLTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGMVTPQFVIKEIL

>EAQ71902.1 cytochrome bd-II oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176]

MNELSSVDWSRAQFALTALYHFLFVPLTLGLSFMIAIMETIYVKTKNERWKKITKFWLSLFAINFAIGVA

TGIIMEFEFGTNWANYSWFVGDIFGAPLAVEGIMAFFLEATFFAVMFFGWDKVSKGFHLLSTWCVAIGSN

LSAFWILVANGWMQYPVGMSFNPDTARNEMQSFFEVALSPVAISKFLHTIGSGYVISALFVMGISAWFML

KGRHIIEAKKSLVVGASFGLVCSIFLFFSGDESAYRVTQTQPMKLAAMEGVYQGEHRAGLVPFGILNPKK

TIDNNESVFLFDITIPYALSILGNRDPNSFVPGIEDLIYGNESKGIEPMQNRIDRGKIAIQALKDYKLAK

ENNDTIAMANHKSILETHFKDFGYGYLEKPSDTIPPVALTFYSFHIMVALGSFFFLLFIVTLYLTMANDI

EKFRKVLWVCLLSIPLGYIAAEAGWIVAEVGRQPWAIQDLLPVHIAATQLGKVNVQISFWIFAVLFTALL

IAEVKIMLTQIKKGFDAHAGHTPLMGKGEK

>EAQ71901.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIILILALFLSASWAQNLEINPDTGLIIDPDSPLVEANCLACHGSNLITNMHASKKAWLAAIRWMQDS

EGLWEIEPEDEEKILNYLEKYYGEKYDTRRRIPLAIFLQNKTH

>EAQ71900.1 ATP synthase F0 sector B' subunit [Campylobacter jejuni subsp. jejuni 81-176]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAIAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>EAQ71899.1 cytochrome c551 peroxidase precursor [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIMILCLSYANIVFAVDMITPIPNSISYDKEKAKLGKSLYMDKSLSKDGKVSCNTCHRLDQHGVDGL

EFSIGVDNQLDKPFNTPTTFNSVFNFVQFWNGRAKDLAEQATVPFFNPKEMGLSPELLLQKVNSNENYVK

TFKKLYGEVTVENIALAIAEFEKTLITPNSPFDRYLSGDQNAISAQAKKGYEDFKANGCISCHQGQNIGG

NMFQKIGIFEEYPNQEDLGRYEITKREADKMVFKVPSLRNIAKTAPYFHDGSIPTLDACVQFMAYYQLGK

FLDQETVDNIVAFLESLTGEYHDK

>EAQ71898.1 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase [Campylobacter jejuni subsp. jejuni 81-176]

MLKIQGVKHFEKSRFFPFFSQNIRSFKYLALIGLGSNIEPEKKRFDMLFRVMMDDKRFKILSTSPMLINE

AFGFKEQKDFTNAVMLIQTNLHARALLKVLLYYEVKFKRKRTFKNAPRTLDLDLLYFSQKVKRDKWCEVP

HKGAKERVSVILPLGMI

>EAQ71897.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>EAQ71896.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>EAQ71895.1 CiaB protein [Campylobacter jejuni subsp. jejuni 81-176]

MNNFKEIAKLVRKYKERNNALYEFLDKEDVSEYFRSLISLSELKQDKTTMLAILRRLIDLKEENLVQEWK

KNNFKEDKIIELKHKFYEEVRKFYEKEHQNLINEIKEKKLLNNFYQSLIQGVHNIGLIMNIFEISWTKEI

IEKNNKILSTQFPNLDDAMEFLRKNHLYQKTPEGEICERSYGVLVRIGNLWKFVPYARFFENEILKLEFA

FENMIDQLKIFASSKEEKAYIEYFEKLKLAFCEKDEDRVIKAWQEAEFAWMKVKSPLQVGHPLEYYEDNY

THAVALEWDIRIEDENDFDVLKFGSEIKESFEHVYKNIGLEDCELEKEVLSNIEKTQLYICTPMIFYGAE

LKGLFSAQVVPNDEFVSSKAGKKIFAFINFVYENAKTKPFMKISSEVFDKEFLDFGRNILFYQEKIWKRV

YEVSTIGHEFGHIFFIANDTEKTMNQSGFFKNIEEYKATTGGLINFFYHEQDDLIMPVFHELIKRAIGLI

SWQRVDEVRPYYTEGLIHLSLLFESEVLIFENNNLKINFDLGHYEKFKELTLKNYHELAKHYALRLDAKE

FLSRFCEIEDNIFLPIMPKCKEFVKFYYDLYEKIGNEIDNSGEFERYKKK

>EAQ71893.1 oxaloacetate decarboxylase, alpha subunit [Campylobacter jejuni subsp. jejuni 81-176]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFAMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVPFYEKILKEILAAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVDGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGFEEEKILKYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDTNIVELASKQLNLEPTTELAINIADKDE

GKSIAYTKTLLEKEGIETSEENIFIAAACKEKGIAFLKGEAKVNIRKLASMPKPMSVDENKFTVAVNGNK

YHVEVSYGFDKDVNVKSVKKVEENKNIISSNSTSSVDAENEVLAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>EAQ71892.1 chemotaxis response regulator protein-glutamate methylesterase [Campylobacter jejuni subsp. jejuni 81-176]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVASSFKPSVDLLFHSAVSLAKTNKILAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>EAQ71891.1 conserved hypothetical protein TIGR00278, putative [Campylobacter jejuni subsp. jejuni 81-176]

MICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFFSTFFRILRCNPFFKGGFDYPRVSK

NFYPINLCFKPIFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>EAQ71890.1 argininosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176]

MKNEMWSGRFSSASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIIKGLEQVKSE

IEQGKFVFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEYAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELADFLPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFALDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGIFDSVKTAKDSLIILNAMLKE

IQINKENMLNACKKGHMLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPVFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILEGFIQNL

>EAQ71889.1 cytosol aminopeptidase [Campylobacter jejuni subsp. jejuni 81-176]

MKFELNDKKLDAIKADFELVFIQDKNLKNFNKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLSSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLERFIISSEELNGK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVHPPRLIHLSYKAKNAKKCVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDILISREGISIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVIGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>EAQ71888.1 glutamine-binding protein precursor [Campylobacter jejuni subsp. jejuni 81-176]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>EAQ71887.1 thioesterase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MKMRVYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILEVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDTQLKKLFEELF

>EAQ71886.1 adenine phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MIKLTQEEQKYLFDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>EAQ71884.1 ATP synthase C chain [Campylobacter jejuni subsp. jejuni 81-176]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>EAQ71883.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKIFLSVFLVLSLNAQNLEIDKIRTDLYSKSGTNVLKKVEISLEFDGNNLKENENKLIDAVNTVISGFF

YEDIFTEIGKNNFKKTLEKFLDKKYKIKLDDIYIISLSGVEKFDLEEFKRFLESTEAKEKGMGSEVKKAL

ENLEVPKTQVPSVEKITAPSVPNLEAKQVEQLFKDSDEENKNDNGEINIDNLNTPKMTPDIEEKIKRDLI

ANPPQIFKENNASKPYHLPQIGYDIKLDENSTQN

>EAQ71882.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>EAQ71881.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>EAQ71880.1 inner membrane protein oxaA [Campylobacter jejuni subsp. jejuni 81-176]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNTPNIQNTTTNTPSAA

LVSQDSVISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYVANASNLFVDENGSQVLKLTQNLSGLKIEKDITFYPKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVMDNKETIETYKDGDVEKDESANNVVMTSAFDRYYATFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFLHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKTSGA

>EAQ71879.1 putative methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKEA

IEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIADE

SCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELLN

HAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDIS

SQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKKV

ENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQIT

KELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSRM

QENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>EAQ71878.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLFLSTLFFTPSFLFGATEIANGNLIYTWGYGDVMNEIMQAVKGITTETSYIVNAALAISLLLFSIKKAM

DGQTNPVFEFGKMFVLFAVVWVMFLKTPNDNNHRFMIHDEVTSKDYVISQISIGIGKSFALITQFEKVIL

EAMEKHFSTPQSTNFSNAGLGFSLQVMSTLPSVKLSAIDATLQKNIDFYFRNCVSVGILLNQQGRNLFQN

SDNLMQDLFTNIGNGFQLTPLFKNNNNIEEQSVVPCSDASPQIVEMIQKDTDEAIKIHAALLGMANDMAN

YEQKFLGAAQIYNKQAVSARSYLQQSMIMLASQDAIINTAKSVGLNPASVAANTAYADQQFYASMQAQGH

LAQTYLPLAKAYLTAIIIGLS

>EAQ71877.1 acyl-CoA thioester hydrolase yciA [Campylobacter jejuni subsp. jejuni 81-176]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKVVNVGNTSISVEVEVTAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>EAQ71876.1 conserved domain protein [Campylobacter jejuni subsp. jejuni 81-176]

MSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRPIKAIYVKMVLK

AITGE

>EAQ71875.1 GTP-binding protein YchF [Campylobacter jejuni subsp. jejuni 81-176]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDIEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNDHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYEDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDVMHFRFNV

>EAQ71874.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MNFLMSSTFTHYSNASYNQTILQKDAHISMGVENTYDLALNGSPYLIGAITTYGDSTNNSLNIKASSSVE

FFTSLPKKDKNGNNTFDERITHLVGGLAYQGNVKNNKIFIKDANMIIHGPSKAYASLAAAHISAGYIIKT

FKPVKTF

>EAQ71873.1 Domain of unknown function (306) superfamily [Campylobacter jejuni subsp. jejuni 81-176]

MKKMLQIALAATFFAGCASTSLTSSTSKGNNELVQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>EAQ71872.1 amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MENVFNAQNIEFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>EAQ71871.1 N-acetyltransferase ats1 [Campylobacter jejuni subsp. jejuni 81-176]

MSEFKIIDLRQEDLDILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>EAQ71870.1 preprotein translocase, SecA subunit [Campylobacter jejuni subsp. jejuni 81-176]

MFLNTLKAVFGTKNDREVKKYFKRVTQINALEGKYQNLSDDELKAEFAKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVILSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKVEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPAKPEGDFVVDEKNRNILITEAGI

AKAEKLFGVENLYSLDNAILAHQLDQALKAHNLFEKDVHYVLRNNEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLVKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDVRAKISQNIAEYSANVMNDYILDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNAWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQEEVQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>EAQ71869.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLIFKEVANRSNFMNYLVMSTPVLAYAIAKASEQGFVSFASGLSQALTGASRTAGSFANQQALSTQTSIA

APRGDEVWAVGAGVASLQYARNIDGVVTKFNTQSVMGDNTKNSETSNANMTGTNVDGMMSGAKLSAGTMT

TVNSVSQANSDAWNKNFNDQYSHMSQSGRASAFK

>EAQ71868.1 phosphoenolpyruvate carboxykinase (ATP) [Campylobacter jejuni subsp. jejuni 81-176]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>EAQ71867.1 permease, putative [Campylobacter jejuni subsp. jejuni 81-176]

MNKSVLKYLLFKYLRFDKEQPFINLSMLLTFLGVCVGLCVLLVAMAIMNGFDKEFEKRFFVMNYPITILP

KFYAPVNDEFIDELRKTFPNLLFSPYISTQVVVKGDNRFEGGVLFGVNFNDEKKINEVVAKALKDENLSG

FDILVGSALIDEFGLHKNDKLSLIFSNLNPSGFSLVPQTKRFDVKARFTSGLAFYDKAYMYTDVDALKKV

LGMPKNPNYDGVHVYSDNAFKDVEKIKSYLKDDYAVVGWWEQNKNFFSALELEKRALFIVLMLIILVASL

NIVSSLLMIVMNRRSEIALLLALGTSKNEVKKSFFALGMLIGGGGMIVGVVLAFFALWLLGNFDIVTLPA

DVYGTSKLPLDLSLMDFSLTIVGALIIIALSSFYPAKKATQINILDTLRNE

>EAQ71866.1 bifunctional purine biosynthesis protein PurH [Campylobacter jejuni subsp. jejuni 81-176]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>EAQ71864.1 peptidyl-arginine deiminase family protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKVVSEFQKVLLIAPKQSDFENFKDIKNVEF

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEELKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLLELPIPKPLYYEERRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPNHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>EAQ71862.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKDLDYYLNLPYEIIIKKLDEKDGGGYFARYKDFPYIMGDGENEIEALKDLKEAFKGALEVMLEKGDYIK

EPIDNEAKIRINITLPKSLVEAIDTISDNRSKFLADLANSAIKSYKIST

>EAQ71861.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MNHDKQPLAYNSVLFADFLGGKTEQGQALDNTINIKRY

>EAQ71860.1 ribose 5-phosphate isomerase B [Campylobacter jejuni subsp. jejuni 81-176]

MLREKIYIASDHAGFELKEKICVFLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGVELAIDIIEKFIQTPFEEGRHMQRIQK

IEVKI

>EAQ71859.1 lipoprotein, putative [Campylobacter jejuni subsp. jejuni 81-176]

MKSCLYFTFIVLFLTACSTKNLTSLHHENLEQKNENQHYAKLEYEQNVSILPQFTYNINFDVKRYKKHFF

NPWHDSFKNYKGQNIFWSFPLYLNSKNTYYFFNKQIIPLSWFKNAINNANIQEFGKLNQKALIIQNTIIK

NLPTQRAILKNPFFENEGIPFDYASDGILNTGSPVLISHFSKDKRYAFVLGEAGFGFVESKNLEFFSNDR

AKIYENLNFITPLKEKFAIYSEDGKFLFESRIGAIYPYYKEDKNYFYGKIGSKKYKISKKDVSKFPLQFN

DKNLKNQLSQVLNLPYGWGGYNFERDCSLLTRDIFSAFGLYLPRNSAAQKNSFNHFDISTLSNSQKKDFL

NRFGKAYLSLLYLPGHIMLYAGQITDNNIAIHNIWGLRKDATQRLLISSSVITSLEIGKNEILEDNLLLS

RLKEISFINLNEQEKEQIKSYLENIQNK

>EAQ71858.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>EAQ71857.1 amino acid ABC transporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. jejuni 81-176]

MSLFTQKNKDFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAIATYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIVFLRFLSTFYIELIRGTPLLVQVLLMYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQVFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLILTLPISIFSRYLERKCQK

>EAQ71856.1 DedA family protein [Campylobacter jejuni subsp. jejuni 81-176]

MEEFLKNLLYQYKDLAYIIIFLWCILEGELALILAGIFAHQGHVNLGFVIFIAGLGGFVGDQIYFYIGRY

NKRYIQKKLKTQRRKFAVAHLLLQRFGWPIIFIQRYMYGFRTIIPMSIGITRYSAKKFAIINLFSAWVWA

SITILLAWYFGEQIWKMVTWAEEHWYYAAIIIIAFLSLLLFGFKQMEKAILKDKRKKS

>EAQ71855.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFKKFYKLKIDGIILKDNIDNFPKN

>EAQ71854.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFFTLCIWIVLWTPILCIINFINDFNLMNVAQVITGEKQL

>EAQ71853.1 amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. jejuni 81-176]

MNESVGFVEHLRQILTSWGLYDENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALLIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYAPAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTR

>EAQ71852.1 hypothetical protein CJJ81176\_0945 [Campylobacter jejuni subsp. jejuni 81-176]

MAFGYEKFIAKILLQKNRKDWQKIRKAKNKIRYNKKSALSFHSWRKFSNQG

>EAQ71851.1 carbon starvation protein A [Campylobacter jejuni subsp. jejuni 81-176]

MTQLSTKILWLFVATLGAICFGYLALQNGESVSAIYLVVAAVCIYMIGYRFYGRFVAYKVLELDKNRATP

ALVENDGRDFVPTNKAVLFGHHFAAIAGAGPLVGPILAAQMGYLPSMLWILVGGVLAGAVHDFVVLFIST

RRKGRSLGEMIKDEMGKFTGGVAMVAIFGIMLIIIAILAMVVVKALAESPWGLFTIAMTIPIAIFMGIYM

RFIRPGRVGEASIIGFVLLILAIHYGSVIAADPYWAKIFTLEAPTLAIVMMAYGFIASVLPVWFLLAPRD

YLSTFLKIGVIVVMAVAIVLVAPDLQMPKANTQYFDGTGPVFAGGVFPFLFITIACGAISGFHALISSGT

TPKMLENETHALAVGYGSMLAESAVAIMALICACILHPGLYFAINSSSALIGTDVVNVAQTISSWGFSIT

PEEITTLTANIGEHTILSRTGGAPTFAIGVALILHELFGGVDLMAFWYHFAILFEALFILTAVDAGTRAC

RFMVQDILGNVYKPLGDIHNYPAGLLATALSVAGWGYFLYQGAIDPKGGIYTLWPLFGVSNQMLAGMALL

LATTILVKMGKARYTWVTLVPAVFVLVATLYGGIQKIMPYEEGNKVANAVSHVAAVSIQSQKIKDLEFKL

NNTKDEKEISTIKKEISIATQNKVGNLLNAILCVFFMIATLLVIISCIGICLGKIKIPLKETKYIKIDEF

QKI

>EAQ71850.1 tRNA modification GTPase TrmE [Campylobacter jejuni subsp. jejuni 81-176]

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>EAQ71849.1 ribonuclease P protein component [Campylobacter jejuni subsp. jejuni 81-176]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>EAQ71848.1 CheR methyltransferase, SAM binding domain [Campylobacter jejuni subsp. jejuni 81-176]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>EAQ71847.1 glutamine transport ATP-binding protein glnQ [Campylobacter jejuni subsp. jejuni 81-176]

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>EAQ71846.1 phosphoribosylformylglycinamidine synthase II [Campylobacter jejuni subsp. jejuni 81-176]

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>EAQ71845.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIEAIDLQSALTEASRSLECSVMDLEYEIIQHPRKGFFGFGRKKAIIEAKAKKRILKKNPKKEFTSSKN

HKPETHEPKQENKIEIKNEKNKSQKEKYTVKSDEIFDSFHRESKGVRNTQDILDEIRIQLVKLLESSQFK

IELSELRMYDEDCVLIRLDGEDAALMIGKEAHRYKAISYLLHNWINLKYNLLVRLEIAQFLENQIQGMQL

YLQSVIEKIKIHGRGQTKPLDGVLIKIALEQLRAEFPDKYVGIKQNNDQRFVVINDFFKKDE

>EAQ71844.1 transmembrane transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMIGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEVSKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGVKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSASLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFEPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>EAQ71843.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MLDKLEKILAYDNVFLSGGAGVGKSFLTNELIKSYRKQKKLAIALGSSALSAFNIGGVTLHSFFCLGYCD

DMMKLSALDRNQKQKEKLTKLKELLKTIELIIIDEISMVSANVFEMIGFRLKNSQFNGKILVVGDFFQLP

PVIKEKKETLFNHSYYAFSSFFWQDLNFKNIKLSQPKRTQNMEFYNHLSLIRQGFLDEKILSFFESLRID

YKELENLEDDYTLLCGINKKVNNINQEKLSKLETPLVCFKAQVKKEDKRIKDEELDSWIRSLNILEELNI

KIGARIIFCVNNWDKNYYNGEQGIIEDILYEEEKIYISIIKNNGMKILLEPYTFFMEELEQSGKDFVVNI

LASVTQFPIKLAYAITIHKSQGMSIEKLVCDIDHIFENGQLYVALSRATNPNTLKIYSTKKINFGFYFAN

ILKIDSNVIEFYKKHNFLDLEIQEQII

>EAQ71842.1 2-acylglycerophosphoethanolamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQKKSFLKIYGLIPFLLIVFINAFVDLGHKIIIQNTIYKAYEGSEQLFLNAIVNALILLPFILMLSPSGF

LADKYPKNIVMKISAIFNVILTLIICICYYSGAFWMAFIFTFIMGAQAAIYSPSKYGFIKELVGKDFLAM

GNGVINAVSIVAILAGMALFSLSFESLYSSMYNQTDEILKEVAPLGIVLILFSCIEVFFACRLPKLKQTN

KDLVFNKKDYIRGKLLINNLKLVFKNKTIWFCIIGISFFWAISQLYLVSFPVFAKNELFIENTFYVQISL

AFSGIGVILGSLVAGKFSKNYIELGLIPLGASGMFLMVFLMPCFISLLSYSFLFFFFGFCGALFIIPLNT

LIQFHAKENELGQILAGNNFFQNIAMLGFLLLATLFAKFEINVVYLFYFIALVTFIGSFYILLKLPFSLV

RILLSIAFLQRYRLLVEGFENIPEKGGALLLGNHISFIDWAVVQMAIPRKIYFVMERSIYSKWYIKFFLD

KFGIIPVSSTGSKTSLELIAKHIKEGNLVCLFPEGTLSRHGQLNEFKAGFELACEYLSEDDGKIIPFYIR

GLWGSAFSRSDEEFSARNRTLNKRKIAIAFGKAMPLHSKKDEVKAKVFELSFMAWKSQCEAMHTIARAWI

DTAKKNLNQIAIIDTLAGDISYRKMLTLSLFLNFFIKRKSKELNINPQRGSYAPKEEAIGILLPASFASS

LTNLSVLIAEKIAVNLNFTAGEKALKAAIKNAQISQIYTSKTFLEKLANKGINLNFDTNIHLIYFEDIIE

DFKMQKTKIFSMMLAVSIMPSFILKSIFTPSKNNLAIAAILFSSGSEGSPKGVMLNNRNILSNIAQISDV

LCTRNNDVILSSLPPFHAFGLTVTTFLPLLEGIKSITFADPTDALGVAKAVAKNNITIMCGTSTFLGIYA

RNKKLDALMFESLRIVVSGAEKLKNEVRTAFEMKFKKSIFEGYGATETTPVASVNLPNRFDADYWLIHRA

NKEGSVGMPLPGTAVRIVDPNNYENLKTNEDGLILIGGHQVMVGYLNDKEKTDEVIKEIDGIRWYNTGDK

GHLDKDGFLYIVDRYSRFAKIGGEMISLGAIEEEITKFVDTEVVKFCATSLEDEKKGEQIVLLIECNNEI

FERVCEAIKNSNIPTLFKPRYYFQIEKIPLLGSGKVDLKKVKELAKNLAL

>EAQ71841.1 cation efflux family protein [Campylobacter jejuni subsp. jejuni 81-176]

MSLQKKATLVASLCAIVLALVKFIVGLTSGSVAVLSSAIDSLMDFAISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGIFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALVLIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICTLISNNPEIISYHELKTRKTPSCNYLSVHLVFCPIISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>EAQ71840.1 hydrolase, carbon-nitrogen family [Campylobacter jejuni subsp. jejuni 81-176]

MKIALIQQKFHLNKEQTIKKTCEFIEEASKQGAELVCLGELHQSEYFCQSENVDFFDYANDYEKDVKFWA

NIARKNQIVLIASLFEKRSAGLYHNTAVVFEKDGSIAGKYRKMHIPDDPCFYEKFYFTPGDLGFEPINTS

LGKLGVLICWDQWYPEAARIMALKGAEILIYPTAIGWFDKDKDEEKQRQLNAWLGVQKGHAIANGLYVVA

INRVGFEKDVSGVEEGIRFWGNSFVFGPQGEELCLLDSQNECVKIIEIDKKRSENVRRWWPFLRDRRIEY

FTDLTKRFID

>EAQ71839.1 ribose-phosphate pyrophosphokinase [Campylobacter jejuni subsp. jejuni 81-176]

MRGYKIFSGSANVEFARQVSKYLSLPLSDAGVKRFSDGEISVQIDESVRGKDVFIIQSTCAPTNDNLMEL

LILTDALRRSSANSITAIIPYFGYARQDRKANPRVPITAKLVANLIQAAGIDRVATIDLHAGQIQGFFDI

PVDNLYGSIVFNDYIKAKHFKNAIIGSPDIGGVARARSVAKHLGLDIVIVDKRREKANESEVMNIIGDVK

DKEVILVDDIIDTAGTIVKAAEALKEKGAKSVMACCTHAVLSGKAYERIASGALDELVVTDTIPLKEQLP

NIKVLSVTPVFAEVIRRVYHNESVNSLFI

>EAQ71838.1 ribosomal protein L34 [Campylobacter jejuni subsp. jejuni 81-176]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>EAQ71837.1 transmembrane transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MRTYFSKIGFVLAVAGGAVGLGNAWKFPTLSAENGGFVFVLLYLFFTLTIGFSIFLAEVAMGRLSKSDLA

NAYSNLAIKYGNRWRYGGVFMLGGIFVLSFYLVIMGWVLKYTVVSLYYLPKTLDEAASNFQNLITTNLTS

SVFFFTLSFFLTLLIVSKGLIKGIEKLNVVIMPSLFLMLVFMLFYCMGFKQGFANAFSYLFYPDFSHFKF

SSIAEALGLAFFTLCLGIGCIVTYSSALDKKTNFIKSSVYIVLINLLISFIMGLIVFTFIFEFGADPHTQ

GAGIVFVSLMSLFNQLGALGYIFAFCFFLALFFAGITSAVSMIEPLTFYMINNYQISRVKALFLIGLFVF

VFGICCILSLNLNFFSMFSFFGKDFFTLLDKLTSNFLLPLGAIVCSIFVGFFMNKKQIYKIFSKFISRKI

FLIWLFFIRFISPIAIILVMCYQIFV

>EAQ71834.1 hypothetical protein CJJ81176\_0948 [Campylobacter jejuni subsp. jejuni 81-176]

MFKDKIESKIAQFTEKAIKNNDNIKTNAIKAITTDLTVVNTPK

>EAQ71833.1 putative periplasmic protein [Campylobacter jejuni subsp. jejuni 81-176]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>pdb|3UAU|B Chain B, Crystal Structure Of The Lipoprotein Jlpa

MGHHHHHHHHHHSSGHIDDDDKHMCGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNAD

GDFIACLSPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFE

DFKLGEKVVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLN

INLKEDLLNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVF

SSYIATAKENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKL

SINNQDATEALKIILPFIMFSMLMGGASF

>pdb|3UAU|A Chain A, Crystal Structure Of The Lipoprotein Jlpa

MGHHHHHHHHHHSSGHIDDDDKHMCGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNAD

GDFIACLSPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFE

DFKLGEKVVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLN

INLKEDLLNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVF

SSYIATAKENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKL

SINNQDATEALKIILPFIMFSMLMGGASF

>pdb|3RF1|B Chain B, The Crystal Structure Of Glycyl-Trna Synthetase Subunit Alpha From Campylobacter Jejuni Subsp. Jejuni Nctc 11168

XHHHHHHSSGVDLGTENLYFQSNAXTFSQXILNLQNYWQEQGCAIXQPYDXPAGAGTFHPATFLRSLGKK

PWAAAYVAPSRRPTDGRYGENPNRLGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWE

SPSLGAWGLGWEVWLDGXEVTQFTYFQQVGGIAVDLVSAEITYGLERIAXYLQNVDNVYDIVWSEFNGEK

IKYADVHKQSEYEFSKYNFEVSDVKILNEQFENSYKECKNILEQGLALPAYDYCXLAAHTFNLLDARGAI

SVAQRQDYXLKIRELSKNCAEIYKKNLNEAE

>pdb|3RF1|A Chain A, The Crystal Structure Of Glycyl-Trna Synthetase Subunit Alpha From Campylobacter Jejuni Subsp. Jejuni Nctc 11168

XHHHHHHSSGVDLGTENLYFQSNAXTFSQXILNLQNYWQEQGCAIXQPYDXPAGAGTFHPATFLRSLGKK

PWAAAYVAPSRRPTDGRYGENPNRLGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWE

SPSLGAWGLGWEVWLDGXEVTQFTYFQQVGGIAVDLVSAEITYGLERIAXYLQNVDNVYDIVWSEFNGEK

IKYADVHKQSEYEFSKYNFEVSDVKILNEQFENSYKECKNILEQGLALPAYDYCXLAAHTFNLLDARGAI

SVAQRQDYXLKIRELSKNCAEIYKKNLNEAE

>pdb|3LZR|B Chain B, Crystal Structure Analysis Of Manganese Treated P19 Protein From Campylobacter Jejuni At 2.73 A At Ph 9 And Manganese Peak Wavelength (1.893 A)

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZR|A Chain A, Crystal Structure Analysis Of Manganese Treated P19 Protein From Campylobacter Jejuni At 2.73 A At Ph 9 And Manganese Peak Wavelength (1.893 A)

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZQ|B Chain B, Crystal Structure Analysis Of Manganese Treated P19 Protein From Campylobacter Jejuni At 1.41 A At Ph 9

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZQ|A Chain A, Crystal Structure Analysis Of Manganese Treated P19 Protein From Campylobacter Jejuni At 1.41 A At Ph 9

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZP|B Chain B, Crystal Structure Analysis Of The 'as-Isolated' P19 Protein From Campylobacter Jejuni At 1.65 A At Ph 9.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZP|A Chain A, Crystal Structure Analysis Of The 'as-Isolated' P19 Protein From Campylobacter Jejuni At 1.65 A At Ph 9.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZO|B Chain B, Crystal Structure Analysis Of The Copper-Reconstituted P19 Protein From Campylobacter Jejuni At 1.65 A At Ph 10.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZO|A Chain A, Crystal Structure Analysis Of The Copper-Reconstituted P19 Protein From Campylobacter Jejuni At 1.65 A At Ph 10.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZN|B Chain B, Crystal Structure Analysis Of The Apo P19 Protein From Campylobacter Jejuni At 1.59 A At Ph 9

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZN|A Chain A, Crystal Structure Analysis Of The Apo P19 Protein From Campylobacter Jejuni At 1.59 A At Ph 9

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZL|B Chain B, Crystal Structure Analysis Of The As-Solated P19 Protein From Campylobacter Jejuni At 1.45 A At Ph 9.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3LZL|A Chain A, Crystal Structure Analysis Of The As-Solated P19 Protein From Campylobacter Jejuni At 1.45 A At Ph 9.0

GGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAY

ELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVG

KWFEPFKVDYKFKYTGTPK

>pdb|3D6X|F Chain F, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>pdb|3D6X|E Chain E, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>pdb|3D6X|D Chain D, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>pdb|3D6X|C Chain C, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>pdb|3D6X|B Chain B, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>pdb|3D6X|A Chain A, Crystal Structure Of Campylobacter Jejuni Fabz

XIDVXQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFXGHFPGHPIYPGVLILEGXAQTGGV

LAFESXEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEXSVVKNRGNXWIFKGQAFVDGNLVAEAELK

AXIVDK

>AAB06710.1 LctP, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLTWQQIYDPFSNIWLSALVAFLPILCFLVCLV

>AAB06709.1 CdtC [Campylobacter jejuni subsp. jejuni 81-176]

MKKIITLFFMFITLAFATPTGDLKDFTEMVSIRSLETGIFLSAFRDTSKDPIDQNWNIKEIVLSDELKQK

DKLADELPFGYVQFTNPKESDLCLAILEDGTFGAKSCQDDLKDGKLETVFSIMPTTTSAVQIRSLVLESD

ECIVTFFNPNIPIQKRFGIAPCTLDPIFFAEVNELMIITPPLTAATPLE

>AAB06708.1 CdtB [Campylobacter jejuni subsp. jejuni 81-176]

MKKIICLFLSFNLAFANLENFNVGTWNLQGSSAATESKWSVSVRQLVSGANPLDILMIQEAGTLPRTATP

TGRHVQQGGTPIDEYEWNLGTLSRPDRVFIYYSRVDVGANRVNLAIVSRMQAEEVIVLPPPTTVSRPIIG

IRNGNDAFFNIHALANGGTDVGAIITAVDAHFANMPQVNWMIAGDFNRDPSTITSTVDRELANRIRVVFP

TSATQASGGTLDYAITGNSNRQQTYTPPLLAAILMLASLRSHIVSDHFPVNFRKF

>AAB06707.1 CdtA [Campylobacter jejuni subsp. jejuni 81-176]

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKDNFDQQWFLTTPPFTAKPLYRQGEVR

>AAA86823.1 unknown, partial [Campylobacter jejuni subsp. jejuni 81-176]

VSDIANNILEDVKKKRF

>AAA86821.1 unknown, partial [Campylobacter jejuni subsp. jejuni 81-176]

AFCVCVSTFVILLML

>AAA86822.1 required for flagellar function [Campylobacter jejuni subsp. jejuni 81-176]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQKFITEAKVHFECDIVGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKIQARMFDTSQNIYIDKELSSSSSHKSKAFTFIFTPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVVIDAQNAINRYRGSIFTSEFI

LYKLRAQNKLYTQDPSMRDQQILEKMIDDAKNWTRTFTSDKNFSEVLHIMLRTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENTYFNTKNLDLAARAAMSLAKNLLSNEQVNKAIEY

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISASIYEDAFAKMSKLDPSYEETLKDLALVLSHANRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAINDLKNAIKADNCINAANIFMRFSAYDIGQKIENKK

QMLACLIRTSNVEQALDYIDKNYNEDSIFYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMVEAYDALLSYANDHNMQTTILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALTKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

SASNWQNLCKSKNQILNQ

>AAA17794.1 enolase, partial [Campylobacter jejuni subsp. jejuni 81-176]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGA

>AAA17793.1 RecA [Campylobacter jejuni subsp. jejuni 81-176]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKIYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>BAJ61726.1 enterochelin ABC transporter, periplasmic enterochelin-binding protein, partial [Campylobacter jejuni subsp. jejuni 81-176]

NNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNPSKVVILNLGILDTFDALKLNDRVAGVP

AKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQSKFYDKLKEIAPTLFVGLDNANFLSSFE

NNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALIILTNSNKISAFGPQSRFGIIHDVLGINA

VDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQGILDNALVAKTKAAQNKKIIYLDP

>AAA02919.1 major cell-binding factor [Campylobacter jejuni subsp. jejuni 81-176]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKKY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>AAA02918.1 major cell-binding factor receptor [Campylobacter jejuni subsp. jejuni 81-176]

MIELKNVNKYYGTHHVLKIFNLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLLDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>AAA02917.1 putative [Campylobacter jejuni subsp. jejuni 81-176]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGVDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKISLQEVFTMKKYKF

>AAS46249.1 hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>AAS46248.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITLNSTNEYNITLKPRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKIEVNNLQFLE

>AAC44858.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176]

MRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRAEKKYEDMPIIM

VTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>AAC44524.1 PspA [Campylobacter jejuni subsp. jejuni 81-176]

MQILKSFFKALGCGIKFINTYFKTFVLLLIVIWILMPSANSSSNLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKPVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERALD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPVWKEEDKIDKFLNRLEGQTSSLIS

KSLIEIVYKTNSSFISAR

>AAC44523.1 ORF1; Method: conceptual translation supplied by author [Campylobacter jejuni subsp. jejuni 81-176]

MSIACCIDNNSINCSKAFLNFIYDFTFKITLEKVKFYIILRCCKFHLLVNFFHFHSTINSHFSYAKHINI

WALDNHYFHGFNLKNLFLTFYYNILKINFCYNVIFERKIVFIVAARYLFLCDEDFTILENQAFVFEDKIL

ELGELDNLKKKYPKAKIIKTPKNSVILPAFINPHTHLEFSANSTTLHFGEFLIWLKSVINSRSILNAQAK

EELILQSIKKMQKSGIGTIGEISSFGSDLDPCLKASHKGMRIVFFNEILGTNENQVEDKKQEFLKRFENS

LKFKNDFFIPAISIHSPYSTHPSLAYFALDLAKKQNLLASTHFLESKAENIWLRESKGGFKKWLENFTLH

PKPLYTPKDFVKLFKGVRTLFTHCVYLKEYEWLDKNLHSITHCAFSNRLLSQKSLDLKTALKSGLNIHLG

TDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMVTLYPARALNLNLGELKKGKIADFSVFELGEC

DKKQAPLQFILNAKEVDKLFIKGKECKF

>AAB18372.1 arylsulfatase [Campylobacter jejuni subsp. jejuni 81-176]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKIVCDDDYSKCPGYENDNGGFDFTWTQHTGWRIDSKSNKRYIYIS

VFDNGDARGAEQPAFASQKYSRAVIYKIDQQNKTVEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYS

ATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSVQIQFSGSGTGYQAMPFSVDQAFNPKK

>AAB18371.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MSCIKMKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGM

IALINPTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPS

WFLPIGECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFI

VLFAMFIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>AAA53139.1 iron-superoxide dismutase [Campylobacter jejuni subsp. jejuni 81-176]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>AAS56913.1 CmeR [Campylobacter jejuni subsp. jejuni 81-176]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>AAL74246.1 CmeC [Campylobacter jejuni subsp. jejuni 81-176]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKETNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>AAL74245.1 CmeB [Campylobacter jejuni subsp. jejuni 81-176]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGAIFYLYKAVPNS

LVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLFTSSLKENAAAMFIGLQ

DWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSGKSYDEIQKDVNKLVAA

ANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVNDFSMLGKNFQVNIRAK

GDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQPAPGYTSGQAIEAIAQ

VAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLAVVTAVPFAVFGSFLL

VYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKLRFRPIIMTSLAFTFG

VLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKRGKVHE

>AAL74244.1 CmeA [Campylobacter jejuni subsp. jejuni 81-176]

MKLFQKNTILALGVVLLLAACSKEEAPKIQMPPQPVTTMSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQALMAKATFENASKDFNRSKALFSKSAISQKEYD

SSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSASTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>CBM39619.1 unnamed protein product [Campylobacter jejuni subsp. jejuni 81-176]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>AAB19645.1 PEB4=major antigenic peptide [Campylobacter jejuni, strain 81-176, Peptide Partial, 34 aa]

ATVATVNGKSISDAEVSEFFAPMLRGQDFKXLXD

>AAB19649.1 PEB1=major antigenic peptide [Campylobacter jejuni, strain 81-176, Peptide Partial, 34 aa]

GEGKLESIKSKGQLIVGVKNDVPHYALXDQAXXX

>AAB19647.1 PEB2=major antigenic peptide [Campylobacter jejuni, strain 81-176, Peptide Partial, 35 aa]

EILVYGPGGPAPVLKELALKFEEKTKEKVIVTAGP

>AAB19646.1 PEB3=major antigenic peptide [Campylobacter jejuni, strain 81-176, Peptide Partial, 41 aa]

DVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATFXK

>AAQ72695.1 putative methyl-accepting chemotaxis protein Cj0951c [Campylobacter jejuni subsp. jejuni 81-176]

MMFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKE

AIEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIAD

ESCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELL

NHAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDI

SSQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKK

VENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQI

TKELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSR

MQENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>AAP87275.1 CtsF [Campylobacter jejuni subsp. jejuni 81-176]

MKFYEVEFLKNNQNYTKTIKAENLNTAQAKALSKNWKIIDIKEIQKSNFQRLKDENFILFFKELALLCEV

GLSVQEAIRELYFMHSCKIMKKILDNLILAQNLNQAFENANFGLNRAELALIKTAEKTGKISEVFSQISK

LREKSLESQKQLKKAFRYPTLVFLSIIGAFLFLMLFVVPNFKDLFENLGVSLPFITHVMLEIYNFLDDYG

IFCIFLFVIFIVMLILAYKNFHSFAFSCDFLFLKVPLISRLIIYNQNYYFFMVFSLLLKNGISISKAFDL

AIIGLENKFLIFQYKKLFSFIDSGLELSQAFKKIDIFDSLVFSMLSVAMKSGRLEVLSEEIAKYYQQKSE

NLMDRFLVFLEPMMTLFVAFLVLFLALGIFLPMWELSSGVNF

>AAP34261.1 FlgE [Campylobacter jejuni subsp. jejuni 81-176]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>AAK97438.1 putative oligosaccharide transferase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>AAG10162.1 major outer membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGVLRYRYDTGNFDKNFVNNSNLNNSKQDHKYRAQV

NFSAAIADNFKAFVQFDYNAADGGYGANGIKNDQKGLFVRQLYLTYTNEDVATSVIAGKQQLNTIWTDNG

VDGLVGTGIKVVNNSIDGLTLAAFAVDSFMAEEQGADLLGKSTISTTQNAVPFQADSLGNLYGAAAVGSY

DLAGGQFNPQLWLAYWDQVAFLYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKRHANGNLFALKGS

IEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGGEIFYTTGSRLNGDTGRNIFGYVTGGYTFNET

VRVGADFVYGGTKTEATNHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA

LYKF

>AAF05902.1 flagellin A [Campylobacter jejuni subsp. jejuni 81-176]

MGFRINTNVAALNAKANSDLNSRALDQSLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAISNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINRLMEELDNIANTTSFNGKQLLSG

GFTNQEFQIGSSSNQTIKASIGATQSSKIGVTRFETGSQSFSSGTVGLTIKNYNGIEDFKFDSVVISTSV

GTGLGALAEEINRNADKTGIRATFDVKSVGAYAIKAGNTSQDFAINGVVIGQINYNDGDNNGQLISAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGSIGVGAGILHTENYGRLSLVKNDGRDINISGTGLSAIGM

GATDMISQSSVSLRESKGQISAANADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVGSG

KNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVMDI

AETAITNLDQIRADIGSIQNQVTSTINNITVTQVNVKAAESQIRDVDFASESANYSKANILAQSGSYAMA

QANSSQQNVLRLLQ

>AAP97518.1 DNA gyrase subunit B [Campylobacter jejuni]

TVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIYRQEFSEGKVISEFGVIGKSKKTGT

TIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGKHESFHFEGGISQFVIDLNKKEALT

KAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAGFRMGLTRVISNYIEANASAREKDN

KITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASFEYLTKYFEENPIEAKAIMNKALMA

ARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVEGDSAGGSAKQGRERSFQAILPLRG

KILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIIIMTDADVDGSH

>AAZ66334.1 Cj0977 [Campylobacter jejuni subsp. jejuni 81-176]

MAKKDNFEEYAQLEEYASAEDISRVRAELLTCPELNTSLAGTIIEIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFFYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>ABD63282.1 hypothetical protein Cj1449c [Campylobacter jejuni subsp. jejuni 81-176]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>ABD63281.1 putative ATP/GTP binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>ABD63280.1 putative dUTPase [Campylobacter jejuni subsp. jejuni 81-176]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>AAX83128.1 Cj1132c [Campylobacter jejuni subsp. jejuni 81-176]

MILAKLFKKRLKMAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHK

IISICAVLSDNFGKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAAT

YLDTQSDKWNNYKTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIY

EYCESDVLNTYMLFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>AAX99099.1 KpsE [Campylobacter jejuni subsp. jejuni 81-176]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGNLSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>AAX99098.1 KpsD [Campylobacter jejuni subsp. jejuni 81-176]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>AAX83132.1 galactosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MFNSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDERFILFDKKNGGLSSARNVGIEYFSGEYKLKN

KTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDYIIFLDSDDYWELNCIEECVIR

MKNVDVLWFDHDCTYEDNIKNKHKKTRMEIFDFKKECIITPKEYANRALSVGSRDISFGWNGMIDFNFLK

KIKLKFINFIINEDIHFGIILFASANKIYILSQKLYLCRLRANSISNHDKKITKANVSEYFKDIYETFGE

NAKEAKNYLKAASRVTTALKLIEFFKDQKSENALAIKETFLPCYAKKALMIKKFKKDPLNLKEQLVLIKP

FIQTKLPYDIWKFWQKIKKN

>AAX83131.1 LgtF [Campylobacter jejuni subsp. jejuni 81-176]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>AAX83130.1 HtrB [Campylobacter jejuni subsp. jejuni 81-176]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARIAFHLNKKHRKIINTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFTTAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSQSRTQFDIELIDKKGGIRQMLSALKKERALGILTDQDCVENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPVYAYKEGGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKGAK

>AAX83129.1 WaaC [Campylobacter jejuni subsp. jejuni 81-176]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FMLNTDFNAKNLAFKQDVFSVDENLKQLLNNKLKLDKNEKNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQTKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFNLEELMAFTKMMDLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDTGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>AAT91037.1 putative iron uptake protein [Campylobacter jejuni subsp. jejuni 81-176]

MKFKKSLLCFLILSGALLKAEEKYQLNDVVVSASGFEQDLVDAPASISIITKEELEKKPIKDIGEAIGDI

PGVDVTMNKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYDNGFSGSESGYLPPLSMIERIEVIRGPAS

TLYGSDAVGGVINIITKKNPDKTEANIEFNTLLQQHSNHYGNAGGFNAYVATPLIEDILSISARLKYYDK

AASDLKWPTPVWNNGNQRPDNYQIASHSPGAFTSLGFGSRLNWTVDDKNNIYFDIERYINEISVNSTSSR

AIKSERQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGKVVLPWNLGQYGNLVNTFGAR

IDYEILKNDQASAGSQIRGKNLDQTTVALYGENEYFIADDLIFTTGLRYIYSDLFDSEFTPRVYLVYHLN

DNIALKGGVSKGYKTPAAKQLTNGYYNYANNNAYFGNPDLKPEESINYELGVDFMVFDFAHYSITGFITD

FTNQISSEDLTGMQNDINCSNGIVCKRPINLGKTQTKGIEFAFNTKTYNGFSLNSSYTFMDNRYKDGQKN

WFGGDRIENLPRHIAMLKLNYERGKFSSYIKTRARLDAIAKAKGGGNGSLPWQKYKPFYIVDLGINYKIN

KQSSLSFAVQNLFDKNFFNPQVTRWDGANPAGYANRYQDYTEGRSFWLSYKYDF

>AAK62274.1 KpsT [Campylobacter jejuni subsp. jejuni 81-176]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>AAK62273.1 KpsM [Campylobacter jejuni subsp. jejuni 81-176]

MLNVIHALFFRELKTRFGKNRYLGYIWVVGEPMSVVLLVTIIGTVIREYHHQVMPEGISIFMFLISGIMP

FFMFRSIVTQLMNGIGANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRLDVFPVHLLG

VLFCIFLLICSAFALGICFAIVWHFVESLRTLLAYFSIVFYWSSGIIFPTWLTPRPLLDIFYYNPLLHIF

ELLRFNFFENYPLQDEYSYFYAIFWILLVLFIGLFIYYYNRQALTAAKKE

>AAM00889.1 HsdM [Campylobacter jejuni subsp. jejuni 81-176]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>AAM00888.1 MloB [Campylobacter jejuni subsp. jejuni 81-176]

MIRTVMDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIV

GTNFKPKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRK

ELDKYPEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGL

VKNLNDSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQY

VPKNEVIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDM

PSKSRNDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIR

ATYQHCCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>AAM00887.1 HsdS [Campylobacter jejuni subsp. jejuni 81-176]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>AAM00886.1 RloH [Campylobacter jejuni subsp. jejuni 81-176]

MVEWKVARDIVESFKLLFIEASNVNMPSVISAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDI

EKDINIYLKQMLDFDNTLKDKEIKIRFAEFEKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQ

YITDKITTDIIWAIDEPEAFLQPKLQKKIMEIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKE

EKIYARKKGRVFQEINTKPIYIGTAFEKLSVIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILN

LSMPNIIHSGGATKIAGFLEYFNNQCSYTSFKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKR

YGESIQENNRDIWEIEDFMPIKIIVDAVNIILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRN

EEKERFILNTESRKKEICQNAFRAREKYTKNDLEDYHVDFMNELIDSFNKVDLIKKDN

>AAM00885.1 HsdR [Campylobacter jejuni subsp. jejuni 81-176]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKIACYHQYYAVNKAISR

TITASSKDGDKKGGVVWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQ

EPKQANDKEHLKELLRVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKS

KSGDVLGQKIVYGFAKYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYE

SRLAKIELSEEGKRLVNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMI

VSISRSVAIKLYDEIIKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDEL

KLVIVVDMWLTGFDVPSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSE

SGGKGDIITTQEDAVKVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFA

ALDKAYTIAMPHEKALSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDAS

GIKKPDISILSDEFLLEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLIS

SSEALDELINMSKSIVSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSI

DWMIKENVRARLRVAVKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>AAL09372.1 CMP-NeuNAc synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>AAL09371.1 N-acetylgalactosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKIISLYKRYSISKKLVLDNEHFIKENKNIYGKKHKGFFDFDEKAKDVKSPLNPWGFIRVKNEALTLR

VSLESILPALQRGIIAYNDCDDGSEELILEFCKQFPNFIAKKYPYKVDLENPKNEENKLYSYYNWAASFI

PLDEWFIKIDVDHYYDAKKLYKSFYRIDQENKALCYPRINFIILNGNIYVQNSGNYGFIGGGDQLLIKRR

NSSFIERRVSKKSQWIDPKGLIEELYSEQQVLSQGVKILQAPLLQWHFPALKYRRNDYQQYLDILSLEEF

QAFHRKSKEAKKIDFAMLKRPVIEQILKKFQGEIK

>AAL09370.1 NeuC1 [Campylobacter jejuni subsp. jejuni 81-176]

MYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYYQTDKALATTIDGFSRYVNEL

KPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISKLAHIHLVNDEFAKRRLMQLG

EDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEITSIKNQADNLVKALIQSNKN

YIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFIIGNSSCILKEALYLKTAGILV

GSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLFFEYLLSGEFFKLSTQKVFKD

IKHA

>AAL09369.1 sialic acid synthase [Campylobacter jejuni subsp. jejuni 81-176]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHSTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>AAL09368.1 sialyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>AAW56182.1 Cj81-121 [Campylobacter jejuni subsp. jejuni 81-176]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>AAW56142.1 Cj81-069 [Campylobacter jejuni subsp. jejuni 81-176]

MINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKSVDLAI

NDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYPRRLID

YVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRNSYRRI

EFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESRIKHYD

KLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVLDDERE

IDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTHSPFIY

DNIFEDYIVDLEKYRVNNG

>AAW56141.1 Cj81-068 [Campylobacter jejuni subsp. jejuni 81-176]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>AAW56129.1 Cj81-057 [Campylobacter jejuni subsp. jejuni 81-176]

MKNFKDSGIEWLGEIPEHWKLIKCKNFFVLKSIPIGDLWNKTKLLSLTLNGVIERDINNPEGKFPSDFST

YQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYTIFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLR

NTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKNFIEKKEKLITLLKEQKQAFINKATTKGLDKNVN

FKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGNDKYYKGGQIVWINSGDLNDGFLKDSKRKITQDA

LDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVNQACCVLEKSAWYNTFYLFYLFNRYKKELISMGS

GGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCKKIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIG

KS

>AAR82940.1 Gmh [Campylobacter jejuni subsp. jejuni 81-176]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>AAR82939.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>AAR82938.1 WaaF [Campylobacter jejuni subsp. jejuni 81-176]

MIESCGIFFLNFVKIIKTILSKFRKFMKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTAL

FKEFPNSKIIIENKQSRYKQALSLRKELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVL

KYLYFIENSLSIKAHFKDLKLPFKLKFQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSH

EILIFGAGKAEQELCNEIYQILKEQNIKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTV

AIFGPTKFTQTSPWQNENAKLVHLDLACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>AAR82937.1 WaaV [Campylobacter jejuni subsp. jejuni 81-176]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>AAA61512.1 ORF1 [Campylobacter jejuni subsp. jejuni 81-176]

MGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYREFGYI

LEIVYGFFSIILGRTGSGIFALLLLLFYLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVFGGVFE

KEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQILDET

IEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIKQIDTN

KNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKKLEEYD

AINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKNINEIV

IEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLDFLANP

KEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLTMALMA

KSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKLPHLLI

AGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALSNMVAE

MERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARASGIHL

IVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRLHAPFA

SEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYLQRRLK

IGYNRSANIIEQLTQNGILSEPDAKGQREIL

>AAA61511.1 ORF3; 14-nt overlap with flhA [Campylobacter jejuni subsp. jejuni 81-176]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKVGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>AAA61510.1 RpsO [Campylobacter jejuni subsp. jejuni 81-176]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKNDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>CAJ20048.1 glutamine-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKILLSVLTTFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIALAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTQTPERAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQDYPNIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>ABF83744.1 preprotein translocase SecY [Campylobacter jejuni subsp. jejuni 81-176]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>ABF83743.1 putative X-Pro dipeptidyl-peptidase [Campylobacter jejuni subsp. jejuni 81-176]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>ABF83742.1 putative efflux protein [Campylobacter jejuni subsp. jejuni 81-176]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>ABF83741.1 hemoglobin-like flavoprotein-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MTKEQIQIIKDCVPILQKNGEDLTNEFYKIMFNDYPEVKPMFNMEKQISGEQPKALAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEHYPIVGACLLKAIKNLLNPDEATLKAWEVAYGKIAEFYIDIEKKLYDK

>ABF83740.1 cytoplasmic chaperone TorD-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MQKLAIDIFINFLQNPPNHFLLEKLKKEEFWQNWFLKNNSKLQCTALKLLSSSNEDDKLIASDFTSLFLS

DVDYVKAPPFASFYLDENKEIYSDNSDKVKQIFAQNNFFSFFNEEPADSLINELLFISFLIKKQDDITLQ

KFLKEEFFIWFNMWSFDVINKAKTHFYKALTMLMQDFFNQLNTKF

>ABF83739.1 anaerobic dimethyl sulfoxide reductase anchor subunit C-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>ABF83738.1 anaerobic dimethyl sulfoxide reductase subunit B-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>ABF83737.1 anaerobic dimethyl sulfoxide reductase subunit A-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MFGGLTLSPISLSANLLKTPPLISKWAGCNVNCGTKCPVKVHTQDGIIKYVSTDNEGDDSFDNRQARACI

RGRSSRYKVYNANRLKRPLKRVGKRGEGKFMPISWEQAFDEISAKMQEIKEKYGNEAFYINYATGTTGTI

INRCTQGPWARLLSLYGGYLNYHNSYSTAQISNAMNFFYGGSPASDIYTLRSAKLAIFFGANHVETRMGG

GGVGYAYQKALEESGCKIIHIDPRCNDSMIGHCDEWIPIAPGTDAALIAALTYVMIKEDLLDRTFLDKYT

IGFSENTLPQDAAKNSSYESYVLGLNDGVEKTPDWASKITKIPARRIVQLAREIATIKPCFIEQGWGVQR

HSNGEQNARAIATLACITGNIGIEGTNTGCRTGSSKTYDIMGMPFKNPIKDSIPCFLFTDAIYRGKEMTD

ISDGVRGTTQLKQNIKFIFNTAGNCLTNQHSTIKEVHDILSDENLCECIVDVNVTRTPSNNYADYILPDA

TMLEQEDFIRPSAGYYSNKPYIIYCQKAIEPVGEAKPIYEMCLELAKRLGIEKEFSEGRTQKDWLKYLYE

ESMKKNPLLPSFEEMCEKGLVKFEPVKPVVALQSFIKDPINNPLKTPSGKIEIYSTKLAQMQKTWKLKEG

QQIVPIPVFESQREGILDPLKQKYPSQFFGYHYKGRTHSSFWEIPQIREANPQEIWINTIDAEQRSIKTG

DVVQVRNDLGIIQGIAKVTPKIIPGCAVTPQGAWAKYENGIDVGTCVNSLASIVPTAISKGNGQHSILVE

IAKV

>ABF83736.1 putative peptide ABC-transport system periplasmic peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>ABF83735.1 probable phosphoribosylaminoimidazole synthetase PurM [Campylobacter jejuni subsp. jejuni 81-176]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEESEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIIGEICINEGIVLE

>ABF83734.1 putative ATP binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKSVDLAI

NDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYPRRLID

YVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRNSYRRI

EFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESRIKHYD

KLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVLDDERE

IDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTHSPFIY

DNIFEDYIVDLEKYRVNNG

>ABF83733.1 hypothetical protein cju32 [Campylobacter jejuni subsp. jejuni 81-176]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>ABF83732.1 probable molybdopterin biosynthesis enzyme MoeA [Campylobacter jejuni subsp. jejuni 81-176]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>ABF83731.1 putative transmembrane transport protein [Campylobacter jejuni subsp. jejuni 81-176]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>ABF83730.1 putative serine protease [Campylobacter jejuni subsp. jejuni 81-176]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYEYKL

SGKTIENNVRFKDFPNQDFVQYHRLNSNLITWGLTSYFIYPNSFFYGFNVVNEFASDQYNINVLGQFGFY

F

>ABF83729.1 hypothetical protein cj1368 [Campylobacter jejuni subsp. jejuni 81-176]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>ABF83728.1 possible nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>ABF83727.1 glucosamine 6-phosphate synthetase [Campylobacter jejuni subsp. jejuni 81-176]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCTDFESQGYGFAI

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVVYENDILKSLCFSKLSGDKAYAKKDGFRFFMEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQADEITLCACGTSYHAAMASAYLFERIAKVKAKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYLHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>ABF83726.1 putative subtilase family serine protease [Campylobacter jejuni subsp. jejuni 81-176]

MKKFFCLTLVCKLFALSEFELHHIDKVHKLGYSGDTIIIGVADDAFNQDHISLKDKILKSTYPTDTAGKQ

LIPDLKKSTHGSHVAGIAVGAKIGDSKPYGVAYGAKFYGAGVFPNGSYTQIPDIYNFFKDVSIINNSWGI

NFYPYFNLKASNSGLVDCTQTNQGTSYNICNTPLEYVMKADKVANDMMRLSKDKGVLNVFAAGNEGILSP

ALHAILPSYDESLRAWLAVGALDANEITLESDGTLIIKSQGLADFSNGFKGATNFSLVAAGVNINNVDSS

TNDKFTKKSGTSMAAPMVSGTAALVKQNFPFLDGKQIADILLSTANKNYKAPKFTVKQVTDGTNQPKFLI

VYISQDPPGIEDEIKRDLKQLYNGIQVQVNGQWIDYSDYIWDNRDSAQSQKLNTSTISSINGVVRVEKEE

LFGQGILDAQKALKGLSILDANRLSDQDVLKYEQEPNTAYYTINTAGYDAEFSNDISQRKWDESTHLSSA

INKPTHLANLNIGLSKEGEGILIISGQNTYEGATLIKQGELKLKGKVKNNAYVEQKAILSGNGIVGQNLN

NKGIVRPGNEDLNDLTVQGTYTQEGVDSKLQLDFGNYKNSKLIAKTYDIKSGNLEYIPLPKYYILNKPVK

INLGDLEKSLSSFNHVLIQNTYALNFDFVLSDDLVSINKTLIKPNLKPNAYEIPNTSLGNALRQLRSRAD

LSQTYQEFFASLDNGIDVKTKLNRIEGSGYLSTFSNHNQSNLMQNNMLFTLHPLNINNFAQNNNILLAST

YLPRIFSNEEYFWHLTPSYKYYKDKDFSGQKTGANISLGENFSSGFLAYALSLSSAKFNFNNGSDLKSYN

MDLLLNYNHDLDFIKILSGLGIGVGFNTLNRFVVEQPIEGKYKTLQTSAQLGVTKDIILGQDFIFNPLMY

FTHSFFYQEDFKENKSPFAKNYESLKHHSINANLGFNLAKNIEQDDYQASFSTFVIFEKRIYGRTLENKA

SFVDFPIAFIQKYKLKDNILSQGFNSEFLYKNNVFWQFMLMNRFSHNAYELHLMSSVGKRF

>ABF83725.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>ABF83724.1 hypothetical protein cju30 [Campylobacter jejuni subsp. jejuni 81-176]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>ABF83723.1 probable enterochelin uptake periplasmi-binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILDLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>ABF83722.1 FkbH domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>ABF83721.1 hypothetical protein cju29 [Campylobacter jejuni subsp. jejuni 81-176]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>ABF83720.1 putative acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>ABF83719.1 hypothetical protein cj1298 [Campylobacter jejuni subsp. jejuni 81-176]

MDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTFSYSFCKNEIYDKNKSKC

TVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILTRNNAKIVYLGADWAHTF

IHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIAKLLEESGSLKKKSFGGT

NISAIDTNDFKKIIIQALNTDKYILVRKD

>ABF83718.1 hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>ABF83717.1 putative aminotransferase [Campylobacter jejuni subsp. jejuni 81-176]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>ABF83716.1 possible sugar nucleotide epimerase/dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>ABF83753.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>ABF83752.1 hypothetical protein cju27 [Campylobacter jejuni subsp. jejuni 81-176]

MSRLIEYPLLLQGLEQSLWLTPNKLLTKLLSFLIIYFLF

>ABF83751.1 Cju26 [Campylobacter jejuni subsp. jejuni 81-176]

MKRFYLLFLSTLFFTPSFLFGATEIANGNLIYTWGYGDVMNEIMQAVKGITTETSYIVNAALAISLLLFS

IKKAMDGQTNPVFEFGKMFVLFAVVWVMFLKTPNDNNHRFMIHDEVTSKDYVISQISIGIGKSFALITQF

EKVILEAMEKHFSTPQSTNFSNAGLGFSLQVMSTLPSVKLSAIDATLQKNIDFYFRNCVSVGILLNQQGR

NLFQNSDNLMQDLFTNIGNGFQLTPLFKNNNNIEEQSVVPCSDASPQIVEMIQKDTDEAIKIHAALLGMA

NDMANYEQKFLGAAQIYNKQAVSARSYLQQSMIMLASQDAIINTAKSVGLNPASVAANTAYADQQFYASM

QAQGHLAQTYLPLAKAYLTAIIIGLS

>ABF83750.1 Cju25 [Campylobacter jejuni subsp. jejuni 81-176]

MLIFKEVANRSNFMNYLVMSTPVLAYAIAKASEQGFVSFASGLSQALTGASRTAGSFANQQALSTQTSIA

APRGDEVWAVGAGVASLQYARNIDGVVTKFNTQSVMGDNTKNSETSNANMTGTNVDGMMSGAKLSAGTMT

TVNSVSQANSDAWNKNFNDQYSHMSQSGRASAFK

>ABF83749.1 hypothetical protein cju24 [Campylobacter jejuni subsp. jejuni 81-176]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>ABF83748.1 hypothetical protein cju23 [Campylobacter jejuni subsp. jejuni 81-176]

MKDLDYYLNLPYEIIIKKLDEKDGGGYFARYKDFPYIMGDGENEIEALKDLKEAFKGALEVMLEKGDYIK

EPIDNEAKIRINITLPKSLVEAIDTISDNRSKFLADLANSAIKSYKIST

>ABF83747.1 hypothetical protein cju22 [Campylobacter jejuni subsp. jejuni 81-176]

MCIIHTHKDIIVSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRP

IKAIYVKMVLKAITGE

>ABF83746.1 replication protein A-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MKRHSKRFVRLYLNFRFFKFKMEVFLTKPQDRKAPCLC

>ABF83745.1 ATP synthase F0 C subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>ABF83715.1 hypothetical protein cj0760 [Campylobacter jejuni subsp. jejuni 81-176]

MFVSVDFFKTFDISNSERLKAKKVQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFF

KPDLSDFNTPHITWLGHSSLFISFKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITH

SHFDHLDAKSIKALKEKARFFITPLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGD

GKNKTLWASFVMEFLSVDKRVFFSADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKE

AKDLNAKAVMPIHWGRFLAGTHAWNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>ABF83714.1 putative type I restriction-modification system HsdR subunit [Campylobacter jejuni subsp. jejuni 81-176]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>ABF83713.1 hypothetical protein cju19 [Campylobacter jejuni subsp. jejuni 81-176]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>ABF83712.1 hypothetical protein cju18 [Campylobacter jejuni subsp. jejuni 81-176]

MNKYTKPCFKGAAFNCPHCGVYSRMEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIF

FPREVAIPPEENMPENVKEIYEEASLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIK

EIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERL

NKLKSAIGEKQ

>ABF83711.1 putative type I restriction-modification system HsdS subunit [Campylobacter jejuni subsp. jejuni 81-176]

MKNFKDSGIEWLGEIPEHWKLIKCKNFFVLKSIPIGDLWNKTKLLSLTLNGVIERDINNPEGKFPSDFST

YQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYTIFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLR

NTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKNFIEKKEKLITLLKEQKQAFINKATTKGLDKNVN

FKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGNDKYYKGGQIVWINSGDLNDGFLKDSKRKITQDA

LDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVNQACCVLEKSAWYNTFYLFYLFNRYKKELISMGS

GGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCKKIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIG

KS

>ABF83710.1 putative type I restriction-modification system HsdM subunit [Campylobacter jejuni subsp. jejuni 81-176]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>ABF83709.1 chaperone protein DnaK [Campylobacter jejuni subsp. jejuni 81-176]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>ABF83708.1 GrpE-like protein [Campylobacter jejuni subsp. jejuni 81-176]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>ABF83707.1 probable heat-inducible transcription repressor [Campylobacter jejuni subsp. jejuni 81-176]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>ABF83706.1 hypothetical protein cju15 [Campylobacter jejuni subsp. jejuni 81-176]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>ABF83705.1 hypothetical protein cju14 [Campylobacter jejuni subsp. jejuni 81-176]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>ABF83704.1 hypothetical protein cju13 [Campylobacter jejuni subsp. jejuni 81-176]

MNFLSSLKDKAVNASEAIKDKTIKTAEVVKDIGMEVKCGIGWHAGEYQNEKDKPKCFFSKICPDCGKYLT

KNQHDFEAPEILNPDNCYGYRRCTLCSIQVFDNFHNYYEIKKDAKCRMHEKCNLCGHERLGQTRHNWKYD

ENGQKICLDCKETV

>ABF83703.1 hypothetical protein cju12 [Campylobacter jejuni subsp. jejuni 81-176]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVK

SDGKVIRLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKN

YNDKIVQEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>ABF83702.1 hypothetical protein cju11 [Campylobacter jejuni subsp. jejuni 81-176]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>ABF83701.1 hypothetical protein cju10 [Campylobacter jejuni subsp. jejuni 81-176]

MENLSKKECLRIEIDKGLENSLKELEDLMEKLPEQQTQTLFEQCTKNAMDAVTGHFGLASTILNAKDGGN

VTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKIVRSEYTGEEMERGAGKNKAQLD

HVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRDLMEWGKEIDLKTGKTNFEKYGI

DEKKLKKFTIQPNQNLKRKL

>ABF83700.1 putative integral membrane protein [Campylobacter jejuni subsp. jejuni 81-176]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>ABF50673.1 probable glutamate synthase (NADPH) small subunit [Campylobacter jejuni subsp. jejuni 81-176]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>ABF50672.1 unknown [Campylobacter jejuni subsp. jejuni 81-176]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMNNILDDECLRLFSQAEIIFYSFGQTNDSTAFKLGEVTESKDEFKNRIIDDCNKCIKRAGYYDI

NEFISEISEDNYEWGKYFHYLFLTYNNVGIEECMKLIDEKIYAFTIEHIIPQNIINNGLLKNYKFENEDD

FNKLKNTFGNLIPLEKILNSICSDRSLLDKKEYYKKSKLSCNLSFANDENFLNFEKKQIIKRNEDFTKWA

RKFFVDFLKITQK

>ABF50671.1 probable glutamate synthase (NADPH) large subunit [Campylobacter jejuni subsp. jejuni 81-176]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLD

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>ABC79676.1 truncated putative acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MEKITLKCNKNILNLLKQYNIYTKTYIENPRRFSRLKTKDFITIPLKNNQLESAAGLGIEEYCAFKFSNI

LHEMGSFSFSGSFLPHYAKVGRYCSIADGVSMFNFQHPIDRISTASFTYETNHSFINDACQNHINKTFPI

VNHNPSSSITHLIIQDDVWIGKDVLLKQGITLGTGCVIGQRAVVTKDVPPYAIVAGIPAKIIKYRFDEKT

IERLLKIQWWRYHFADFYDIDLNLKINQYLDLLEKKS

>AAX99158.1 MurB [Campylobacter jejuni subsp. jejuni 81-176]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>AAX99157.1 FliQ [Campylobacter jejuni subsp. jejuni 81-176]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>AAX99156.1 putative periplasmic solute binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MKYPEARIIYKNFLDIENVVLSGEVDAGVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALR

RSLPLSDAIKIERDLTNAVKIADANRKILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVD

TLFKLGYDYKFYDKIIHVNDYLIPSEYEEARNS

>AAX99155.1 KpsF [Campylobacter jejuni subsp. jejuni 81-176]

MNTLEIAKEVFEKEAQAILDLAKNLDENFNQAVNLMLNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKKNSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMA

SEAEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>AAX99154.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDDQKD

YFSQGKCRNLGAVYANSKVIMFLDVDWYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSEKIY

KEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFYTTN

FSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYKNLA

NLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFLKQN

NINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSKSQI

LECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLDIIN

DMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKPCIN

CANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNKVYK

IDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYRILK

KFLFHRKEFFRDRKNKNKEKPYV

>AAX99153.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFV

>AAX99152.1 putative glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176]

MEQEKKAFQEMLSRCNVKILEKNIWYDNGLDRYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKH

VPAICLVRDPIKIMTSVYNYKILKNKDNLTFSNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNI

NKHIRFTYIARTHLKNLKNISHVYYIDVSEISNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFI

FDIKKPIIYKHYFNNKFIEIYLYGSYNMINKNFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDL

LYEIKLNINIFLDKINNMINMFKKESIKDNDILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYK

EIKT

>AAX99090.1 putative molybdenum transport system permease [Campylobacter jejuni subsp. jejuni 81-176]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>AAX99089.1 putative molybdenum transport ATP binding protein [Campylobacter jejuni subsp. jejuni 81-176]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>AAX99088.1 3-methyl-2-oxobutanoate hydroxymethyltransferse [Campylobacter jejuni subsp. jejuni 81-176]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>AAX99087.1 pantoate beta-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLTKKKEKRH

>AAX99086.1 IlvE [Campylobacter jejuni subsp. jejuni 81-176]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>CAI38888.1 kpsF, partial [Campylobacter jejuni subsp. jejuni 81-176]

EACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVHPD

TEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMASE

AEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>CAI38887.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKVMPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDD

QKDYFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSE

KIYKEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFY

TTNFSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYK

NLANLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFL

KQNNINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSK

SQILECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLD

IINDMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKP

CINCANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNK

VYKIDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYR

ILKKFLFHRKEFFRDRKNKNKEKPYV

>CAI38886.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGHGTGEKAFQEMLSRCNVKILEKNIWYDNGLD

RYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHVPAICLVRDPIKIMTSVYNYKILKNKDNLTF

SNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNINKHIRFTYIARTHLKNLKNISHVYYIDVSEI

SNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIFDIKKPIIYKHYFNNKFIEIYLYGSYNMINK

NFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLLYEIKLNINIFLDKINNMINMFKKESIKDND

ILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKEIKT

>CAI38885.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDISKNNILKLKKLIQHLSNSYY

NCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLVCGDIRELFYMELNNKVAGV

VTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNKCIDAFNIYDHGGLADQSYL

NIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSEFEEAMKNKKIVHFCAAKPW

WNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTIEWILKNGDKNSSNVLYSSY

DIDNIKKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>CAI38884.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVVNQTYKNLQVVLVNDGSTDENSLNIAKEYTLKDERFILFDKENG

GQSTARNVGIEFFSKEYHFKNITQELKENSLVEFKLSNEDNPYNIYKIYKSSNFFKNKDELLNFRAPDID

YIIFLDSDDYWELNCIEECVPRMDGVEVVWFDFEIFLDGIDGKNVWNYSDHKTDLEYLRYTENQYTNFND

IIARITKEYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQN

SSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINK

YFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKKILFIFNIIKAL

YDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKR

TKR

>CAI38883.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSW

RNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFSDLTIIKNNLTKDQIYLNQILENKDKIL

TTQTNQIYNLNTTLENKNQLLIAKQNLINFQNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFII

LSIVISHKQEQKAYKFKVKKNPNLALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRL

KIKKLKREQ

>CAI38882.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYV

YLNILSDFLNYSQRIYNIKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLD

LKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEY

KNKKGK

>CAI38881.1 putative nucleotide-sugar epimerase-dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>CAI38880.1 hypothetical [Campylobacter jejuni subsp. jejuni 81-176]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGYMSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEK

CPYSHENIIFHKKFIGNINNENTITLAQALKDNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQV

IFEFHGCNPEEQDGVEKRISLLKKLNEYFIPIHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGL

HYRKECGNLQNLDFPVWPSNPEIPLRF

>CAI38879.1 GDP-4-keto-6-deoxy-D-sugar-3,5-epimerase-4-reductase [Campylobacter jejuni subsp. jejuni 81-176]

MMQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGG

ILANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAI

AKISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKF

DSIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGP

HKNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQN

IRQ

>CAI38878.1 putative GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. jejuni 81-176]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>CAI38877.1 putative nucleotidyl-sugar epimerase [Campylobacter jejuni subsp. jejuni 81-176]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>CAI38876.1 putative sugar kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>CAI38875.1 putative phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>CAI38874.1 putative heptose-1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>CAI38873.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni 81-176]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYL

DNFEHSYDCIHILFLDRNDFNKSFKYINLLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIP

IQKILDRVQYPFFEQITLEHMLNYWINHGVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFK

LNNIDNLEIMQNIIFGPYRYILPLIINFSFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSI

SELDFEYLNNPLIKQINDFQKDFLDVLNKKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIK

QYRPDIVASWKYYQEFEQMCKELDGDIQEKDL

>CAI38872.1 putative methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPDLARVSSGTQNVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>CAI38871.1 putative methyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MKKGNKVQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKV

VSVEPNDAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYF

SCMWNHRDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINA

WKSVKNPYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>CAI38870.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>CAI38869.1 conserved hypothetical protein [Campylobacter jejuni subsp. jejuni 81-176]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEMCLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>CAI38868.1 putative sugar-1-phosphate nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176]

MNAIILAAGFGSRLMPLTKDQPKCMVEYKNKKIIDYEIEALKSAGINEIAVVGGYLNDVLKNYLNKYDIE

HFFINSKYDKTNMVYTFFCAKDFMLKCIEEKQDLIISYADIIYFQDCVQKLINAKEELAIVVDKSWRKLW

SKRFANPLEDAETLKMTNGYIIELGKKANAHDEIEAQYIGLFKFSYQFLSEVIAFYEMLDRDILYDNKNF

ENMYMTSFLQALIEKYNNAKAVEIDGNWCEIDFMSDLEVQIEK

>CAI38867.1 putative adenylylsulfate kinase [Campylobacter jejuni subsp. jejuni 81-176]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>CAI38866.1 kpsC, partial [Campylobacter jejuni subsp. jejuni 81-176]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILG

>CAA59176.1 fructose 1,6-bisphosphate aldolase [Campylobacter jejuni subsp. jejuni 81-176]

MGVLDIVKAGVISGDELNKIYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>CAA59175.1 cell binding factor 2 [Campylobacter jejuni subsp. jejuni 81-176]

MKKFSLVAATLIAGVVLNVNAATVATVNGKSISDTEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>WP\_072224772.1 MULTISPECIES: 2,3-bisphosphoglycerate-independent phosphoglycerate mutase [Campylobacter]

MMSKVILVVLDGLNCKSASINMGYLNALCKENLGKFYSLECELPSMSRPLYECLLTGVKPVLSGIINNKL

SFSKQTSIFDLCKEQGLKAGGAAYHWVFELYNKKEFIPSLHRHIEDENLTLPYGHFYYEDDYLDSHLFAD

GEHLRNKYNLDFTLIHSMNIDDAGHKFGSHSIEYANKTKKVDNLISEYLPTWLEQGINVIITSDHGMTEG

KSHGGLSEDEILVPFFTFGSAFSYENAKIKQDEICGSVCEILGLKHDKRYNDEILKAKK

>WP\_002868949.1 UDP-N-acetylbacillosamine transaminase [Campylobacter jejuni]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELENSRSNR

WLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>WP\_002856307.1 ATP-dependent metallopeptidase FtsH/Yme1/Tma family protein [Campylobacter jejuni]

MKNKKIILASFMVLCMLLGILYFKNEPKYIDENLYQSLLSQNLIQKAVIDKDEIWLKAEGENYIIIKDGI

DIKTLLSKVPVEVKKDNTLWVFFVLLIFIIALFISLGYFARKKELAKYPISNKNQNHTQAQNSNINLESS

HIKPVISNITFNDVAGVDEVKMELSELVDFLQNPKKYKEFGVKMPKGVLMVGPPGVGKTLIAKAVAGEAG

VPFFYQSGSSFVEIYVGMGAKRVRELFSKAKMMAPSIVFIDEIDAVGKARGEMSNVERDSTLNQLLTQMD

GFEDNSGVIVIAATNKIELMDPALLRSGRFDRRIFLSLPDFKDRLKILEIYMKDKNNNVNLNKIAKASVG

FSGAGLETLVNEAAINALRRNSALVEESDFYAVLNKVLLGKKKILSFNDEEKKIQATYQAAKALSAYYFD

IGFDKITLIEDRFKEYEHNIKSKSELINRIKVYLAGSRAMRLIYNESYTNSQDDFLKIKELLDYMLSFDM

LKEPNLNEQKKEMDEFLNSMKDKILKLSELLLEKEKIEHDDVKNIMQV

>WP\_002853531.1 MULTISPECIES: UDP-N-acetylbacillosamine N-acetyltransferase [Campylobacter]

MARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKKIYQKISE

NGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFSHVSVGAK

CAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>WP\_002875253.1 hydrogenase 4 subunit H [Campylobacter jejuni]

MQDFVYIKNDVLIPLPDAIEILDQANDKEALICNDKNQKAQIYAPEINFYLKNSQDEILEQSKNVLTLYE

ARASVYDLGLDLEQSKEVQNRLIVADGDAQTVEFLKEHEFKVIALSSAEILAVFGSVGELCAVVKNQGEE

VEIDFDFLLFKAEDLSVVRKDFTRQSGCYNLLNFENLEVLLEFLQSKSPKYHYKTYISYNASVCQYHERR

SEHCAKCAEICPTVAILKDDENKHLEFSQVDCLGCGGCISVCPSGSLDYAPMPRESFFTLCEFYKDKKIL

IIPKKMSLENLNLALPKDVLPFMIEGEKWLSSMHFLTLLQNSGANLVFYTDFVSRGSNEAIVLLNTFFER

KFQKKAIFVAKDEKELQNVLKEQEFIQDLKYDFHNNTLTTRENFAKRMQEMIKNEDFGSMESGEWLRYGK

VEINPNTCTLCLSCVGACNVGALIADKQENALKFNASLCTTCGYCELSCAEKDTLKLFRSGMEFRASYFE

YQTMAKDELFACIECGKEFATKKAVEKIANLMKPKFGNDENKIKTLYCCADCKAKVMIKAMGFAGQN

>WP\_002873268.1 oxidoreductase FeS-binding subunit [Campylobacter jejuni]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>WP\_002871921.1 MULTISPECIES: trimethylamine-N-oxide reductase TorA [Campylobacter]

MLDRRKFLKIGASLSALPLIPSLSAGKTVEASKVSLGLVKNGEVITAAHWGILKLTIKDGKIVKSEPWEK

VTKMDNPLQHYTADMVYKSRVKYPYVRKSYLENPDNPKPELRGKDEFVRVSYDEAIKLIAKELKKTRDSK

GASAIFGGSYGWKSSGNMQNSRILLHRFLNVTGGFVGATGDYSTGASQVIMPYVVGSIEVYEQQTSWENI

LSDSKYVVIWGADPLSTLRIAWTSNEQRGLAYFEKLKNSKIKVICIDPVKTTTAKFLNAKWIAPRPNTDV

ALMMGMASHLIAKKKVNYEFLDTYTTGFDKFKDYLEGKEDGVKKDTKWASKICGIDEKTIKNLAETFYDN

PTMIMSGWGMQRAHHGEQPHWMLVTLCAMLGQIGTKGGGFGLSYHYSNGGVPTCKGGVIGGMTAGSLGIW

KNGKFKGLSKAEASSEGAEWLQNAASYSFPVARIADALLHPGKTIDHNGAKITYPDIDFIYWVGGNPLVH

HQDTNTNVKAWRKPRTVVVNEIYWTPTAKMADIIMPVTSSYERDDITMTGDYSNMHIAPMKQAVEPVGES

KDDYVIFSDICKIYGKDVFNAYTENGKKAKDFIKEYYNSALKQTQSFGEAFATPMPSFEEFWAKNEPITF

EPTAESLEWTRFSEFIEDPILNALGTDSGLIEIYSETIKNYNYDDCKAHPTWFEPIEWLGNASKEAPFHL

LTNHPRDRLHSQLCHTSLRDTYAIKDREPILINSKDAKKLGIKNGDVVRVFNKRGEVLAGAVVSDEIMQG

VVRLCEGAWYDPNENGLCKCGNANVLTMDIPTSKLANGNISHTGLVNIEKFKGELPKLTAFSAPKGAN

>WP\_002868950.1 UDP-N-acetylglucosamine 4,6-dehydratase (configuration-retaining) [Campylobacter jejuni]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>WP\_002868947.1 N,N'-diacetylbacillosaminyl-diphospho-undecaprenol alpha-1,3-N-acetylgalactosaminyltransferase [Campylobacter jejuni]

MRIGFLSHAGASIYHFRMPIIKALKDRKDEVFVIVPQDEYTQKLRDLGLKVIVYELSRASLNPFVVLKNF

FYLAKVLKNLNLDLIQSAAHKSNTFGILAAKWAKIPYRFALVEGLGSFYIDQGFKANLVRFVINNLYKLG

FKFAHQFIFVNESNAEFMRNLGFKESKICVIKSVGINLKKFFPIYVESEKKELFWKKLNIDKKPIVLMIA

RALWHKGVKEFYESATMLKDKANFVLVGGRDENPSCASLEFLNSGVVHYLGARSDIVELLQNCDIFVLPS

YKEGFPVSVLEAKACGKAIVVSDCEGCVEAISNAYDGLWAKTKNAKDLSEKISLLLEDEKLRLNLAKNAA

QDALQYDENNIAQRYLKLYDRVIKNV

>WP\_002854283.1 MULTISPECIES: flagellar protein export ATPase FliI [Campylobacter]

MNLEKLRSKLGKENLSAIFGEITKISATSIEIRGLKTGVGDIVKLVSNENENLNTLAMVVEIKEQFSYLS

PFSFIEGFKIGDRAFISDAGMQIGVSDELLGRVVDPFMRPKDGKGAIEVSKYMPIMRAPIDAMKRGLIEE

VFPVGVKTIDALLTCGVGQKLGIFAGSGVGKSTLMGMIVKNSKAPIKVVALIGERGREIPEFIQKNLGGK

LDDTVIIVATSDDSALMRKYGAFCAMSVAEYFKEQGKDVLFIMDSVTRFAMAQREIGLALGEPPTTKGYP

PSVLSLLPQLMERTGKEEGKGTITAFFTVLVDGDDMSDPIADQSRSILDGHIVLSRELTDFGIYPPINIQ

NSASRVMSDIISPEHKLWARKFKRLNSLLKENEVLLRIGAYQKGSDKELDEAISKKEFMQKFLGQNPEES

FEFNQTLELLSQIDTPNTPLPPTQNINVGSASATLPNPNLK

>WP\_002853498.1 MULTISPECIES: undecaprenyl phosphate N,N'-diacetylbacillosamine 1-phosphate transferase [Campylobacter]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>WP\_002856079.1 ABC transporter ATP-binding protein [Campylobacter jejuni]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLSPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKEFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKLVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYKNSKPYILALKEKK

>WP\_002869208.1 formate dehydrogenase accessory sulfurtransferase FdhD [Campylobacter jejuni]

MDPLFTTQILKYKGNESFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIETKDDGMSVHIKAKIDKENLAKLNAEGVVISGCGRAHTANIDPEAIEASKISSDAKFSKGEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHG

>WP\_002851949.1 MULTISPECIES: RNA polymerase-binding protein DksA [Campylobacter]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKHEN

>WP\_011187245.1 DNA topoisomerase 3 [Campylobacter jejuni]

MRLFIAEKPELGRAIAEGLDGNYKSGEGYIQKGDNIVTWAFGHILELAKPEEYDEKYKLWKLEDLPLPIK

EFKYLPKKESKKQLKIICDLIHSDKITSIVNCGDADDEGQILVDEIIQYSKTSKPVFRVLINDLTPKAVK

EEIAKIKPNADFKGMSERGFARSQADWIVGINLTRAYTIMARKNGYEGILSVGRVQTPILALIVNRDKEF

ENFKSINYYSLLGDFNINNNTIKARLKTEDKILDENLAKEIKESCENQNAKINLKIENKKEYPPLPYNLL

VLQAECAKLFGFSPDKTLEITQILREKHKAITYNRSDCQYLPETMFEQAPNILNIIKENLNSNDEIQALI

ASSDLTIKSKAFNDANISAHYGIIPTQNKISSQLTQDELVVYNLIAKRFIIQFFHPREYQTTTINLEVNQ

RIFTATQNKTTKSGFRSLWQNIDSEEEQENNENDINDLSILKNGDIAKCSLIQIEKKQTKPRPYYTMTTL

LKDLNSVAKYVSDERIKKLLIEKDKDKKGESGGIGTPATRSNHIKTLIEREYIEVSKDKKQIIKSTKKGR

DLIKLSPKSLITPDMTALWFEQQKMIEISELRREQFLEEITKEVISEIQRIDKNQEFKILDNENKPKIQC

PQCNKGFLTKRKGKYGNFWGCSEFKQGCKAIYPDNKGTPNFETKQASNDTTHKCPQCNKGFLQRIKSKNG

NSWWWGCSEFKQGCKAMYYDDNGKPKIINV

>WP\_002857086.1 MULTISPECIES: MetQ/NlpA family ABC transporter substrate-binding protein [Campylobacter]

MKIKSLFIASILTLSLNANALETITVAATPVPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGVKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDIIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDPKIKALTQVLQSDKIKQFIIEKYNGSVLPAF

>WP\_002857001.1 MULTISPECIES: UbiX family flavin prenyltransferase [Campylobacter]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGAKLSFKAENQANLEEICQENFKYTHFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIHAGFADTLLMRAAAVALKERKKLILGVREMPFSTLNLEHMLKLSQ

IGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHNLYEKWQNF

>WP\_009882239.1 filamentous hemagglutinin N-terminal domain-containing protein [Campylobacter jejuni]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFAN

GVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLL

YFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDL

SKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILS

QIPKITEQQKNIQKAYDQAVDAYNEAVKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLEST

TASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNN

NPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>WP\_002869071.1 MULTISPECIES: MerR family DNA-binding transcriptional regulator [Campylobacter]

MEQHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRSELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>WP\_002859752.1 MULTISPECIES: flagellar motor switch protein FliN [Campylobacter]

MINDFLKMFTNECISTIEGLTGKSAEFSEYKEFDVNASDTLKAPLVYAIFNIANGGKIGILAGAVLMSAI

GEWMMGEEEITKNDKLGPDEMDAAKEAIQNIISAFSTTLGAQKDIPKMDFSIESCEFVPESVDFKDFKKL

FLYDVKIGDLEEQVSLAMDQTLHNILSGKPAETGNTSTDSNHNTEEKAIMLSEELKNINLIMDVRLPVRV

RIGNKKMLLKDVLTMDIGSVVELNQLANDPLEILIGDKRIAYGEVVIVDGNFGVQITEIGSKKERLEQLR

>WP\_002857725.1 MULTISPECIES: anaerobic C4-dicarboxylate transporter [Campylobacter]

MDIMIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVILGLVLGMKPGNIPWDVILIIAAAIAAISAMQQA

GGLDYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVS

SQIGITASPVSAAVVYMSGVLEPLGWNYPTLIGIWISTTFIACMLTAFIVSLITPMDLSKDSVYQERLKA

GLVKDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITW

LCKVEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEASIKEVAGDWVKQTPAMLAVAFFFASMLLY

SQAATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNH

SFFIPGVLAIAIAVALGFVLAPMLI

>WP\_002854338.1 tetratricopeptide repeat protein [Campylobacter jejuni]

MAEQEDIILEKPEDGLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPQENSESGFKFTRESAPEDVST

FEEVESQEPTPWYKDRKFMSLVGLSLGIICILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDMEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLARLQNSYDNDKDRYKILDAYKIQVRLNKDLFNIAVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQAALYIKKANVTDFVDDSADAGVYLNTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDETKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPNIAREFYVNLMHIAGLLNLERQKIKEL

INVSGAKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAIGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>WP\_002854243.1 MULTISPECIES: cytochrome c [Campylobacter]

MQKAKILIALSFFLLVLSACSNDEKNISKTQNTDQEVVQIEQNDEKTELSDSNLPLPVDDEAQSSDDEHE

ANPTIINSLYKQKCATCHGEKGELKPKNSTAIKTLGNKIFIQKIKMIKDKNHSFLSDEQIQNLADFINKG

K

>WP\_002851673.1 MULTISPECIES: TerC family protein [Campylobacter]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEHRDKGRILGLAFAMITRILLLLSLFWVM

KLVTPLFSVLGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKLWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLVAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNG

>WP\_002826913.1 MULTISPECIES: NYN domain-containing protein [Campylobacter]

MENKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

KDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>WP\_011812791.1 MULTISPECIES: autotransporter domain-containing protein [Campylobacter]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYEYKL

SGKTIENNVRFKDFPNQDFVQYHRLNSNLITWGLTSYFIYPNSFFYGFNVVNEFASDQYNINVLGQFGFY

F

>WP\_011812767.1 MULTISPECIES: MetQ/NlpA family ABC transporter substrate-binding protein [Campylobacter]

MRKGEKMTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSVLQKQGYDLKIYEFNDGVIPNV

MVENGELDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRA

LRIVASKGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLNDVDYSLINSNFAILAGLNPVKDGLY

TESKYSEYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>WP\_011117577.1 DUF3991 domain-containing protein [Campylobacter jejuni]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFFNDDRLISQEILET

FNTLKQDKHYNVCVPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNK

DNKQKIEDIKTIIITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDN

DEKGLDFTLKTKQCFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKS

VLIESKKTELIKEISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>WP\_009882299.1 acetolactate synthase, large subunit, biosynthetic type [Campylobacter jejuni]

MKELSGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNTITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPC

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKFAELLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSVGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENSNTTFKEWHETLK

RYNELYPLSYEDSNEILKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNIQELMTAYEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISNKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>WP\_002869033.1 MULTISPECIES: U32 family peptidase [Campylobacter]

MIIPEIVAPAGNFTKLKIALAYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSFQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHVFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTSIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFIEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>WP\_002867075.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MKVLNFFYENHPKFEVSYERKNQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTNIKDLNINGFEELELDYFDFEEFISVSKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQISISKIFIELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDNFFEQGVKFEVISFDKFSLGF

>WP\_002857383.1 MULTISPECIES: FAD-binding protein [Campylobacter]

MGEFSRRDFIKTACISVGALAASSSGVYALDDSSKMDKDTNLPSCDVLVIGSGGAGLRAAAAVRKENPKL

SVVVATKMMPSRNATCMAEGGINGVTDFSNGDSYKLHAYDTIKGGAYLVDQDAALKFCELAGKAIFNMDF

IGTLFSRNEQGGVAQRLMGGASKKRCNYSADKTGHILMHSCLDDAISSGVKFLMDHELLDIGVVDGKCEG

VVLRDIQSGGIYPVLCKALVIATGGYTRIFYNRTSTPFIATGDGVAAALRAGLGFEDPEMIQFHPTGVAN

GGTLITEAARGEGGYLLNNRGERFMKNYHEKMELAPRDVVARAIETEIREGRGYGEGLGAYVLCDVRHLG

KEKILKDLPKIRHTAMLFENIDLVDTPVPIRPTAHYSMGGIEVAKFEDMSTKIAGIYVGGEASCISIHGA

NRLGGNSLADAVVTGHLAGIGATNYAKDASFGKGAKTHELAQKWQARFKEITNNGGNGQEMYELREELGS

QNWDNMGIFRTQEKLDLLAKNLEDIQARYEKIRIPNPNEVMNTAFTDYVELGNLILLSRCACLAARNRLE

SRGAHTREDYPKRDDKNFLKHSIVNLENDELKLSYKDVVVTEFSLDGRRVQ

>WP\_002856768.1 MetQ/NlpA family ABC transporter substrate-binding protein [Campylobacter jejuni]

MNIKKIFLSVLFTISLSFGADKTIIIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLNSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKKLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFMEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYKGSVIPTF

>WP\_002856595.1 MULTISPECIES: acetyl-CoA carboxylase biotin carboxylase subunit [Campylobacter]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVARIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIHKMGNKNIARKLMAKNGIPIVPGTEKLNS

YSMEEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKVIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>WP\_002855890.1 MULTISPECIES: PAS domain-containing protein [Campylobacter]

MFGAKKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEIKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLCLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

SAEVAKAMS

>WP\_002854819.1 MULTISPECIES: 4Fe-4S dicluster domain-containing protein [Proteobacteria]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>WP\_002854810.1 MULTISPECIES: filamentous hemagglutinin N-terminal domain-containing protein [Campylobacter]

MKKMSKHIVLSFAVSSLLFSQAYALPQGGKFTHGTSGTIHTSGNTVTITGKGQNHVIQWGGGFNIAQGES

VNFTTSGKNYLNIAYQKDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFF

KARS

>WP\_030123215.1 MULTISPECIES: TonB-dependent receptor [Campylobacter]

MKFKKSLLCFLILSGALLKAEEKYQLNDVVVSASGFEQDLVDAPASISIITKEELEKKPIKDIGEAIGDI

PGVDVTMNKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYDNGFSGSESGYLPPLSMIERIEVIRGPAS

TLYGSDAVGGVINIITKKNPDKTEANIEFNTLLQQHSNHYGNAGGFNAYVATPLIEDILSISARLKYYDK

AASDLKWPTPVWNNGNQRPDNYQIASHSPGAFTSLGFGSRLNWTVDDKNNIYFDIERYINEISVNSTSSR

AIKSERQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGKVVLPWNLGQYGNLVNTFGAR

IDYEILKNDQASAGSQIRGKNLDQTTVALYGENEYFIADDLIFTTGLRYIYSDLFDSEFTPRVYLVYHLN

DNIALKGGVSKGYKTPAAKQLTNGYYNYANNNAYFGNPDLKPEESINYELGVDFMVFDFAHYSITGFITD

FTNQISSEDLTGMQNDINCSNGIVCKRPINLGKTQTKGIEFAFNTKTYNGFSLNSSYTFMDNRYKDGQKN

WFGGDRIENLPRHIAMLKLNYERGKFSSYIKTRARLDAIAKAKGGGNGSLPWQKYKPFYIVDLGINYKIN

KQSSLSFAVQNLFDKNFFNPQVTRWDGANPAGYANRYQDYTEGRSFWLSYKYDF

>WP\_009882169.1 YigZ family protein [Campylobacter jejuni]

MQTINQIFQTQIDIKKSIFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLARAYSDAANAVINNSSLLSFELKKNISIAIDLK

NLNRFEYFLKTYSFNFTKDFKDCKAILHIKLNEKEDQEFEIFCKNFAPFEIEKL

>WP\_002869136.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRSKNQDAYIIFKPHPDVLSGNRVGLKDETRILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCKRRTRKLSLEELVAGALIT

YPRYINPKTKTLCEIEVCLDIMLNLQKAYFSKKYIKLAIDFKTFMLRKIRRFYEFLAKK

>WP\_002868808.1 MULTISPECIES: KR domain-containing protein [Campylobacter]

MKTVFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNAHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMIDTNIKGFLYVAKAVIPILRKQKNAYIFNLGSVAGRN

PYFGGNVYCGTKAFVGQFSLALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKADAVYENTQFISAN

DIAKVVMSIINLPSHINVNEIELMPVTQTWNGFYIERDE

>WP\_002857015.1 MULTISPECIES: MetQ/NlpA family ABC transporter substrate-binding protein [Campylobacter]

MNLFKIIILACILNLSSLFAQNITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKVIDEILRSDKFKAIINEHYKDILIPAF

>WP\_009882032.1 prephenate dehydratase [Campylobacter jejuni]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGAIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALANIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFAGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>WP\_002869125.1 MULTISPECIES: DNA topoisomerase (ATP-hydrolyzing) subunit A [Campylobacter]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDSKDASLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARARAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSVGVRAINLDENDELVTAIIVQRDEDEIFATGGEENLENQEIENLDDENLENEESVSTQGKMLFAV

TKKGMCIKFPLAKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSISAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>WP\_002855088.1 MULTISPECIES: bifunctional 3,4-dihydroxy-2-butanone 4-phosphate synthase/GTP cyclohydrolase II [Campylobacter]

MKFVSVEQAIKDLQAGKMLVMVDAEDRENEGDLIFPAQFSTQEKVNFMIKEARGVVCVALDETLAKKFEL

PLMVPKNTSNHETAFTITVDAKDATTGVSAYERNMTIQIFADDNAKASDFVRPGHINPLIAKKGGVLERT

GHTEGTVDLCKLAGLKGACVICEIVKDNGDMARREDLEIFCQKYDLNMIAVSDLIEYRLKHESLIKLEEK

SQSVLAGFKAEKFIFSDHNQTQHIAFCFKDIKKCENVKFHISGSDFELLTSDKFSKLLEQIKFLSENGGV

IVFMQGEKSSTIQYKNYGIGAQILRYFGIEEIKLLSQSCDKDYIGLEGFGLNLKACNFN

>WP\_002851617.1 MULTISPECIES: peptidoglycan-associated lipoprotein Pal [Campylobacter]

MKKILFTSIAALAVVISGCSTKSTSVSGDSSVDSNRGSGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>WP\_002859851.1 MULTISPECIES: adenosylmethionine--8-amino-7-oxononanoate transaminase [Campylobacter]

MQNEILKKLDLEHIWHPCTQMKDHENLPLIPIKRAKGVWLYDFDDKAYMDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGVKKSKF

LSLSNSYHGETLGALSVGDVALYKDTYKPLLLECLSTPVPQSKDYTQELEILKDILEKNASEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHKFGVQVIFDEIAVGFGRTGTLFALHQCKQSPDFICLSKGITGGFMP

LSVVLTRDEIYNAFYDTYESQKAFLHSHSYTGNTLACAAANAVLDIFEDENILVKNQILSEFIKKEFSRL

EKFDFLGNFRTCGMISAFDILSTKYKRVGLFVFQKALEKGLLLRPLANTIYFMPPYIITKEQIVYVLESL

EQIFKEF

>WP\_011812810.1 MULTISPECIES: bifunctional diaminohydroxyphosphoribosylaminopyrimidine deaminase/5-amino-6-(5-phosphoribosylamino)uracil reductase RibD [Campylobacter]

MSNFKIQGRQMKEFYMNLALNEAWKYQFLTYPNPAVGCVILDKNGKILAIKAHEKAGLAHAELNAITHAF

KSLRPEISLPKEANALHEFICKNHQGVFKDSIAFVTLEPCSHQGKTPPCAKLFSELGFKKIFISVKDGNK

IASGGAEFLKKQGIEVEFDILKEEGKKLLKPFLKWQKGQFKLFKLALSMNGSPFGKIVSNELSRTYAHKI

RAVIDLLVVGGETIRKDHPILDARLCKAKAPNLCILSRQNIDNFDKNIPLFKVPNRQIYTQIPSEAKFLM

YEGGENFLKTFKDGIDMFLIFQSSSLNDEKNVTIPLNFKPLYRNFLGSDTYGIYEL

>WP\_002869311.1 MULTISPECIES: NADP-dependent isocitrate dehydrogenase [Campylobacter]

MQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTSDISLSGRILATFSEYLKEEQRCEDALELLGELV

KRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNYPDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNS

DRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGDFFSNEKAVLIDQDCVANIEFTSVDGKNEILKEG

LKLEKNEILDATFMDVQKLQEFYAKEIKASKDDDVLFSLHLKATMMKVSDPILFGYAVKVFFKELFIEFQ

DEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEILAKSADISMVNSDKGITNLHVPSDVIVDASMPA

MLKNGARLWDKEGKEKDTNAVIPDQTYATIYEAVIEDLHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDK

TFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKFDAVLNWIDLGIERSELSGAEAIFWLDSKRASNK

IMITLVQNRLKEKGKNIAILTPKEACLRSLELIREGKDVISITGNVLRDYLTDLFPILELGTSAKMLSVV

PMLKGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGEFLALQASLEFYANKCSNHKAKVLAECLDEAIGE

WLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQASDMELQSFFKDIALELSSNEEKIRAEFNNAQGVK

VDLGGYYKFDDEKANKIMRPSATFNAILEKIGQR

>WP\_002852232.1 MULTISPECIES: trimeric intracellular cation channel family protein [Campylobacter]

MEINALTITTLYIIGISAEGMTGALAAGRHKMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIIAGAIYYSLIIWLELNALVCTLLTLFIGVFARLLAIKYQWSLPIFSYNEEK

>WP\_002868810.1 bifunctional aconitate hydratase 2/2-methylisocitrate dehydratase [Campylobacter jejuni]

MSFMQEYNKLVEERAALGIPPLPLNANQTRELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKGKISAPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDSAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIKCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQAGSLEK

IKELKKSGREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNALLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVRPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDTVGTGGDSHTRFPI

GISFPAGSGLVAFAAVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIIDINLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTNEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>WP\_004297946.1 MULTISPECIES: thiol:disulfide interchange protein DsbA/DsbL [Campylobacter]

MRKFFCKFVLALVFYSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLEKLREAFPNLH

FKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRNFSNLDEFYDI

GLKAMNVNKNEVLNFLNTQKAKEILSEFQRANDIAKTYGTPAFVVNGKYQINPSAINSMQDLEDLVKKLS

NMK

>WP\_002868925.1 MULTISPECIES: PhoX family phosphatase [Campylobacter]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDDNDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDILYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDANTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSDENLEFNDAFKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGADTSKILDEGTLYVGQFNGNMG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQVLINTRLAASIVGATPMDRCEWIASHKQSGSKEVFATLTNN

KNRQEPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>WP\_002868762.1 MULTISPECIES: peptidylprolyl isomerase [Campylobacter]

MAIEKNSVVSMFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLG

EYDENAVQTLPKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIVDA

RAASEDEILTGIIAGSHSCGCGSGHGHDHHHGHGHGHGGGGCCGGGGCGCH

>WP\_002857195.1 MULTISPECIES: thiol:disulfide interchange protein DsbA/DsbL [Campylobacter]

MKFPVKLARSIVVCAFLAGISASALSEGKEYVILKNPIANADNSLIEIFSYRCTHCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMGDYGKQANEIFAFAAFKDGVNKADPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMNVSKADFENFLKTPEAAELLKSYEIANPISQNYGTPAFVVNGKYQIVPSAIKSPEALI

EITKELSKQK

>WP\_002855755.1 magnesium transporter CorA family protein [Campylobacter jejuni]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFNDEKIYKLQNEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQNLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSISILSKNTKEHLARVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQTK

>WP\_002854867.1 MULTISPECIES: GatB/YqeY domain-containing protein [Campylobacter]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEELGVSSLKEQGLIMKEAKIKLGASVDGKRLNL

ALKELLQ

>WP\_002880964.1 MULTISPECIES: endolytic transglycosylase MltG [Campylobacter]

MTIPFLSTINKANISTTKNTTIYKIFFFIRNFFLIFILGIFYYLTQPLKSNSVVFIPQGSISQIITYLKQ

NKYQMSSIDKYILFFLGHPQSGWINIGTKDLNRAEFLHKLTIAKAALQTITLIPGETSVIFLEQAAKQLE

LDKDMLLKEFQAQAPYDEGVFLPETYKIPKGITENLLIQMLLNHAEISNKKTSEKIFGDYNPKKWHQYII

IASVIQKEAANDNEMPIVASVIYNRLKKGMKLQMDGTLNYGIYSHVKVTPQRIRQDNSSYNTYKFTGLPK

EAVCNVSLAAIRAAIFPLKTDYLYFVRDKNTGVHIFSTNIDDHNKAINLQKGK

>WP\_002860004.1 MULTISPECIES: RNA-binding S4 domain-containing protein [Campylobacter]

MRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQKYKVLAIPSTKSIP

KNAQNEYVVKL

>WP\_002857627.1 multidrug efflux system transcriptional regulator CmeR [Campylobacter jejuni]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>WP\_002857003.1 MULTISPECIES: phosphoribosylformylglycinamidine synthase, purS protein [Campylobacter]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNSV

IEDYELVIEKE

>WP\_002866271.1 MULTISPECIES: acetyl-CoA carboxylase biotin carboxyl carrier protein [Campylobacter]

MTKEEIKELVNLFAEANISKIKIKEQDGFEIELERDMCCDVPAPVCPPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>WP\_002851874.1 MULTISPECIES: YraN family protein [Campylobacter]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>WP\_079254191.1 MULTISPECIES: heavy metal translocating P-type ATPase [Campylobacter]

MIMKCEHCKLDYKQAQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFI

TKTKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIG

YKASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPV

LFYTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYIYSLWAMFFRVGEVYFDSVAMIICFVFIGKYLEMF

SKKRALDTIDGLNDFLQNEVLVFDGKEFAPKEVQKVCLGDRILLKTGDKILIDGICKSGEMSVDTSSLNG

ENIPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIQLLELASSKKAKLESLVNSLSAYFSRTVL

LIAFICFAFWFFYKEESFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSK

CDCVVFDKTGILTKIELELKEVFLDKALDLNELYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSI

QAKGLSAELNEGLLLGGSSKFLQEKGIVAKEFDNTHFIFAKEGKILAFFEFDSVLREDAKELITYLKKEK

KELMILSGDHQKAVEKIARKLEIQNYQASCLPEDKMKTIEKLSKNYKVLFVGDGVNDALALKYASVSMTL

REGSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMS

FSSIIVVLNALRIKE

>WP\_079254186.1 nitrate reductase cytochrome c-type subunit [Campylobacter jejuni]

MMKKKLVLLGSAAVVFFAACAMNSGVSSEQIGLRKASLENENKVNLVEANFTTLQPGESTRFERSYENAP

PLIPHAIEDLLPITKDNNMCLSCHDKAIAADAGATPLPASHYYDFRHNKATGDMISDSRFNCTQCHVPQS

DAKPLVGNSFKPEFKNEQLKSRSNLIDVINEGVK

>WP\_002869046.1 endonuclease III domain-containing protein [Campylobacter jejuni]

MTGARIFTKLLNLDLNYHDFDWLENQGLSEFELLISVILTQNTNWKNVLKALENLKKENIVSLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDSILNYLCKREI

LVVDNYSLRLAFCLGYEFENYEELREFFQSGIESEQENLCKILGRKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>WP\_002868920.1 MULTISPECIES: coproporphyrinogen III oxidase family protein [Campylobacter]

MNLFQNLALKYSHTMMEKSLQKGFNVELLKQPEEKIPKQDKSYMLYAHVPFCHTFCPYCSFHKYYYDENL

AKVYFQNLREEIKIMKDKGFDFTSMYVGGGTTLINEEELLKTLELCKKLFNIKEISCESDPNHIDPNKLS

MFKGIIDRLSCGIQSFDDETLKKVARYNKFGSSKELQEKISKALGILPIFSIDLIFNLPGQSEKQLLNDL

EIAKNLAPQQITTYPLMKSNLTKDNIAKSLGVSIKDNEFAYYQIICEFFKDYTQNNGWSFSLEKNKLNDE

YVSSHHEYLGVGSGAFSFLDGELLINAFNLNDYAKFIQEKQNANIAKACFDKKEIIKYVFLTEIFSGKIE

IDKFNKTLNCNLEKELFIELLGLKTSGAIIKDQNALIATEFGQYLFVVLMKDFYTGMDLVRAVFRDDKRL

KNKDYIDIMKENIDPLNSASMEFKAETN

>WP\_002868803.1 MULTISPECIES: prepilin peptidase [Campylobacter]

MIFFIIILGACLGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCQTCKCHLPI

SLLINEILGIILLILAYSLSQNFYDFLFLSLFLFNLFLLSLIDIKLKAVPQILLWSAFLFAFFYAFRESE

ILHFLIFKEFSGGFLLNAFSFGGFVFLLKSLVFFLMNFRKKDEILENLGDADIIIMSCIGGILGFEYGFL

VLLIASILTLPFFIFFKIKAIKEQELAMIPFLNIAFVAVLFYKNLGLF

>WP\_002868747.1 MULTISPECIES: LptF/LptG family permease [Campylobacter]

MWIFFRFISGIYLKNFFIIFFSLLGFYCGIDLLLNFKDLPKAANLDLLYVMFLSFSAVPYVLPISLIFAL

VVSLISMIRANEFVSLYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFAYANDYKRNILKNGTIMNQSG

EVFLKFNNNFVYISKINNGQNSAQNIKIFNINDLNLSSFVSAKNAHFEGESWILRDGNITLLPKNYELAN

DGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNTDTLKINLYKFVFTPFFAPFL

MLIMYYFFPVIARFFNLAIVTFVTFVVTLMIWGVLFLLTRLSENSVIASEIGIVVPIIILGCLSAYMYYK

HR

>WP\_002857363.1 MULTISPECIES: 3'-5' exonuclease [Campylobacter]

MSLQQIDQIISILNKQSKPYDWVMQEFAKVEELKNFDLDLETFELLGLGLTLNKDNIFTLKTRTTKIKDE

IFCIVDIESTGGVSKGEILEIGAVKIQNSKEIARFQSFVKVKEIPENITELTGITYEMVENAPSLAKVLS

DFRLFLKDSIFVAHNVRFDYSFISRALNECGFGILLNRRICTIEFAQCCIESPKYKLEVLKEFLGVENTH

HRALDDALAAAEIFKYCLGKLPYHIKTTEELINFTKTARIKQK

>WP\_002857324.1 MULTISPECIES: pyridoxal phosphate-dependent aminotransferase [Campylobacter]

MFDEIRFNTIERLPNYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLAYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPESKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQATRNIKKYLKE

>WP\_002856798.1 MULTISPECIES: LptF/LptG family permease [Campylobacter]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMIPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKYENIIMYRPKHKADDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYTTIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILSRY

>WP\_002856614.1 MULTISPECIES: cytochrome bc complex cytochrome b subunit [Campylobacter]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGPELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIIAIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWIGFYASIVFLLLLIVVLPVITIMERKGAKQ

>WP\_002856257.1 MULTISPECIES: DUF814 domain-containing protein [Campylobacter]

MKYTELLQLQTFFSQFKKIDFIKRINDNILELSFDRERFIFDLTRAMSVIYTAKFNAKNYNAPFDFMLKK

YFSNAFIKEVKVLEGNRILCFSVKANKAYKSYESKIYFEFTGKNTNVILTDEKDLIIEALRHIDKSYRVI

KPNVILESLKPYKMDENFEEIKDFADYFSRKFTSIYESKIKQIKNLKLAQVDKKIQNLQELFSSLDEENS

LLLKALEYRKRADVLFANLSVLKDYEREFKLDDFEGKELEFKLEFSPKQSANLYYKNAKKLEQKAKNLNI

QRQNLKEKLDFTLSLKELLLQAKSEIELEILLPKKNSKKNQDHKQEDLVANFYFNEFKICVGKNEKGNEF

LLKNAKKDDLWLHVRNIPSAHTLIISNKQKISLDVIEFAARLCVSFSKLKKGSYWVDYTLKNFVKVQQKA

FVNYTNFKSINITKD

>WP\_002856175.1 MULTISPECIES: YeeE/YedE family protein [Campylobacter]

MNSFKQKYLINFWDNPRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFIGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMVLGIYLGVKICNTSFFKPKAKLERVNKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRDNAIKGALIGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVFAGGCECGWTYRAFEGQSHFIIVGIANIIGTMILALSYD

FLPKAFKEGIKINLLTEFGNLNGFFINLILFILMFVFVVFYKKHFFKNQLKG

>WP\_002855700.1 MULTISPECIES: thiamine biosynthesis protein ThiF [Campylobacter]

MMRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNENDELFCIEKNTLPPKDALDAMM

RARHTPKLHDKLKNGRVAVCGLGGLGSHIAINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTE

ALKEQISEINPYISVEICTLKIDEDSLKSLFKDIDIVCEAFDSAIAKAMIAQNFHRFYKDSVLICASGLA

GYGDSNSIQTRKIAKNFYVCGDLVNGAKLGNGLMAPRVNICAGHQSNLVLELLANKE

>WP\_002855221.1 MULTISPECIES: coproporphyrinogen III oxidase family protein [Campylobacter]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFQALKEDIVFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKVGFKNINLDLIYDTKLDNKKMLEFELLHLKQIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LMKFFIKQLLELNFFQYEISNFSKTKAQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>WP\_002854276.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MKKLKCISFHEGLDIIEVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCDFAFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIKKAKIVVPKSIAQKA

SMIPNLEVYGLENLNEAIEFFKEKNYENFRFSHNHPLFASPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKTSISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNISKTH

ILEALSFRARN

>WP\_002857597.1 MULTISPECIES: protoporphyrinogen oxidase HemJ [Campylobacter]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEIVKIQERKLYFYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>WP\_002868858.1 polyphenol oxidase [Campylobacter jejuni]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKIHNENLFSHLGFKDIEKCVFMDQIHSHKVIIYEKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHENGIIAALHSGRKGSFENILKECVDQITMQNSHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFKEFVQDNKLDLKALVKFQAQNLGIENIKDCGICSFDDESFFSYR

RDKTPKRFVSVVYLKD

>WP\_002857378.1 MULTISPECIES: 7-carboxy-7-deazaguanine synthase QueE [Campylobacter]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLNA

NELLKRVIKLKQDFNPIVVITGGEPLIHYENPEFIKFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKEGV

>WP\_002818958.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MLNVIHALFFRELKTRFGKNRYLGYIWVVGEPMSVVLLVTIIGTVIREYHHQVMPEGISIFMFLISGIMP

FFMFRSIVTQLMNGIGANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRLDVFPVHLLG

VLFCIFLLICSAFALGICFAIVWHFVESLRTLLAYFSIVFYWSSGIIFPTWLTPRPLLDIFYYNPLLHIF

ELLRFNFFENYPLQDEYSYFYAIFWILLVLFIGLFIYYYNRQALTAAKKE

>WP\_002856712.1 MULTISPECIES: thiol peroxidase [Campylobacter]

MSTVNFKGNPVKLKGNSVEVGADAPKVNLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>WP\_011812805.1 multicopper oxidase CueO [Campylobacter jejuni]

MNRRNFLKFNALTLASMGVAYANPMHDMHSMHKNHSINHDLDTSFINFAPKNLKLLDPKQFPQGEILKAL

PLLKNESKEKNIFRATIEIKENHIELIKGKKTLFYTYNGLVPAPKIEVFEGDKLEILVKNKLKEATTIHW

HGVPVPPDQDGSPHDPILAGEERIYRFEIPQDSAGTYWYHPHPHYTTSKQVFMGLAGAFVIKAKKDALSH

LKERDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPKIKLATNERIRIYNATAARYLNLRIQ

GAKFILVGTDGGLIEKAIYKEEFFLSPASRVEVLIDAPKDGEFRLESAYYDRDKMMVKEEPNTLFLANIN

LKKENVELPKNLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALASMFLINGKSYDLKRIDLS

SKLGVVEDWIVINKSHMDHPFHIHGTQFELISSKLNGKVQKAEFRALRDTINVRPNEELRLRMKQDFKGL

RMYHCHILEHEDLGMMGNLEVKE

>WP\_002869288.1 MULTISPECIES: type I DNA topoisomerase [Campylobacter]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKNAIENALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTIANKDRAKLILEACKNEAYTISDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIAAKFLDKDELKLYTLIYNRFLACQMNPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNFKIGENLKIQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSDVAFNVTEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKSESKNESENTAAKAKANGTGITCP

SCQKGEIVERFSKRGKFYGCSAYPKCNFISKYKPSEEKCEECGETLVIKELKKGIFLECLKCKIKKEMKD

>WP\_002856014.1 MULTISPECIES: class II fumarate hydratase [Campylobacter]

MEYRVEHDTMGEVKVPNDKYWGAQTERSFENFKIGCEKMPKVLIYAFANLKKSLALVNNKLGKLDDAKKN

AIVQACDEIIAGKFDDNFPLAIWQTGSGTQSNMNMNEVIANRATEIMGGDFRKEKLVHPNDHVNMSQSSN

DTFPTAMSIVAVEQVEKKLIPALDELIATFEKKVKEFDGIIKIGRTHLQDATPLTLAQEFSGYLSMLLHS

KEQIIASLPTLRELAIGGTAVGTGLNAHPELSQKVSEELTQLIGTKFISSPNKFHALTSHDAINFTHGAM

KGLAANLMKIANDIRWLASGPRCGLGELIIPENEPGSSIMPGKVNPTQCEAVTMVAVQVMGNDAAIGFAA

SQGNFELNVFKPVIIYNFLQSLDLLADSMHSFNIHCAVGIEPNRAKIDHNLHNSLMLVTALNPHIGYENA

AKVAKNAHKKGISLKESAMELGLVSEEDFNKFVDPTKMIGPKA

>WP\_002852246.1 MULTISPECIES: hydroxyisourate hydrolase [Campylobacter]

MFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEEFTEENGRIGD

LLPYEKAENRAFGIYKLKFFTKDYYTSHKINTFYPFVEVSFELSKDQKHYHVPITLSPFGYSTYRGS

>WP\_024088204.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVIFCAALALLLFLGMIAYLITSDGKKTIKKQKTSQKQHVTEKTKKFDTDLDKMIIAASDVKLTDIELKE

LAKLYVQTHKLGSKTSKELDEATKKKLEFVSALAANINASAQTVSYLNKELKKISGSYKKEIDAYEHMGL

AKRKIKEDK

>WP\_010891825.1 MULTISPECIES: RluA family pseudouridine synthase [Campylobacter]

MAYIKIKLSNNGKKAFQVLMENLKISINEAQKLIDKKRLFCDGILVEEKNKILNGLVELIVYENNPKGVE

IVFENEDFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKEACVAHRLDKETSGLILIAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEENFIVDKAINLTKNYDDVKTRMQICKEGKQAITEFEILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKQQIESILDEKLNPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>WP\_002856495.1 MULTISPECIES: RluA family pseudouridine synthase [Campylobacter]

MQTFLVDENSRLDVFLAKKLNQSRNQVALLIEKDCVQVNDKIQDKNSFKLKNGDIISIASLKLCNEIKPQ

FEVDFDIDVLYEDEDLLVLNKPSNLVVHGASSVKNATLVDWLIEKKYTLSNLGGEIRAGLVHRLDKDTSG

AILIAKNNFTHQKLSEQLADKSMGRIYLALIDLPLKEDKIIVEKFLMRSPSNAIKKIAIDKENKFSKNAK

SAFINIVKTENLTLMAAKLFTGRTHQIRAHLASLNRHILGDSLYGYKGKYDCRIMLHAYFLYFIHPKTKE

QIFVKAPLMEDFKNIMFKQINLGENDEKISLGFLLEFFNSFA

>WP\_002856304.1 MULTISPECIES: tRNA pseudouridine(55) synthase TruB [Campylobacter]

MNKIFAAFKPRGLSSNAFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYTKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKEIKNIKEFDLANLQQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YIDLKPNFIKELNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>WP\_002855240.1 MULTISPECIES: RluA family pseudouridine synthase [Campylobacter]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKTLTKIVIQTGRTHQIRVHAKFIKHGVVGDEKYAK

ISSDRMYLHSYEIKIFDYYFKAELDNSFAKVGFEIKNLDF

>WP\_011812681.1 MULTISPECIES: type II asparaginase [Campylobacter]

MKKLLLCVLVFLSIGACMAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANI

SGEQIANIDSSNMRDEIWLKLAKEINKLFAEGVDGVVITHGTDTMEETAYFLNLTIKSDKPVVLVGAMRP

STAISADGPKNLYNAVALAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIVDGKV

FFYNNVIKAHTKNAPFDVSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGIVVAGSGAGSIHEDQKNV

LKELMKKGLNVVVSSRVVAGRVAVSDSDEKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>WP\_074468901.1 MULTISPECIES: SLC13 family permease [Campylobacter]

MIMVFLIISSIIVAIILGYITRHNVGIFAMIFAYIIGAFFMDLAPKKIIAFWPISIFFVIFAVSLFYNFA

TVNGTLEKLAGHLMYRFANHPYLLPFVIFVVSAIIAALGAGFYTVLAFMAPLTFLLCDKIGLSKIAGAMA

INYGALGGANFMTSQSGIIFRGLMENSGIEANEAFANSSIIFAFTIILPIVVLSFFVFNAFKNNIKISVI

SKPDPFDYKQKTTLILMFMMIVVVLIFPVLNIIFPHNEIISYFNKKIDIAMIAMIFVAIALFLKLADEKQ

VVALIPWGTLIMICGVGMLISIAVEAGAIKLFSDLVENEINVIFIPLIMCAIAALMSLFSSTLGVVTPAL

FPIVPSIAASSGLSEALLFSCIVVGAQASAISPFSSGGSLILGSCPDKYKEKLFKDLLIKAVPIGFIAAI

LATIIMSFIL

>WP\_011812759.1 M23 family peptidase [Campylobacter jejuni]

MVKNKFTITITDINGSRHFYLNQIIKKIVFYTIAFIVLFLVFSGFYIKYLDSKLSDISEKREELLKKSKE

LELSNSQMQKSIEEKTQQYAAIEDKIASFEEALGLEVENNLTISARLDNLQLTNEQQLGILGQIPNGWPI

ENKGITGNFGWREHPLLKRREFHPGIDLRAEIGTPIYAPASGVVEFSGYSDNGYSYNVILLHNFGFKTVF

AHMMRKEVVKAGQFVSKGQLIGYSGNTGLSTGPHLHYEVRFINKTLEPLYFLNLQRKNMNDFFNQERRVP

WQSLIKAVSAQHPALAQKQQ

>WP\_011812682.1 MULTISPECIES: cytochrome c biogenesis protein [Campylobacter]

MFKKIFFSFWMSLILLFIYALSCAVATFVENDFGTNAAKALVYNALWFDILHLLLLINLIGIIFIHKLLQ

RKKYASLLLHSAFIVILLGAAITRYFGIEGGMHIREGQSSDIIVTRDEFIALMLYNDEGKVVEYQSFGVA

FNPLLHNSFEKKVSMQQNKTINLKLLDYEKAPNAMSNPIIKMQISFNNESKEILLTPNYNNENVLPFRLG

GEIFALNWGPEEIKLPFSLALKDFILDRYAGSMSPSSYASDIEVIDQDKSFEYKIFMNNVLDYGGYRFFQ

SSYDQDEQGTILSVNKDPGKIPTYIGYTLLTLGFLWILFAKNSRFQKLSNYLKNQKNLLLILFCLFAFNI

KSFADENTLKLIQNIKENSAKHSMLFGSLLVQDFDGRIKPIDTLAMNYIHKITKKNDFLGLNYNQIFLGM

MMYPQHFRQIKMISVKTAKLKEILGVDKNEKYLAYDDVFDGDFYKLSNYIEEANRKKPALRDQFDKDILA

LDEKINTAFYIYSGEIFRIFPDPSQKTYTWYSPATPMPFDLKDIENIQSLLAKYFFDFEQALSTKDFSKA

DESLERLKNFQNFYGSNLIPTPTQISLELFLNHYNIFDNLTPIYLLLGSMLFILLVYEILSLKKAPKMLK

NAIFILIALSVLAHALALIFRWYVGDHAPWSNAYESMVYIAFACAFAGLVFYKRSSLALCTASIMAGISL

FVAHLGFMDPQITNLVPVLKSYWLNIHVSIITASYGFLGLCFLLGVFSLILFMLRNPKKAQIDQSILNLH

CINEMAMIIGLALLTIGNFLGGVWANESWGRYWGWDSKETWALISIIVYTMILHLRFISKFNNPYAFASA

SVIGFYSILMTYFGVNFYLSGLHSYATGDPVPVPKFLYFFIAFTVILILGAFFKRKLKSPA

>WP\_009883017.1 MULTISPECIES: carboxynorspermidine decarboxylase [Campylobacter]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIDEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSTIEGLHFHALCEESADALEAVLKVFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYSVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNARILATRENEKISDLKESEFSYLLTGNTCLAGDVMGEYAFDKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLNAKNELQMIREFSYKDYSLRN

>WP\_009882152.1 MULTISPECIES: prolipoprotein diacylglyceryl transferase [Campylobacter]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>WP\_009882145.1 MULTISPECIES: shikimate dehydrogenase [Campylobacter]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDKIYAYNTDALGFLEVIKDFDNIKKALILGAGGTALALAYVLKQKGVEVH

IANRSKERFKDFLAYRAYLYKDLQDFDFDLVVNSTSAGLKDENLPCDRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>WP\_009882143.1 MULTISPECIES: SPOR domain-containing protein [Campylobacter]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLINGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTASSSNNNDSTNFAMPDQEVPAEPTAATSENT

APQASAPKQEVKQTVKPKEEAKKQTAVKKEKESTKQTPKKEQNANDLFKNVDAKPVHPSGLASGIYVQIF

SVSNLDQKSKELASVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>WP\_009882139.1 MULTISPECIES: serine hydroxymethyltransferase [Campylobacter]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>WP\_002911887.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLTQKDIIKKIKTIFIRSFLYLIIKISKNKKINKRLKVLRYIDLRKGNSITQIINKMIKHLFKNTIIKAY

>WP\_002869204.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKILQDGFFLAIFFFVLLPSRVFALDAVLFNENILSQKVSNEINLIGKELYQKSNIFIGVMVGDKTEIE

TLLNKQKELPQSYILLLLSKNSHKVDIVGSKGTLALIDKEAVLSPYPGTGSILPILATNKGDIYNAAILN

GYADIVDRVAKSLGLQLEHSIGNANRDTINILRILIYGFICFALLYYAQRRIKRKKNVRN

>WP\_002869135.1 MULTISPECIES: capsule polysaccharide transporter [Campylobacter]

MRFNTKIKKEFSGKNVLLLQGPVGNFFHHLAIRMEKKQTKVFKLNFNGGDFFFYPSGTRCKCDEKDLENF

YRDFFQSKKIDAILMYNDCRIIHAKAIKVAKELGIEIWIFEEGYLRPYCITLEKDGVNANSSLPRDKNFY

LSQNIFTKESIKEIPGGFKFMAFDAFLYWLFAFILAPFFNNKLHHRTLYPFEFLFWFRSLYRKYLYKITE

KKLNEKIYNLEKKYFLAILQVYSDTQIKYHYKKSIEHFIEETILSFANHARAKSYLVFKHHPMDRGYKNY

SKLINDLSQKYHVEGRVLYVHDTHLPVLLRKALGCITINSTVGLSAILEGCPTKVCGNAFYDFEGLSYPK

KLQFFWREAHAYKPNPVLVCNFKKYLLQTNQFNGNFYKNFFLDK

>WP\_002868939.1 MULTISPECIES: M23 family peptidase [Campylobacter]

MAKRKGKTYLSVLILVLIAILIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDESSIKNVQIIL

HKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKAEDANLDKVYIETNKGKIFKVTPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYRVSNINLTDKFLDGKIENLANQYAPKDNNLNRYEKFKFVNETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGLDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWVENNIYNVLNDGKKIILGKN

>WP\_002868864.1 isopenicillin N synthase family oxygenase [Campylobacter jejuni]

MNLPILDLQAYEKDKSTFLKNLREIASKIGFFYLINTSIDKNLNEKLFKLGKEFFNLSRSSKELISMVHS

PQFRGYTSEGFEYTAGTKDYREQLDIGTERDALNWNLNSPLWQRLEGPNLWPSEIPELKKTFLTWHKQTK

KACLKLLKAFAQVLDLPSNAFDKLYGENSYEHCKIIHYPKSSKNITQGVGSHKDGGLITFVFQEKQSGLE

AFIDGKWLSIPPLENSVVVNIGEFLELATNGYLKATIHRVNLSPKERFSIAYFLGVQLDKDIPIFKLNPE

LAKESKGVDTDPKNPLLRNVASNYFKRMIRSHPDVASIYHSDLIEKFSFA

>WP\_002868831.1 MULTISPECIES: iron-sulfur cluster carrier protein ApbC [Campylobacter]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDDGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISMAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSRRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>WP\_002866308.1 MULTISPECIES: thioredoxin [Campylobacter]

MLKKLILGFIILLFCACNDEKIDENILSKGTKTTEQYKQDANNLDLNSYKEIAEFFKDNQNIVFSDKPVL

IIFSANNCVYCDKLKHEIQNDKEVQNILKNTYNSYYINTSYHKIHNYDNKKTSTEELSREFNIDATPTLV

FFTPKHKTLLIYPGFMSAKRLALTMEILKDEKNQKLNEDELFKTLFLAYKEKNV

>WP\_002866307.1 MULTISPECIES: membrane protein [Campylobacter]

MKQSLIKFILLAVFCFSTPFLLADGKIQIGIVEGVTPISMKDAEKLLGQKNVYFVDVNSKEEREVAGNIP

NAVLVDAQNWQNLLPDDFNATLIFYGSNRFTFDASNIANLSQKLGYTHVYVMLDGIESWVLSGRKVQKEQ

IEKWQNAKNLDDFKDSIHSRMYFGDVPSCRDCHGKGEDKKSIRYNNAANLDLINKNCASCHKDVDKEFKH

SIHQNISQIQLDKDGKKKKIPTCTTCHDIHNNDPLMNAMTLKQRSDFKCGECHQDKQDRYHDTFHGKAMV

LNSPGSAPKIAACYDCHGKHNILKVEDLNSTLSSLNRVQTCAQCHPNSNENFANFIAHADHSDGENYPLL

HGAYIFMTALVIGVFVFFGLHTLLWSIRLILARLSHPIEWKKAKENAHNDKILIKRFSTFHKIQHFFMAA

SFLGLAFSGLPQKFYTAPWAQTMIDLMGGPIGATIVHHISAIVMFIVFFSHIGEIILVNWKRRDLVRDPQ

TGKLDKMKILKALFGPDSLMPNWQDFKDMKAHFKWFFGMGERPQFDRWTYWEKFDYLAVFWGMFVIGLSG

LVLWFPTFFSAFLPGWMINLCSLVHSDEALLATGFIFAIHFFNTHFRADRFPMDMVIFSGTQSEAEIKQE

RNAYYQRLKESGRLESLYEKNSKFNSYKGIAKLAGYLMLITGMIFLFLMIYAFIVDLLK

>WP\_002858817.1 MULTISPECIES: FAA hydrolase family protein [Campylobacter]

MKFVNFIQGQKHNLGVLNSSGKIVSFTDLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEIPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATAPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIAYVLEELSAGMLLKAGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKIKNINY

>WP\_002856841.1 MULTISPECIES: K(+)-transporting ATPase subunit B [Campylobacter]

MSKKQNKLITKEILNNAIKGAFLKFDPRFMVKNPVMFMVEVGLILTLILSIFPTLFNGNSDERIYNILIT

FILFITLLFANFAESIAEGRGKAQAATLRQSKKDSKARRIKSDGSEEMLNSSELKIGDIVLVKAGELIPN

DGEIIEGAASVDESAITGESAPVMREAGGDFSSVTGGTTVLTDFLKIKILVGAGESFLDKMINLVEGAAR

QKTPNEIALNTLLIVLSLSFLVVVVSLYPFMQFLGVSLPISWLVALLVCLIPTTIGGLLSAIGIAGMDRV

TRFNVIALSGKAVESCGDVDTMILDKTGTITFGNRLANEFYEVQGISKEEMIKACVLSSLKDETPEGKSI

VALAQKMGYELEGNDIKEFIEFSAQNRMSGVDLQDNTKIRKGAFDAIRAYISEMNGKIPSDLETKVMEIS

NLGGTPLVVCKNEKILGVIYLKDTVKPGLKERFDELRKMGIKTLMCTGDNPLTAATIAKEAGLDGFIAEC

KPEDKIEAIKKEQAQGKIVAMTGDGTNDAPALAQADVGIAMNSGTQAAKEAANMIDLDSNPTKILEVVEI

GKGLLITRGSLTTFSMANDIAKYFTILPAMFSVVLPQMQILNIMHLATPQSAILSALIFNAIIIPLLIPI

AMRGVKFKPMKSEHLLLRNLSIYGLGGMIAPFIGIKIIDIPTAWILRILGV

>WP\_002856578.1 MULTISPECIES: putative lipid II flippase FtsW [Campylobacter]

MVADKRLFYLSCILITIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNTEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGVICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>WP\_002854923.1 MULTISPECIES: protein-disulfide reductase DsbD [Campylobacter]

MRIFGIILLSFCLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKLKLYINEKDISSLINLPQ

SSTRGNENVYYQKLNLALPNLLLEHFAKNTTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKDAFEISKPY

KTQKTDKKTKIESEESSIANFLATDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIVAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGASIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVLGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFGFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFTIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISASKSALSYDYINNFEQLKQEIQTNTKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSENNNEQIKTMKEFNVFGPPVLIFFENGKEKLKITGFISADD

LLKKLEP

>WP\_002854354.1 MULTISPECIES: 4Fe-4S dicluster domain-containing protein [Campylobacter]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>WP\_002853667.1 MULTISPECIES: LTA synthase family protein [Campylobacter]

MRKILLQIFIFSVLFIVTFAINRILMQNSFIPTGLISDKNEIFLMYLLGVFHDIRFLSAAFLPFLLCGFL

SLIFSNIKINNKLVIYSKNFYFIFSSVYIIVLSCLCIGFSYVKYYYYEIYKTKFDIFMFTLKDDNTKTIL

SIIYHDYPILKILALMLIFGVFVFFLNLKILNLKLKPVNLRLFPLIALNLILIIVYVIALRGPFKHVAIN

VQNYSFSEYSVVNDTMLNPIMAFSWALKQYKEEAALKVITPLKAQELKEKLFDYLHQSPINLKAEKNHPS

VFVNLMESFGLNLADFTNTEHNFLGSLDKHFKQDFLFKRFLSSSNGTIPSFANLFFVSPFSNISTSKFQK

TYLDLTPIAVYKKAGYKVIFVSAGNGSWQNIKNYLSILGVDEIIDENILMKEYNGAKDSENGYGIADEFL

YKKVYDLLQKNPHKTLIIALTISNHPPYKIPQNDLPKLQNIPQTLLNMLPYEKDKQDNIIKAYTYANNEF

GKFLDKVKQSPFKNSVIIAATGDHRVREMSMDLNSQKAFAYSVPFYLYIPKDLQDNIYYDKDRVGSHKDI

FPTLYALSLNNVKYLSVGGRNMLARPSDEKLEFGINDAVWIDKKGIYSGGKGYYFESNDTLKDMNKAFNL

DGYTKDFDKFYRELNLYQLAERLGISK

>WP\_002853261.1 MULTISPECIES: apolipoprotein acyltransferase [Campylobacter]

MKIALIQQKFHLNKEQTIKKTCEFIEEASKQGAELVCLGELHQSEYFCQSENVDFFDYANDYEKDVKFWA

NIARKNQIVLIASLFEKRSAGLYHNTAVVFEKDGSIAGKYRKMHIPDDPCFYEKFYFTPGDLGFEPINTS

LGKLGVLICWDQWYPEAARIMALKGAEILIYPTAIGWFDKDKDEEKQRQLNAWLGVQKGHAIANGLYVVA

INRVGFEKDVSGVEEGIRFWGNSFVFGPQGEELCLLDSQNECVKIIEIDKKRSENVRRWWPFLRDRRIEY

FTDLTKRFID

>WP\_002851328.1 MULTISPECIES: paralyzed flagella protein PflA [Campylobacter]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQKFITEAKVHFECDIVGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKIQARMFDTSQNIYIDKELSSSSSHKSKAFTFIFTPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVVIDAQNAINRYRGSIFTSEFI

LYKLRAQNKLYTQDPSMRDQQILEKMIDDAKNWTRTFTSDKNFSEVLHIMLRTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENTYFNTKNLDLAARAAMSLAKNLLSNEQVNKAIEY

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISASIYEDAFAKMSKLDPSYEETLKDLALVLSHANRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAINDLKNAIKADNCINAANIFMRFSAYDIGQKIENKK

QMLACLIRTSNVEQALDYIDKNYNEDSIFYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMVEAYDALLSYANDHNMQTTILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALTKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

SASNWQNLCKSKNQILNQ

>WP\_002851201.1 MULTISPECIES: NADH-quinone oxidoreductase subunit N [Campylobacter]

MLNNFLNLELLNISLSYPFLFLITTAIVLLLCSGFWKFHRSFYIGISSLSLIVSAFLILNNANAQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMVSSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGAGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFAALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFMKNDRVHNIKFSFIQNFILAFCVCVSTFVILLML

>WP\_002869317.1 MULTISPECIES: S41 family peptidase [Campylobacter]

MMELILKTKRFFAGLAGFATTFILCLFLTSHLQAKVDQKEEQVQKRLEALDKLTKTLAIIEQYYVDDQNI

SDLVDKSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVGMKDGALTVVSPIEGTPADKAGIKS

GDIILKINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENIL

YLRVTNFDKNVVDVASKELKKYPNVRGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRITSENQEY

KADPKNKISDVSLAVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSVQQIIPINKTEALRLTIARY

YLPSGRTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKKEDKQENKDNKNLISQK

QINDDAQLKSAIDTIKILNIKQGQ

>WP\_002857727.1 MULTISPECIES: (Fe-S)-binding protein [Campylobacter]

MMKKVYFYATCLGSAAMQQSVLNAIKLLRREGIEVIFKKNQTCCAQPSFNSGYFDESREIALYNVDLFDK

DYPIVVPSGSCAGMMSHDYKELFKNRPEFSKIKTFSPRVIELSQYLDEVLKVDYEDKGAPIKVTWHSNCH

ALRVQKSIQASKNLIKKLKNVELVELQYEEECCGFGGTFSVKEPEISNAMVRSKIKDIQNSGAKYLISGD

GGCLLNIDGTMKRMGLDIKGIHLYDFLLKRLEGERL

>WP\_009881802.1 metal ABC transporter ATP-binding protein [Campylobacter jejuni]

MLFFEISNLNYAYNNEIILKNINLSYDNKDFLSIIGPNGVGKSTLVKLILGLLKSKNEIHFKALQKKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTASVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEKNCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>WP\_002869197.1 type II secretion system F family protein [Campylobacter jejuni]

MKFYEVEFLKNNQNYTKTIKAENLNTAQAKALSKNWKIIDIKEIQKSNFQRLKDENFILFFKELALLCEV

GLSVQEAIRELYFMHSCKIMKKILDNLILAQNLNQAFENANFGLNRAELALIKTAEKTGKISEVFSQISK

LREKSLESQKQLKKAFRYPTLVFLSIIGAFLFLMLFVVPNFKDLFENLGVSLPFITHVMLEIYNFLDDYG

IFCIFLFVIFIVMLILAYKNFHSFAFSCDFLFLKVPLISRLIIYNQNYYFFMVFSLLLKNGISISKAFDL

AIIGLENKFLIFQYKKLFSFIDSGLELSQAFKKIDIFDSLVFSMLSVAMKSGRLEVLSEEIAKYYQQKSE

NLMDRFLVFLEPMMTLFVAFLVLFLALGIFLPMWELSSGVNF

>WP\_002868876.1 MULTISPECIES: NlpC/P60 family protein [Campylobacter]

MRHIFFIIAIIFFISGCSFYQNLNYTRPIYNTNKETKLKTIANEWKKTPYVLGGTTKKGADCSGFTQSAL

AQLNIRIPRTTKTQLGSGRKVSKSKLQTGDLVFFKTGRGPNGMHVGIYMSKGKFIHLSTKGGVKEVELNS

SYWKARYIGARRY

>WP\_002868845.1 MULTISPECIES: type II secretion system protein [Campylobacter]

MNKAFTLLELVFVILILGIFSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDTPIYSDFKSWIKIGKNHYRFALNAKEMVEFIYDSKEGLLKCIGSSR

CKDLI

>WP\_002866641.1 MULTISPECIES: Ppx/GppA family phosphatase [Campylobacter]

MAKKTAVVDLGSNSIRMVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCA

LKHKCKKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGG

GSSELCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAIS

NSIMQKNSYPLKNLHDFRYMLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKEGIFIFLKIAEKIKAKQ

VITSGVGIREGVYLQDLLRPKITFPPNFNPSLKCLQDKFLQSKQKNKTPHFALQIFTTLKNLHKLNDNYK

HTLLNAAKLCHIGEYLNFYFANEHSAHFVLGGLNYGFSHKEKALIASIIKLNGKKVNPYNLEPYKQLLPN

IHTISWLNFILCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>WP\_002857159.1 MULTISPECIES: DNA/RNA non-specific endonuclease [Campylobacter]

MKIFIFLLAISLNIFALEPYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEASNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQIAQINNKIWN

EIEQRERNLAFKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYVKIIKTPKFKECYQVPNHEVNNENIKQYQ

INCDKF

>WP\_002856666.1 MULTISPECIES: (Fe-S)-binding protein [Campylobacter]

MKFSQISDACVKCGKCIPVCTIHEENRDEITSPRGFLDLLAAYKEGSLELDKEAKKVFESCFLCTNCVEV

CPSKLRVDNAIEEVRYDIAKKFGIAWYKKLIFFFLRRRKILDLVAKLGYVFQSCAFKIQNENENTGMKAR

FSMPFVKKGRLLTSFNKKSFLNSNPKFINNDGEKTIGFFVGCLANYFYIDTANAVLKIAKELKINVDLMK

EQVCCGAPQFFTGDFKSVEVLAKKNIEYFEKKLEKLDAIIVPEATCSAMLKIDYEHFFIMQNDLDWAKRA

KCVSSKIYMASEYFYKFTSLEEILKTKNKFNYSITYHDPCHARKMQGVFKEPRELLKTNYHFVEMSNSNT

CCGFGGVSMQTDYYDRALSVGLKKAQMIDESKASVVSAECSACRMQISNALEQNSSKVVFVSPLELIVKA

L

>WP\_002856534.1 MULTISPECIES: DUF2603 domain-containing protein [Campylobacter]

MKELEKYNTCLKRIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFDSPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIERVNQNERL

>WP\_002853874.1 MULTISPECIES: acyl-CoA thioesterase [Campylobacter]

MKMRVYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILEVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDTQLKKLFEELF

>WP\_002853564.1 MULTISPECIES: ComF family protein [Campylobacter]

MRCINCGAFALLCFCELCELELSEFSLNVRKLDNNFKVYSFYKYHEIQHLLHSKHYFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVIALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>WP\_002853470.1 MULTISPECIES: AEC family transporter [Campylobacter]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>WP\_002851668.1 MULTISPECIES: BAX inhibitor (BI)-1/YccA family protein [Campylobacter]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWILFAVEI

GLLFALQWKKREAPLNLVLLFGFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>WP\_011812722.1 MULTISPECIES: bifunctional riboflavin kinase/FAD synthetase [Campylobacter]

MLNIFTTISKINITSLAIGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIEVD

FENIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYDAKDIESLSGIKTIIVDEFSIGGVGVHASL

IKDFLSKANLQKAKEFLGRDYSIKGKMIKGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGEKFTQGEFFELEFISFLRENQKFQDLKKLKNQIAKDIEQARELLRK

NDER

>WP\_002787769.1 MULTISPECIES: YebC/PmpR family DNA-binding transcriptional regulator [Campylobacter]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>WP\_002855231.1 MULTISPECIES: YggS family pyridoxal phosphate-dependent enzyme [Campylobacter]

MTLEQILEKTKNVRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKENLDEKKLDIKWHFIGTLQS

NKINLLIKQKPILWHSCNGIKIAKAMDKRLDYKLNTLLEINSANENSKSGLDPNQAVEEYLQIQEECSNL

NLCGVMSIGSHSQDKESIIKSFETTFKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>WP\_002854950.1 MULTISPECIES: succinate dehydrogenase/fumarate reductase iron-sulfur subunit [Campylobacter]

MKIIIDRFNGKEKYEQSYDIDDKDIQGKTLLSLLLFIKKTKDITLNFTASCQSAICGACAVRVNGHSYLA

CDTKMQDLLKEYDNPSSIRISPLGNFRVISDLIVDWEPSIENLRKIRPAMVAKNEFSAEKGCKQSQEEFD

RISKQWDCILCGSCASECNKLEADSSDYMQPFVFTHAWRAAADSRGKDPMLHVKPSVMNGLWLCVHCQEC

ADRCPKGISSVSDIANLRVMAIKKGLNEGLGPDHAEAFYKDLVEGSGRLNEIYLALRSEGVIGSMGKTDI

AFKLMRAGKMNPMHVFGEDEIEGHKDLVKMIKAAQEAAVKE

>WP\_002851405.1 MULTISPECIES: cytochrome-c oxidase, cbb3-type subunit I [Campylobacter]

MHPGNVLNYDYTVARYFMFATILFGIVGMAIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

LVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVTGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>WP\_002851187.1 MULTISPECIES: cytochrome-c oxidase, cbb3-type subunit II [Campylobacter]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETAYAEALTVKKVFNVPYDAENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>WP\_002825802.1 MULTISPECIES: ribosome silencing factor [Campylobacter]

MQERIDLIVKILDEKKAENIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLENLKKGRV

>WP\_002858695.1 MULTISPECIES: sulfite exporter TauE/SafE family protein [Campylobacter]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASVSGIISFSNSGVIDSEVIHKGILV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNFINF

>WP\_002857358.1 MULTISPECIES: YkgJ family cysteine cluster protein [Campylobacter]

MIFDKNFSYAFDENACEKCGGKCCTGESGNIFASKEELEALRKHLKLESKEFAEKYLRKVGFKMSFKEVE

FEDGFACIFFDTQKRNCSIYDFRPKQCRTFPFWEYFKTHQKELEKECIGICYLS

>WP\_002856484.1 MULTISPECIES: imidazole glycerol phosphate synthase subunit HisF [Campylobacter]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKYSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKVPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>WP\_002854192.1 MULTISPECIES: 6-carboxytetrahydropterin synthase [Campylobacter]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMINGEQGVTLQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>WP\_002831625.1 MULTISPECIES: QacE family quaternary ammonium compound efflux SMR transporter [Campylobacter]

MNIAKKELFVAWFFLITAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIVLSIVGIIMINIGEVKE

>WP\_002875835.1 MULTISPECIES: murein biosynthesis integral membrane protein MurJ [Campylobacter]

MKSLVFKNFIINALGILFSRILGLARDVLIALFLGAGLYSDIFFVALKMPAFFRRIFAEGAFGQSFLPNF

VKAKKKGAFCVSVMMQFSLIVFLFCLLVSFFSSFFTKLFAFGFNADTIALAAPLVAINFWYLFFIFLVTF

LGAILNYRQKFFITSFSAALFNLSIVIAAFFVDKNAPQNTLYYFSYATVLSGVAQLILHLLVLKNNPVIR

AMTLSIKFKKAKAKLQGFYGNFFHGVLGSSATQFSSLLDTTIASFLMSGSISYLYYANRVFQLPLALFAI

ALTQVSFPKILKHLKSDQENLALKFMQRALALLSILLIASSIVGSVFALEISKLLFERGNFTHEDSVITA

YVLIAYLIGLLPFGLQKLFSLWLYAKFKQKTAAWIAVKSLIISALCSMAFIFLIKDESLKVIAVALSSSI

SAFYLLGANIKEFGFKKFFALISIKICLLVIVALIVFTILLILIKPYILSFFIGIFTSFKGVF

>WP\_002869409.1 GDP-L-fucose synthase [Campylobacter jejuni]

MQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGGI

LANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAIA

KISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKFD

SIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGPH

KNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQNI

RQ

>WP\_002869408.1 GDP-mannose 4,6 dehydratase [Campylobacter jejuni]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>WP\_002869381.1 MULTISPECIES: UDP-glucose 4-epimerase GalE [Campylobacter]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETSPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>WP\_002869304.1 MULTISPECIES: flagella export chaperone FliS [Campylobacter]

MQNNLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKVAIRNEDIEQRVYFVKRTTAIFIELINTLNY

EKGGEVAHYLSGLYTREIQLLSLANLENNEDRINEVINVTKGLLEAWREVHNNETVAQ

>WP\_002869274.1 MULTISPECIES: DNA ligase [Campylobacter]

MRFVFLICCACLVFANEILLLSKFDKQDFNSKDFNTYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFTIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFKISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>WP\_002869189.1 thiamine-phosphate kinase [Campylobacter jejuni]

MNKEDFIIKAFLNEKNGDDGAVIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNAVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINDKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGNLKPNHVFIKPKLRASFFYEVAPLISCAMDISDGLSKDLSRLLALNKCG

ISWFKKLDDYTLYSGEEYEILFAFDEKERQNIKTIAKKHGVKLNIFGKAVKGKYEFRGREHHF

>WP\_002869148.1 MULTISPECIES: glutamine--fructose-6-phosphate transaminase (isomerizing) [Campylobacter]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCTDFESQGYGFAI

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVVYENDILKSLCFSKLSGDKAYAKKDGFRFFMEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQADEITLCACGTSYHAAMASAYLFERIAKVKAKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYLHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>WP\_002868946.1 glycosyltransferase [Campylobacter jejuni]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVHLILMNDKISYEIPECQIHFLECSKPSENPILKFLKL

PFLALKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTHLVINECTTPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTDLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>WP\_002868916.1 MULTISPECIES: anthranilate phosphoribosyltransferase [Campylobacter]

MILLIDNYDSFVFNVKSMLEQLSNDEILVRRNDAISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKNSLIKQCRENELFSNLPSNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALGHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKPQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKDYEILQVAALLILITEKSLNEKSLSAFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNITTPNTLESVLKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYDNAKDLKDILSGRMQGAKFDLVVLN

AMFALYTANKASSPLVAKDMILEAIYSGKVIEYFKEYQAYAKA

>WP\_002857493.1 MULTISPECIES: branched-chain-amino-acid transaminase [Campylobacter]

MISADKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEDHTKRLLESAKITLLNC

PFSQKDLENAQIELLKANNFQSNVYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLKIAHDLGITVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARIIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>WP\_002856787.1 MULTISPECIES: molybdopterin-guanine dinucleotide biosynthesis protein B [Campylobacter]

MKQLIMAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDFNGKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLAPNFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLTWL

DLNDIQAICRYILKNAKNLQGEL

>WP\_002855252.1 MULTISPECIES: LPS export ABC transporter ATP-binding protein [Campylobacter]

MSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDVTKD

PLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSLSGG

ERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAYVIR

SGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>WP\_002852457.1 MULTISPECIES: signal peptidase I [Campylobacter]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSGSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKEHFVKRCVGTGGDRIVYANKTLYVRMHEGDEFMKEHYPN

DLVTLGGQIYVKEPYKQKGIHYDPKKDIESDILRFLSIGDFAMSPAYIKELGNHIGFSGGNAYVFDVPEN

EYFMMGDNRDYSYDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDEDK

LS

>WP\_002869328.1 prepilin-type N-terminal cleavage/methylation domain-containing protein [Campylobacter jejuni]

MRKAFTILELVFVIVILGILAAVALPKMSSSKDEAEVSKSLNNLKTLINDISIYTLKNDHLNSIKTMSNV

SGIENIDLSNFNGTKEVNFRVGDDKKCLKLVFINKVDFILMGISSNEASKNAIINAANQSHEDLENVNFT

SSSSNKACVILSKNENFKNLASKTYLLIGGM

>WP\_002858490.1 MULTISPECIES: fluoride efflux transporter CrcB [Campylobacter]

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>WP\_002781807.1 MULTISPECIES: HAD-IB family hydrolase [Campylobacter]

MKLVLFDLDDTLIQGDSAKLWLKFCVEKGFLPQEYLEKIVFYQKQYQEKKLDMDEFMTFFLQSVKGKNED

RISSLVDEFIKIYIKPYEKAKELIIKYQDQRCIIISATAEFLVRKIASFLGVRESIAIKCERVGDKFSGK

AYGIYSFKEGKVLRLKEYLGKDYEKWMKDSYFFSDSINDLPLLESVSKAFVCNGDEKILKIAKERKYEIL

TF

>WP\_072224425.1 MULTISPECIES: sodium/proline symporter PutP [Campylobacter]

MIKERLMEVVQINTPIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLL

MGLPGALYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAV

VILIFFTFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIV

PLVMLYHLGGFGEAMNIVREIKPQALSMGEGVGIVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMAT

FIGIAWMAVCLLSACMIGILGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQ

LLVSSSTIAEDFYKKIFREDAPSHIVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSV

MLFSLFWSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLVASAVIIIASLFTNVRSGTKAAYEK

MLKEL

>WP\_002868869.1 MULTISPECIES: TlpA family protein disulfide reductase [Campylobacter]

MKKNLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVVKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>WP\_002867374.1 MULTISPECIES: TlpA family protein disulfide reductase [Campylobacter]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGGSISVKKENTVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LAKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>WP\_002856169.1 MULTISPECIES: TlpA family protein disulfide reductase [Campylobacter]

MKKILTLFLISLAFFLNACSKEEEIQNDFMFEEYHKGDKIVLNSVNGGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIIGLTHFEDVSDETVKKFADDYGAYYFLSNGGSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>WP\_079254192.1 MULTISPECIES: NAD(P)H-dependent glycerol-3-phosphate dehydrogenase [Campylobacter]

MMRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFIN

KGQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFF

PDFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGL

SGAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAI

FKGKSVQEATQNLLKQND

>WP\_079254184.1 16S rRNA (cytosine(1402)-N(4))-methyltransferase RsmH [Campylobacter jejuni]

MILEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDF

HNRITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINT

YTKEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVN

QELKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITK

KAISASKEELLKNSRSSCAKMRAFYFNNLDNK

>WP\_079254180.1 MULTISPECIES: ATP-dependent Clp protease ATP-binding subunit ClpX [Campylobacter]

MEFLSIGVKIMPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKD

ITPKELKAYLDRYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLA

KFLDVPIAICDATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVS

GEGVQQALLKIIEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDA

KEENKALLEKIEPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLK

FEEDALRAIAQLALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>WP\_002869285.1 MULTISPECIES: citrate synthase [Campylobacter]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYMEMAARIVAKIPTIAATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWIEQKEQESLKIVRPRQLYLGETS

KI

>WP\_002868940.1 MULTISPECIES: acetyl-CoA carboxylase carboxyltransferase subunit beta [Campylobacter]

MNFADIFSKIRRQQPSIKEAPNHWVKCQSCHALMYYKEIESCFNVCPKCNYHMRISADERIKLLSDEGSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINSLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSAALKLLSKEKLPYISILTNPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>WP\_002868750.1 flagellar basal body M-ring protein FliF [Campylobacter jejuni]

MDFKNMLHQIGQLYQNLTRKQRIVIAASIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQVYRQRMFIASEGLIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRVQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

TKKQFATVLRTSAAVTIDGKYQDVVDENGDVKSEYVPLTKEELASVESIVKNTINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAARKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>WP\_002856979.1 MULTISPECIES: potassium-transporting ATPase subunit KdpC [Campylobacter]

MLRTLLSFFVVMLILCTLIYPFALNTVAKFIFPYQSSGSLVDKEGRPTLDISKAVGSKLLGQDFNKPYFL

HSRASVSNYNTSDTNESSVSSGGFNYAMSNPALKERVQKDLQKFLDENPQITKEQIPLDLLSASGSGLDP

HISLQAALVQIPRISQSSKITKEELEKIIQENTESKFLGIFGEEKVNVLAVNIAIAKAMKKE

>WP\_002855878.1 MULTISPECIES: flagellar type III secretion system protein FliR [Campylobacter]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITSQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNMGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>WP\_002855629.1 MULTISPECIES: flavodoxin FldA [Campylobacter]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKMNSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTVAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFEASDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>WP\_002855091.1 MULTISPECIES: 3-oxoacyl-ACP reductase FabG [Campylobacter]

MKFSGKNVLITGASKGIGASIAKTLAGFGLKVWINYRSKPELADALKDEIIASGGVAAVIKFDASKEDEF

ENGVKIIVESDGELSYLVNNAGVTNDKLALRMKLEDFSGVVDTNLSSAFLGCREALKTMSKKRFGAVVNI

ASIVGEMGNAGQVNYSASKGGMIAMTKSFAKEGASRNLRFNCVTPGFIKSDMTEVLSDEIKQTYQDNIPL

KRFAEPEEVANCVAFLLSDYASYVTGDVLKINGGLYM

>WP\_002855031.1 MULTISPECIES: inorganic diphosphatase [Campylobacter]

MDLSKIKIGDIPNKINAVIEIPYGSSIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLNKIKNFFETY

KILEPNKWVKVQDFKDEKAAIEILEKAIKNYK

>WP\_032581867.1 MULTISPECIES: biosynthetic arginine decarboxylase [Campylobacter]

MMDYGIDIWGNENFIIKNGKVCINHEKKPAIIDIVKELRDDGYKGPLLLRFPHLIQKQIENIYGNFNKAR

KEFGYKGGFNAVYPLKVNQYPGFVKNLVKLGKDYNYGLEAGSKAELLLAMAYNNEGAPITVNGFKDRELI

NIGFIAAEMGHNITLTIEGLNELEAIIDIAKERFKPKPNIGLRVRLHSAGVGIWAKSGGINSKFGLTSTE

LIEAVNLLKENKLLEQFTMIHFHLGSQITEIHPLKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYS

QFKNEKSRNYTLREYANDVVFILKNIAEQKKDLEPDIFIESGRFVAANHAVLIAPVLELFSQEYAENKLI

LKKQNPKLIDELYDLYKSIKPSNALEYLHDSIDHLESILTLFDLGYVDLQDRSNAEILTHLITKKAILLL

GDKQNPADLLAIQDEVQERYLVNFSLFQSIPDFWGLEQNFPIMPLDRLDEEPTRSASIWDITCDSDGEIS

YSKDQPLFLHDVDVEKENYFLGFFLVGAYQEVLGMKHNLFTHPTEAIISINEKGYEVEGIIEAQSILDAL

EDLDYDIHAIMDILNERISNSKLVNDKQKKHILGELYLFLNDNGYLKSIGV

>WP\_002869295.1 16S rRNA (adenine(1518)-N(6)/adenine(1519)-N(6))-dimethyltransferase RsmA [Campylobacter jejuni]

MVKAKKQYGQNFLIDKSVLAKIIQAIPKEMNNIIEIGPGLGDLTQELLKISQVKAYEIDNDLIPILKKKF

QKELECGKFNLIHQDASEAFNPSLDEKPYFLVANLPYYVASHIILKALEDKNCLGLIVMVQKEMAEKFCA

KEGNGEFSSLGVLSAMICERKILFDVDPQCFNPPPKVISAVMSLIKTKDFNELCEIENFKNFLKDCFKAP

RKQLLGNLKTYKAKVLEVLSTLGLKENIRPHEICVDSYLKIYDKLKDKYGRKQRDK

>WP\_002868935.1 MULTISPECIES: 30S ribosome-binding factor RbfA [Campylobacter]

MNPNEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNVHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>WP\_002868915.1 MULTISPECIES: excinuclease ABC subunit UvrA [Campylobacter]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVSEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKIIDENLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFMQLSEEQKRL

VLYGNAKTIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAVKVAKKGL

GEILDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQR

IRIASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKA

GKFGGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRTQKEWLELKNVNINNIQDLSVKFPLQNLVAI

TGVSGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGAM

DEIRNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCEGKRYNDATLEI

KYKGKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSD

TGKTLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGIKGGKVIST

GSVEKVAKEHKKTRSYTGYYLDLELKNTQKS

>WP\_002868846.1 MULTISPECIES: excinuclease ABC subunit UvrB [Campylobacter]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNMPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGETRLKQAIKDIKAELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDIPYTLFDYFAIKDRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEFLFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKITKS

MQEAMDTTNERRKLQMAYNKKYNITPTSVKRHIEESLKNEEDLGEIYRKGKKLEKMPASERAKLVKELRK

QMLEAAKALEFEKAAAIRDEINKLRDL

>WP\_002868829.1 MULTISPECIES: bifunctional phosphoribosyl-AMP cyclohydrolase/phosphoribosyl-ATP diphosphatase HisIE [Campylobacter]

MQNFKELNEKIAWQKVDHLLPVIIQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDISCFEKISKNADFVFLARLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>WP\_002867955.1 MULTISPECIES: quinone-dependent dihydroorotate dehydrogenase [Campylobacter]

MAYEMIKPLLFKLNPEHVHTLVEYSLRALSASFPGSLSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKNLRELQNDDFLNTLLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGADGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISEAVGVN

LK

>WP\_002860591.1 MULTISPECIES: 5'-methylthioadenosine/adenosylhomocysteine nucleosidase [Campylobacter]

MMKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFAKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQ

VLLFTGVAGAFNPELEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIK

LRAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEF

VINSAKISANFVLKMCEKL

>WP\_002857634.1 MULTISPECIES: protein-methionine-sulfoxide reductase catalytic subunit MsrP [Campylobacter]

MIITPENLYKKRRDFLKLGAGALISSSVLASKLSALNFTSDTNPNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSMEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEMAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>WP\_002857581.1 MULTISPECIES: carbamoyl-phosphate synthase large subunit [Campylobacter]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGTQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAADEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQVMRNASFAILREIGVDTGGS

NVQFAINSKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFGAKIIGTSARVIDVAEDRKKFAEFITKLGINQPKNSTATSVE

EAVLKASDIGYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKIAAEYV

KLGFKLMATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIR

FKIPYFTNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKS

>WP\_002851847.1 MULTISPECIES: cytolethal distending toxin subunit B family protein [Campylobacter]

MKKIICLFLSFNLAFANLENFNVGTWNLQGSSAATESKWSVSVRQLVSGANPLDILMIQEAGTLPRTATP

TGRHVQQGGTPIDEYEWNLGTLSRPDRVFIYYSRVDVGANRVNLAIVSRMQAEEVIVLPPPTTVSRPIIG

IRNGNDAFFNIHALANGGTDVGAIITAVDAHFANMPQVNWMIAGDFNRDPSTITSTVDRELANRIRVVFP

TSATQASGGTLDYAITGNSNRQQTYTPPLLAAILMLASLRSHIVSDHFPVNFRKF

>WP\_002851780.1 MULTISPECIES: protein-L-isoaspartate(D-aspartate) O-methyltransferase [Campylobacter]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALDFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKAAQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDDGILVAPILHNGKQFITRLRKNGTNLQKEILEECLFVPIVDGKE

>WP\_002851490.1 MULTISPECIES: NADH-quinone oxidoreductase subunit NuoK [Campylobacter]

MIEKYFFVAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>WP\_002856085.1 MULTISPECIES: putative sulfate exporter family transporter [Campylobacter]

MKTSFLAHSVAIVRSNFKGLLFTACIVIFAMYLSSVQSIKDTTHLAATAFAIIVGVLLSPWFFKYQHHFQ

AGVHFSAKKLLRLGIVLYGFNITLTELLSVGLKGFLLSAIVIFFVFIIALFVGMKIFKLDKETSMLVGAG

SAICGAAAVLALESSLKSDPFKGILAVGTVVIFGLVFMFLYPIAFSLNLFPFFDQNAMGVFMGATLHEVA

NVAGAAEMAKDMAGFEQGASNVAVIIKMMRVILLVPFLLIVTYFFAKNQHSSSGKTAKSITIPYFAFAFL

GMIVLNTYLASKESILGIATSDIISLGKTLCTLCIVFAMAALGLQIDFKKFLKSGSRVFGLAFVLGLVLI

FGGYFLTLAFKGILW

>WP\_002776342.1 MULTISPECIES: HypC/HybG/HupF family hydrogenase formation chaperone [Campylobacter]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDLGLNEFHR

>WP\_009882907.1 MULTISPECIES: type II toxin-antitoxin system RelE/ParE family toxin [Campylobacter]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>WP\_002780456.1 MULTISPECIES: enoyl-[acyl-carrier-protein] reductase FabI [Campylobacter]

MIMKGKKGLIVGVANNKSIAYGIAKACFDQGAELAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKDKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>WP\_002869161.1 MULTISPECIES: redox-regulated ATPase YchF [Campylobacter]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDIEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNDHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYEDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDVMHFRFNV

>WP\_002855951.1 MULTISPECIES: bifunctional histidinol-phosphatase/imidazoleglycerol-phosphate dehydratase [Campylobacter]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>WP\_002869017.1 MULTISPECIES: acylneuraminate cytidylyltransferase family protein [Campylobacter]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>WP\_002868838.1 MULTISPECIES: flagellar hook-basal body protein [Campylobacter]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIAGFKRIFKETQDELPIENHTRDASRFVNT

TIDGIPQVSQEYTDFSLGFLKATNNPLDLAMTREDAFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

DLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLATVK

>WP\_079254185.1 quinol dehydrogenase ferredoxin subunit NapH [Campylobacter jejuni]

MMKYLIARRIVQLGILALFSFKATDFILQGNLSSSRLFNTIPLSDPFAVLQIILASWSIDLVALIGALII

FFIYGLLLGRIFCSWVCPVNLITDFAAFVRNKLTLNNKFLILPKNLRYFVLVLVLVLSFVFSLPVFESFS

YIGMIHRGIIFATSSWIFVAFILFCIDTFLSPRAICSHFCPLGAFYAFISRFALLKIKHDSDKCTKCYEC

IRICPEKQVLWMVGKESTSVKSGECIRCARCIEVCNDDALNFNIFDLRNK

>WP\_024088149.1 23S rRNA (adenine(2030)-N(6))-methyltransferase RlmJ [Campylobacter jejuni]

MNDEFISVKDFFNHNEKRKKFLQKQEIKPLKEKTKKTKETKLYTNIESGKYKGKKLLLPSLTTTRSTKSM

VKSCVFNVIREDLRSKIFIEAFGGSALIAAEALSNHALKAYAIELDVKAYKIALENAKNIDPNLEVIHAN

TFEILPKLIENSKNEIILYLDPPFDTREGFSDIYEKIYHFLENLDLKTLNLIIFEHHSTIKTPEKIQNFQ

KVKEKKFGSTSLSFYAS

>WP\_009881974.1 MULTISPECIES: methyl-accepting chemotaxis protein [Campylobacter]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLD

VLQARVGSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQT

AVQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAI

EAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQ

TTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>WP\_009881803.1 MULTISPECIES: methyl-accepting chemotaxis protein [Campylobacter]

MKSVKLKVSLIANLIAVVCLIILGVVTFIFVKQAIFHEVVNAEINYVKTAKNSIESFKARNSLALESLAK

SILKHPIEQLDSQDALMHYVGKDLKNFRDAGRFLAVYIAQPNGELVVSDPDSDAKNLDFGTYGKADNYDA

RTREYYIEAVKTNKLYITPSYIDVTTNLPCFTYSIPLYKDGKFIGVLAVDILAADLQAEFENLPGRTFVF

DEENKVFVSTDKALLQKGYDISAIANLAKTKEDLEPFEYTRPKDGNERFAVCTKVSGIYTACVGEPIEQI

EAPVYKIAFIQTAIVIFTSIISVILLYFIVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFG

QISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDVLQARV

GSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLT

TSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAG

EHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNV

EIANESAIISSTVSDIANNILEDVKKKRF

>WP\_002868883.1 MULTISPECIES: STAS domain-containing protein [Campylobacter]

MNANFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKAIDTAGVRFFLALENDLKDKNI

KITKEGLNSSFQTLFELCEKNYQRLSKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLAKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>WP\_002866489.1 MULTISPECIES: hydrogenase maturation nickel metallochaperone HypA [Campylobacter]

MHELSIVESLIELCEENALNNKAYNVQEIYVKIGRLSGIEADLFKRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVFKCPKCQSIEYKITQGEDLHLMRLVME

>WP\_002857287.1 MULTISPECIES: autotransporter outer membrane beta-barrel domain-containing protein [Campylobacter]

MFINLGNDYKLNDKTRFSFEFEKTFFGDLNVDWSANANLRYSF

>WP\_002855574.1 MULTISPECIES: DUF655 domain-containing protein [Campylobacter]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>WP\_002853751.1 methyl-accepting chemotaxis protein [Campylobacter jejuni]

MFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKEA

IEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIADE

SCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELLN

HAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDIS

SQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKKV

ENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQIT

KELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSRM

QENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>WP\_002853517.1 MULTISPECIES: DUF1751 domain-containing protein [Campylobacter]

MLTIFLIFLNILCYFLISYDYYNILGLNILFFNGAYWQLLSSMFLHGNLTHLILNMIVLFQFGRILETYL

GALRFIFIYFIGGLLCSLLSVFYVYFDFKYFGENINVIGASGAICVLMGFYAVLDKNSTKGLIVAILLMS

FAPLLMGVNVAWYGHIFGFMCGYILAKIKEVK

>WP\_002852142.1 MULTISPECIES: flagellar basal-body rod protein FlgG [Campylobacter]

MMRSLHTAATGMVAQQTQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTEGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>WP\_002812870.1 MULTISPECIES: RIP metalloprotease RseP [Campylobacter]

MRSLLLLIVILILGIKFYSIEFLATVLVISFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIGNIAPNSAAQEIGLQKNDTILEINGVKIQSFDEISKHLSLEPLKILIDREGKNLEFTLTPKIGQG

YNDFGQIVEKPQLGVSPNGTSTLVKHQGLESFKYAIQESFQASTLIIKGIIKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRRKVPQRAFEYLSYAGMAIL

LSLMLFATYNDISRIAGE

>WP\_002868848.1 potassium-transporting ATPase subunit A [Campylobacter jejuni]

MLEILITLIIAFILALIFGNYLYKIASCNKTIFDFIFNPIDNLIYKICAIDRKNMTWQKYSLHLIAFNAL

VAIFSFVIFYLQDKLFLNPNSINSMKGDLNLNTVISFITNTNLQHYSGESALSLLSQNTGILLAMFVSSA

SGYSACMAFCRALCGMQMGNFYEDFTRIITRLMLPLSFILAVIFISEGVVQNYHANFSVLTLENKFQSIA

TGPVAALESIKHLGTNGGGFFGANSSMPFENPTSLTNFLQILSMMLIPSACVVAFGLMVYHRKERQGFAL

MGKEGGVIFGAMGIIFIISLLLIYFSEKMSNPNLDSLGLNANLGNLEGKEIRFGTDGSSLFSAVTTAFTT

GSVNNMHDSLNPLSISATLLNMMLNVAFGGEGVGLMNMIIYVLLTVFICALMIGRTPEFLGKKIESAQMK

LIALVILIHPLLILVLSALAVVFAKDSISNPSFHGLAQILYEFSSSAANNGSGLEGLKDDNLFWNLSTAF

AMFCGRYLVLIAQLAIAGSLLAKNTQENTANSLKTDNLTFMFVLVCIIYIFAALTFFPVLTLSSVAEYLS

LWH

>WP\_002859198.1 MULTISPECIES: porphobilinogen synthase [Campylobacter]

MFKRFRRLRLNENLRAMVRENSLSVNDLIYPLFVVNGTGIKKEISSMPDVFQMSLDEILKECQNVVNLGI

KAIILFGVLENEKKDSCGSDALDDEGLVARSIREIKKNFPDLFIISDLCFCEYTDHGHCGIIDPKTKSVD

NDVTLEISAKQALVHARAGVDMIAPSGMMDGIITTLRKALDKEGFENLPIMAYSTKFASSYYGPFRDVAE

SAPSYGDRKSYQMDFANGKEALEESLEDEAQGADILMVKPALAYLDVVKEISLHSNLPLCVYNVSGEYAM

LKAAKNAGVIDYEKVLYETMIAFKRAGAKLIITYHAKELAKMLKGEK

>WP\_002853129.1 MULTISPECIES: DNA topoisomerase (ATP-hydrolyzing) subunit B [Campylobacter]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVIDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPIEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEANYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQAHAKDVKHLDV

>WP\_002851290.1 MULTISPECIES: flagellar biosynthetic protein FliQ [Campylobacter]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>WP\_079254196.1 ABC transporter permease [Campylobacter jejuni]

MILFKFLIILAPLIFLFLCALFAPFLAPFDILSTHLENLYQAPNFTYILGTDFLGRDLFSRLLFALRNSL

IIGVGGSLLSIIFALCYLFLARCFFYVFWMRILEFFLALPAFLLMMFFQSMITSDVFLMIFLIALIHWCF

IARIIESELKRLENLDFYKANIVLGRTKFRAFFKDLIPALKTLIFTLFIFNIVHAIATEATLSFFGLGLG

FEIPTLGTLLSESSKAVFIGAWWIILFPLLSLLLLFLPLLWLGNFLQKIWGIRS

>WP\_079254174.1 MULTISPECIES: flagellar hook-length control protein FliK [Campylobacter]

MMSNLAPQNDVLNLTPSKTSNTSSSFSKTSKNKEHESSDSKNSTQDDTESFLNSLLNSIDETNEFLPDHM

KISQKEVVNEAMNRLQKGAFDESDKISIFESASFMQILSLLDKLKTDTADVKLANLSTQLSSLIKTEANF

NALKGASNLSELLDIAKDLGLNVKNIKVDRLLDLKATFPNLDKADFFKGAVDNVFKEIINNKISNVSKNL

NHNLENTTHTTSTHSTQKTNSKDSGSLLSQTLKNLDSILSSKESKHEKNDKVKSKIEEDTTDAKNTLKNL

KNDEFAKNLTEELNIKDKKNQDNLNKDNNLKDLNKESKDLNKDFNKELNKELNKNQEKNNLNQENIQDQN

KNLKNNDQNLNLDKNLNKEIVKDTQNLVSNLTQKDFNLNKEPKNNNKENKDIKQNFFDQKLNFENLNKTQ

VVQNKENNANFNNNATNKETFTQEQTKTHSENVDKNSLDELNSLVKDLNKVTQNNARNITPKETLQYFSQ

DLKEAVDQYKAPITKLSITLNPNNLGEVEVTLIQRGNNLHINFNSNTNAMNLFIQNQAEFKNSLVNMGFT

GLEMNFSDQGKREQNQNQGKNRSGYGFKDALDGKNESEKVNLELVLAKYF

>WP\_002868768.1 MULTISPECIES: aspartate/glutamate racemase family protein [Campylobacter]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSAKILLYSVNFEEIENLQSQDKWQEAAQILTQCAKK

LELAGANFIIIATNTMHKVFNEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMTQDFYKKMLIE

ENISVITPSDEDIKIVNDIIFNELCKGKIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>WP\_002857075.1 tRNA (cytidine(34)-2'-O)-methyltransferase [Campylobacter jejuni]

MFNIVLVHPRIPQNTGSIGRMCFNAGFKLHIVKPTVFDISQKAVRRAGLDYWDKLEPIIWENLEEFLNEN

MIYKNRFFFATTKSQKAYFDAKFQKNDFLFFGSESYGLPMELMQLNWENAITIPMKSYGRSLNLATSVGI

ISYEALRQNFSNFVS

>WP\_002856710.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MNEENISIISAFFGRIFQFFNEFSWQDIKEVSLSSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLAIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGISIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>WP\_002855396.1 MULTISPECIES: PLP-dependent transferase [Campylobacter]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRELRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDAHFLITDAIYGPVRTICELFLEKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGANGMITIEFAEGYSKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDWSARGPFVRFHIGLEDTKDLIADLTQAFDSIKK

>WP\_002868765.1 MULTISPECIES: MotA/TolQ/ExbB proton channel family protein [Campylobacter]

MNFEAIFHFFNNSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>WP\_002853664.1 MULTISPECIES: TrkA family potassium uptake protein [Campylobacter]

MKNLNYGIIGLGKFGSVVADELIAGGHTVIVADKDEEALKSIQNPPSYAYILDSTNISALKEAGFHDVEV

VIVSIGENVEKSILTLMALKDIGVKNIIAKATSNIHGQILSKLGATKVIYPEKESAKRLVKEFLTKDADY

EVFDLSANTIRAIKINIDEKLAGNSLKHVAQNMKVISYKKLNSDWEILPDLETTTVYSGDVVILLGTVKE

LREFEH

>WP\_002854835.1 MULTISPECIES: DegT/DnrJ/EryC1/StrS aminotransferase family protein [Campylobacter]

MNFINLQAQYLAYKDEINAEIESVLSSSSFIGGAKLNEFEQNLAHFLGVKHAIGCSSGTSALYLALRALD

IGKDDEVIVPSFTFIATAEVVALVGAKPVFVDINLSNYNLDFEAVQKAITPKTKAVIAVSMFGQMSDLRA

LEEILKNKNITLIEDGAQSFGASFKGEKSCSIAKISCTSFFPSKPLGAYGDGGAIFCHDDEIAKKIRILL

NHGQTQRYKHEFIGINGRLDTLQAAILNVKLKYLEKELDKRQKLAQTYNANLKNCQIPQIDPNAFSAYAQ

YSVLVEDRASVLQKFEKANIPYAIHYPTPLHKQPCFSEFSNLELKNSEYASEHILSLPFSPFLSEEEQEQ

VICIFKD

>WP\_002852622.1 MULTISPECIES: type II toxin-antitoxin system Phd/YefM family antitoxin [Campylobacter]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>WP\_002868775.1 MULTISPECIES: TIGR00730 family Rossman fold protein [Campylobacter]

MNEKISQDLEKFANIPNLKNAVTFFGSARLKEDNFYYQQAKILAQKCVQNGFCVISGGGGGIMRAANEGA

FSQKNNTNSMSSVGFNIFLPHEQKLNEFVEYNITFESLAIRKMALIEKSLAFVIFPGGFGTLDELCEILT

LKQLEFKKDVPIILFGSEFWRGFDEFVRNSLLKLEVISKGDELKYKITDDLDFIINTLKEI

>WP\_002868856.1 MULTISPECIES: sensor histidine kinase [Campylobacter]

MAKKVIRQILLIYLTTTGIFLTIFFALWYQKLYEELVVLKGATLRENHRNIVISILNSRFTPIDISAKNI

AQSTALKFAIFDAKKIVFSNIDFDLRKAKIELKGRGICDNKVFFLAPMSADHYFLRHASNEEVNTNDGLQ

ILIQGEDVGKDLFWIRTKVFSFAIMAFCILGLISYILVKIALKPLEDKISTLNRFIKDSTHELNTPLSVI

LMSIEQLEHQNLGDNTKFTRIKLAAKSLSQVYSDLVFYNFPNTLETEKQKFDLRILLEERLEYFKVFFEQ

KKITLKLDLNQANIFAPKSQISKLIDNLISNAIKYNKKGGVISIILKTNFLSIADTGCGISKSNLNHIFD

RYTRFNTDQGGFGIGLSLVKKVCDDNDIKIICESVENQGSVFKLNW

>WP\_002859823.1 MULTISPECIES: sensor histidine kinase [Campylobacter]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDELEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>WP\_002857920.1 MULTISPECIES: sensor histidine kinase [Campylobacter]

MTKNYSIHTKLIILFVVTFFLVCVLFIVLLKIEGNTYNEEESLKQENLIKNLLISYENTSGVEIGAYLGN

SGFNAIQNPNLVKAIRNNGQSLFKAGGELCTLSSLKYHSNLYFDVQCKDFDGLYEENTSDRVYNLLLIGF

FSFSLLVVFMYFSVLKSLEPLKKLRRQVAEVANGEQPDFLDYQEDEVGKIAFEFQKAFKKNQELIQSRQL

FLRTIMHELKTPIGKGRIISEMIKEDRQKERLIAIFLRMDSLINEFAKIENLFSKNYNLHFKPSRFSTIL

EEAKEHLMIDDFNKVVKVDIRYDALINVDMEIFSVILKNLIDNALKYSNNGTCELFCCKECFTIKNPGKP

LAEPIEHYLEAFTREKHNQVKGMGLGLYIVSEVCKLHNFDLIYFYDDGKHCFKIFFGDKEK

>WP\_002857320.1 MULTISPECIES: 16S rRNA (cytidine(1402)-2'-O)-methyltransferase [Campylobacter]

MLYFIPTPIGNLSDISFRALELLKTCDLVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGKALVEFAQENNITYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNFPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFEKKFKGNAKELSEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKINGKNAKEIYQKLLLSQD

>WP\_002857273.1 MULTISPECIES: sulfite oxidase heme-binding subunit YedZ [Campylobacter]

MQTKYFKFLAYFSFIISLIYGFYHIIKAFDFVKEAYIYTGIFALIFLNLSLLFSLLKFKKTKNYPKILGI

FAAFWAILHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCL

VLASYHYFLTPKIPMFWEWSALIIALFYFIVRYTKTLKKLKSNNLTFIKT

>WP\_002853241.1 MULTISPECIES: sensor histidine kinase [Campylobacter]

MNKSSIFYTITFIFIFAGVSVILGFLWLIEYDQQNYTRELNTKYSLIANARLLNFAGVISEKEFEEQTKN

YNKMDEITEAKQIRKILFRGDVLARVEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKA

IAVAVICILVLLYIYIFKKLKPLKRLKKQIDKFAQGKLGDIEDVSTGVDEISQVSEAFYQAIVQIRKLNQ

SRQFFLRNIMHELKTPITKGLLTLEMIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNI

LDVLDEAKEIAMRDDSNIRIFMEESFFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRG

PELNNTLEYYTQAFTQGSKQKSSFGLGLYIVNTILETHGMKLDYLYEDGVNLFYFRNLKSVIVKE

>WP\_002778629.1 MULTISPECIES: thioredoxin [Campylobacter]

MGKYIELTSDNFAQAKEGVALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>WP\_009881984.1 MULTISPECIES: hybrid sensor histidine kinase/response regulator [Campylobacter]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLDLLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGNDTAIGMDIEPICARLTAISEGESPVAATDSN

EKSTPQAEPEAPKQETTTPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNTSSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGVEDPATRAANGKPEKGIVQLKAYNEGNHIVVEITDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLVEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>WP\_009881354.1 glutamate synthase large subunit [Campylobacter jejuni]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLD

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>WP\_002869352.1 MULTISPECIES: aminopeptidase P family protein [Campylobacter]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFALLPLSLQKDLKINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNSELEKKLNLDGFWLKNYDEIIMELEKLANTNLLIEPSKMTALLINSLDKS

VKIIQEINPSTHLKAVKNTKEIAHIQDAMIEDGVALCKFFAWLEEAIENKELISELDIDAKASEFRAQSK

HYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRAPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KVKEGMLTSIEPGIYKVGKWGIRLENLVIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>WP\_002869215.1 MULTISPECIES: EamA/RhaT family transporter [Campylobacter]

MTRTKYLYILLVIAMFLWGSSWPTSKILANYTDTSIITFWRFFFVVLGSFFVLNFLKIPLKIEKTALKWV

LIAGVLNGLYAFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAIFFQKNKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALMAVFNHKAKGAHPLAINFYINLISILMFSWILFDVKSY

EIFHFEFKFWISMFVVAFLSTIIGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CALAIGAIYFINIYGKKA

>WP\_002869171.1 sensor histidine kinase [Campylobacter jejuni]

MLKTKNIFIVFFVVLALIFGFIFYTFTNSYLNFLLTKQYEQKIKSLDDVLKFSLLEHLNDANIKDFAKDT

RADFIILNNDMKISSVKNPDFFSNLKEGEILNFNSKKILTKSFIYKGYKYIIIVYPRFLDLELFWIKIAI

GFGVCLLFVFILMLLLGRRIEKNFNKILDFLDSISDHKVVILEKGMFKEFNLLNEKLLKTKDKILKNTQK

NKKQSDKITLKNTQLASVISAISHELKNPLSVIDLSLEILKDEKLEDKKLKKELLEKISRQSIKLNALTH

KLNFVFNLNSEALQMQEFDLFFLCEKITKNPGFERVVLQGKNTKVKADEFLIEQVIINLLSNALKYSQKE

VILTARDQKIIVQDFGKGIEEDKIKLITKKFYKIDVKSDNSFGLGLFLVKKILNIHKSYLEISSTLGYGS

SFSFKLSQG

>WP\_002869141.1 class I SAM-dependent methyltransferase [Campylobacter jejuni]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPDLARVSSGTQNVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>WP\_002868975.1 MULTISPECIES: DUF2130 domain-containing protein [Campylobacter]

MQNLNQNEQIKCPSCGSFIDISTALYAQILDKAKQEMLKQKKEFDDEVNAKRAEYTKALNDLKTQKIEQE

KLINEQVSQKLLLEKQKFEQELLAQKQNFQKEFSEKFNKEHENEMKIMQEELEKKSKELSEFLSIKAENE

RLKREQKENEERLKFQAKEEAFKEFKEQESKNLEFEREKMRLEFQKSTQEQDLKYKELETNFKSVAQKLE

DAQRRIEQGSQQLQGEAAELLIEEYIQSEYLSDEVKEVPKGVNGADCLHIVKDNFGNICGSILYESKRTK

EFNKEWLDKLKLDSIAAKSDIAVLITKTMPKDKEKTHFKEGILICTFNEFKGVLAVLRESIINAYKLKNA

LQNKDEKNHILYEYLNSKEFNTQITFILKTYQNMKEELEAEKRALQNIWKKRERAIENLSFNSTAIVSSL

NAIFSDLQGGNLIGEEGIKSLENLAKDED

>WP\_002868866.1 MULTISPECIES: inorganic phosphate transporter [Campylobacter]

MQKDNLIAFVIFIISTIAFVIWGFGYISQHQLILFILASIFGIFMAFNIGGNDVANSFGTSVGAKTVTIK

QALIIAAVFELSGAIFAGAEVTKTIRSGIVIFPNSLDPMLFVIIMLAALLSSGVWIFIATKKGLPVSTTH

SIVGGIVGASIMMGLLKFDGIQTLSMVKWSEILRIAISWVASPLLGGIVAYIIYSYIDKKILKPSEKLND

DLKNIKKERKKFKEEYFLNLKTKSQEEQIKELSAIALDEEEQENNFYRNKMKEFKDQEKDIDIYSILKTH

MPIIACIAAAIISAMFLFKGLNNVSTLDILQNFWIIGIIGTISYVITFAIVKIVKKTELNKTTDRIFSWF

QIFTASSFAFSHGANDIANAIGPFAAILDVLKNGTINATSPVPFAALAMFGVALVVGLWFLGKEVITTVG

SKLATIRPTTGFSAELGASIVILLATQFGIPVSSTHILIGAILGIGVYNKNANWIMMKPIGLAWIITLPA

AGIMAALVFLGFKLSLGI

>WP\_002868819.1 MULTISPECIES: EamA/RhaT family transporter [Campylobacter]

MGVFLVLLGGIFWAISGVLAEYLFKNNYSVDWICFYRLLSTGLILIFLSFKAQKILVFTNLKESLSICMF

GFFGLLLTQFGYFKAIYYTDAGTATMIQYCAPLIIMLYLCFKNKKFPKLIEIFALILIIFALFLLATKGD

IEAVVLNYWGIFWAVIGAFGVAFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYAFNLK

AFFSMGGIVFIGTIGAFCLYLKGVEYIGALRASMIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSV

ILNAKKTKVS

>WP\_002868753.1 MULTISPECIES: RidA family protein [Campylobacter]

MIKRFDECDRMSQIIVFDKYFKTAGQVAFEPSGDIKKQTKEALAELDALFEKIGASKGDLIQIQIWLANM

QDFDAMNEIYDAWIKNYPKPVRACVGSALAEGYLVEIQAFGKLREN

>WP\_002860771.1 insulinase family protein [Campylobacter jejuni]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELMENLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWSIEDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKTIPKIHTKEPKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKLNLINDYYAYVNDCIDDNLFIFICNCNPNVNAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDSNG

>WP\_002859818.1 MULTISPECIES: tetratricopeptide repeat-containing protein [Campylobacter]

MMKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDE

EINEFKRWLIKI

>WP\_002859716.1 MULTISPECIES: porin family protein [Campylobacter]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>WP\_002858609.1 MULTISPECIES: insulinase family protein [Campylobacter]

MQYLESRGIKIPFIFEKNSDFPIVVLKLVFRNCARSYDEIAGLAKMFSRILNEGVDDKFFKDLEFRAINL

EASSGFESLEINLSCLKENFDFALKSLEKLLLKPRIEEKTLQKLKINALGELASKNSDFDYLAKNLLNAQ

IFKCKEFQSPNDGDEKSIETLSLKDLQNFYKNFIHLSDLVVILGGDLEEKQAKEDLLKLLSKLQIGKKNT

PKKYELGKNIKDEILVRPESEQAYIYFATPFFADFKDKDLYLAKIALFVLGQGGFGSRIMEEIRVKRGLA

YSAYAMLDMNMSFSRVFGYLQTKNESAKEAKKIVKELFEDFIKNGMTQNELDQAKNFLIGSTPLRYESLS

KRLSMSFNEFYQGLNLGYYKEELKLMEKVKLETINAYIKKHQELLNISFASIQNEN

>WP\_002857630.1 MULTISPECIES: class I SAM-dependent methyltransferase [Campylobacter]

MNLWDKKAKTYARYQNTLNTIQKQTFEYLQNLNISFQNKSIIDIGCGTGVWTLHLAKEAKEILALDSANT

MLEILQEDAKKLNLNNIKCENLSFETWMQNNPNVKFDLAFLSMSPALQNEKDYTNFLNLAKIKIYLGWAD

YRKSDFLDPIFKYFNTEFKGFYKKDLENYLLEKNIFFHKIVFDETRKVQRTKEEAIENALWHLSMNKITT

SKEAVSSFVENDIIETIESKIKLLIINNL

>WP\_002857542.1 MULTISPECIES: thioredoxin-dependent thiol peroxidase [Campylobacter]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSANYDKFGGKNAVIIGIS

PDSVTSHEKFISKFNLKHILLSDSEKEVAKAYRAWGLKKNYGKEYEGIIRSTFVIDETGKIAQIYSNVRV

KDHALKVLESL

>WP\_002855871.1 MULTISPECIES: DUF2165 domain-containing protein [Campylobacter]

MQQKCFCISKMIRFSKIIILLTVASLAGIVVFGNVTDCNSNFQFVSHVMSMDTKPDYLGNAIVYRAITSP

VIHHIGYIAIILFETFITLTALKGAYDMFKARNLDAQSFHNAKIFGIVSLTCCCILWFFAFQVVAAEWFG

MWMSKVWNGLPDATRLVTYMFLALIFISLKNDD

>WP\_002853489.1 MULTISPECIES: carbon-nitrogen hydrolase family protein [Campylobacter]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVSVEAKSYKKLCLKVTPNGVKSYEQQILMPYEHWNEEKFFSNKTPSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMAKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>WP\_002852985.1 MULTISPECIES: AraC family transcriptional regulator [Campylobacter]

MNKILSLPEDLKQLKGVNYKKIKSCTFAKYTQTDTSHSTFVNVGSHLLTFVRKGYKILHTASKDYKINSY

ETLFLKAGSYTLSNVGLSKGVYEAYLFFFDNAFLIELIYKYKDFFKLDQKFQNYEIFWVKNDKILQGILE

SFSPHFEENTQILDPIVSLKFEEIFLHLLLNKNIYFISFLSGILKEFRLDLSQLFEYCGREFLSVNEMSN

FAKLDLATFSKEFKKCFGQSPKKWLDEKRLQKAKILLKFSKKNINEIANECAFSSVAWFIERFKEKYEQT

PKQYQKTKNLYFLSKN

>WP\_002852144.1 MULTISPECIES: KH domain-containing protein [Campylobacter]

MVENFLREYAKLIADYPEQIDTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>WP\_002822502.1 MULTISPECIES: peptidylprolyl isomerase [Campylobacter]

MIKTIDTSKVNEYKFALIETEKGTMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGVGGPGYEIICECDDQEHKHERGTLSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>WP\_002818418.1 MULTISPECIES: type II toxin-antitoxin system HicB family antitoxin [Campylobacter]

MLLNIIIEKDQDGYFARILELEGCVSQGNTYEETLANIKEAGELYLESLANEEKRIIENKTTSIIPMVLA

NA

>WP\_002779573.1 MULTISPECIES: type II toxin-antitoxin system HicB family antitoxin [Campylobacter]

MKDLDYYLNLPYEIIIKKLDEKDGGGYFARYKDFPYIMGDGENEIEALKDLKEAFKGALEVMLEKGDYIK

EPIDNEAKIRINITLPKSLVEAIDTISDNRSKFLADLANSAIKSYKIST

>WP\_002869344.1 MULTISPECIES: DUF4145 domain-containing protein [Campylobacter]

MNKYTKPCFKGAAFNCPHCGVYSRMEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIF

FPREVAIPPEENMPENVKEIYEEASLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIK

EIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERL

NKLKSAIGEKQ

>WP\_002868794.1 MULTISPECIES: DUF374 domain-containing protein [Campylobacter]

MGKSFKIHCLTYIIFILQWLIFLSCKKHYKGEKVDRKAGVILFWHGKLALMPFAFRHYRQKNKKAYVMIS

HHKDGEQIAKIIKLFGLDTVRGSTSRGASSALRAAFKVLEQNDDIVITPDGPRGPYHSISDGSIILAQKK

ELKIRILNYEANRFWEFKSWDKMIMPKPFSRITYSLSEPLDILSLDKEKAKEFLMEQFDKISLADQFKE

>WP\_002868760.1 MULTISPECIES: [acyl-carrier-protein] S-malonyltransferase [Campylobacter]

MKTAFIFPGQGSQSLGMGKDFYENSIKAKELLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLM

AYSVLLEKKPDLSSKFALGHSLGEFSALAVNGAFDFLEALSLVNKRGLFMQEDCAKVEAGMMVVLGLDDE

KVEELCQKAQKENKQIFAANYNCDGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASA

KLCVELEKVLKPNFKAVLSNANAKIYTCKEEALELLKAQLISPVLYKQSIKACENEVDYFIEFGASVLKG

LNKKITSKETYALTNMNDIDEFLKVI

>WP\_002867452.1 MULTISPECIES: putative selenoprotein [Campylobacter]

MNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTRGEFFKECLDKKYNSGGLNKC

>WP\_002856273.1 MULTISPECIES: DUF4261 domain-containing protein [Campylobacter]

MTIDLNHNFTSFVLLDEVDFDFLELKSILEDKFNIKITDENFTKEGVIFSYENMLITLNLIKNPIPNHEA

EYYANFNFMWKDALEQTKKHKAHLLIAVLSQDQSKLEQAKMFTKIAALCLDNKHALGFYTGAVVLEPSFY

IENAKMLDDNRLPVYNWIYVSVYPSENGVNAYTYGLRNFDKLELEVCDLNIEEKELFFCIYDIVLHILTY

DINLKDKDILKFEDGKEIKFIKSQGISVENESLKIIF

>WP\_002882773.1 MULTISPECIES: DUF1440 domain-containing protein [Campylobacter]

MPLIAEVPPLCEIPFDEHLSEIFGHIVWLWGMEIVRRDIRNRITKEIEE

>WP\_002869031.1 MULTISPECIES: DUF4149 domain-containing protein [Campylobacter]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFHSGLMMTQIFIKMGYLLIFVSVVNFLYE

IYSLIKDEMKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>WP\_002862279.1 MULTISPECIES: PDZ domain-containing protein [Campylobacter]

MKKILIICMLFTLSFGIERPKFEDFLAGYERNKASMLNYEGMPAFALSENLLAVLKQPNTKLNKYVKYDP

FLNLYLVRTDFSLIPTPMGDEEKLTRNDWVGIWDPNKPYIGHIKYLAQNIDEKDQLDFNSKIGLLGTPCC

EMMGIALNNSSFIGNRYLKHFMKYNDVYWGDIGVDFVVRENKIYVNNVRKNPQFLINDQVISVDGLPAND

LRKLNEKILFADRGSTLYFQVLRDNMDLNISTEVFAKDLSKFNLPDSKPKPKITNFTSNLGLTVNTSLVV

TKIDPKSKASNAGFMVGDKILRVNNIILNNFKELQNILSAGNDFSILIERKSTKLPLSNFNNELGGNANS

GGDGKFQFFIRLTK

>WP\_002812869.1 MULTISPECIES: DUF535 domain-containing protein [Campylobacter]

MNKKFSYPIPNFTDRRKSIIFWRYLRFQARKILYFPQVRLLEKTLNEEKNKHLKDFFSQRPYACYNAIRR

FCDKSFKANERVKTLIYDVDKGLTCFKFLPEEQMIFSFDEDFELFLGYNHNVYEEGFWAFSLKFKKYTIS

QCNFCFTLENNLLLSCIQGYKYKDFNILEINKILTKKCHGLRPVALLIECSKMLCEILKLQATLGVHEKN

QIRSQKGKEKGYFVDYQKIWLENGGELIKIDKHKYYKLHHSQKNLEEIPSQKRSMYKKRFAMLEEIKVNL

DKTLDIQD

>WP\_079254187.1 MULTISPECIES: aminotransferase class V-fold PLP-dependent enzyme [Campylobacter]

MYLQISDLKKELILKKGILHFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQTYEQARKDIK

KSLSLDENFALIACGTGSSSAIKKFQELIGIYIPPLVKERYFTQIDKNTLPLVIVGPYEHHSNELSFREG

LCECIRIPLDKNGEIDFDFLEKTLQKNKKRKIIASFSLASNVTGILSDYKRISEMVRKFKGIVAFDASSF

IPYKNISCQYYDALFISSHKLIGGIGGSGLLAIKKDLCGNKPSFAAGGTVGYVSRTSQCYLCNEEALEEG

GTPGILQLIRASLAFKIKDSIGVKNIEKKEEILKDYFFEKLKTIPNLILYAKNLKTRLPIFAFNIKGISP

FDIAYELSKKYHIETRAGCACAGPYGHDLLGLKDNQKLKTKPGWLRISLHYTHEKENIDYFFNALNKTIV

KLSH

>WP\_024088076.1 DUF115 domain-containing protein [Campylobacter jejuni]

MNKDLFLKNTQALFEVDQILAYKLRALEKNDFKILQNENGINFIKDDIMLYKNPEQELLENLTLFQNKYK

KYPVLFFYGFGNGMFYKTLCENKNHKHIIVFEDELEILALALHLFDFSKELKNEKLILFHTPNITTAQLT

TLFMYEHIQKSVKIFNLFIHSDFYLKFYSHQIQELNKKLIENIRFIVLAKGNDPYDSIIGIKHMLNNLPK

LLNHGVFQNFLKARKQKVKNAIIVSTGPSLTKQLPLLKKYANKATIFCADSAYPILAKHNIKPDYVCMLE

RDDIVSKCFDNDFKEFDQGILFIISSVVHQEVIDFLEKNSRKYILVHRPLHFAVSLNLKEFGYIGVGASV

ANMAYELAASLRHENIIFIGQDLAYAKDGSSHPREHIYGNQGEKLRGEIYTLAYGGEKQVRTQLTWNLFR

QAFEKDIFWAKEKLKINTYNCTEGGARIEGAIEKPFQEVCETLLKENLKKPFDKPKILEKNKIKNKFLQT

QKLLIKNVKQSEEFIKKCQNELKKLDFELSKSQLNSQTLIKIKKNLLFFFNEFKRLKLFNELTQAIYYHN

ECEIMYYEVLNDLEQDKKIEDFLTNQKKWWLQSFEYLNTQNQIIKETLKKYKNDDI

>WP\_009883028.1 MULTISPECIES: DUF4435 domain-containing protein [Campylobacter]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>WP\_002927400.1 DUF1090 domain-containing protein [Campylobacter jejuni]

MKKILILLTLCAFAFGASECDRKIDRINKEISFSKAHNDTARTLSLELALKQVQNDCTKDPMFYDKKLEA

KKLKEQEVEKIEKELDALKEQKDYMSKVEYKAKKKALKEQKEKIKKEIEEYIDNL

>WP\_002869391.1 DUF115 domain-containing protein [Campylobacter jejuni]

MQTNEIFKKNLEAMQGSTYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLK

LYQEQYTNYPFLFFYGLGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLD

YNNNIAELIFGLTEISLFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQA

IWNLPEMFKHYSYKELLDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPD

YVLSLERIPLTSEFFNNDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYI

GGGMSVAHSAYELAILLKCENIILIGQDLAYSKEGKSHTDDYINLALHEKDFERNKGHFTTIAYGGEGEV

ESSEVWTLFRKIFENYAINNQKYIKTYNCTEGGARIKGTIEKPFAEICKEILTKDIKKPLKKLKKKTKKE

QFDKMLKSYRKIKTNIQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEI

LGPTLHHEESLIAPIYTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRS

LI

>WP\_002869330.1 DUF115 domain-containing protein [Campylobacter jejuni]

MTILEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNIDENLNIFDKTHNVFMYENLEEEINFFYQSILEK

TPRYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSMIDLSEELCSGKIYLVDIKEERVNLQL

RILFDQNDMFLWLNIYEMFINHKFYEKYYYEEILNTDKIIYENINLVIRNLDPDSKISLSCYENFYKNIP

LMLKNIPFKRIIDERKGLFESCIVVCAGPSLQKQIPLLKQYQENFVIFCVDGAYPLLVKNNIIPDYVLNL

DFEEYPLKFFKEVNPENKTLFILSASTHPSVVDYLYKKQIPLSIALNDNLPYQNLHIDEFGYLEFGTHVG

HACYALAIALKFKNIIIIGQDLSYDKQGNSHFDSFDLGSDIDATLNIPTLKTIAYGGLGEVLTHLAWDDY

KRKLEDLFARNLELNFFNATEGGARIEFAKELDFKSCCKKFANLNNKSNKYLPKTLTTNRGAKILNKILA

TFKREKQNTLICLEHAIRLNDVLKIILASDRKFPIDFLKNTYESIAKFEIFLEENSFLNDGVLKGVIFHK

GKLLSEVIVSKIEDEREYLLIYLTFYKQWLEIFICRFQLKCDIYNFLV

>WP\_002858873.1 MULTISPECIES: DUF4006 domain-containing protein [Campylobacter]

MMENNNRCVFSLSGVTGMLIATVLLLAILAVLTIWGLKAQQEVMQKPYSLKDVQSVKMFGSKEQDHRSIK

EAQ

>WP\_002856328.1 MULTISPECIES: DUF815 domain-containing protein [Campylobacter]

MDWNKTYAAIYRARKDYLKPIFEIDPITLKDLVGMESQKKALYENTLNFIQDKGANHALLWGSKGTGKSS

LIKAIFNEFKDQGLRLVELNKEDLFALVDIIDEIRLENFKFILFCDDFSFEKGDDSYKFLKPLLEGSIEK

APNNVIIYASSNRRHLLSESIADNLDTQIAHTELHLSDAAEERLSLSDRFGLWLSFYQGNLEEYLKMIDF

YFKDYSCDKELLHAKAKEFATLRASRSGRTAKQFYLAFKENFK

>WP\_002854367.1 MULTISPECIES: DUF452 domain-containing protein [Campylobacter]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>WP\_002853237.1 MULTISPECIES: DUF4230 domain-containing protein [Campylobacter]

MEMILFVLVMILLVLLFVVLFRQYKSPKIEEKSTQSFSDIMQLKSIGELSVFQVFSKEIVTKKDSAFNGI

WKNLLGWSLSERQIALIFEFEITFLYDLRDKNFDILPLGDDAYKIIMPECRYKHSIIDMKFYDEKNAKFL

PFLLPDSINSTGISFSESDKNKLIKEAKDEVKDLSLNLIQNLESKIHKSAKDTLEAIAKGFGAKRVEFEF

KDNTQKLDVS

>WP\_002852798.1 MULTISPECIES: cbb3-type cytochrome oxidase assembly protein CcoS [Campylobacter]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALDKKRLS

>WP\_002852251.1 MULTISPECIES: DUF3972 domain-containing protein [Campylobacter]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSSAKSQTAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYKLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>WP\_002851269.1 MULTISPECIES: DUF507 domain-containing protein [Campylobacter]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>WP\_011812728.1 DUF2972 domain-containing protein [Campylobacter jejuni]

MQNLLLYIKNNLTPTLAQILLQALKNSNNEKFFTFVLENIETICTWLNSNEFRDRYLSTKHPYPPLINPN

FIEIDSSRHCAELAWDLNLPLPKHYKFIYISPHGVGAAAFLRYLNQCCDVTCFASWVLPPDSKERYCINY

MCLNDNTIAQYAINISEINLPYFDKYLSLLDFNSKIICGVRDPIGLLKHSWGRDWSKVLRNYPPEFNLTY

DWRYYINYLTHQNHKIKIDINELQQGVFIISYLLKYFNKDNVYYLDMEEIRQSKAFDTMNLLAINFNFTP

PHKDKLDLFKIKEFRGYIRYLFPITLYANSKDINNTFYLNTPKNNKNFNIDRTSSIPIILDRKHINHEKI

DVIQEIIKNDLCNDMGVYIDKNDFKQLEQNNLLFSTIKHYLYDFLYQIKITIDETESKMMKEKDVIDYFI

KNKSLIYTFFNIFENELNHLKQTHPHIIDSWKYYKEFEKIYKDK

>WP\_011799388.1 MULTISPECIES: plasmid mobilization relaxosome protein MobC [Campylobacter]

MGTIRVYLNEYEQRQLKKLSIKRNESQSAVIRKLIAIEKYAKTLEILEKNNEINVEYLYHIAQCGNNLNQ

IAYHLNIGIESPSQTQNRLPKLIEELSQILNEHKEHIKNKAIKTSINKKIKRLSPDENFIGEENQ

>WP\_011117555.1 MULTISPECIES: DUF1738 domain-containing protein [Campylobacter]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>WP\_009882893.1 DUF115 domain-containing protein [Campylobacter jejuni]

MKFNLNQKELFNKNIEALDNIPLKESLKEIKSSKFKLILGKDNLDINLQNTSDNTFLYENVIDELNTMLN

TYNDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWTMFHILDFSNELQKNNLIIINTNI

LSEFDLLNFYKKANSIFLQFSRIYFLELISNYYERYNEEILKLNDTILSTIKISIIQYGNDSIDNLMGIK

HFIYNLSKLLTHPHSEIFLKKRYKLSDTAIIVSTGPSLTKQLPLLKQYANKATIFCADSAYPILAKHNIK

PDYVCMLERDDIVSKCFDNDFKEFDKGILFILASVVHKEVIEFLERNNREYMLVPRAYDFFYYLNLAKYF

QPIDGMVSVAHMNYWLAKFLSHKNIIFIGQDLAYSKDQSSHAKDFIHEKLHEGHFQKDENLFTSIAYGGK

GEVESSYFWKLFREIFEKWISHDNNFINIYNCTEGGARIKGTIEKPFLWACENLLGKDLNKPFPKLNPLN

INKQNELMLKAYNKIYKSIYHCKDFNKKLLQEYNEIKELYLTLENLQIEESKELLNFIIQKIDTIKYQID

DAKNMQDLYEILGPLLVQFELNLARIYVLNPKTPEDSFNKSLIWIKEHLEWIEMIYGHIQAQENALFENI

IPLEQKLKERKMQKYLRRIKNANK

>WP\_009882883.1 DUF2920 domain-containing protein [Campylobacter jejuni]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGTVLPLLRYIIGRDLEQFDFIFNDPNTLIEMFTKTYWTREDENSPYFFANENYMIRSLLN

SSHLIIQVNVNKNIVLVSYHSSKDEFNTSKDKQTLFLAYKELGYDATLHLIKDESEIDGRFIKDLNHGMR

ITDRALFRKELPLMLEKLQKRKSFMQENSISYPCGNKVFTFKDVGDKFVLCIK

>WP\_009882781.1 MULTISPECIES: DUF3373 domain-containing protein [Campylobacter]

MKTKFSLILSACLLSSSLFAKNADDEITKLQKQLAQIQAELAQIRKEREAQAKQNEAVKAELADLNDRAD

ETEFQAALSKVKFGLEFSTAVSNTNYKVSGQDYSANNKWMNELHLNMNADINDKTKFYGRLSMAKNWSQM

DWSGSPYDLDAGRNTRSSGPVLYVDRAYLDYYITPEWIATIGRQPGTDGPGSNLRNNALRQSTYPALAIN

ALGDAAVITYKPESLQDHKVAIRAAYGKTYQWDEEGKVRDWMSDQKDADANLYYAAVEGELPIEGMGDNL

IIFNVAHMTDFALPLPSIPSILNQGVYNLGDLTLANIHFENYNAFGTNFNYFVSLGYSNGANAHTLSANP

VAQSQLEFNEKDGYAVHVGGRYDFTKALKVGYEFFWGSRYWYTMSRPSINDPLNIRMTRGTAHDFYVIYQ

LDRYQFLRLSYTNIQNIWGNRGIPFGGAKKDKARADNIMLMYNVKF

>WP\_009881389.1 MULTISPECIES: DUF1440 domain-containing protein [Campylobacter]

MKKYFQKRYTLAFFIGILAGIFGAIVKWGWEVPFPPRNPNVFWPADALERVTPPKIFLEQLGLPTERCSF

WIFCLSFCPCYCNAFNCRSSTTL

>WP\_002902800.1 MULTISPECIES: DUF342 domain-containing protein [Campylobacter]

MALDEKIIAYTENPARELLSVASRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNIPLNKTIQITVAQGIDPIESQDESLILAYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVKDAVNSGVGIECEELNVVGSVGSNTQLNAAKMKIE

GTTHSKAKIQAKQAYIKTHRGFVEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDSNYDEEFAILGEQISKLNHKMNKIRQYILSSKNGILSVEKKITEL

KNQGQNVPIQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYEEKDIAWLSASKE

>WP\_002869357.1 MULTISPECIES: RNB domain-containing ribonuclease [Campylobacter]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKSKYYLNNGFAFGVLDISSKGTGFLQCFDESFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKRANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDIQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLAYCFKIALDHENKVIKEELFEGIINSKRRFNYDEVDEILIQKPDLKE

LSWLYELFEITKNLRKMRLKNAFEFRTEELRMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGVFRNHLSADARKIDKLLNELRELGIDVNFKPNLPELIRDIQALSDELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKNDEKLFNYLLLNIESTCESLSTLEREADKVAF

DFMDRKFARWAAKNIGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIVMAKI

YAKITQRLIKEENV

>WP\_002869329.1 DUF2920 domain-containing protein [Campylobacter jejuni]

MIVSKTYEIDSCDDVELGIKRESKLEFKLCFDDEKEIKALVFIIPGLGGDVDENYREHLAEFVAGEFNVA

VASVNYHCIGNRPQTGSTFYLDDIDKLILKVSCEAADIKLPYDVDNIQDYKQMSEIFHFVNNQIIEGKQK

GNFTPNYFLNLHVSLQPAKNEYQNFGIMQAQDLLNVALYLKKNAPFDTMGGGIPVIMIGSSHGGYLAHLA

AKIVPWLIDGVIDNSSYAKFLWHLIGFGKEIDFMQYSEFSTFDFFHHIKTHCSTKTFWTSNSSSNNFFSM

PRRMIRYILEPKHLEIQANYPKPCYTSYHSFYDKEIAPPDEKLELYKYLEQFGFDADLYMIKNPDQVDGR

FIKSLEHGMGMSIKTLISKELPLMLEKIKQNLKKDCKEKYISYPCEDLLYQFSEKDDKILLKIDKI

>WP\_002869320.1 MULTISPECIES: ammonia-forming cytochrome c nitrite reductase subunit c552 [Campylobacter]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDEANKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKTTEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGKKVKVMGET

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSVAHDQRTAEYAIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFEDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>WP\_002868906.1 DUF459 domain-containing protein [Campylobacter jejuni]

MSVVRFFFILIIVLGLVVVVMNQSISSYIEQKYHFAFYPHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

EETTNQENKSIDENLSKIDKVLNTLENDENTSHKETNPTLIQDANISFIDNTKLELQNGDEFLFIGDSLM

QGVAIALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFIKNSNIKYLVVLLGANDPWDIKKGGN

YHRFGSLSWIDIYTSRVDEIIKIAKKHKAKVFWFEIPPVKKEDLNKKIQVLNKIYSDEILKNKEIFINTK

LFFSVNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>WP\_002868872.1 MULTISPECIES: DUF2318 domain-containing protein [Campylobacter]

MSIYFVHFLISVLPLSILMAFIASDKKYIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFMLFLLLILIESDKALANILLTLMRNSIIETHTFLVSFVGKSNYFGVFGIYIYLIFI

AFLAFLSLKIRKKNISKKQILDINYRKNEAKTSLINRYFSSVFISCVISFCIILYFFMVSSKPLTIDEPK

EILPDKNGKFIFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDRDSPVAVFDACMICGDMGYIKKDGQ

LICISCNVRIFLPSVGKSGGCNPIPLKYEYDGKKITIDVKDVIAGSNYFSQIKEIEVQDPVSKTKVINTQ

APFSYSYKGITYYFSNQNNYEEFKKDPTKYVEENEAQFLIQRRNDVG

>WP\_002860371.1 MULTISPECIES: SIS domain-containing protein [Campylobacter]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>WP\_002859353.1 MULTISPECIES: DUF448 domain-containing protein [Campylobacter]

MKKHIPIRMCIVCKNRFEQNMLFRFKVVLGDIVPKAEHGRSGYLCQNCIEREDKVLQKAFSKICKNLNTK

ITQQGLKEIFLNGKD

>WP\_002857767.1 MULTISPECIES: DUF1425 domain-containing protein [Campylobacter]

MKKIILFILMFLLSACAPSYQINSNQNTVILGSNLPKSLVKQFQKRINSNGYLEFEVILRSTFAKDVIYK

VDWLDKDGFVLRDVLNEDYQALRIPAGQEVILRKLASDIRAKDFRLEIKAKN

>WP\_002857290.1 MULTISPECIES: HIT domain-containing protein [Campylobacter]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEDLGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>WP\_002856967.1 MULTISPECIES: copper chaperone PCu(A)C [Campylobacter]

MKKILLLGALFAVNLWAVNDIEVKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSTELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKIIELKNIDSKEF

>WP\_002856937.1 DUF2891 domain-containing protein [Campylobacter jejuni]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKPPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLTLEINLLAKENDKAEIWAKNLEGI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLHKNDFVKFFKAYLPNLEAKEPVTLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKILSNFCDENLKILLRNNATEHFDKAIAHIEDDYLGSHWLGSFALLALDVDIL

>WP\_002856030.1 DUF455 domain-containing protein [Campylobacter jejuni]

MQKEFFQELQDILYEKNITIKFHSFQNFYEDFKSRKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFLN

STHALAKIIHSVAHIEFNAINLALDASYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGIVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNRYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQKECEVIEKFYS

>WP\_002856021.1 MULTISPECIES: peroxide stress protein YaaA [Campylobacter]

MKILFSPSESKNENCVKNPINENSFIFKELFPYRIKALKHYEEFIKNASLQNLQELFGIKNENEIDKFKH

DLKQAPTQEAILLYTGVSYEYLNFKALDKKSQAYILENTLIFSNLFGVVRANDTLPFYKFKQGAKIGNFA

IEKFYKEHFSKALDAYLENEEILDLRAGFYDKFYTPKKKFYTYKFVKNGKVISHFAKAYRGILLSISAKN

QVKNNKELLANLPSNLKLKEIQIKGLKEEIVLEILD

>WP\_002855201.1 MULTISPECIES: DUF465 domain-containing protein [Campylobacter]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHVKDELSQYLANYK

K

>WP\_002854880.1 MULTISPECIES: DUF979 domain-containing protein [Campylobacter]

MISLDLLYYIVGILFLVFGILSFSNQAKDIKSRISGGVFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAVHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIAV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>WP\_002853192.1 MULTISPECIES: ribbon-helix-helix domain-containing protein [Campylobacter]

MKRNVKTYSFRMPLELKERLDNLSKNLSKPKSTIVKEAIEAYLNEVEDFSFAVNALEELKDGDYQKASKK

IDKIVKNLKQTK

>WP\_002851753.1 MULTISPECIES: DUF2393 domain-containing protein [Campylobacter]

MEKLREIVLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIAALFIIAFDIIICFLVYIYGYKLID

NEVRTRKTAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKS

REIKDLKKNATQVQRIAFENFNYENNYTIRLVSECF

>WP\_024088084.1 DUF2920 domain-containing protein [Campylobacter jejuni]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGSAVPPLNYILGREMEHSYSEYYEDFPHNRIIFFLKTHWTRKENSPYFFNNENYFIRTLL

NKDHLILQSQKNKNIIYVSYHSKEDPLTPANFKEQTMQILKILGYDVSLNLIDENKIDGKFIKNLDHGCG

IPDKALFRKELPLMLEKLQKRKSLMQENSISYPCGKKVFIFKDVGDKFELEIKD

>WP\_011812723.1 MULTISPECIES: DUF2920 domain-containing protein [Campylobacter]

MIINQIYSIDSCDDVELNIKRGSKLEFRLTYDDSKEIEAIICIIPGGAEDMNSYIYIDDYLTRNYKVAVI

NINYHCIGNRPHLGSSFYLDDIDKFILDTSLKAINLKCINVYGINSYENLNNAFIRIDQEIQKLKLNQQL

HQNYKLKTHVSFLPFKNEYQNFGIMQAMDILNAIFYIKENSPFKLMRGGVLERFCLEIHMVDI

>WP\_009882286.1 MULTISPECIES: DUF2860 domain-containing protein [Campylobacter]

MKKYLFSCVLASILTQSATAVEFQEGFSGNLSIGVGARDIKSNISTLANSDYLSSYNADNSDSSFIPFIG

AELYYGNLIDNDRIFIKNYNGRDISGIALGYERAYLERFSTSFSVISSLREKAYANPYAIGNREETDVDR

YGFKISQLYESDFGKFTTSYLFSKNKYDKDTIAQSSLKREGYYHEIELNYNYSLLNLGLNYDYNDADGKA

QSYSRYGFSIGTNLAFANDYIFTPNLNLSKYEAVGTDPIFHKKQDGNIVKLNLKVVKNQFLGYNGLYGFA

NYGIEKRNSDIGFYDETYQIILTGIGYKF

>WP\_002858554.1 MULTISPECIES: DUF2920 domain-containing protein, partial [Campylobacter]

MFGNSYGGYLANLCAKIAPWSIDFILDNSSFVNLFGNIFRLIGFGKEIDFTRYHGTYDDTLFKNIFLYLS

DKTYWNNNKFSKNYFSNARKIIREPLNKEHLIIQSLYPNPKYILYHSIFDERSPFKNKENFVHILKELNF

KVEFFAISQVDNKFIKNLNHGMGLSTKLFFKKHLLQILKEPLQDKICKKEVSYKCDELVYTFKEENHQII

LNITN

>WP\_002856730.1 MULTISPECIES: DUF969 domain-containing protein [Campylobacter]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMCYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILFIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLSDDKS

>WP\_002855637.1 MULTISPECIES: DUF2325 domain-containing protein [Campylobacter]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>WP\_002854834.1 MULTISPECIES: DUF2018 domain-containing protein [Campylobacter]

MDFFDEMFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEER

QNDIYIELGAKILGHEG

>WP\_002853457.1 MULTISPECIES: MFS transporter [Campylobacter]

MHFVISFNITSNLVGITLGLILAESISNYFGNWRDSLSFYAWINLILLILWLFVGKDENKKEEKKNNAKD

LIYALKSRVTWGMIIFYIGPILFLNSLFTFLPTFYAQYAGFSKELADFAKKEIPALANFAIIFGPYLGLF

FKRKNISFKIMLLSGGACIFICGFCMLFLQNLVLIQIFAVLSGIFYSMWFPFFFNLPSELKNSNPNQTAY

IMSAFWSITFVILSFNLWVVSWSVDKTHSFTLGFVYIFALIFISAILAQFVLPRRENFIQGEK

>WP\_011812762.1 MULTISPECIES: glycosyltransferase family 4 protein [Campylobacter]

MMKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVKVTSLEQFKFDTLYHKIAS

RFKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCD

ALSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPVMFLKAIAHLDKN

LQENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRIENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEV

CRISSSYYNGAKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWL

KLIAEVKNA

>WP\_011812735.1 MULTISPECIES: CCA tRNA nucleotidyltransferase [Campylobacter]

MQISKISLKNNPDLQFIAEFLKPYTKRVYLVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGAQG

FGKSFFVCKFKNYDLALARTENKISYGHKGFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLK

DLGAGFLRHIDKQSFQEDSLRVLRAVVFASRFNFKITSESLKLMQSMDITDLSKDRINAELCKFFKSPRL

DVGYRYLQELGLEKQIFGFESVFMSLEFQNLLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEY

LKYANQAFYLDDISDFELAKIAFEMPLKEWLGLWSKKRIEQAKRLGLYENKFESKILAKDFINAGFCGKI

LGLKLQEARENELKEYIKGLAK

>WP\_011812734.1 MULTISPECIES: ATP-dependent helicase [Campylobacter]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVAPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIALKQASELKTLLKSVYEKRTFRHLSDIKPYQSSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYVDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDVKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLTFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSSMLALVVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKNVNLQNHQKRNYQLGLFADLEELASETRFKFESEFDAHPILKLSKINDLCARNLE

KIYLFLKKAMEIKHSLTLVNLICENSFYREICEELATKRATNKAGQVDLLRKSENLEKIETKFNVLKELA

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGELTID

>WP\_009882950.1 glycosyltransferase family 2 protein [Campylobacter jejuni]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSW

RNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFSDLTIIKNNLTKDQIYLNQILENKDKIL

TTQTNQIYNLNTTLENKNQLLIAKQNLINFQNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFII

LSIVISHKQEQKAYKFKVKKNPNLALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRL

KIKKLKREQ

>WP\_009882844.1 LPS-assembly protein LptD [Campylobacter jejuni]

MWRKFSLLLGTSIALNAAQVDIYALDAKKEGDILTANNDVVIFSDFYFITANKAIYNEKTEDVELFGDVN

ILRGQNERSHSDYAKINLNSNQADFSNFFFSNNNLEVWFQSKTSHLNDKVFESKISAVSSCNVEDPDWEI

RFSKGWLNRETNFVHLYNARLYVKNTPVFYLPYFGFSADTHRQSGLLIPKIVLKSSEGLYYEQPIYIATQ

ENWDLELDPQIRTNRGFGLYSILRFLDSPYSTGELNFGAFRENSSYFHDENLKNQTHYGIELKYSRDDLI

KSLLSDNFQEGLWIDATYLNDVDYLNLGSRDYRDLNSLVTSKINYFLADENNFYGAYARYYIDTSKLSNN

TTLQEYPSFQYHRFLNNLFDERLRYSFDASFHNFYRPAGSYANELNLDLPISYHNAFFGDFLHFTFTERF

YASFVNYSNDPERNHEHYFRNTHDFNLYTDLSKAYENFFHTLNLGVNYILPGAKSGKITQDYLEEYDKEN

EHTSLYAVQYFYNNEGQKKLKHRISLDYLNKQNEFYELENLLTYYFNENINLNSEVLYSYEQSRFTNVIS

QIEVNTNSKFNWMFSHAYQNDEYGKYSFIGTRANYIATPNYNLFGGIWFDTQRAHTNMWELGYTYQRKCW

NYSLMYRERIDPQLTSGGITAKNQSGIYFIFNFYPLGGVKYDFSLAESENKI

>WP\_002931024.1 MULTISPECIES: type I restriction endonuclease subunit R [Campylobacter]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>WP\_002882285.1 MULTISPECIES: mechanosensitive ion channel family protein [Campylobacter]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSSINLNSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLAFFISLRRFFANIVYFFLVQLFYR

NKNDVDDIKVIFIENIKKPVGFLLIVYAISLCLTIATYPAPLSVNLSNFFHIVYAVLIAWLILRMLDGYG

VVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVETGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYIKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>WP\_002869367.1 MULTISPECIES: type II toxin-antitoxin system HicA family toxin [Campylobacter]

MSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRPIKAIYVKMVLK

AITGE

>WP\_002869015.1 MULTISPECIES: glycosyltransferase family 2 protein [Campylobacter]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>WP\_002868993.1 O-acetylhomoserine aminocarboxypropyltransferase/cysteine synthase [Campylobacter jejuni]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRLSNPTSDVLGQRLAN

IEGGAFGIPVTSGMAACFYALINLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIAIADIEKISQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GTALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRVIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEAKDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGITKATIRLSIGLENSDDLIADLKQA

IES

>WP\_002868945.1 MULTISPECIES: glycosyltransferase family 2 protein [Campylobacter]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQASGEFVTFLDDDDELLSGALSTLMQKASEGYAHVFGNCLMEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSVFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQDSVTL

GASKNAYRVYLGYLELAKILENELRMSKDKDYKKTCASYYKMAAYYAKLAKNYKALYKCLFKSLSIKINA

PALILLILSIIPNNMIEKLSKIRVALCKN

>WP\_002868894.1 MULTISPECIES: TlyA family RNA methyltransferase [Campylobacter]

MRFDFFVSKRLNISRNKALELIENEEVLLNGKSFKASFDVKNFLENLKKTQDLNPEDILLTDGLKLDLLS

EIYVSRAALKLKNFLEENGIEIKHKNCLDIGSSTGGFVQILLENQALKITALDVGNNQLHLSLRTNEKII

LHENTDLRTFKSEEKFELITCDVSFISLINLLYYIDNLALKEIILLFKPQFEVGKNIKRDKKGVLKDDKA

ILKARMDFEKACAKLGWLLKNTQKSSIKGKEGNVEYFYYYIKN

>WP\_002868885.1 MULTISPECIES: polyprenyl synthetase family protein [Campylobacter]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKKLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPTNNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNKKLAQMIQNLIIQY

L

>WP\_002868859.1 M23 family peptidase [Campylobacter jejuni]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPISDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEVTLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYRAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVVKIAKSELSGKAKE

NFKHIIAGYEQVVKEALVSNQPNPPKEEDFENYIEF

>WP\_002868847.1 MULTISPECIES: sensor histidine kinase KdpD [Campylobacter]

MQRQSPEQILKKLEVKAKEEEKNKLAKLKIFLGYAAGSGKTYAMLSEARTLRDNGVDVVLGYIEPHDRPE

TMALTQGFESIANLEIPYKNIVLKEFDLDATLKRKPALVLVDELAHTNAKGLRNEKRFQDIEELLKAGID

VYTTLNIQHLESLNDLVANISKIEVKERIPDRIFDEADQVELVDIEPNKLLKRMQDGKIYKEKQAKLALE

NFFRQERLIALREIALRRLASRVNLRASEQRLINDDLAYHTGEHILVCINASNAKVIRAAARLALAFHAK

LSALYIKNPNIKEEKALEENIELAKSFDAEIISVYDDIARQIAEYSSLSNVSKIVLGKNKDKKKFKEEIF

EAVAKKAPNIDLYLVNENQISTPKIRSKKGFDFLGFLKITGVLLLATFIAFVFHKFNTQPSNIVMIFILA

VFASSFISDNKIFAFYSSLVSVLIYNFFFLEPIFSLKVHDSGNIITFTTMFIVGFLTAVFTRRLKLQSKE

LTKRAYRTAILLENSEKLARVKSKQELWEQLGNQALKLLNLPIIIYPINKNNILSKPLLFFNDDKQMLKN

CFSADEIAIAQWVATNKERAGVCTNTLPNANAMYLPIEDGEKTKGVIGIVLKEKRPLQDFQYEILSALLN

EVGVRTRDIFLL

>WP\_002868811.1 MULTISPECIES: methylated-DNA--[protein]-cysteine S-methyltransferase [Campylobacter]

MFKVYYKMPLCYLSLHSDGKFLTRVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLRKFSIPVLIQGADFE

SKVYKALMKIPYGKMVTYKDIAQKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>WP\_002867666.1 MULTISPECIES: penicillin-binding protein 1A [Campylobacter]

MKILKYIFSFFTLLFIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYAPYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAALGYFHKNLNELSLKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYNLGWISKADYDTAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPNIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYDEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGGKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGTIKDPQIIRQVQDK

TGKTIMEFNSNERKVSDEAQSFLVLDMMRNVVEKGTGRNARVKDIEIAGKTGTTNKSVDAWFCGLTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPNGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>WP\_002866624.1 MULTISPECIES: flagellar hook protein FlgE [Campylobacter]

MMNSFYNGISGVKSNSFGIDITANNIANVNTTGFKYSDAQFKDIFYTTITTQSTNPAQGGYGSGAASSQV

VFEQGSPVASDGEFDVALQGKGFFGVLGADGNAYYTRNGSFRRDANGYLVDSYGNFVLGTMNPAFTGINY

SDRVAGLMGDYLNTGTPVNNGFTVNSNNSFSIGTTASQGAIKVPVNMYLPPQVTQNVKWSGSLNTNTTTE

VVKVDLDPSKFNITKTEDGKYVVSGSVSKEDVFSAKAGDRIILNFTDDNGVKTSFEATLDENLNFKSNEL

DLKGLDENSIKLDTAQISTEQQKANKDILESPIYNADGSKSTLRVTLERVLPQEGDNIQYKAIAQIYDSN

GNAVGNPTEGNMVFDKNGALLQNNITSIANPNGGTINIDLGSPYDANKPGSGYSGIYIKEGVEKNVVTQQ

DGVAEGFFEQYNISDDGSIVAQFSNGKNAIVGKLALYNFINEQGLVAMGDNIFAATANSGDASFIMKDGQ

VVNTAKFKGGFLEQSNVDLSAELSNLIVTQKAFDASSKSITTSDQMIQKAINMKR

>WP\_002864642.1 MULTISPECIES: polyprenyl synthetase family protein [Campylobacter]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAAIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEKDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNENEKEWLKTKFEEQKALEKAILEAKTYAKKARKAIEKY

DNNKLNDIIKAMIDREF

>WP\_002860361.1 glycosyltransferase family 2 protein [Campylobacter jejuni]

MQTKIVGVVIPIYNVEEYLRECLDSVVNQTYKNLQVVLVNDGSTDENSLNIAKEYTLKDERFILFDKENG

GQSTARNVGIEFFSKEYHFKNITQELKENSLVEFKLSNEDNPYNIYKIYKSSNFFKNKDELLNFRAPDID

YIIFLDSDDYWELNCIEECVPRMDGVEVVWFDFEIFLDGIDGKNVWNYSDHKTDLEYLRYTENQYTNFND

IIARITKEYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQN

SSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINK

YFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKKILFIFNIIKAL

YDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKR

TKR

>WP\_002860360.1 glycosyltransferase family 8 protein [Campylobacter jejuni]

MIKVKIGIVIKKLKHRRRIVLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDIS

KNNILKLKKLIQHLSNSYYNCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLV

CGDIRELFYMELNNKVAGVVTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNK

CIDAFNIYDHGGLADQSYLNIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSE

FEEAMKNKKIVHFCAAKPWWNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTI

EWILKNGDKNSSNVLYSSYDIDNIKKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>WP\_002858356.1 MULTISPECIES: type I restriction endonuclease subunit R [Campylobacter]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKIACYHQYYAVNKAISR

TITASSKDGDKKGGVVWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQ

EPKQANDKEHLKELLRVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKS

KSGDVLGQKIVYGFAKYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYE

SRLAKIELSEEGKRLVNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMI

VSISRSVAIKLYDEIIKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDEL

KLVIVVDMWLTGFDVPSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSE

SGGKGDIITTQEDAVKVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFA

ALDKAYTIAMPHEKALSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDAS

GIKKPDISILSDEFLLEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLIS

SSEALDELINMSKSIVSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSI

DWMIKENVRARLRVAVKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>WP\_002857179.1 MULTISPECIES: cupin domain-containing protein [Campylobacter]

MKIIQWSRAEFSPKEVKINVLIDNEKGKEIQILLAKDSVMKEHKAPFAIHIQVLSGKIWFEVEKEKFELN

ALDMISLEANVAHSLGGLENSIIRLSLNKSDSIQRVNAVLKKP

>WP\_002857025.1 MULTISPECIES: WD40 repeat domain-containing protein [Campylobacter]

MKKFLFILSLFCVLSYAYELKLNANITALKLDKQNLYIGTDKGEILQYNIKDKSLKELLSLPKIKNYYGD

DFAKIYNIDIFKHTLLILSEGDFGAKNLSFYKENLQIKKLEENSIIKAFFINENTYLLISIGSEIELIDK

SLKNIKKFNFSHSSLNDAVLNEDKGRLVAGFESGEVELFDLKNWKMLKNYDKMHKDNIYQVDFKNNIILS

CGTDRRIGVVKNEEQNFLQKDFLIYTCALSPNGEFAVYSDNEAGVSEVFSTSDFKPVKTFNNENLMSEFI

IFLNNKDFIVSGFGDSIMFRSIDE

>WP\_002856872.1 MULTISPECIES: restriction endonuclease subunit S [Campylobacter]

MKNFKDSGIEWLGEIPEHWKLIKCKNFFVLKSIPIGDLWNKTKLLSLTLNGVIERDINNPEGKFPSDFST

YQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYTIFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLR

NTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKNFIEKKEKLITLLKEQKQAFINKATTKGLDKNVN

FKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGNDKYYKGGQIVWINSGDLNDGFLKDSKRKITQDA

LDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVNQACCVLEKSAWYNTFYLFYLFNRYKKELISMGS

GGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCKKIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIG

KS

>WP\_002856744.1 MULTISPECIES: penicillin-binding protein 2 [Campylobacter]

MQEYKKNRVSKVAFAYCMALLFMIIFISSTFFLTSKRHIPNTEKDQYALALRGSIITKDNFTITSSKQIY

RAEIDLRSINKDKFDLFLKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKL

YIQGFFKAFTNNSGRVETRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYDE

CLSPVQNEKIQGLKDIGGNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVM

ESKTGRILALASSRRYDPQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSY

KLGRFTIKDDHKMDKMTMEEVIRYSSNIGMIQIAKRLNNIEIVSGLKIFKFGEKSGIDLPYEQKGEIPNP

KRLRDIEKSVLSYGYGLKTTFMQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAA

KTMQNVLINVIEKGTGKKAITQGIIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHP

TKPYSYYAAQSALPMFKDVVDILINEEFLTPIQDNNQTSTNN

>WP\_002856357.1 MULTISPECIES: energy transducer TonB [Campylobacter]

MKTLFLNHKYQASYITFIVFIPLLFVIFHSNDFFKMEIKNEDSFSLAIKQFTQTNPTNETKPTESIIEPI

KPKPQPKVIKKTPEKIQKKVKKIPPHPIPNKTPIAPTQEVKTFAKTTDTNVKPKITQLTQGKDNHPVLKE

IQKAIQQAQFYPRQAKKMRMQGTVKVEFLWKENKTLADLKIIESSGYDLLDKSALESIRKASLNFPHYNG

DLRITLPIIYDFKILRG

>WP\_002855938.1 MULTISPECIES: M23 family peptidase [Campylobacter]

MKALWLFLSLTLWLFGAQNLELIKGQALFLELDKKDFLSLKNNDKNIPTFAHPKNQEKILAIFSLPYKNP

PQNTKLIAFYKDKKEEIFIKTLEGNYKSEKLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKALFNG

AFNIPLNSFITSDFGKARTFNEKVASYHSGTDFRAAIGTPIYAANSGIVKIAKDRYFAGNSVVVDHGFGI

YSQYYHLSKIDVKVGQKIKKGELIGLSGASGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFR

>WP\_002855628.1 MULTISPECIES: ankyrin repeat domain-containing protein [Campylobacter]

MTTLSLEEEKRFEELCKMAFNFARNNEYENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNGLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>WP\_002854907.1 MULTISPECIES: rhodanese-like domain-containing protein [Campylobacter]

MIENIPASLWTKQDLNAYQIFDVRTPLEWEEGVLPNAQCVALYDNQGLLNAKFLDEFQSKRDENKKLAFI

CRSGHRSMVAAEFIAEKLGLESINLDGGMLALKGY

>WP\_002851985.1 MULTISPECIES: MinD/ParA family protein [Campylobacter]

MNNQANKLRNLMSQNGTKKSQNTHFIAITSGKGGVGKSTISANLANVLANNGYKVGLFDADIGLANLDVI

LNVRIQKNLLHVLRGECSLEDILIEVKPNLWLIPGESGDEILKYNDKNIYERFLNQASILDELDFLIIDT

GAGIGGNILNFLEMADEVIVVTVPDPAAITDAYATIKTTSKTKENLLMLFNVVKNENEALKVFENIKKVA

DANIKNPLNLEFLGHLSASKDVSGSIKKRTLFSDENTASSDEIKALASKLLYRLERKVLDNVSNRSFSSF

FRKIIERF

>WP\_002851455.1 MULTISPECIES: NAD(P)-dependent alcohol dehydrogenase [Campylobacter]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGECDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNNIVVSEKFAVCVPKDAPMEKVAPLLCAGITTYSPLKFSNIKEGSSVAVAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSCDKNAVKERFDLIISTIPTPYNPAIYLDLLKFGGEMAIVGLPP

HEVAPSISVITFVHKAGKKVYGSLIGGIAETQEMLDFSLKHGIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>WP\_002851154.1 MULTISPECIES: restriction endonuclease subunit S [Campylobacter]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>WP\_002784894.1 MULTISPECIES: N-acetyl sugar amidotransferase [Campylobacter]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNQNINWQEREKEFFELIKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLDNLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELQRVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLEFSGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>WP\_002868802.1 MULTISPECIES: bifunctional phosphopantothenoylcysteine decarboxylase/phosphopantothenate--cysteine ligase CoaBC [Campylobacter]

MKTILLAISGSIAFYKSYELISLFKKEDFRVKVLLSNGLLKFASKMSFEALVDEVLCEENESWQNSNNHI

AFSKDVDLVLFAPASVNSINKLAFGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LIIEPICKVLACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGSTRERIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLNHDFLIMTAAVSDFIPQSVKGKIK

KNEHLQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQKNYFGSD

QNELYFITLNNENKSTLQSKEKLAFELVKWCEKL

>WP\_002859854.1 MULTISPECIES: 50S ribosomal protein L25 [Campylobacter]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>WP\_002854336.1 MULTISPECIES: molybdate ABC transporter permease subunit [Campylobacter]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>WP\_011117594.1 MULTISPECIES: ATPase AAA [Campylobacter]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>WP\_011117583.1 MULTISPECIES: hypothetical protein [Campylobacter]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>WP\_002869228.1 MULTISPECIES: amidohydrolase [Campylobacter]

MNLIPEILDLQGEFEKIRHQIHENPELGFDELYTAKLVAQKLKEFGYEVYEEIGKTGVVGVLKKGNSNKK

IGLRADMDALPLQECTNLPYKSKKENVMHACGHDGHATSLLLAAKYLASQNFNGTLNLYFQPAEEGLGGA

KAMIEDGLFEKFDSDYVFGWHNMPFGSDKKFYLKKGAMMASSDSYSIEVIGRGGHGSAPEKAKDPIYAAS

LLVVALQSIVSRNVDPQNSAVVSIGAFNAGHAFNIIPDIATIKMSVRALDNETRKLTEEKIYKICKGIAQ

ANDIEIKINKNVVAPVTMNNDEAVDFASEVAKELFGEKNCEFNHRPLMASEDFGFFCEMKKCAYAFLENE

NDIYLHNSSYVFNDKLLARAASYYAKLVLKYLK

>WP\_002869182.1 KpsF/GutQ family sugar-phosphate isomerase [Campylobacter jejuni]

MNTLEIAKEVFEKEAQAILDLAKNLDENFNQAVNLMLNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKKNSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMA

SEAEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>WP\_002868923.1 efflux RND transporter periplasmic adaptor subunit [Campylobacter jejuni]

MKLFQKNTILALGVVLLLAACSKEEAPKIQMPPQPVTTMSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQALMAKATFENASKDFNRSKALFSKSAISQKEYD

SSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSASTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>WP\_002868903.1 efflux RND transporter periplasmic adaptor subunit [Campylobacter jejuni]

MKKKVILIVLIAILGSVGAYFIFFNNDEKISYLTQKIQKKDISQTIEAVGKVYAKDQVDVGAQVSGQIIK

LYVDVGTHVKQGDLIAQIDKDKQQNDLDITKAQLESAKANLESKKVALEIASKQYQREQKLYAAKASSLE

NLETQKNNYYTLKANVAELNAQVVQLEITLKNAQKDLGYTTITAPMDGVVINVAVDEGQTVNANQNTPTI

VRIANLDEMEVRMEIAEADVSKIKVGTELDFSLLNDPQKTYHAKIASIDPADTEVSDSSTSSSSSSSSSS

SSSSSNAIYYYAKFYVPNKDDFLRIGMSIQNEIVVASAKAVLAVPTYAIKSDPKGYYVEILENQKAVKKY

VKLGIKDSINTQILEGVNENEELIVSSSADGLAPKMKLRF

>WP\_002855808.1 MULTISPECIES: efflux RND transporter periplasmic adaptor subunit [Campylobacter]

MKKILFLLLVFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVSKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSRMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYNNIMAKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVRLGDDFFYKIDQNGTELKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>WP\_002855829.1 MULTISPECIES: agamatine deiminase [Campylobacter]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKVVSEFQKVLLIAPKQSDFENFKDIKNVEF

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEELKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLLELPIPKPLYYEERRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPNHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>WP\_002856133.1 MULTISPECIES: Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase GatCAB subunit B [Campylobacter]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>WP\_002854550.1 MULTISPECIES: Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase GatCAB subunit C [Campylobacter]

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFVVPKIIE

>WP\_002853884.1 MULTISPECIES: Asp-tRNA(Asn)/Glu-tRNA(Gln) amidotransferase GatCAB subunit A [Campylobacter]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>WP\_072223323.1 MULTISPECIES: UDP-2,3-diacylglucosamine diphosphatase [Campylobacter]

MLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPIKLNLHTSKGNNLV

LNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITCNFISNKILQNQNKKNLFYQIKDFENLA

KKRYERYENLGFWVCEGHYHQNHQINKENIKYLNLASFAYERSFFVVEYQQEIKFREQKLRGQNV

>WP\_024088065.1 methyl-accepting chemotaxis protein [Campylobacter jejuni]

MTNKKSSFLIKFIILSTLVLAFILVLLGIIFNNYSSSKDNKELINIVQQLEISDEKINSVFQNSFNFINY

DPSVQAIKKMQENFTKLKTFGIDINKAEEIFNAKLIQLNYFKSANSIAVNSKLYLFELAKNYFEELEQNH

ETNKNNYKTMSSMLSVLSTENILQKTTLNQLNNLMKEIKNDTKSENLQLFLKHYNMIVKQISIMQDNSSI

YENNSLMKELKQLNTFTQNTIEQSNLFKFYIALAVFGITLVLFVFFILLTLKKVIMPIHTLEKLSANLAS

KEANLHSRLNIEPKSELGQSAQYINSFISTVQNSIIEAIENAKSSHQNSQKLKNNSMMLENSSNSQHEQI

QGVKEITHVLDDHINLAGNLAQESIENMQDMHILMDKVELTLSELVNLINENNEKEQNIVANMDNLTQSA

DNIIEITNSIKDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVGQLADKTSKSLLNINATVNTIVQQI

NDNKALMDLIHDSMKETSSKTNDLQQELVNSMHKLESSIESTQTMKDKSMEVKDKMLILGTNIDKVNELA

NSVKDLSCEINNISQNVLNGASKLSEKLSSFQ

>WP\_011812809.1 MULTISPECIES: radical SAM/SPASM domain-containing protein [Campylobacter]

MLHILINFINFGKMFTLGNIMKFKKIYIELSDICGLKCDFCPSRKGIRGVMSEEKFQNLAHEISNKAELF

TFHLLGDPLLLPNLENYLKIAKSEAMKLEITTSGFYLNSKNQALLLGYENIHQINISLMSFLSQSKISLE

QYFKPILELCKKHLEQKSLSFINLRLWNLDANFKAPKSNLKIYEFLAKEFEVKIDTNLSKNRLQRHILLH

QNKLFKWPNLKDEPLYKKGKCHALKEQIGILSDGSLVPCCLDTKADINLGNVFENNFDKLFKSPRIKMMK

KAFEEDKRIEKLCQTCEFFKARLGD

>WP\_011812800.1 type II/IV secretion system protein [Campylobacter jejuni]

MESRMDKIFQAYIDNEISLDEICTKFNITSWDFFKKLANFCNLHFVDLDEDNDFIYEGIPFSLLLKFKFL

LIKNNDGFMIIRSKPCSLELLEQVKTFMICEKIDTAIADELKIAKILNQIRIQEEIKRLSIKLRLEWQEN

HKRDDQSCISQIFDFLLHEILSFHASDIHIEARNDDALIRFRVDGILREFAIFEKDIYEALVFHVKFLAC

LNLAESRKTQDGSFELDFENERYDFRVSCLPLIYGESVVIRILKHDKEILDLYKLNLGNKNLEILKKILH

RPNGMILLTGPTGSGKSTTLYACLNELKSIEKKIISAEDPIEYKIPLVQQILLNSKVGVEFNSVLRAILR

QDPDIIMIGEIRDEESLDIALKASLTGHLLLSTLHTNDALSTIDRLLDMQAKSYLIASALSLVIAQRLVR

KLCPWCKQKSKKHYIEFEGEFFEPKGCERCHHSGFFGRELIAECLEINEDLACAIRENQDKTILMELAKK

YGFQTMFEQGLKKAKEGLTSIDELLRVVR

>WP\_011812693.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MMLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMF

QNYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCQLL

LLDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSDQIAFLEKGKILAHANPKELYFKP

DFKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFCRLKLLYKNII

FFILVSSSYDLEEKISFDIINF

>WP\_011812688.1 MULTISPECIES: tRNA threonylcarbamoyladenosine biosynthesis protein TsaB [Campylobacter]

MIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVGLSTLSIVKNIPL

FAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLDAI

>WP\_011799392.1 MULTISPECIES: replication initiation protein [Campylobacter]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKNKK

RFYENVVEFALKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTI

LDLRNFCKISNKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYF

KNLEYIKEKDKTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPPTKRERIEVSF

>WP\_011117558.1 MULTISPECIES: type IA DNA topoisomerase [Campylobacter]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>WP\_009883046.1 NAD(P)-dependent oxidoreductase [Campylobacter jejuni]

MKIAILCASGKVGKEISKEALKRNLEPVCFVRNSSKMNEFLPQAKIVQRDLFELDSKDLIDFDIIIDAFG

EWENLSLHKKHIECLSVILQGSKAKLFVVGGAGSLYMDENHTTRLMDMPDFPKEYLDIAKASAEVLEFLR

NEKGFKWVYVSPSAIFSPDLPKNNHYKIIGEKFEVNANNESKISYSDYASAMIDIVLNSCYENTRIGVIS

L

>WP\_009882934.1 MULTISPECIES: phosphomannomutase/phosphoglucomutase [Campylobacter]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIK

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKYLDDDIE

ENLEVEKYDILNLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKALNLKAHVMFAEPDGQFPNH

APDPTEEENLSAIREFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKDIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKALPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERAKELESMVFTLFNDIKARFKN

>WP\_009882805.1 MULTISPECIES: class I SAM-dependent methyltransferase [Campylobacter]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVSDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>WP\_009882158.1 sel1 repeat family protein [Campylobacter jejuni]

MRIFLTLFLFFNSLFALSELEEGLKLYEANKFDKAYEIFKSLCEKDISKACFSLAFMHESARGVSKDLNQ

AYKFYDKACKLGLANACSNMALLLQNQGYENEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASVKSALAFYSKSCTLGFGDACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>WP\_009882098.1 ATP-binding protein [Campylobacter jejuni]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLENNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FARIQLYERLSFIQKSAYNSEIKNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSTDINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFQKPDF

KDRLKIWEKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSKDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>WP\_002922491.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MKVRNLNISLKNNLLLKDINLDIKTGKTLMILGQSGVGKSLLGKVLVRLLDSNFTISFDELSFHNSCIFN

FNKEELRNFRSKVALVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWH

SYANELSLGMARRVSLALALLNQPQILICDEITASLDKENASKIISILKELKNTTALVCITHDLNLVNSL

ADEILMLEKNSSNLYSLDEFLRYYNA

>WP\_002911413.1 ABC transporter permease [Campylobacter jejuni]

MLKRLVFSIVVAFFSTFLCFVLLYFSKGSIAYTNGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGVSFLSGESVLKLIKERIFNTFILGFNALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKILPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSPIVAYFGGSALSFMMGTYVVESVFAYEGLGSLLFKSIIFKDYPVVL

ALIFFSVLLAAFFTFLSDIVARILNPRLRRLDFV

>WP\_002893372.1 MULTISPECIES: DUF342 domain-containing protein [Campylobacter]

MNFQVKTLETFNPFESLNHEQANTEQILDFRVIDFKLLCSSVKPAKTKTYERKDFDLFYADDFFVKNYNT

IIQKFLIEIYPKKSFPFTVKLRSNSNLTHLKASINLTENFKYYPNLKFDILQNIYKIMIKQKFLILRLDK

NLFTKIDDFILSIQKNPSIKELELEIAKGVDKIEHKSDEIIYHRNVEEVCFSENANYDEGNYCKPIEKNE

LLFEYIYRILGKEGRNLRGEILHLNPIAFLNNPFIIKDESIYVEELEDRIKYFSANYGFLNKDHSGYSVI

NNLKLSQVGLKTTGSIKTNTNENINLEITNFDISDDAIKSGIVNVQASDIKVNGSIGATKLYGKNISIKG

LTHAKSEIFAQDVFVAIHKGTLQADTVYIKNLENGTIIAKNVFVENCMGGKIEAENIYICNLLTDNTLYP

RKNLIIANNIKFKNNIVVSPLVSIENNSDTECENLKNLSLKIKSKLDDTISKMQNYYDYLIKNQIKIIKL

QKTKNPSAIEMKFSNLYHDIIKKYNHLSILYKKLIKLKYQIDAKLNFLNEMVYNVKIYIKAKNIGKDNFL

KFYPKTNTNLELKHHINLKDYEKVLYLEKGQQVSYIKSSHNYSESDIEEIKIIFEKLEKDNS

>WP\_002869420.1 ShlB/FhaC/HecB family hemolysin secretion/activation protein [Campylobacter jejuni]

MRKILVVLVLLQVFSHAEELNNNKIRELIESSPEANEPQNKNLKNTLKNQKSPVNFKEQNTTNITNSQTD

QNEAKVFVREYVLHIDNKDLTFKKLRISEKEIQDAIAEYRNQELSLQNLKDITNIIAYYCQVSGYPSATA

YIPPQDLSSNKVQINIAFGTLGKVIIKNNSGVRDYALESKLNKNLKGKVITTKNVENEIYKINEIYGIQT

NANLQSGDGYGESDVIIEVNKGDSATLTLYSNNYGTKETGRFRAGMSQSLNNIARQGDNLNFYLQDSDEN

QIDYGINYSTFIGNLKITPFATQGHYVLGGIYRNLGFYGDSMNVGVNFSYPVFLYTEYSLYLVSGFTHKK

IKDYYLDGLVSNEKTSNSVNLGIEGTYKGLENNVLSYTLNFTYGNVENDGDSSGFNGVNLGNFGKMNLNL

SNEYQFQERLTHIFQLNYQKVVGGAVLDSSESVSLGGPYGVRAYLEGEGSADNVVSGTLGIRFQTPLEGL

YLTPFYDIGYSWYENKEY

>WP\_002869363.1 MULTISPECIES: M48 family peptidase [Campylobacter]

MARQSSSLKSFIYKDECYFYSKKCIKTLRLRLNEKGEFVLSIPYFCTFKSVYEFLDKSSSWMNEAKKRFE

KKALKDDELIFLAKKYQIIFDENVKKTYFNKDKILCQNKAKLDLFLRQNAKKIFTFYLKKWSQKTGLFYT

HLSIKNMKTRWGSCNHNKAYVNLNLKLIQKSLRAIEYVILHEISHLKFPNHSKEFYTFIEHFMSDFRQRE

KEFLS

>WP\_002869342.1 MULTISPECIES: MBL fold metallo-hydrolase [Campylobacter]

MFVSVDFFKTFDISNSERLKAKKVQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFF

KPDLSDFNTPHITWLGHSSLFISFKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITH

SHFDHLDAKSIKALKEKARFFITPLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGD

GKNKTLWASFVMEFLSVDKRVFFSADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKE

AKDLNAKAVMPIHWGRFLAGTHAWNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>WP\_002869293.1 MULTISPECIES: rRNA pseudouridine synthase [Campylobacter]

MRINKFISHNTRYSRREADELIKQGLVKINNKIALLSDEVKFDDKVFVKGKRVQKRTQFSVIIYHKQKGE

IVSKKDDRGRKTIYDTLPRQFSTWLSVGRLDYASEGLLLLTDSPVIANALMHSDLEREYYLKVKGTVSKQ

VIEAMQNGLEIKNEKKGAHAKTKITSMSFAPFIDFEIFGSSGGYTKLRVVINEGKNRELRRFFGHFDLEV

MDLKRVAFGALDLGMLKAGKHRYLENGEYEKLRDFLKFNEIRY

>WP\_002869286.1 MULTISPECIES: cation:proton antiporter [Campylobacter]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIARILRLPLSATEIILGAIIAYFGFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYTLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKRIGFKNMILFGLSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAVIVMSMIKFLSNSKK

>WP\_002869201.1 MULTISPECIES: HAD family hydrolase [Campylobacter]

MNKTILFDLDGTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>WP\_002869165.1 MULTISPECIES: DJ-1 family protein [Campylobacter]

MSKKVLIPLAQGFEEAEFIGIADVLKRARELNPDLEVVIASLNSELLVKGANGISIKADCSIEDVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>WP\_002869127.1 MULTISPECIES: sigma-54-dependent Fis family transcriptional regulator [Campylobacter]

MNLVIVEDDINMRKSLEIALAEYEEFNIKSYKSATEALKKIDDNTDLIITDINMPGIDGIEFVKACENKY

DFIIMTGNATLSRAIEAVRLGVKDFLTKPFDVDTLVEAIKRAKIIREKTANKKSKKNEKKEENKDFFSTS

PNLEKTLNLSQKAAKTDASVMFFGESGVGKEVFSRYIHTHSKRSNKPFVAINMAAIPANLIESELFGFEK

GAFTDANATKIGLFEMANEGTLFLDEIGEMPYEIQAKLLRALQEKEITRLGSTKSIKIDVRIISATNANL

DEKIKNGEFRSDLYYRLNTVPVNIPPLRERKEEILGIAQKVLEDTCKEYDFKEKQLSQEAKNALLEYDFP

GNIRELISVVQRACILSENDEISSEDLFLEARSIKKDVKNLEKELICEVLLSVDYDKDQASQILGMDIKI

LNEKIKKYQIKDR

>WP\_002869123.1 MULTISPECIES: AcrB/AcrD/AcrF family protein [Campylobacter]

MFKLAINRPITVLMFFLALMIFGLISAFSMSVNLFPNVSIPLIKITSKINGDLNFVESKVTKEIENALSE

IDGVKTITSAAYDNFSVSVVEFKLGKNLEVAANDVRDKIGTLSLPSKPEIEKISSDSGSAISLFLYSKDK

IQLMREINDKIKPFLQRVEGVGKIEAKGFLEPQIRIELKPNELRKYNLNALDVANIIKSQNFKQALGELN

NNQDNYIIKGYFEATNLEELSNLRIKTGVFLSDIANISSLYEDEKQSALYEGKEGVLLELGKITNYNTLE

MIKNVKNALPILEKQIPKDISINMLYDKSLNIHKHLSQVIFDMVLGIFLTLVIVFLFLRNLSATLIACIA

IPTSIISTFFIIDLLGYDLNRLTFIALTLSIGIFIDDAIVVIENIAKKLKTYPPLQAAFLGINEIGFSVL

SISIVLLCVFIPISYMNSISGLFFNALGISVASGIVISFLVSVFLIPSIGARFLNPKENKFYEKTEAFFE

KIEQKYENLLYKILQNKVKFILATLVFIGLSFALATRIGLDFLPMEDDSEIQVLLESKKDLSLEAMKEKS

LNLLEKIKNDSNVKYAFLLVGYDDAKDATKAKIYVKLKNLDERNLRQTAIVSLYRQKFQDESLKIKILEL

PKIEGAGIDDPVQFLILGDDLNTLKEAASQAKEILGTNARIVDISDNANATKDEVALHINKEKAKLLDVN

PQYIAGVLGYSFSQLSVGSMDRGNSKDDIILSFAPEFKKDIEALKRISIKNNQGINLELSSVVDFIYSKD

LKTINRYNKNRSVKITAGVNDLSLGAVQKLLLDNMDKILNNNPSLSYAFSGFINLLGETVQGFAMAVALA

FVLIYLVLAALYESFILPLIIMITMPLAFGGASIGLFITGHNFSLFVLIAIILLFGMVGKNAILLVDVAN

KKCHEGLDPDKALLIAGKSRLRAILMTTFAMIFAMLPLALSRGAGYEANSPMAIAIIFGLISSTLLTLLV

VPALFKFCFKLDSKLRKIYEREKLN

>WP\_002869096.1 MULTISPECIES: aminoglycoside N(3)-acetyltransferase [Campylobacter]

MDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTFSYSFCKNEIYDKNKSKC

TVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILTRNNAKIVYLGADWAHTF

IHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIAKLLEESGSLKKKSFGGT

NISAIDTNDFKKIIIQALNTDKYILVRKD

>WP\_002869095.1 MULTISPECIES: class I SAM-dependent methyltransferase [Campylobacter]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>WP\_002869087.1 nickel-dependent hydrogenase large subunit [Campylobacter jejuni]

MSQKIIVDPITRIEGHLRVEVVVDDNNVVKEAYAGSTLWRGIETIVKGRDPRDAGFMTQRICGVCTFSHY

KAGIVAVENALGITPPLNALLTRTLMNAALFLHDHIVHFYQLHGLDWADVVSALSADVKKASDEAFKYTP

NPYATGADKLLEVQQRLKTFVDKGNLGPFANAYYGHPTYRLTPEQNLIVLSHYLECLRIQRIIAQCMAIF

GAKNPHPQSLTVGGVTCVMDLLDPARMGEYMVKFQEVQDFVNRAYYPDLVMAGKAYAHEASVLNDIGVNN

LYTFKEFQIGRDEWLFESGIIKNGDLSKVYEVEEDKITEEATHSWYADNEPLHPYDGKTNPNYTGLVDGE

SVDHHGNNVHSKVFDTKGKYSWIKAPRYEGNPMQVGPLANIVVNYAKGNPNVVPVVDEFLKETGLPLNAV

FSTLGRTAARCIEAKIVANNALKAFNNLVENLKVDQSTCAPYVIDNSKEYKGRYMGHVPRGTLSHWCRIK

NGVIENWQAVVPSTWNASPKDANGVGGSYEQCLIGLKIADVKQPLEIIRKIHSYDPCIACAVHVMDTKGN

NLSEYKVNVNL

>WP\_002869083.1 MULTISPECIES: low molecular weight phosphotyrosine protein phosphatase [Campylobacter]

MKKILFICLGNICRSPMAEFIMKDLVKKANLEKEFFINSAGTSGEHDGEGMHYGTKNKLAQLNIEHKNFT

SKKLTQKLCDESDFLITMDNSNFKNVLKNFTNTQNKVLKITDFSPSLNYDEVPDPWYSGNFDETYKILSL

ACKNLLVFLSK

>WP\_002869037.1 ShlB/FhaC/HecB family hemolysin secretion/activation protein [Campylobacter jejuni]

MIIIDHSNTSDDNNSKTINTKKNTQKDNNNTQKNQPNLSNDNTLKTKTPNSNTPSLKNTSKEESIHKVSF

SFHITNKNINFKDLGLDEQVLQEALNDYKKESISVQDLQDIANIISYYVQVSGYPAATAYIPQQELKDQI

QINITLGVLGKYVVQNNSSVRDYAIESKLPNHKGEIITTKLVEDAVYKVNEMYGIQTLASLKAGDNPGET

DVVIETTPSDSFVSVLFYGDNYGIKESGRYRGGASMSFNNIAHQGDSLNAYLQRSDEAQTNYGISYTTFL

GNLKITPSYSKGNYALGGIWREFDFIGTSENLGVDLKYPLWITTYNSFYLTSSYYHKKLSDSKFDILTFD

KSSDTISFGIEGVYNGISNDSFSYSANVSYGNVKDEGMTIVGIGTSKVGGVEFGKFAKLNVNLNNAYFFN

DTFTHLFSLNYQQVINGATLDSSETISLGGPYGVRAYNNGDGEGDNAVVASFGLRMATPLKDFYITPFYD

IGYSWYENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKKYKLDDDYSSKAYVSFGKYF

>WP\_002869010.1 HAD family hydrolase [Campylobacter jejuni]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARSYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYHCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNANIGTLILVNEEKKEGDFFRQFKNLKEILSFFKEKDI

>WP\_002868994.1 MULTISPECIES: NAD(P)/FAD-dependent oxidoreductase [Campylobacter]

MRKSIAIIGGSIAGLSAALFFASAKNKELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSDIKELEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>WP\_002868987.1 MULTISPECIES: DUF262 domain-containing protein [Campylobacter]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMNNILDDECLRLFSQAEIIFYSFGQTNDSTAFKLGEVTESKDEFKNRIIDDCNKCIKRAGYYDI

NEFISEISEDNYEWGKYFHYLFLTYNNVGIEECMKLIDEKIYAFTIEHIIPQNIINNGLLKNYKFENEDD

FNKLKNTFGNLIPLEKILNSICSDRSLLDKKEYYKKSKLSCNLSFANDENFLNFEKKQIIKRNEDFTKWA

RKFFVDFLKITQK

>WP\_002868921.1 TolC family protein [Campylobacter jejuni]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKENNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>WP\_002868907.1 MULTISPECIES: MBOAT family protein [Campylobacter]

MTYFSLEFSILMIAFFAIYWTFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKREFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYVDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYIYIPLGGNRKGIPRTVANILIAFILSGMWHGNTLAFIVWGLLHGIGIVFIHLLTLSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLEDAIEYFKACYYNFFQIPSYNDIYMLVAFGVLFMIYPLFINFKEYCI

KILNLTPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>WP\_002868904.1 TolC family protein [Campylobacter jejuni]

MRVIFSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALTRADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIEQSLLR

AKQNLLSNDQNRNLLIKNLQDLLAKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFTYEQL

LISYEQALQSAMNEFALNYKDYQSNTLLLQNLQSINIKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYQITALSFNDENLEFLKY

>WP\_002868881.1 MULTISPECIES: MCE family protein [Campylobacter]

MENRANYFFVGLFVFGVFFASLGFILWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIQGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEILLQNLAELSANLNANSKNLSLNLSNASLKIGKMAN

NISLSAQNFNSSLKDIKESTMILKKFIKKADEKLNTYDDIKASLMQNLELFKRVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>WP\_002868860.1 MULTISPECIES: DedA family protein [Campylobacter]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGVLSSQGKMDLSFCITLAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKIALAMIKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFIKFFIINTLASLAWAIVLG

FTAYTFGYVIEAIFDKLSLYPYAAPLFLLFLAGIIWLYLSKFSKK

>WP\_002868835.1 TonB-dependent receptor [Campylobacter jejuni]

MHPNKKAFKLSLFALLLITNLNAQESNKAINLQKVVVSTTGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGHAINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGGLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWEFNLEAFWQNQKINYLKDEISMKGTTAYQNGSGFEDTLTGISLKNKLNYANNSYFIFGY

EFANHDAKRTSIIHYDVNAGRFQMSHTMTTLMDMDKQSHSIFALDSHEFNDIFSISGGARYEYSLYDTNR

NYTSNMIIPGRPNIKTELFSTDDTSHNFAFEITPNFKYSDTGKLYIKYERGFVSPSPAQFVNKDKNLQKY

YSANLNPEIFDTFELGIDDFWWDFYGFNLTLFYTLSKDEISYLGNPHSTSGSWWKYYNIDQTRRLGVELS

LSQNFLDDDLIFRESLTYLDAKISKGVNDGMRIPYVSKIKATAGFEYAWNKNFSNFIDLTYFSRAKDGGA

IDENTGKMSKNSWIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLVGNGRNYYVEFKY

AF

>WP\_002868789.1 MULTISPECIES: Crp/Fnr family transcriptional regulator [Campylobacter]

MKDYLELLSSVGKLKKFQKNSILFYEGEEAKKFFILLKGKIRIYKSTASDKEITLHYFNPPNFIAEMPAF

KKLNYPANAIFEEDGEILEIDFINFQNLCSENKEFNFLLISSLFDKIKILEKKLSQNALDLRTRLLKYLL

ENEKNLDTISQKQIAIDLNVRAQSLSRVLKELKISELIDTKKGRIEILNKDMIMKELW

>WP\_002867950.1 MULTISPECIES: alpha/beta hydrolase [Campylobacter]

MAQTQLSYKNKTYQISYEILGDLTLPQILILHGWGANKELMKQSFYPFLKDFCQIYMDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNVCFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLSPMMYETFKNVVDEDFGEIFAKQKAKSLVFWGKSDEATPLYCGEKMHQLL

KNSTFYPLEGDHFFFLKYSAFIAQKIKEI

>WP\_002866128.1 MULTISPECIES: MarC family protein [Campylobacter]

MGSELYLMFFAAITLLAILNPFGNLTQFLAMSDGLPLMLRKKLFRTILYTAFTIVLVFLLSGPLFMNYIF

RVSLDDLRVSGGLVLIIMAIKNLLFSTKIATKDFSSYQDMDDKEILRQSLIPMAFPMLVGPGTLASVIVI

AEDGGLDVALGGVMIAFIFMFILFHFAATIEKIVGKLILHVFSRIAQVFIAAMGFKMIIVGLKDIFNL

>WP\_002860769.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLKVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLAVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDALCKLNLKSARIDALTSPLMDMIGSVGVAVVIIVGGREVINGSMSVG

SFISFVSALFAIYTPLKRLSSLYGKLQGAVAASERTFYLLDLEPQIKGGSKELKNIEKISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGTSGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHAKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANACEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLIFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>WP\_002859441.1 MULTISPECIES: DedA family protein [Campylobacter]

MFDFLYNDISYLGLFMVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIVATLGNTLGSLSTYALAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSIFAFFTFLPLVGDLFALGLGFAKYSFLKTIFFILLGKLSRYAFI

IFIANSF

>WP\_002857365.1 MULTISPECIES: chemotaxis protein CheV [Campylobacter]

MFDENIVKTGSNEMELVDFRIFKQGHDKVYEGIYGVNVSKVREIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

EKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>WP\_002857348.1 MULTISPECIES: metal ABC transporter permease [Campylobacter]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMALVDS

VVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMVLASFLSMIFCVLGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>WP\_002857282.1 MULTISPECIES: tRNA1(Val) (adenine(37)-N6)-methyltransferase [Campylobacter]

MSDLITLAQLSQGYRYNSDSLILADFILKQGIKGAVFDVGAGCGIIGILLKKNIANLSLSLIDIQKENIK

LIEKNLKSNQIQGDIFYDDFNQFQSIKKFDFIVCNPPFYRQGAYKSEDQHKAISKFQEFLPLHSFLTKAN

SMLKPNGTLYFCYEALALDEICFILKDMKMKITKLCFVHTHQNKKARLVLIQVKKGSKSPCEILPPFFVY

ENEILSKQMQEIHLRFRLKSYDI

>WP\_002857062.1 MULTISPECIES: pyridoxal phosphate-dependent aminotransferase [Campylobacter]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFDTPQIIKNAAINAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

EGLEENGFKITAEQLKKAITAKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTQITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGECDKDIEKMRQAFEKRRNLALDILKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYATSDELIKKGLERIANFIKNYK

>WP\_002856934.1 sodium:alanine symporter family protein [Campylobacter jejuni]

MNLDIMLDFANKASDIIANKIVPNTDIIMVVLLIVCGLYYSFLTRFVQFRMLSSVFKILTEKNEGHTKEH

ISPFQALMISTASRVGIGNIAGISLALATGGAGALFWMWVMAFFGGASAFAESTLAQVYKSKDDTGGFKG

GPAYYIKKALGSHFFGAFFAFILIITYAYGFNGLQSQTMTSSFKVYYDMFNPNAAVDFASSSWPMIIGIV

LTIFGAWMFFSHHTKIGKISSLIVPFMALAYVLLAVIAVLMNFDKIPSVVHMILQSAFDFKAIFGGFAGS

ALVIGIKRGLFSNEAGMGSAPNAAAAALTSHPAKQGVIQAFSVLIDVVVCTSSGFLVLFSMAYLGLGESK

IDGGMPLVQEAMREYYGSFGIHFITIAIVLFAITSLIGNYYYAQANVKYLTNSKFAMNLFRITAVAMIFI

GSQMNLKLAWNLADLTMAFMATTNIISLLLLGGIVNKVLKDFNTQQKSGIDPKFNASKLGIKNAECWD

>WP\_002856871.1 MULTISPECIES: MOSC domain-containing protein [Campylobacter]

MKIQSLQIGKIKNYKNFQSAFIKDTYLEETQIDFLGILDDQIADKIHHGGYHKAIFANSCQNYPIWERFL

NKKLNFGSMGENLSIDGLCEQNVCIGDIHQISNAILQVSEPRKPCVKISKIHNNSNFTHEIFKTGLSGWY

YKVLQVGQIRKYENIKILEKNSTSLSVFELNQLFYSPHQALRQNPILLDKLEKLNSLISQNWHETIHKRL

KNTYDISYMDSL

>WP\_002856856.1 amino acid ABC transporter ATP-binding protein [Campylobacter jejuni]

MIEVKNLQKKYGELEVLKNINTTISKGDVIAIIGPSGGGKSTFLRCINRLELADSGEILINKQNILDKEI

DINKIRQKVSMVFQHFNLFANKNVMENLCLTPIKTGILSQEEAIKKAKILLAKVGLADKENIMPHKLSGG

QKQRIAIARSLMMNPDVILFDEPTSALDPEMIGEVLSIMKDVAKEGLTMLVVTHEMGFARNIANRIFFMD

KGKIAVDASPKEVFENLSNERLREFLNKVLNH

>WP\_002856820.1 MULTISPECIES: TatD family deoxyribonuclease [Campylobacter]

MFLNLDFQDGLRIVDTHCHLDSEAFKDDLDETLNRAFKNGIEKIIIPGADIKDLPYAATIAHKYKNIFFA

AGVHPYEIDNYDEKILRQYLCDEKCVAVGECGLDYFRFKSDLAEEIQKEKENQKKIFIAQLELAIEFKKP

VIIHSREANHDTYEILHGYSKDLVGGVLHCFNASEHLLTLFEEGFYFGIGGVLTFKNAKKLVEILPKIPK

DKLLLETDAPYLTPEPYRGKRNEPLLTQFVANKMCEVLNLSRKELLEICFNNSEKLFFKGY

>WP\_002856526.1 MULTISPECIES: iron ABC transporter permease [Campylobacter]

MLNLNTHSKILVIIGLLVAYIIASFTALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIG

MLLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKAS

IATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNEL

NILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCT

AFGGLFLLICDTLARTLLAPVQIPIGILTAFFGAPIFLYLALSARRFL

>WP\_002856156.1 MULTISPECIES: bifunctional (p)ppGpp synthetase/guanosine-3',5'-bis(diphosphate) 3'-pyrophosphohydrolase [Campylobacter]

MKPIDEELLLEQLIDNVKNCKDLEAAKALLFEICGHDAILEKAVDYCIFCHEGQFRKSGEPYAVHPILVA

TLVGFLSENKSNILAALLHDVIEDTNCTEEELREQFGSEVLKLVLGLTKIIEIREDNLISSKSKKSLTKS

ALTFRNMLLASIEDVGVLIVKLCDRLHNMLTLDILREDKQKRISEETLVVYAPIAHRLGISSIKNYLEDL

SFKYLMPDEYKLIDNYINSNNQEMQLGLNEFISKIELLFLSNGFRQGSFEIQKRIKHSYSIYLKMQRKGI

GIEEVLDLLGVRILVEKVSDCYLALGILHTHFNPLVSRFKDYIALPKQNGYQTIHTTLFDAKSIIEAQIR

TFDMHKIAEFGIAAHWKYKEDGSVVAPRLDWLTDISMQSINNLENAEDYNAIELYEYAKDSLYVEDVAVY

SPKGEIFTLPRGATVLDFAYEVHTKVGLHAKSAYVNRIKVPLLTELKNGDIVRVVTSNDKFYRCSWIDSV

KTGKAKASIREFCKQKIREINLASSINMLSFIFGVDKNRIETWIEKENLARRIRQVATDSAYLKDIVNGL

KKYAKKSYWFDKYEIKEQKIGNFTLYCNHKIANVDFDFCCHPKRGDAVLAFVKGGNAIVHHKLCDRADKM

IDNNQDMVFIKWDSNIPKSYKLIFSLENKKGVLAEFLAFLAKMQINLLTINLSSDLNSAVDYFEITIEFP

DNINPDSVKDRLKSRCKILDFTSLNDAYKEG

>WP\_002856032.1 MULTISPECIES: nitronate monooxygenase [Campylobacter]

MNLQPLQIGKHTIKYPIFQGGMGLGISWDRLASAVSLNGGLGIISSVGTGYYEERKYASKELNAKPYGSE

NFYSRKGLQALINNARKVCGDVPLGCNILCASNDYARIARDACEVGFNVIVSGAGLPTNLPEFTADFPDV

ALVPIISSAKALKIICKRWQSRYNRLPDAVVLEGPKSGGHQGFTYEQCLDPNYQLEKLIAPVVEEVKNWG

SFPVIAAGGIWDKKDIENAISLGASGVQMGTRFIGTFECDASEEFKSVLLASKEEDIELIKSPVGYPARG

VRTNLLNLVDKRMGPKINCISNCVAPCGRGKEATKVGYCIADRLFDAWSGKKETGLFFTGANGYRLDKLI

SVKELMEKLVNGE

>WP\_002855907.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MSQECKELIILVVEDEIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSAYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGKEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>WP\_002855813.1 MULTISPECIES: RDD family protein [Campylobacter]

MKENLQDRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDRLIQAKDLFETTQIIGNFYLGFILLHF

SYQAIFTYLYGASLGKILCKIIILDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>WP\_002855787.1 TolC family protein [Campylobacter jejuni]

MLEKYLKSAIFLALYPLAMLASNLHEFIALSQNNESYLIKQMQSEQANLDKEQAFRNYLPSLSLNSAYVA

NNKDRFIIDPQESLFAKVSLNFLLFDGGAREANLRALESREKLSFLDKEQNKNYLALNAITLYFNTLSLE

KILLANQQKVSFLKSTFKRLQKFYDAGLSSKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSDTDF

KVQGNAFLENPQQEKSQNYEVMIAKEQINLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFANL

ADQFLEKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARFSERKNKEELNYLDKSLKVLQEQ

ILALNLSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNS

KVKE

>WP\_002855354.1 MULTISPECIES: MmgE/PrpD family protein [Campylobacter]

MFYSEILADFIFNLKYENIPNAVVQRAKELMLDSLGTAIAASKEECVLNAFKAFENLSTEKNTPIWINDQ

KLDPIYAAMLDGIASHALDFDDTHTEAILHASAILTPLCLSYGFHVSKDAKKIIKAFIIGWEIAARVGIA

SKGTFHKRGFHTTAIAGIFGSVSASAILLDLNKEQIINALGLAGSFASGVNEFLSNGSNSKVLHIANAIK

NGIMVAHFAKNNMSGPLSIFEGRDNIFKCFGIEEECDKTELNKALGEIWQTMQVSIKPYPSCHFAHGLID

CAIALKNDGLKADEIKSIHCFVDEVPISFICDPLEAKYTPNSAYEAKFSMPFLMALGFFDGKITLNSYEN

LKREEVLEFAKKISYEKRKSQGFPKYFPGHLEASLQDGHIIQKDVFINKGNFDNPLSFEELKAKFLANAQ

IYLDNAKANKILDQIINLENLNHFSF

>WP\_002855142.1 MULTISPECIES: gfo/Idh/MocA family oxidoreductase [Campylobacter]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNRNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSLYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCIASIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFSEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>WP\_002855085.1 MULTISPECIES: peptide chain release factor N(5)-glutamine methyltransferase [Campylobacter]

MTIKNALMEAKSSLKGYENEAVFILCEYLKKDKAWLFLNQDIQIDHEPYFELIRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIVLAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIKENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKLTNMRYDKK

>WP\_002854841.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MDFDFILVQAPAFLTAAWLTIKLSFFGIIFSLIIGLFCILMSYFKIKILENICKLYIEFSRNTPLLIQLF

FLYYALPKFNIHLEQIPPLDLICLSVEETLRPSFACAIAGLSFLGGSYMAESLRAGFEAIRKQQFEAGLS

LGFSKFGNLRYVILPQALAISMPSISANIIFLIKETSVVSIIALPDLVNLMKSLNSLTYKTDELLFLLFM

GYLCIILPLSFILLKFEKRLLHA

>WP\_002854239.1 MULTISPECIES: HlyC/CorC family transporter [Campylobacter]

MDPSQVLDLNQTSTASFDAGYSILMVVVALALVFLNGFFVLSEFSIVKVRRSKLEEMVKEKKAGAKKALE

VTSRLDTYLSACQLGITLSSLALGWIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGE

LVPKSIAIAVADKAVLFIARPLHWFWILFLPCIKIFDFLAAISLKLFGIKPAKESELTHSEEEIKIIASE

SQKGGVLDEFETEIIRNAVDFSDTVAKEIMTPRKDMICLNKQKSYEENMQIICEHKHTRFPYIDGSKDTI

LGMIHIRDIIQNELSHKSQNLDTFVKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDI

MEEIIGEIKSEHEEDSYKKLAENIYEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDR

IEDELCYYEVKKMDGNSIERVKVVKKTNKDEE

>WP\_002854219.1 MULTISPECIES: peroxiredoxin [Campylobacter]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>WP\_002854106.1 MULTISPECIES: HAD family hydrolase [Campylobacter]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSREIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFVKHYEQSVVLFEGVKELLEFLKNKNCFLAIATNAPQSSLSSILKKHQIIPYFDKILGVSLGIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLQKYL

>WP\_002854047.1 MULTISPECIES: DedA family protein [Campylobacter]

MEEFLKNLLYQYKDLAYIIIFLWCILEGELALILAGIFAHQGHVNLGFVIFIAGLGGFVGDQIYFYIGRY

NKRYIQKKLKTQRRKFAVAHLLLQRFGWPIIFIQRYMYGFRTIIPMSIGITRYSAKKFAIINLFSAWVWA

SITILLAWYFGEQIWKMVTWAEEHWYYAAIIIIAFLSLLLFGFKQMEKAILKDKRKKS

>WP\_002853490.1 MULTISPECIES: CinA family protein [Campylobacter]

MKHLLYLIGDELTINEKFKNYIYRTYEEKFKEINEIRIQNKTDKDLPFLLENLLNQYDFITLFTSPLHYA

TVAKILATLNDDNLILKDDTLVPDKAEFSKNSFVCNFSNSKINVVKINPSEKLPDLLGHIKLNFAYFCIF

GMDDESAILLLQTLTKSYEISIKSTKFLDNLVLIKATCANFGKLDGFLNSVKNLFGQKVFLGKDPIHFIS

SKLLEKKLKISFAESCTGGLCASTLTKISGVSEIFEGSIVSYSNRIKHEWLGISESVLENNGEYSERCVY

FMLKGIFKTANPDFALAISGVVGEKDEGKIKSGTIYIGAMFRDGTFIQETLYLDGDREFMQEQAVLATFC

LLLKLKPEIFEI

>WP\_002853205.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNAQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELAELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSELSLRAYVKNLRKILGKEKI

INQRGRGYCYG

>WP\_002853125.1 MULTISPECIES: HD family hydrolase [Campylobacter]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

RILPFVPEGLRAEFSYILGIREGRNGESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>WP\_002852725.1 MULTISPECIES: YihY/virulence factor BrkB family protein [Campylobacter]

MKNFFTILLNLRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDV

VATYIDTFLKNSVNLGIVGLIAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLS

FYISGFIQQTLDDYKIGFNFFEILPFVIIWGLFFISYSSSVHKGTLKSLALVSFGAGTIWYIGKNLFVYY

VVYNKTYASVYGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKS

>WP\_002851697.1 MULTISPECIES: ParA family protein [Campylobacter]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>WP\_002851467.1 MULTISPECIES: SAM-dependent DNA methyltransferase [Campylobacter]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>WP\_002851227.1 MULTISPECIES: flavodoxin family protein [Campylobacter]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKIF

>WP\_002851188.1 MULTISPECIES: SirA-like protein [Campylobacter]

MKITYSLNLQGEACPYPAIATLDVLPKLKSGEILEVLCDCPQSINSIPQDVKNRGFKVLEIDQSGPTLRF

LIQKP

>WP\_002826355.1 MULTISPECIES: chemotaxis protein CheW [Campylobacter]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>WP\_002779488.1 MULTISPECIES: molybdopterin synthase sulfur carrier subunit [Campylobacter]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>WP\_002776579.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MAYLKIKNFKKAYGDKIIFEDINFSAKKGEFITLLGPSGCGKSTLLRCIAGLSQINGGKISLNDKDLTKL

SPQKRNIGMVFQNYALFPNLNVFENVAFGLKIKKMDKKDIEKRVKKMLKLVELEEYAKTYPHKLSGGQMQ

RVALARSLVTKPDLLLLDEPLSALDAKIRKHLRVQIKEIQKELELTTIFVTHDQEEALELSDRIILMNEG

KIIQNSNANNLYLLPESHFVASFIGNYNILSPKELDSLGLKHDFKKDIALRPETIEISNEGLEAKIKEKS

LLGNIIRYRVRVQEIEFKVDTLNFSTHSTYEAGDKIALKFNLSLAKELK

>WP\_002857514.1 MULTISPECIES: orotidine-5'-phosphate decarboxylase [Campylobacter]

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>WP\_079254199.1 MULTISPECIES: 3-isopropylmalate dehydratase large subunit [Campylobacter]

MTMAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTK

SVDLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFG

ALAFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELI

RNLSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESIT

LDVSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCT

NGRLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKA

NSGQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>WP\_079254198.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKMRYCFILFLSLVLSSNLLANNFSQKKVIKIEKSADSFEVIDLNQNVANPNLNQQKALFDSSTLIEKKS

QITKDKDIDFAIVLTSRKNFGYFLDGFRVSDKEFSTLFAKNLIQSLKLNWVNSAANGIYQSPKTLSYFSP

NDAKLINVSPFLTQEKDKAKMYAKFTDYVVVVNLQDFYVNITNYFITTSKEGVANVNFKIISTSNGKILV

AKNAELNLTLKNQDAKQNYQDIVNQMPKMLASVIDNEIKKLKLTIN

>WP\_079254197.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MMLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLSIEI

GNELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDF

ITGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSN

KIIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRMGEEKLDQLEYDKWYCSAYVGSIASQISDG

LPGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQI

YLIFAGENLIVALFAALFGFIFGTAFSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQ

LSAAGVLYGR

>WP\_079254195.1 MULTISPECIES: formate dehydrogenase [Campylobacter]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARIUHSATVAGVANTFGYGAMTNHLGDIQRSKC

IIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYARIRPGTDIAFMYGMLKIIFDEGL

EDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAKNKPTTLIWAMGLTQHTVGTSNT

RLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPLNEATWRYYAKIWGVDYEWLLGN

FVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGITSTAQQVKVKEGLEALELLVLA

DPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDPLYESMEDQEILFELAKKLGFYE

DFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWSPERLKKHTLYWDKFDEVTLEGKDEVAGEYYGLPW

PCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYEGESLLAKNAPLNSPIDTGYPQITKDNIEKVLGIT

LSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNAKARAVVWTFKDKIPLHREPLHSPRNDLVQKYPSF

EDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLVNLNGAGMENRASMYLTRLTPEMFCEINPELAKEQ

DIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLPFHFTGVMQGVDLTHNFPEGTKPYASGESANTVTN

YGYDIMCQIPETKGGLCRISKDGK

>WP\_079254194.1 MULTISPECIES: selenide, water dikinase SelD [Campylobacter]

MQYKNQNLTHFVKAAGUAAKLSPGGLKTILNFMQKTPALLSDIGNNEDASVYQISPDLALVQTLDFITPI

VDSAYHFGAIAAANALSDVFAMGAEVINALNIVGFDTCNHDLNILKELLEGANDKVKECNALVVGGHTIE

STELFFGLSVTGKVHPSKFIANNTSKIGDCIILTKPLGIGILSTALKAQMLNQKHLDIMLKNMMELNYKA

SQIALKFHPSAMSDVTGFGLLGHLKEMLNKNISFEIFESELPFLDGVKEYFNMGLIPAGAYKNLEFIKEL

TPDLNEEKLLLCDPQTSGGLLISISEKDSLECLKKLEDENIQAKIIAKVVNKQENDIIIS

>WP\_079254189.1 MULTISPECIES: UDP-N-acetylmuramate--L-alanine ligase [Campylobacter]

MMQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAA

IKEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGS

NMIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDE

FLKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIET

IRTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLAT

NLKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGA

GDISNKLRQKNE

>WP\_079254188.1 MULTISPECIES: endonuclease MutS2 [Campylobacter]

MMNDTKEELISKLDLNSYLEEFKALFARDKEIFLQGDSNLHFKRIHELCEVEFPTMPELSNLDKALVHLS

KQGILHLDEIFEFVKIFRYFEKLKKLKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDERLVDLN

AALRLKNENIIVEFKKFCHTKALMPYLIDTQIHLISNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLS

VENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQS

TDLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGAF

KEFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLITNNLKI

IITTHHKHLVMLLAKNEQVELIAALYDEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGD

DKENLEELVGKNINLELELKAKLENVEKKEQKVDEILLSLKDQKEKNEQEFRTSLRNLEFKFHKAIEEAK

KTIQLKDTKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRV

PLKLLKKSTPTPKISPKTSISVAKPTNLSVSLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTG

KLAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>WP\_079254181.1 MULTISPECIES: carboxy-S-adenosyl-L-methionine synthase CmoA [Campylobacter]

MMKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIF

LANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELL

DKIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNM

LEKAGFKKIESIFKWANFETFIAFKD

>WP\_079254179.1 MULTISPECIES: hypothetical protein [Campylobacter]

MYFKKEGKMKNTLIIFENSLSNLGKDEASDLLEDLSFNLAYKQISHNPHETKKVLNSLLVEFLTILKKLD

FFDDENVTKVIKALVKASIVDAQNSLYEYISEAELLNKQIENQKNLIKNQISDNFFEFENILQECSFCDE

FSGGLNDAILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSII

LNTAFEIANESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDVSLKSKELIGIEDDFIALLKK

EIQLQNDPCKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEI

FELEKIASEKYKDLNSKKAKKLGVRLWEKAKKIVKK

>WP\_079254178.1 MULTISPECIES: ribosome recycling factor [Campylobacter]

MIMLNEIFNKQKTQSEKSLEALKKDFTTLRTGKVNIHILDHITVDYYGTQTPLNQVATVLASDASTISIT

PWEKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDA

VKKLEKDKAISEDEAKKAYDEVQKLTDTYTTKIDESVKSKESELLKV

>WP\_079254175.1 MULTISPECIES: oligopeptide transporter, OPT family [Campylobacter]

MMYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVVISMAVLSLFKTSNILENNMVQ

TQASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRTMVVESKLAYPEGRAAA

EILKVANKDQSSKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGA

GYLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSAKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELL

KPVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVG

TLVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTS

VILATAAISNDNLQDLKTGHLVGATPWKQQVALLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASS

ALAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILKGTQKMSLPPLAVGIGIYLPPAINIP

LVIGGILKYIVMQHLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENP

LALNLANFHDSELFALIFFVGVVLYFIKRIVKKDA

>WP\_079005306.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTMKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAYKVGFPKDEWEDENI

SNP

>WP\_074468975.1 MULTISPECIES: bifunctional folylpolyglutamate synthase/dihydrofolate synthase [Campylobacter]

MQRLMNNIMKVENFLAQKSINYDKIDRFLMFRMYEKYKKYFKNIPIIQLIGTNGKGSTGRYLTQLLENLN

YKIGHYTSPHIFSFNERFYLDGKIANDEELEQAHIRLEEIFKQDLQKLSYFEYATFLAMILFQKCDFIVL

EAGVGGEYDATSVFERRMNIFTRIGFDHIQILGNSLEDIARTKLKVMAPIALISDEQEQNVLNLAKKIAF

LKKANLQVSSLNPFLKEKFEIYCEKFVLPCFLKHNLKLALKACEILTSQEKTLEALKKLQELNLQGRCQE

ISPNFFVDVGHNPMAAKAMLDKFQGEKINLIYNAYLDKDIFQILNTLKPIIDTIQIYKYKSAERKLADDE

IYSIASKLGIQCKEFVKLEENKKNLVFGSFMLVENFLKEWCGKK

>WP\_074468912.1 MULTISPECIES: hypothetical protein [Campylobacter]

MMKINSLNKINFIKSTDLLYAQRTGISKEDELFNNLTADFKLSKPFDYQIAFFKHNEIYHCFLAPVYKLK

KSRFCFPEPLIFQALFDERFIEESDYCVLNLYDQTLYLYFYQEGKFINLKKIENFNPSNMDLFFKQNRFI

ELLKHYESKLLLYQDLDTIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISF

KIILIFIFSFSLSMMILLFKDFIEYKQNKEIQNKNFIIQEEISKLKQDKQKLLTNIQDLNFTLSNKISST

QQQFHILSTITKEINLDKNKAIILNQIISWLNSNELKITNLEFKQTKIILSFIDENHFKRALENLNSAFK

ILDKNEETLNIILEVIHE

>WP\_072238758.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVGILSSKEEKLMINSLNSNLNYDYNTSNFKQDKNIDFKINKHGVAVITGEGALPYRGKKFEYNPKIFGL

DESISKKDMQEFNNFMKSNALKDPNKIEKSPLKDFNPAYTKWDPTTEKMMLGFFVSYSKMFHLGYDIIKK

ADEFYKEFDALISKDLSLNEFKTKYIDFKQRHDEFVKEYEMAMGDKMLLSSDNEIITQQSEKPFKAIQGE

SKNKETYKDDSTRNELVKKLLEGKFSTSKELELLFGMKFSDDDAGEFNKILSLNSTPKSIDIKA

>WP\_072225850.1 MULTISPECIES: thiaminase II [Campylobacter]

MMLFSNLIKENQKIWNAYLHHDFVKKLEDKSLKQENFLFYLKQDYIYLLNYAKCYARLALNSNTAKELRF

AMKFQNYIVEGEMELHRAILSLGINADELDAKDESLVNIAYSRYMLSVGENGDFLDMLVALSACAIGYAK

IGAEIINRLKNENLKDHPYKEWILTYGSENFQNEAKEFEDFVNSYTSSVSAQKFQKLSEIFHTVTRLEVA

FWEHSLRMELNL

>WP\_024088174.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGALMDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSI

QAFFKEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILVKSKIRRNEKFFKESEDSVGFCLLLMSE

FLRQNEDDLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQ

NDLSRSEFLRREANKQRRTREKSQGIS

>WP\_024088100.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSLLKNSSYILTLLSLFGFLLTWQRTVFSLFFLIPIFLTLFWEFFLFLKLRKNIIKEATLIKGSLFYRIS

IGDFYLYIFSFFLAIFGLISLFLNFLNLEKIDFVFIFIILPLLMIFLKKELHLQFVDNAYNDFRIVVIAS

FFTALFYAFYGLFFTYNEILNLELFSRKIIAYKSASFVYFDFLSEFLHFISNLKFFIFSYFGYLGFRALN

FIFDFFNFFMFCSLLAFVFNFVLKIKIKIIVLFLCFIMVLASYFLKEQRNNALKSEQEQILLWMNNFDFL

KDHNLSLIQKEKDLFEKDLKDLREIFKKNAFEIGIWWFSKEKEDLEKRINESLK

>WP\_011812755.1 MULTISPECIES: hypothetical protein [Campylobacter]

MMMKIVFKGKSSEYEIQRSCFCVDAFVIKDKIEERDGVDFITSNVDLLEFSDDSFTFEEIVKHFNICDTE

DMIIVEDFDMKSNKDNQNQEDDIEHNILKSEKIMHENTKQTSMQFKNLKFFSRIFKNENFLSDFKESKQE

VVTIKKHEKLEIFKNLSQEDQEISFVKIEILNYDSNEDSLIFNLDIFPSGMSYKYGILKGSMHIILQGKT

SSTMLFPFLKSMIYKNKSENSSEKIFTLMINQKKHYKLIANLS

>WP\_011812754.1 MULTISPECIES: MFS transporter [Campylobacter]

MEKSLLFHFRRIGVEFIIFSVYAVFSISWAATGSLMPLISNDLALNTQQATLITSMIVVAKIFGASFTAF

LVYKFGLKKGYFLGCILMSSGIFLSFVDSYSGILVIRFLTGLGSACALVCLVPIAQQWFEKKLCIL

>WP\_011812739.1 MULTISPECIES: tRNA pseudouridine synthase A [Campylobacter]

MMKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFV

NLEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANE

LLGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMS

EKELKEQIEAKKQYNHFLAPPNGLYLSRICY

>WP\_011812736.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLYKRKNIKFKNFVDLHKNLSLSKLFDFYSVFEGFEKLNILNFEDDVFTNIERILLDDYLKIKSYFALDE

TSSYALTLLAKNNRKRFSINRKIQHFKALSTLKYLLETGIIKLEYSKEAKKIKDKRQKIKKELRSYVVQD

KIIFSNHFTRFFFYFLKPNEKLILQNRYKEVLECIKEKFELYQSFCFEQLSRELLEKKFNINGVQSYWDK

NLELDLYYQDENLCFVGEVKFKNKKICKNILNLLKSKAKSLNLAPNYYIIISKNGFSKEFDKICEQNLLL

LDLNDFKILLEE

>WP\_011812724.1 MULTISPECIES: RsmB/NOP family class I SAM-dependent RNA methyltransferase [Campylobacter]

MQNILSSFAQEKNVCVFANTLKTSIEELEKEFLKQNLKFKKINAYCYLFDAKDKAILSSMKAFNEAHFYI

QNYSSYLCALNLEVKAGQSVLDMCAAPGGKSINLANFMQNTGYLACNEMSRDRFFILQKNLKNYGVNAKV

FMKDGKNIGNLCPLKFDKILLDAPCSTFAKIGFDLEKSYKEIKNIAKTQKKLLHSALKALKIGGELVYST

CTFTKEENEEVIENALKSEFKLELLDIDLENVEAKAGQSEEFAEISKCRRILPSLDYDGFFIAKLRKLC

>WP\_011812712.1 MULTISPECIES: DNA-directed RNA polymerase subunit beta [Campylobacter]

MCDMLDNKLGNRLRVDFSNISKQIEIPNLLQLQKKSFDYFLNLDNGESGIEKVFKSIFPIHDPQNRLSLE

YVSSEIGKPKYTIRECMERGLTYSVNLKMKIRLTLHEKDEKTGEKVGVKDIKEQEIYIREIPLMTDRVSF

IINGVERVVVNQLHRSPGVIFKEEESSTVANKLVYTAQIIPDRGSWLYFEYDAKDVLYVRINKRRKVPVT

MLFRALGYKKQDIIKLFYPIQTIHVKKDKFLTEFNPNDFMDRIEYDIKDEKGKIVHQAGKRLTKKKAEQL

IKDGLKWIEYPVEILLNRYLANPIIDKESGEVLFDSLTLLDESKLAKIKEQKSFDIANDLANGVDAAIIN

SFAQDGETLKLLKQSENIDDENDLAAIRIYKVMRPGEPVVKDAAKAFVNDLFFNPERYDLTKVGRMKMNH

KLGLEVPEYVTVLTNEDIIKTAKYLIKVKNGKGHIDDRDHLGNRRIRSIGELLANELHLGLAKMQKAIRD

KFTSLNADLDKVMPYDLINPKMITTTIIEFFTGGQLSQFMDQTNPLSEVTHKRRLSALGEGGLVKERAGF

EVRDVHATHYGRICPVETPEGQNIGLINTLSTYAKVNELGFVEAPYRKVVNGKVTNEVVYLTATQEEGLF

IAPASTKVDAKGNIVEEFVEARQDGETILARREEVQLIDLCSGMVVGVAASLIPFLEHDDANRALMGSNM

QRQAVPLLTASAPIVGTGMEQIIARDAWEAVKAKRGGVVEKVDNKSIFILGEDDKGPFIDHYTMEKNLRT

NQNTNYIQHPIVKKGDIVKAGQIIADGPSMDQGELAIGKNALIAFMPWNGYNYEDAIVVSERIIREDTFT

SVHIYEKEIEARELKDGIEEITKDIPNVKEEDVAHLDESGIAKIGTHIKPGMILVGKVSPKGEVKPTPEE

RLLRAIFGEKAGHVVNKSLYATASLEGVVVDVKIFTKKGYEKDDRAIKSYDKEKMALEKEHHDRLLMMDR

EEMLRVCALLSKAPLNSDQKIGDKNYKKGQTADISELEKINRFTLTTLIKAYSKEIQKEYDDLKNHFQNE

KKKLKAEHDEKLEILEKDDILPSGVIKLVKVYIATKRKLKVGDKMAGRHGNKGIVSTIVPEVDMPYLPNG

KSVDIALNPLGVPSRMNIGQILESHLGLIGLRLGDQIQEIFDRRQKDFLKELRAKMLEICSIPRLASEKE

FIKSLSDEELLNYARDWSKGVKFATPVFEGVNIEEFSKLFEMAKIDMDGKTELYDGRTGEKIAERVHVGC

MYMLKLHHLVDEKVHARSTGPYSLVTQQPVGGKALFGGQRFGEMEVWALEAYGAAHTLREMLTIKSDDVE

GRFSAYKALTKGENVPATGIPETFFVLTNELKSLALDVEIFDKDEDNE

>WP\_011812707.1 MULTISPECIES: shikimate kinase [Campylobacter]

MMKAKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKVSEIFEQKGENFFREQEQKMSDFF

SSCEKTCIATGGGFVNVSNLEKAGFCIYLKASFEYLKKRLDKDEISKRPLFYDEIKAKKLYNERLSKYEQ

KANFILNIENKNIDELLSEIKKVIK

>WP\_011812694.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSMKKIILFLLCVGFAFACSEHSHTDFKDLNKTEYNSQ

>WP\_010790923.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFYTFFVILKQGEKMLKQIAFGSIALTATGYGIKKLYEKLSKPERKFDTHAIVPSCKDMINIEEYKLKRE

LEVEQKKNQIQEFLCECMECYSGFSKYFNSKEFLEFEQNFTSKNNHKTEFLLSSYKDQMIKVIDYAKKFE

CLSAFLETQSEKNDLAVVKMISESMERKTQRFYLQTKFQTFPQYIFPSVWSSPMWGKQWE

>WP\_010790823.1 MULTISPECIES: cell division protein FtsA [Campylobacter]

MILNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHY

DKVVVSISGAYTKSVDSIGVVNIPNHEIGIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDD

PLGMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAI

CDMVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLSYAALSQQPNTLIQIPSMGDERKVNE

VSLDIISNVIYARAEETLMILAKILSDNRYANAIGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARK

DLITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDAESEIKSD

FFDENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>WP\_009881789.1 MULTISPECIES: 50S rRNA methyltransferase [Campylobacter]

MENNLQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKG

YCIALDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIY

RAFCINNNHPYHK

>WP\_009881605.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFITATAPNPLVVDLIAQATNLEVHLTWGGVIGFRDVFTWYSCYAFDAFDALFSLSARN

>WP\_002893375.1 MULTISPECIES: hypothetical protein [Campylobacter]

MHFLEFFIAVIMAVILQVMPFIAIAIVALSGITTTQLKI

>WP\_002868922.1 MULTISPECIES: multidrug efflux RND transporter permease subunit [Campylobacter]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGAIFYLYKAVPNS

LVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLFTSSLKENAAAMFIGLQ

DWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSGKSYDEIQKDVNKLVAA

ANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVNDFSMLGKNFQVNIRAK

GDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQPAPGYTSGQAIEAIAQ

VAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLAVVTAVPFAVFGSFLL

VYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKLRFRPIIMTSLAFTFG

VLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKRGKVHE

>WP\_002864416.1 MULTISPECIES: NADH-quinone oxidoreductase subunit C [Campylobacter]

MMRKYSDKKNAQTQNYYKDRFYHAPHTVKSDVNESVFKEDFEVLKTQVEILNSFVELDFWVIEIKKEDNV

KTLQMLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRIKTFVGVKERLQSVAHVFKGANWSE

REIYDMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFA

DDKDTLNFARLYHEVPKGGQKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>WP\_002861483.1 MULTISPECIES: lytic transglycosylase [Campylobacter]

MIKKILVFLFIFSSLNATQYSIEKLKKEENSLAKDYYIYRLLEKNKISKKDAQDLNSHIFRYIGKIKSEL

EKIIPLKPYINPKYAKCYTYTANTILDANLTCQSVRLNSLVFIASLNSKDRTTLAQTFKNQRPDLTNLLL

AFNTSDPMSYIVQKEDINGFFKLYNYSKKYDLDLNTSLVNKLPNHIGFKDFAQNIIIKKENPKFRHSMLE

INPENVSEDSAFYLGVNALTYDKTELAYDFFKKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKTLSQSSSL

NIYSLYAKELTNTPFPKIESLNPSKKKNNFNMQDPFAWQKINKQIRDANASQLDVLAKEFDTQETLPIYA

YILERKNNFKKHYFIMPYYDNIKDYNKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLANHIGEK

ELKIPNFDQDFMFKPEIAYYFGNYHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGKFEPFLS

MELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>WP\_002853937.1 MULTISPECIES: membrane protein insertion efficiency factor [Campylobacter]

MICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFFSTFFRILRCNPFFKGGFDYPRVSK

NFYPINLCFKPIFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>WP\_002825721.1 MULTISPECIES: membrane protein [Campylobacter]

MFYLNKILYFFLILFLLIGILGFFINSNPSNQIIKKPYLPFLEIGDLVFRAGIGSESFLIENLSQSPYSH

IAMVVKTSPTILIHATTDDDKNAKNQVILSSMDDFLKLSHKIAIKRLKFDEKTKQKIVAKALEHLGRKFI

ISTDKDAFYCTTFLEQSINSITPFHLQYTLIKAPFNEGLYLFPQAFFENN

>WP\_002869341.1 MULTISPECIES: flagella basal body P-ring formation protein FlgA [Campylobacter]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKTTSLPKDFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKNVFFRYFIQANLEVLKSERAIKRGDKLGAFDYKSVLIDFDKVPLNALTLDDVDN

LVAKSNINKNAILRANMFKTTALIRRNDPIIGVLSEANVDVLIELVALQSANMGERIRAKNKEGKVMQGI

VVGKNRMIIQ

>WP\_002869185.1 30S ribosomal protein S12 methylthiotransferase RimO [Campylobacter jejuni]

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>WP\_002868981.1 MULTISPECIES: ribonucleoside-diphosphate reductase subunit alpha [Campylobacter]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFQKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLIKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVAIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIYWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>WP\_002799607.1 MULTISPECIES: translational GTPase TypA [Campylobacter]

MENIRNIAVIAHVDHGKTTMVDELLKQSGTFSEREQISERVMDSNDIEKERGITILSKNTAINYKGTKIN

IIDTPGHADFGGEVERVLKMIDGVLLLVDAQEGVMPQTKFVVKKALSLGLKPIVVINKIDKPAADPERVI

NEIFDLFVALDANDEQLDFAIVYAAAKNGYAKLDLNDESDNMEPLFKTILERVPAPSGTNDNPLQLQVFT

LGYDNFVGKIGIARIFNGVVKKNQSVMLAKADGTKVNGRISKLIGFMGLEKMDIEEAGSGDIVAIAGFEA

LDVGDSVVDPNNPMPLDPLHIEEPTLSIVFSVNDGPLAGTEGKHVTSNKIAERLEAEMKTNIAMKYESTG

EGKFKVSGRGELQITILAENMRREGFEFCMGRPEVIVKVEDGVKTEPFEHLVIDVPEEFSGAVIEKLGKR

KAEMKTMAPTGDGQTRLEFEIPARGLIGFRSQFLTDTKGEGVMNHSFLEFRPFSGAVEKRNNGALISMEN

GVALGYSLFNLQERGVLFIEPQTKVYTGMIIGEHSRPNDLDVNPIKGKNLTNVRASGSDDAIKLVPPRKL

SLERALEWIEEDELVEVTPVNVRVRKRYLDPTQRKRMEKAKS

>WP\_002869206.1 sulfurtransferase-like selenium metabolism protein YedF [Campylobacter jejuni]

MKIDCRNLSCPQPIVETKNALEKLQENEILEIVLNSIISKNNVVKFLNSLNLTPVVDENAQEFCIKVQKK

NFDSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLSTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>WP\_002868886.1 MULTISPECIES: UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--2,6-diaminopimelate ligase [Campylobacter]

MKLKLENSFITDSTLECEKECFFLQTTQNAKFHARALEKGAKIIDVNECKKLLKIDEKIQIIGITGTNGK

TTTAAAIYSILLDLGYKCGLCGTRGAFINDEQIDEKSLTTSPILKTLEYLQIATQKKCDFFIMEVSSHAL

VQNRIEGLNFVAKIFTNITQDHLDFHGTFENYKKAKELFFTDESLKFINKDALAIKFNVRNAFTYGIENP

ALYQIKAYSLEEGISAIVTNKNQTFHIDSPLLGLFNLYNLLVASACVNELIKPDLKDLEKAISGFGGVCG

RVEQVAKGVIVDFAHTPDGIEKVLDTLKNKQLIVVFGAGGDRDKTKRPLMGKIVEHFAKIAIITSDNPRS

EEPKTIMEEILSGFAKKEKVLMIEDRKEAIKKALELKENDDLVVILGKGDETTQEIKGIKYPFSDKVVVN

EILKNQG

>WP\_002868771.1 signal peptide peptidase SppA [Campylobacter jejuni]

MQILKSFFKALGCGIKFINTYFKTFVLLLIVIWILMPSANSSSNLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKPVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERALD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPVWKEEDKIDKFLNRLEGQTSSLIS

KSLIEIVYKTNSSFISAR

>WP\_002856930.1 MULTISPECIES: twin-arginine translocase subunit TatC [Campylobacter]

MFEELRPHLIELRKRLFISVACIVVMFIVCFALRSYILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

VSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITIGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPAPKDKESDE

>WP\_002855100.1 MULTISPECIES: twin-arginine translocase subunit TatB [Campylobacter]

MSFGEIIVILVVAILVLGPDKLPEAIVQIAKILKAVKRNIDDAKSSIEKEIRINDLKEEAKKYKDEFSST

NENIRKKLSFEEFDDLKRDILDKTKVDLTFDSRDDNTKNNLSGQNLNTEEKPNLSKLETQDKTEK

>WP\_002852866.1 MULTISPECIES: twin-arginine translocase TatA/TatE family subunit [Campylobacter]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>WP\_011815225.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGKGRTRQWVIDDSLKMLDKVIGDRFGL

IPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGVQLRPTYLVSSGKGVHLYYFLQEPVQ

LYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVGSQSKLGVDFPVKAYKLSENRYTLED

IKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQGEPKQKSKKQGGTWVCNEALYEWWKR

KITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLESLTEDEDNHFSRADVKDGIKKPKMIY

FYGILKY

>WP\_011812746.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>WP\_011812701.1 MULTISPECIES: thiF family protein [Campylobacter]

MMNDRFTRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFQNLTLIDADKFEITNQNRQIHSE

NLGEEKAKVFARIYNVKGIVSKIDNEFLANFDLSEFDLIIDAIDDIPAKVALANLIDFKRQIFISSTGGA

RKLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLA

LRKVLAR

>WP\_010891943.1 MULTISPECIES: transcriptional regulator [Campylobacter]

MIRTVMDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIV

GTNFKPKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRK

ELDKYPEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGL

VKNLNDSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQY

VPKNEVIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDM

PSKSRNDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIR

ATYQHCCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>WP\_010891942.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MLKLLILKRIFLDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLALLIGFPLGFILGFFEFKLK

RFIKLIVDTSLSFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFILALPIVIALFSNLIENMNKK

HFLLIKSFHLSPLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGNIKYDTRTITTAISLETNKG

EFASGIALALVLILIAFCLNFITHKLKRT

>WP\_002860253.1 MULTISPECIES: guanylate kinase [Campylobacter]

MKLQGFVLLISGPSGAGKSTLLKKLFDEFEDELYFSISSTTRKPREGEKNGIHYHFISHEEFQKGIDSDH

FLEWARVHENFYGTSLKHTQNALDNGKIVVFDIDVQGFKIARKKMADKIVSVFITTKNKDELKKRLIKRN

TDTIIQLEKRLQNASDEMKELSEYDYLIINDELKQSYEALRAILIAHKFRTKGQNLGQIQNIWNEGE

>WP\_002860132.1 MULTISPECIES: ribonuclease J [Campylobacter]

MNMDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKK

NRNLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDA

IIVDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGM

ISNKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPI

DGYPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFARTKGRVIMSTFSSNIHRVYQA

ITYGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIVTTGSQGETMSALYRM

ATDEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLT

KPKFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIA

DDVVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINVKDEVLN

DPRFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>WP\_002859764.1 MULTISPECIES: DUF4492 domain-containing protein [Campylobacter]

MFYFVVFKGRIYMYLKHLYFSISQIFNFYKEGFKNLTLGKTLWKIIFIKLFVMFVILKLFVFDVNFNSIF

KSDKEKSTFVLKNLTLEGK

>WP\_002859753.1 MULTISPECIES: RNA polymerase sigma factor FliA [Campylobacter]

MNSKKDEEMLKEPPKAYAQMLKKEQDELVLSYMPALRAMAFRLKERLPSSIDVNDLISIGVEEMIKLSRR

YDKEQNDNFWGFARKRVNGSMLDYLRSLDVMSRNNRKIIKDIDAIMDEYFLEHECEPDDEYLAKKLDLDV

EKIKEVRTAHAISYTLPIDEQIELYNEDNTLEKIEKEELLEKIHEVLDDLKERDQLIIQLYYYEELSLKE

ISEILQISESRISQIHKKLLKKLRERLV

>WP\_002859649.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLEFTLNFNDYGLKMGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAH

NTAWAARRLNLEEVTDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPL

IVNVPNIISK

>WP\_002859498.1 MULTISPECIES: hypothetical protein [Campylobacter]

MMAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLS

DKEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>WP\_002859393.1 MULTISPECIES: acetylglutamate kinase [Campylobacter]

MIMQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDI

SAMCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENL

AFVGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYED

FNDKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLV

G

>WP\_002859022.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKILKDLAMELKLARTLINEKPKNISLEKIEEAIEKEGQKFFYFDKDNTHKQLIALVNHFEKKGVSIYHR

TVKYGLDDNDFMYEVHIL

>WP\_002859017.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGGIVLLVLVNKFQELQMKDKSLEEIDLLKLIICALSFISVCTALILFLLLPTLKNYKQANLRENSQLAI

LKAAKLKFDFSEDKISTLRSENNKSLEQFEQNFNIGNFDIFLQKYFQNVKIQETKPEKQEKYLKNRLAIK

ATMNNPRRLYDFIDALKNYNNLIKLDYPLNLKAGEQGISIDLTLKVYSS

>WP\_002854628.1 MULTISPECIES: hypothetical protein [Campylobacter]

MMKSLILPPNEFLDHYILNAEFHRFAGISKNAYKFWKNVEIGRYQGTRIIFLHRNCILEKHQQALRQCSG

LNGFVLASAFCSFTGLAPSHLVEKNNSSIYKLLELKEICGIKFVNLKKFYDFLGLNYHQHIYIEKCHFFS

PAPFEKRIKITESMCVGYY

>WP\_002804842.1 MULTISPECIES: CcoQ/FixQ family Cbb3-type cytochrome c oxidase assembly chaperone [Campylobacter]

MEHLSIVFDVIKNLITFDLATVQKHEWEIFQGYGFFALVMFLSIVLYAYLYHLYRTEKKGERNYENYANL

ALKDDIDDSVLESKRSA

>WP\_079254193.1 ferrous iron transporter A [Campylobacter jejuni]

MMKRFRLGFYLSFLTLLLSACSVSQMNSLASSKEPAVNESLPKVESLKSLSDMSNIAFEWESLYNENIKG

FYLYRSSDENPDFKLVGTIKDKFQTHYVDTKLEPGTKYRYMMKSFNEQGQISEDGKVIEVSTAPRLEAVP

FVQAVTNLPNRIKLIWRPHPDFRVDSYIIERTKGDDKEFKKIAEVKNRLNAEYIDSDLKPNENSSYRIIA

VSFNGIKSEPSQVVSSTSKALPPQVEHLSASTDGSNKIMLTWDAPTYEDFSYYKVYSTSSSFLPFSVLAK

TDKNSYEDIVEGVGKSKYYKVTMVDKDGLESPMPKDGVEGKTLGNPLAPSIILAQSTSEGINLEWSDNDT

RAVEYEVRRYGGEQNAVFKGIKEKRLKDVKALPGVEYSYEVIAIDSAGLRSEPSSKVKAAQ

>WP\_079254190.1 hypothetical protein [Campylobacter jejuni]

MLFQSYFVKIICLFIPFRKIRHKIKKTFLLKNIQRDKIDSYLPKKFLYKLINTTMKI

>WP\_079254183.1 phosphate acetyltransferase [Campylobacter jejuni]

MMANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQTVKSAYGFTF

REAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPIAAIINDEDKL

IAQKYFDHALDGRNYVLINENFNFEEVQKLKEYDFITPHRFKYELIKQSIKNKKTVVLPESNDERILKAA

EILLKSKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKLV

QDKTYFGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVLAFADCAVNPS

PTAEQLATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELNIDGPMQFDCA

YDPKTAAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDLSRGCLVDDIV

DTVILSAIQAQ

>WP\_079254182.1 peptide ABC transporter [Campylobacter jejuni]

MPTNWFQSFNPIFIIILAPIASYIWIFLEKKNIYFSSIGKFTLGILFAGIGFMMMTFASQNLINNNGLPI

SMAWIIISIFFLTLGELCVSPVGLSIMAKVAPDLIKNQIMGLWFVASALGNFVAGLIGGNVNIKNIDQLP

NIFEQCMWMLFVVALLLFIAKKPIYKILNEKNKQLSN

>WP\_079254177.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni]

MMTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAED

IEFLRKQGIFDTEFLDFLANFKFKGEIYAMREGEVIFPNEPLLCIKATTIEAQLLETFLLLSLNHQSLIA

TKTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFE

NELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQKGGVRIDSGNLLKLSLKIRQELDQAG

LQKCKIIVSNALDEWSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNE

KSTLPHFKKLFRVYDKNTQKILFDELYVFDENPNQDENLERKELLKLVYKEKRLLKKSSLNTMQDYTKEQ

ISKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>WP\_079254176.1 aspartate aminotransferase family protein [Campylobacter jejuni]

MKMDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLH

TSNLYYNENIAAAAKNLAKASALERVFFTNSGTESIEGVMKTARKYAFNKGIKGGQFIAFKHSFHGRTLG

ALSLTANEKYQKPFKPLISGVKFAKYNDISSVEKLVNEKTCAIILESVQGEGGINPANKDFYKALRRLCD

EKDILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYG

GNPLVCAGVNAVFEIFKEEKILENVNKLTPYLEQSLDELINEFDFCKKRKGLGFMQGLSLDKNVKVAKVI

QKCQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>WP\_079254173.1 hypothetical protein [Campylobacter jejuni]

MLFILFLYVFLNSFCTKPKHFPPFLLFLLENCFIVNFIYFSCCNISSLKFLILSFSIFLNISNLSLKSSN

EI

>WP\_002869179.1 MULTISPECIES: periplasmic nitrate reductase subunit alpha [Campylobacter]

MNRRDFIKNTAIASAASVAGLSVPSSMLGAQEDWKWDKAVCRFCGTGCGIMIARKDGKIVATKGDPAAPV

NRGLNCIKGYFNAKIMYGEDRLVMPLLRMNEKGEFDKKGKFQQVSWQRAFDEMEKQFKKAYNELGVTGIG

IFGSGQYTIQEGYAALKLAKAGFRTNNIDPNARHCMASAVVGFMQTFGVDEPSGCYDDIELTDTIITWGA

NMAEMHPILWSRVSDRKLSNLDKVKVVNLSTFSNRTSNIADIEIIFKPNTDLAIWNYIAREIVYNHPEAM

DMKFIKDHCVFATGYADIGYGMRNNPNHPKFKESEKDTVEKENVITLDDEEAASLSYLGVKAGDKFEMKH

QGVADKNWEISFEEFKKGLAPYTLEYTAKVAKGDDNESLEDFKKKLQELANLYIEKNRKVVSFWTMGFNQ

HTRGSWVNEQAYMVHFLLGKQAKPGSGAFSLTGQPSACGTAREVGTFSHRLPADMVVANPKHREISEKIW

KVPAKTINPKPGSPYLNIMRDLEDGKIKFAWVQVNNPWQNTANANHWIAAAREMDNFIVVSDCYPGISAK

VADLILPSAMIYEKWGAYGNAERRTQHWKQQVLPVGAAMSDTWQILEFAKRFKLKEVWKEQKVDNKLTLP

SVLEEAKAMGYSEDDTLFDVLFANKEAKSFNPNDAIAKGFDNTDVKGDERKIQGSDGKEFTGYGFFVQKY

LWEEYRKFGLGHGHDLADFDTYHKVRGLRWPVVNGKETQWRFNTKFDYYAKKAAPNSDFAFYGDFNKMLT

NGDLIAPKDEKEHSIKNKAKIFFRPFMKAPERPSKEYPFWLATGRVLEHWHSGTMTMRVPELYRAVPEAL

CYMSEKDGEKLGLNQGDLVWVESRRGKVKARVDMRGRNKPPVGLVYVPWFDENVYINKVTLDATCPLSKQ

TDFKKCAVKIYKA

>WP\_002855889.1 MULTISPECIES: 2-iminoacetate synthase ThiH [Campylobacter]

MQDYMQYLPHMQEIKSEILNKVLSQVQSYDESQFSAKDVENALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLNEAEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEDEYKILHEKGCDYVTVFQETYNPLKYSKIHLAGEK

RIFPYRFNAQERALKAGMRGVAFAALLGIDDFRKDALATALHAHFLQQAYSHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDEQF

EISDDRSVDEILAMLKRSNLQAVMSDSIYVG

>WP\_002869077.1 MULTISPECIES: GMP synthase (glutamine-hydrolyzing) [Campylobacter]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>WP\_002857190.1 MULTISPECIES: 3-deoxy-7-phosphoheptulonate synthase class II [Campylobacter]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIVLTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAYYQSATTLNLLRGFAKGGLADLHEVHRWNLGFLKKSELHKQYTDISEKISQALAFM

EACGINTSNTPSLREVSVYTSHEALLLPYEEALTRVDSLSGEIYDCSAHMLWIGERTRALDEAHVHFLRG

VKNPLGVKIGPSASADDIIALANVLNPNNEEGRLNIIIRMGADKIINNLPKIFSKLKSEGLNLVYSIDPM

HGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHLEMTGKDVTECTGGASNVTAQSLEDRYETQ

CDPRLNADQALELAFLIADLVKKARK

>WP\_002855740.1 MULTISPECIES: protein translocase subunit SecD [Campylobacter]

MRNSKINYRLIIFIAVFIFGVAFSLPSFLQSERGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEAASYGLILVPDSRNPNLKYTLKSIPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>WP\_002854658.1 MULTISPECIES: bifunctional ADP-dependent NAD(P)H-hydrate dehydratase/NAD(P)H-hydrate epimerase [Campylobacter]

MKAIIDNIKILEQNAINKGLDELILMENAGLNLAKLIKKEAKKIRIQRKIRKVKTLFLLGGGNNASDGLV

ALRNLKHAKAYKIGFKENTLFKKQEQILQNYAFKFCKKEPNFKKFHIIVDCILGTGSNRCLDEKTSLIIQ

KVNQSKALKIACDIPTNLGFYPCFKADITFCMGALKEILLEDFAKEFVGRIKIANLGISSKKFYPNSQAF

LLEKKDLKTIDRKINANKGNFGHIYIVANASAGTLAGLGALNFGAGLVSLVAQKSFSPLLMLKEKIENNA

SAIALGMGLENLDFLKDEILQNTPLILDANCFLSEALLWYLNRKDIVITPHPKEFIKLYKMCFDENLDIE

TLQKNRFFYARKFSQNYDCVLVLKGANPIIAQKEKLFVVNLGNQALAKGGSGDVLSGMIAAHLGFGFSAL

EAAKNATLAHGLVAKKYKFNKNSFDALKLIKGLKCL

>WP\_002853635.1 MULTISPECIES: protein translocase subunit SecF [Campylobacter]

MQFFSEKKIYDFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPTLLWFKFSVLEFRNKEIEKAKRKQDKERNRAMYEKGTV

>WP\_009881967.1 MULTISPECIES: cyclic pyranopterin monophosphate synthase MoaC [Campylobacter]

MKLSHLDEKNHPKMVDVGDKNITSRIATASGMIYMSQEAFDVIKNNTAKKGPVLQTAIIAAIMGAKKTSE

IIPMCHPLMLSKVETDIMEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRS

>WP\_011271768.1 MULTISPECIES: VirB4 family type IV secretion/conjugal transfer ATPase [Campylobacter]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPLGNENLKILSTETAYIDVIEKIFSQENKSLDE

KVLELKEIYKNS

>WP\_002856129.1 MULTISPECIES: bifunctional 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase/2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase [Campylobacter]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>WP\_002856115.1 MULTISPECIES: undecaprenyldiphospho-muramoylpentapeptide beta-N- acetylglucosaminyltransferase [Campylobacter]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>WP\_002854405.1 MULTISPECIES: N utilization substance protein B [Campylobacter]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTDTPSAIVINEAIELAKELANDNSPKFINGVLDALIKAKK

>WP\_011117589.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>WP\_011117557.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>WP\_011117553.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>WP\_008976813.1 MULTISPECIES: hypothetical protein [Bacteria]

MLQDAISGEIGSLKDEVKENTVQEVRKALQANIEAIQRATKLLEKQSDTLTSVMKQKIRELEESKNSFFR

YEGLKLYLFWGGMVCNILVFLMLLYGMISK

>WP\_002860103.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MMKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENL

EQMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQL

SGGEQQRVCIARALINNPELLLADEPTGNLDEANEQIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLI

LQHGVLK

>WP\_002869355.1 MULTISPECIES: Holliday junction resolvase RuvX [Campylobacter]

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>WP\_002856927.1 MULTISPECIES: Holliday junction branch migration protein RuvA [Campylobacter]

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDVNSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTKTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLG

>WP\_002856258.1 MULTISPECIES: Holliday junction branch migration DNA helicase RuvB [Campylobacter]

MDRIVEIEKYSFDETYETSLRPSNFDGYIGQESIKKNLNVFIAAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMSANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASAKSYSALKLNYEKTLFEE

>WP\_002869019.1 MULTISPECIES: UDP-N-acetylglucosamine 2-epimerase (hydrolyzing) [Campylobacter]

MKKILFITGTRADYSKIKSLMYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYY

QTDKALATTIDGFSRYVNELKPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISK

LAHIHLVNDEFAKRRLMQLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEI

TSIKNQADNLVKALIQSNKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFII

GNSSCILKEALYLKTAGILVGSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLF

FEYLLSGEFFKLSTQKVFKDIKHA

>WP\_002856003.1 riboflavin synthase [Campylobacter jejuni]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFYISLPKEAMKFIAEKGSIGVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLARYIYAQLQGKNKGLSWEEVERISYLY

>WP\_002853111.1 MULTISPECIES: thymidylate synthase (FAD) [Campylobacter]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEHCLHKDIE

>WP\_002869269.1 MULTISPECIES: UDP-N-acetylmuramoyl-L-alanine--D-glutamate ligase [Campylobacter]

MKISLFGYGKTTRAIAENLVDKFGPFDIYDDHFIETKKDTLGNLLLNPNDFDDNLSDIEIPSPGFPPKHK

LIQKAKNLQSEYDFFYDIMPKSVWISGTNGKTTTTQMATHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFDNYVQDKLSVLKRMNECDVAILPKIYANTPTKAHKIS

YEDEKDLAVKFGIDTEKISFKSPFLLDAIMALAIEKILLDTLSYELLNSFVMEKNKLEELKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKNFNIELYAIGISTEKMLDYAKKANLKA

YKCEVLSKAVNEISNHLRVNEVALLSPACASLDQFNSYAERGKVFKECVNKI

>WP\_002855793.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MKFFKTHLSLILPLLFMMFAFEFILITNATLKHYEELVNKDYNIIVVSKTELDQNVVKTKVPFFAGLESL

DPKDLIDRLKNDVSEKNLKVLKDSLPKFYTLKLNSLPDQNELNSIKNQLLNIVGVSKVETFSKTHDKIYS

LLILMKFVFWLFLFIIILLAFVLFLKQMRIWLYEHTDRIEIMCLFGAPFWFRSFMLYKVVVIDCFIAFVI

LLAFFTQIFDLSIIQESLKAVDIIFPPINFILHLTLIFLATLFICLLCVNTVMFKVKR

>WP\_002818746.1 MULTISPECIES: ketoacyl-ACP synthase III [Campylobacter]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHAANT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLICGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFELGSDGKYFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVDEKDIAFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>WP\_002869333.1 MULTISPECIES: NCS2 family permease [Campylobacter]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>WP\_002857401.1 MULTISPECIES: N-acetyltransferase [Campylobacter]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLGEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>WP\_002857196.1 MULTISPECIES: DNA-processing protein DprA [Campylobacter]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCVVS

GGALGVDITASIAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYLPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELNKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>WP\_002855885.1 MULTISPECIES: FAD-binding oxidoreductase [Campylobacter]

MKKEFEQYFKRFLGEENAYFDEIHKRAYSYDATKKHYLPDGVLFPRNEEDIAQILKFCNENNIIVIPRGS

GSGFTGGALAVNGGVVLAFEKHMNKILEIDLENLVAVVQPGVINIHLQKEVAKYGLFYPPDPASMEYSSL

GGNVSENAGGMRAAKYGITKDYVMALRAVLPSGEIIRAGKRTIKDVAGYNLAGILIASEGSLAVLSELTL

KLIPLPKFKKTAFAIFPSVKSAMNAVYKSLASGVSPVSMEFLDNLSIRAVESKFNKGLPIEAGAILIADV

DGNVKEAIDEDLRNLEYYFLEAGASEFKIAKDEQETADIWFARRNCSQSIAMYGTLKLNEDITVPRSKLP

TLLEGIDEISKKYGFKIPCFGHTGDGNVHTNVMVPDKNDKEQVKKGYEAVEEIFKLTVKLGGTLSGEHGI

GLSKAPFMNLAFSEAEMNLMRNIKKAFDPNNILNPFKMGL

>WP\_002853673.1 MULTISPECIES: histidine phosphatase family protein [Campylobacter]

MKKIYIIRHAKASKSGDIDDFERKLTKSGKEDLKKLFKNLALHEIHPDLVLSSPAVRTAKTAKKIAKFYN

FDKNKICFDERLYLCNVENLLKILQDIDDEFNEVFLVGHNPGLMELGELLSSLCLASFPTSSILCLEFDI

KEFKNLKKHSGKLVFFEHVRKLKEEKDLGF

>WP\_002851141.1 MULTISPECIES: MerR family transcriptional regulator [Campylobacter]

MAYTIKKVEKETKISAHTLRFWAKKGLFPFVQKDENSVKYFSKSDIEWVKWIEWLRISGMPIEQVKHYIK

LCSLGIKTAKERQEMLKQTKKKLQNQIKTLKESEKVLSKKIKIYEEMLANEVDGFNPESKDYQPCDKLHK

FKG

>WP\_002779137.1 MULTISPECIES: RidA family protein [Campylobacter]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVAFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>WP\_009882773.1 MULTISPECIES: DedA family protein [Campylobacter]

MQEIISFVVETASAWGYLGIIILMTLESCFIPFPSEVVMIPAGYLAHKGELDITLCILSGTLGSVLGALI

NYYICFFWGKNFVLKWGKYFGINEAKFAKFEEFFNKHGEFSTFTCRLLPGIRQYISMPAGLVKMKLVNFI

LFTALGSAIWVAILVFLGYYIGQNEELIKTYLTQILIIIIVFVILASLIYIKIKKPFKKA

>WP\_002868958.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MNKSVLKYLLFKYLRFDKEQPFINLSMLLTFLGVCVGLCVLLVAMAIMNGFDKEFEKRFFVMNYPITILP

KFYAPVNDEFIDELRKTFPNLLFSPYISTQVVVKGDNRFEGGVLFGVNFNDEKKINEVVAKALKDENLSG

FDILVGSALIDEFGLHKNDKLSLIFSNLNPSGFSLVPQTKRFDVKARFTSGLAFYDKAYMYTDVDALKKV

LGMPKNPNYDGVHVYSDNAFKDVEKIKSYLKDDYAVVGWWEQNKNFFSALELEKRALFIVLMLIILVASL

NIVSSLLMIVMNRRSEIALLLALGTSKNEVKKSFFALGMLIGGGGMIVGVVLAFFALWLLGNFDIVTLPA

DVYGTSKLPLDLSLMDFSLTIVGALIIIALSSFYPAKKATQINILDTLRNE

>WP\_002868870.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MVDKFFLNELFKSISFSYQRLFIIVLSVFIGALTCSAFLNIYFDIDTKLSKELKAYGANVMISPKRDENF

ISNAEYEKIKEILKARALTPFLYDFLNLGSTSGVVLGTDFRALKITKPFLEVKEGSFSLNDFDENSAFLG

VNLAKQLGLKTGNELQIYNPNNGKSIKLTIKGILSSNDEFDSIVLAPLSVVQNLSDRAGINYANAVVYGN

FDEVKAKTQAINNEFIDAKPISSVSLSEGLVLGKIKALMFLIILVVLIIVTTSVNTTLSSIIFSRKKEIA

LRLALGAKKSEIFKLFASECFIVSFFASLIGAFCGIFLANVFGYLIFNSSIDFRFIAVFIALIISLIFAF

LAAFFPIKRALKINVCENLKGE

>WP\_002852501.1 MULTISPECIES: YggT family protein [Campylobacter]

MVIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGNIDLA

PLIIVLALQFLGIFLGNILRSIL

>WP\_024088040.1 SAM-dependent methyltransferase [Campylobacter jejuni]

MQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKVVSVEPN

DAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYFSCMWNH

RDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINAWKSVKN

PYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>WP\_002854544.1 MULTISPECIES: EamA family transporter [Campylobacter]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFFIVYLLKRSKAHKEGGHFWL

LVFRGVVGTLSLYMFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQ

PWAHNLNHSGFDLKNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQ

HLDSLHLDFILAPFVMPSLTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIIL

GDSLPSAMVFLGIIGIIFGGLILVKNKGKK

>WP\_024088103.1 MULTISPECIES: boa domain protein [Campylobacter]

MSANTDKALIFDGNIYNKEGVFRTENAKLNFQGHARIHAYVSKEQAKKLQEHGLSALTKPVSFTQEDWVF

VLKELNLEKKRVLFRA

>WP\_011812766.1 MULTISPECIES: arginine--tRNA ligase [Campylobacter]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>WP\_011812749.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLIFKEVANRSNFMNYLVMSTPVLAYAIAKASEQGFVSFASGLSQALTGASRTAGSFANQQALSTQTSIA

APRGDEVWAVGAGVASLQYARNIDGVVTKFNTQSVMGDNTKNSETSNANMTGTNVDGMMSGAKLSAGTMT

TVNSVSQANSDAWNKNFNDQYSHMSQSGRASAFK

>WP\_011812744.1 MULTISPECIES: DNA translocase FtsK [Campylobacter]

MLAPGMGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYR

EFGYILEIVYGFFSIILGRTGSGIFALLLLLFSLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVF

GGENEKEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQ

ILDETIEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIK

QIDTNKNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKK

LEEYDAINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKN

INEIVIEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLD

FLANPKEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLT

MALMAKSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKL

PHLLIAGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALS

NMVAEMERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARA

SGIHLIVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRL

HAPFASEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYL

QRRLKIGYNRSANIIEQLTQNGILSEPDAKGQREIL

>WP\_011812737.1 MULTISPECIES: tetraacyldisaccharide 4'-kinase [Campylobacter]

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>WP\_011812720.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>WP\_011812708.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIKILEQTIKALKLNLKPYDLSMLTRKKSYICAKDQNNILFMYTGKTKFLMKDALFLENLAQQININNKY

FFSMTSLCSKAKNHLEMKGFNIYAAL

>WP\_010790719.1 MULTISPECIES: Na+/H+ antiporter family protein [Campylobacter]

MILTLLTNPIIISVVLMTLLCLFRFNVLLSLLISALIAGVFSHLELVDTMNILISGMKENLKTALSYILL

GAIAAAISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLSLFNKLKID

RRAVACALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSASLNDVTNTMYFAAICMIAGLFLALFVFY

RKPREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFVLMVILGGVEFSKVNEV

FDDGLKMMGFIAFVILVAAGYGEVLKESGSVVDLVNSVVPWMEQSKFLAVFFMLLIGLIITMGIGTSFGT

IPIIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFY

NGPLLILGSIIAMFL

>WP\_009883153.1 MULTISPECIES: N-acetyltransferase [Campylobacter]

MQNTIIQKAIHKDLNSILEITKDALNAMKTMNFHQWDENYPNEIVFQEDIQAQELYVFKENDEILGFICI

NEKFEPEFYKQVIFNKNYDDKAFYLHRLAVKQNAKGKGVAQKLLNFCENFALENHKASLRADTHSKNFPM

NSLFKKLDFNFCGNFDIPNYQDPFLAYEKILNQKAF

>WP\_009883066.1 MULTISPECIES: MFS transporter [Campylobacter]

MRKSKFGTKEIKILGLSSLGGTLEFYDFIIFVFFAEYIANVFFPKDMSEFWALLNTYGAFAAGYLARPLG

GIVMAHFGDKFGRNNMFMLSILLMVLPTFVLAFIPGYETLGFLAPVLLILIRIFQGIAIGGELPGAWVFV

REHCQEKQKAFFLSCLNSAMALGILLGSIVFLIINAFFSIEEIAAYAWRIAFFVGGIFGIISIYLRRFLQ

ETPVFKQMKKESSLSSFPLRDLFKEKDIVKNLFSSMMMTWVLTGCVIVLVLLMPKFMPSILNLSGVEGSY

LQVLGILGIALGGAFMGYLVDKFGLFKICIFFSLTFVFFSFLYFYALYELKNLVLVCILYSIVCFLGGIN

VFAPILMSEVFRAKIRFSGISFSYNIAYAISGGITPQLVFWLNTLASKNENPFLYGMSIYMIFLALLAIC

AVFIVKDKIKF

>WP\_009883064.1 MULTISPECIES: dimethyl sulfoxide reductase subunit A [Campylobacter]

MFGGLTLSPISLSANLLKTPPLISKWAGCNVNCGTKCPVKVHTQDGIIKYVSTDNEGDDSFDNRQARACI

RGRSSRYKVYNANRLKRPLKRVGKRGEGKFMPISWEQAFDEISAKMQEIKEKYGNEAFYINYATGTTGTI

INRCTQGPWARLLSLYGGYLNYHNSYSTAQISNAMNFFYGGSPASDIYTLRSAKLAIFFGANHVETRMGG

GGVGYAYQKALEESGCKIIHIDPRCNDSMIGHCDEWIPIAPGTDAALIAALTYVMIKEDLLDRTFLDKYT

IGFSENTLPQDAAKNSSYESYVLGLNDGVEKTPDWASKITKIPARRIVQLAREIATIKPCFIEQGWGVQR

HSNGEQNARAIATLACITGNIGIEGTNTGCRTGSSKTYDIMGMPFKNPIKDSIPCFLFTDAIYRGKEMTD

ISDGVRGTTQLKQNIKFIFNTAGNCLTNQHSTIKEVHDILSDENLCECIVDVNVTRTPSNNYADYILPDA

TMLEQEDFIRPSAGYYSNKPYIIYCQKAIEPVGEAKPIYEMCLELAKRLGIEKEFSEGRTQKDWLKYLYE

ESMKKNPLLPSFEEMCEKGLVKFEPVKPVVALQSFIKDPINNPLKTPSGKIEIYSTKLAQMQKTWKLKEG

QQIVPIPVFESQREGILDPLKQKYPSQFFGYHYKGRTHSSFWEIPQIREANPQEIWINTIDAEQRSIKTG

DVVQVRNDLGIIQGIAKVTPKIIPGCAVTPQGAWAKYENGIDVGTCVNSLASIVPTAISKGNGQHSILVE

IAKV

>WP\_009883056.1 MULTISPECIES: NADH-quinone oxidoreductase subunit H [Campylobacter]

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>WP\_009883026.1 MULTISPECIES: molybdopterin molybdenumtransferase MoeA [Campylobacter]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>WP\_009882916.1 MULTISPECIES: membrane protein [Campylobacter]

MFAKLLKFFISRPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDTDLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKAPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

RNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNDLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKSIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKVERIVLETLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSMGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSILSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNEFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVAAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLSGSLFLLPSFLITIYSKKTKFPNQHKEHILKQ

>WP\_009882875.1 MULTISPECIES: haloacid dehalogenase [Campylobacter]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>WP\_009882858.1 MULTISPECIES: tyrosine--tRNA ligase [Campylobacter]

MDIKKILAEVKRGCAELIDEERIENLIKNYYEKGENFFIKAGFDPTAPDLHLGHSVVLTKMAFLQKHGAI

VQFLIGDFTGQIGDPSGKSATRKKLDKEQVLINAKTYETQVFKVLDKEKTQIKFNSTWLNELGAAGIVEL

TSTFSVARMLERDDFTKRFKEQSPISICEFLYPLLQGYDSVALKSDIEMGGTDQKFNLLMGRQLQRVYNI

GKEQAVIMMPLLEGLDGVNKMSKSLNNYIGVTEKANDMYAKILSISDELMFRYYELLSQKSLEEIAQIKK

DIEQGNLHPKKAKENLALEITEHFHSKEEANNAKSEFDRIHSQNALPSDMAEFEIQGKIWLAKALVECGL

ESSTSAARRSISANAVSVNSQKVSDEQMHLEQGEYILQIGKRKFAKLKVKE

>WP\_009882768.1 MULTISPECIES: membrane protein [Campylobacter]

MEKPDIQRLTNFLIVYTKTLLGAGTYTARVAKCVGRIAEVYGYEININFFFHHITLNVVDMDDNSIQRTY

VIPNHHAHVNFKLIFDLSALSWAMYDHKYDLEKAKVVFEQISQQKKHSYLLNLLFVSMANSAFCRLFGGD

FGAGNLVFFATFVGLLLRYILTKAKIDLRIQYILCSFISSWFVFFGLDMGYTNTSDVALGSSILYLIPGV

FFINSVIDILKDHILMGLSRIISVAILICCIALGIYMTLSISDFGILR

>WP\_009882760.1 MULTISPECIES: copper-translocating P-type ATPase [Campylobacter]

MEELRIKIGKMTCVNCSNAIERACRKIDGVKDASVSYVNSSGVFLLENQEKRKDIIAKIQNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLKIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

AVVLNGALRIKANKKAMDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFVFWVLKADL

NTAFLHSCAVLLISCPCALGLATPIALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLN

IFKHNLSKDDFDKLCQIESLSSHPVAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAKFLHENE

IDTKESDVFFDTFKEYVRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIA

KELQIDEFYAQLKSEEKLQIIQKFKKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPIAAGFVPFITLSPHIAALAMCFSSITVVFNSLRLKRI

>WP\_009882673.1 MULTISPECIES: isoleucine--tRNA ligase [Campylobacter]

MDYKETLFLPSTTFAMRANLAELEPQRFKKWFEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKDLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDVKACEKLGVSKASAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

SGCYDETLRAKGLLPSHLLEEFIGLHIFKANEKILELLGEKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIGSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFDFVAAIFEKHGADAWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNAVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIASEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVKEFSFIDKWILSRATKVF

KASKEAFFAYEFAKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALMAKELLNLLAPN

LSYSVDEALEHANVLIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDILKKDKIIKSTLELN

LNISFNKFPNEELADWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKLQSKNEETPCLRCEE

VLKGVQC

>WP\_009882608.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKGIFLSIGIAVLFSACGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNADGDFIACL

SPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFEDFKLGEK

VVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLNINLKEDL

LNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVFSSYIATA

KENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKLSINNQDA

TEALKIILPFIMFSMLMGGASF

>WP\_009882420.1 MULTISPECIES: nucleotide exchange factor GrpE [Campylobacter]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>WP\_009882410.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKLFLKQGASFSPAFDVSKQGNIINLGKINADNIVLIGNKVEIGVGAELAGQDGQTNAKTAHLIGNYVY

VSVGKDKENKNTIKIDKDGFKGTAIVEGFMQRDMTSFANDKYQFGDFGSIKSQSYDGKNSVDFYRAITIG

GHYYNNGQNINHYMNANEWKLFADGWNSDALNGDIFKDGLTTIRLMSDIDFSYLTSNGKQIAIDPVGANK

YAFSGNFDGGNYTLKNILINAQNTDKGWNTGIFGKVEGKDSNKKAKIYNLNVDGLKFSGKTNSGGAFVGQ

SSNADFSNIHLKNIGDLIFFDPNSKNGTDGFLYGGGFVGYAQSGSSFNRISLDNFSKIALQPEGKFSSAY

IDIYLGGFAGYSEGSNFSNILLNNIGGVTILGSETGGNIFAGGFVGYAGDKSYFSQIDLKNIGSVQADGK

TFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>WP\_009882372.1 MULTISPECIES: peptidyl-prolyl cis-trans isomerase [Campylobacter]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVITDKLNQIFNIPSKDEELKMLASSYFMQDALSIAKIDYDKKNIKINEEDL

KKLWDEHKEDYKTKKIYEISTYFLSVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDY

ALMQLKNVANAKFLDLKNGKDNFQKDQNISESDVYYPIDLLNKAKNGDVLRPAPYNNGYIIVKLNKVDPI

RNKTFEEAREEVLPMYLSEQARKNLEEKAKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLM

NVFNTDQNSSYVIINDNKAILYKINKQKLDMNSDKFEQYKTMLEQNLRNLKANELKQELVDELKKIYPIK

IYYKGN

>WP\_009882359.1 MULTISPECIES: HslU--HslV peptidase ATPase subunit [Campylobacter]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRAENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKALYEILTRPKNSLLKQ

YSQLLKTENLELEFDDEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>WP\_009882282.1 MULTISPECIES: pyridine nucleotide-disulfide oxidoreductase [Campylobacter]

MKKIDLIVVGAGPTGIGCAVEAKLKNKEVLILEKSNNICQTLMQFYKDGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFGSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSVLGNEKILVVGGGNSAAEYAVDLANSNQVSLCYRKKEFTRLNDINLKDIHEARNSGK

VELKLGIDINEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>WP\_009882279.1 MULTISPECIES: gamma-glutamyl-phosphate reductase [Campylobacter]

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>WP\_009882278.1 MULTISPECIES: FUSC family protein [Campylobacter]

MNKIEILKQYLKEIAKLNSSEQVWQMPFFAALGVGIVLGLSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPAIFAFIPIGIMAMGSSILIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAVFVDSLIMGSFVAFSIFI

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELILLMMSLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADKLILARLIDVVIGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>WP\_009882250.1 MULTISPECIES: chaperone protein ClpB [Campylobacter]

MANIQDFLTDNMLSNLESAASLAIHSKNTEVVPLHLLWALSVDSTSILNQILNKLNISKEALELEIKSRI

SKLATSSNVNRENIRFSNELINSLENAKGLMSANGDSYLSVDTWLISESQKSPIKEILAQFLDLREFQKE

LESLRAGRKMDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIERLMQILIRKTKNNPILLGEPG

VGKTAIVEALAQRIIKKDVPKSLQNKKVIALDMSALIAGAKYRGEFEDRLKAVVNEVIKSENIILFIDEI

HTIVGAGATEGSMDAANILKPALARGELHTIGATTLKEYRKYFEKDAALQRRFQPVNVGEPSVNEALAML

RGIKEKLEIHHNVTINDSALVAAAKLSKRYITDRFLPDKAIDLIDEAAAELKMQIESEPSSLRKVRKDIE

TLEVENEALKMENDEKNQKRLDEIAKELANLKEKQNALNSQFENEKSVFDGISAKKKEIDLLKNEASLAK

ARGEFQKAAELEYGKIPSLEKEVEILEDKWKKMSENGVLLKNQVDEDLVAGILSKWTGISVQKMLTSEKQ

KFLEVEKHLKESVIGQDKALSALARAIKRNKAGLNADNKPIGSFLFLGPTGVGKTQSAKALAKFLFDDEK

AMIRFDMSEFMEKHSVSRLLGAPPGYIGHEEGGELTEAVRRKPYSVLLFDEVEKAHKDVFNVLLGILDDG

RATDSKGVTVDFKNTIIILTSNIASSAIMNLSGKEQEDAVKNELKNFFKPEFLNRLDDIITFNPLGKDEA

YEIVKLLFKDLQMSLENKGIKASLSENAALLIAKDGFDPDFGARPLRRAIYDLIEDKLSDMILADELHEN

DSIIIDAKDDEIIIKKA

>WP\_009882129.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPSNKNLLEQLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNTQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKFLEQNKIEEANVLLSQIKENSSLNQITKNLKHYQGITQ

>WP\_009882121.1 MULTISPECIES: serine--tRNA ligase [Campylobacter]

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>WP\_009882115.1 MULTISPECIES: 2-dehydro-3-deoxyphosphooctonate aldolase [Campylobacter]

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKNGVFVAERGSSFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLNLTRLKNCVNTLLEIQNIIKENK

>WP\_009882002.1 MULTISPECIES: 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>WP\_009882000.1 MULTISPECIES: pantoate--beta-alanine ligase [Campylobacter]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>WP\_009881982.1 MULTISPECIES: phosphoserine phosphatase SerB [Campylobacter]

MIKLCVFDFDATLMDGETIDILATAHGKGNQTSEITRHAMAGELDFFESLQKRVSLLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGISLGFANYLHHKNDILTGLVGGEMMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLTMFNESGLKIAFCAKEILRSKADICIDIKDLKEIIKVI

>WP\_009881977.1 MULTISPECIES: cytochrome c [Campylobacter]

MKKIFISFVVLATCLWAKNIAYTDEVVSLYLNKDDTKVIGRLLPTNPFEVLKSENNKVLLKIDGYVNPKA

LSVIYFNDSQRIIVAAFSKNTKLNFSQRVAGKDGKWDKVSLEIWADKKEFAKDNKEMLNRAKELFVNNCG

ICHAIHKEKEFTANAWPAIFRSMADRTGIDKKDRWLVIEYLQKNAKDFKTK

>WP\_009881966.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAYEDEEDLNYDDYENEDEEYPQNHHKNHNYDDDDYEYDDDNNDDDFYEMD

>WP\_009881964.1 MULTISPECIES: MFS transporter [Campylobacter]

MSKTLNQKDIKVLGLSSLGGTLEFYDFIIFVFFANYISTNFFPKDLSSFWQMFNTYGIFAAGYLTRPLGG

VILAHFGDKFGRKRMFMISILLMVIPTFTLAFIPNYESIGFLCIVLLVFIRICQGIAIGGELPGAWVFVY

EHAPQGQKRTYLGILTASVVGGILLGSLVFLIMNKIYTQEELHEWAWRIPFFLGGIFGIISAYLRKFLRE

TPVFEQMKKDKALEKFPLKEVFKKAKMGIVLSMMITWVLTGCIVVMILLMPSYMAKILQINTSIQTYLQI

GGILLICLGCIISGILADKIGIIKSCVFFSVFFGIVSLLYFNTLYRQNADFNLVACLYLLVCFFSGVMNF

CPLIMSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFSLGIYVFFLAIIALLC

AFIFSYLNNTQRTYSQ

>WP\_009881923.1 MULTISPECIES: hemerythrin [Campylobacter]

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>WP\_009881850.1 MULTISPECIES: Fe(3+) ABC transporter substrate-binding protein [Campylobacter]

MKKIFLMFLTAFSFLGASELNIYSARHYDADFEIIKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFITADISNLTEAKNLGLLSPVSSKYLEEFIPAHLRDKDKEWFAITKRARIIAYNKNANIDISKMKNYED

LARAEFKGEIVMRSATAPYSKTLLASIIANDGNKEAKAWAKGVLDNLATNPKGGDRDQARQVFAGEAKFA

VMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDAVKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>WP\_009881779.1 MULTISPECIES: endoribonuclease YbeY [Campylobacter]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>WP\_002934257.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAFMNFSGFFYARNDLRLFKIEKKNELKSFFYKDYTLSSYKDALNLNNEIFFYQSLKEGLFKENDEILVS

NLGKKIILFRNFTQNCDNFNEAKLKQILLLFFLLLASVFFASLAMINEFGAIDLVFLMICLLLLVMGAIN

LGLLFKQIRILKSFSKEEMKEFLSQRMKKYTKV

>WP\_002922676.1 MULTISPECIES: HDOD domain-containing protein [Campylobacter]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLNNLLSKLPSKAKEN

LNKED

>WP\_002922489.1 MULTISPECIES: peptide ABC transporter ATP-binding protein [Campylobacter]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLIILGKSGAGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKSYELSGGEATRVGLIRALVLNPKLLILDEITSAFDIKISKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>WP\_002922487.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIYDNALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEVKYLIIDKNIHSYKDSENIKYFLNFLSVKYGLKILDSDEEECDFK

KAKLNTLKELDNYDGLVLFRANLQDKNLHCSRQFLQIAKCKDQSEVEILAKDFSFKTKLCLDENLQGTIA

FLNYENNGFDFTPIRIKEAK

>WP\_002907589.1 MULTISPECIES: DnaJ family protein [Campylobacter]

MNSLYETLGVSKNASADEIKKAYRRLARKYHPDINKEKGAEEKFKEINAAYEILSDEKKRAQYDQYGDSM

FGGQSFHDFSRNTGGVNLDDILKDLFGGGFGGRSRGGFNGFSSKGFSSGFGGFGGFEEEILDSNLELHIP

FEKAVKGGEHSFNFQGETIKFKIPHGIKEGEKLRIRSKGKQSRNGARGDLIIIVKIEESPIYTREDDDLY

QKVDISLKTALFGGKINIKTLKEGKEEATINITPNSKNNQKIRLKGYGVQNRKSNIYGDMYLNLNVVLPN

LDTLDEKFIELLKEKLP

>WP\_002898865.1 MULTISPECIES: 2-oxoglutarate translocator [Campylobacter]

MGLGEISIMIFLSLAFLYTHYFFASTTAHISAMFFVFYSAGLALGAPPLLYAFIMIASGNVMMALTHYAT

GTAPVIFGTGYVTLKKWWSIGFVISMVDIVVMIAVGLFWWKILGFY

>WP\_002892108.1 MULTISPECIES: tRNA 2-thiouridine(34) synthase MnmA [Campylobacter]

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKSLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGAHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYDHDKVIASGFIE

>WP\_002883441.1 MULTISPECIES: recombination protein RecO [Campylobacter]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>WP\_002882716.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYNINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLSRDL

ISKLSSGFSTDNGEFLSQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLRSNSIENFLDRRQKQANINKILNSYMSVMV

>WP\_002882286.1 MULTISPECIES: cysteine desulfurase, NifS family [Campylobacter]

MKVYLDNNATTMLDPNAYELMLPFLKDMYGNPNSLHQYGSATHPALREALDKLYTGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQVGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVPYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKRERRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGAEHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>WP\_002882243.1 MULTISPECIES: hypothetical protein [Campylobacter]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>WP\_002874626.1 MULTISPECIES: 2-oxoglutarate translocator [Campylobacter]

MARGVIKTGLGEHLAYHFISILGKKTLGIAYSIAFCETILAPVTPSNTARAGAIINPIVQVIARSFKSTP

EDGTQNKIGTYLSLVNYQEPILFHQLCLLQLQLQILWWLIL

>WP\_002872157.1 MULTISPECIES: DUF4917 domain-containing protein [Campylobacter]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>WP\_002871986.1 MULTISPECIES: phosphoglycerate kinase [Campylobacter]

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>WP\_002871985.1 MULTISPECIES: triose-phosphate isomerase [Campylobacter]

MIFAANLKCNHTRASFKIYAEILNKTIGVKCDDIIVFPPSVAFLEKENNFIQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEEFIKAKFDFAKEHGYKIVFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQSTDIAKVLEFLASLTKAPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>WP\_002870694.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDFIFANQSLYYLTKQAFKEAVQEFYELCNEGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLS

GSSYIRFTKDIEELKEDFKPFKPLFWGDYELINLYNFEGSVEHFIYIGQK

>WP\_002869425.1 MULTISPECIES: dihydroneopterin aldolase [Campylobacter]

MSCIKMKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGM

IALINPTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPS

WFLPIGECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFI

VLFAMFIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>WP\_002869424.1 MULTISPECIES: aryl-sulfate sulfotransferase [Campylobacter]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKIVCDDDYSKCPGYENDNGGFDFTWTQHTGWRIDSKSNKRYIYIS

VFDNGDARGAEQPAFASQKYSRAVIYKIDQQNKTVEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYS

ATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSVQIQFSGSGTGYQAMPFSVDQAFNPKK

>WP\_002869413.1 MULTISPECIES: D-alanine--D-alanine ligase [Campylobacter]

MKFAILFGGNSYEHEISIVSAVVLKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIK

QGGFFSKGFLKENKLECECVINLIHGRDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMVRKGQNSKEKLSFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCMINDEFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEIYLNEINPNPGSLANYLFKDFSTTLNALADQISLEKMIKISYNFLHSINGQKGKL

>WP\_002869393.1 MULTISPECIES: amino acid adenylation protein [Campylobacter]

MTTHIYDFLEKSLIKFSEKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQAPVLIILPKG

INCLISFFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLKFNLDLPTLYTQDFESFNIDESL

IKNAKEKHIDTNLLYVLFTSGSTGIPKGVSIAHKSVIDYAFHFCEAFEVDENEIIANQAPLYVDASLPDI

LATIKPSATLHLIPNHLFAFPNKILDYLEQEKITMIFWKPTVLIYFIKDQDNLKNYPLKNLNKILIGGEI

MPIKQLNIWRKHLPNALFANCYGPTEITDVCCYYILDREFSENEILPIGKAYKNTELLVFDENMNFISPK

QIGVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDLLYKTGDIVSYNEFGELLCYGRNDNRIKF

MGHRIELGEIESVINSHSKIILCACIFKEKIICFYESDEELDFKAFLKDKLPSYMIPKHFIKIEKFKLNQ

NSKIDRKALHELI

>WP\_002869382.1 MULTISPECIES: glycosyl transferase family 2 [Campylobacter]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>WP\_002869380.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MLKKLFFILSKEDKNFLFFLLIFSVFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHAIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLVSEIFVVLLLYALMLLINYKITLFLSVFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKLKTKEDGVLSLFKAQSEAFSKANITNESVTAVPRIYLEGIGFCVLVFIVVFLVL

KNESDISGILSTISIFVLALYRLMPSANRIITSYHDLLYYHSSLDIIYQNLRQEEENLGEEKLSFNQELK

ICNLSFGYEGKKYLFKNLNLNIKKGEKIAFIGESGCGKSTLVDLIIGLLKPKEGQILLDKQELNANNAKN

YRQKIGYIPQNIYLFNDSIAKNITFGDAVDEEKLNRVIKQANLEHFIKNLPQGVQTKVGDGGSNLSGGQK

QRIAIARALYLEPEILVLDEATSALDTQSEAKIMDEIYKISKDKTMIIIAHRLSTITQCDKVYRLEHGKL

KEEK

>WP\_002869378.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKFALILSFFIALFMSACTNATFIQSFIQTSNEGIFIRSQKQQSFKISFQNPSQLRTTLDRDLALKLKN

LGLKEVKENADYEILINLVDMKKHSYAQKITTSARFFYDFDPLESDGEWMVENYYTMQVNLQINSKNHNS

QKTSLLARTAYLGNKERCQLSLENKIINQIVSFFIFKKRQSRV

>WP\_002869377.1 MULTISPECIES: selenocysteine-specific translation elongation factor [Campylobacter]

MKSVIIGTAGHIDHGKTSLIKALNGFEGDSLKEEQERQITINLSFSNLKLKDKNISFIDVPGHKDLVKTM

VSGAFGFSVCLFVVDINEGLKEQSLEHLEILKILDIKNIILVLSKCDLCENIEQKSVEILEELKNLDYPI

LKVFHTSIKNNQGIEELKNYLYTIENKENDEELIFHYYIDRVFSLKGIGTVVTGSLNEGSITLNEKIICL

DTQKELIVKNIQNHDTNLEQIKACNRVALSLNCDYKELKKGYLLSKKGCFKAFKECDALVKAKNLQNSKM

IFCVGSRQIECKINILKKLENDEFFVHFSFDKNVFLSFDEAFILLQNNRVIGGGKVLNPLSEPLKKEQKN

KFLMFLKNKDFKAAFSFLKDAHKYGFGLLSSYQRFKLSHQKALKLAKELNQVFVDEKNLNVYHLQSLEEI

KNFIKFILEKNPYAMLSAHSLALRITWASENFCELGLKEMSNLLDFQNGIYFKKGIDFEKLQEKNNNQMY

EILKKQGIKPEAPYNLYDFLELDRKSGDNILKKLTQKGLVVRLSHNLFIEKQALEKLMQECLNLLKNQSL

DVQSMKEYFNLSRKYAIAYLEYLDKFPQVSKEAEKRFLTNI

>WP\_002869375.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGVENIYTLPLNGAPYISGSVAFDGEAKDNKLILESNTKIDLHNFQYFSDEEGKDIYDERITRLMGAFGI

NSNLQNNKVLIDSANIVLHGPDGEYTARSTFEILGALADVNNLKKYNVSKNSVIIKNLNLDLMVNSQNKI

TFYDAVLFGEIYGGRTLQGNAEKNSIEVYHFNSLDHLDKNIKTHASLNLYGGYSNDGEANGNKIVFRLKK

PLKISDNFYGKNYYNLYGGFATEGANFNIIDIQNDLTYEKVPQNYSDKFTVYAARTLSGKANNNTLSIKD

SVISLPLYAFITSETTLDGIDYIADESNNNEVNFENIKSSKNLSLMINAKNVSNNKINYNLIQSLTEASS

LGKGSKIILKATQNANNNLIKLKDCSSAAVESSCIIKADKESAFNKIIINNTVFSTASDKRQGYVGLIAG

VSANSHDNIMELVNLNIDEYKNQDAIFLAPSGTSDISNFKSYNNTLYLGGELNFFKDVNIDLLSGSVFHE

VNKKGKIITQILPHQEDFSKNNRLIIDTQDVKSEVVNNFENFTFILPNKIKNPILTIEKLINLPSNGSME

ILTKNKPTKGKYILIQSDVGIYDGVNRLLNQQELENLLEKMKNNKNKFNYNKIEKLAKSTLKNVNFSFEV

SDDAKIIYINIL

>WP\_002869372.1 MULTISPECIES: molecular chaperone DnaK [Campylobacter]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>WP\_002869370.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>WP\_002869369.1 MULTISPECIES: acyl-[ACP]--phospholipid O-acyltransferase [Campylobacter]

MQKKSFLKIYGLIPFLLIVFINAFVDLGHKIIIQNTIYKAYEGSEQLFLNAIVNALILLPFILMLSPSGF

LADKYPKNIVMKISAIFNVILTLIICICYYSGAFWMAFIFTFIMGAQAAIYSPSKYGFIKELVGKDFLAM

GNGVINAVSIVAILAGMALFSLSFESLYSSMYNQTDEILKEVAPLGIVLILFSCIEVFFACRLPKLKQTN

KDLVFNKKDYIRGKLLINNLKLVFKNKTIWFCIIGISFFWAISQLYLVSFPVFAKNELFIENTFYVQISL

AFSGIGVILGSLVAGKFSKNYIELGLIPLGASGMFLMVFLMPCFISLLSYSFLFFFFGFCGALFIIPLNT

LIQFHAKENELGQILAGNNFFQNIAMLGFLLLATLFAKFEINVVYLFYFIALVTFIGSFYILLKLPFSLV

RILLSIAFLQRYRLLVEGFENIPEKGGALLLGNHISFIDWAVVQMAIPRKIYFVMERSIYSKWYIKFFLD

KFGIIPVSSTGSKTSLELIAKHIKEGNLVCLFPEGTLSRHGQLNEFKAGFELACEYLSEDDGKIIPFYIR

GLWGSAFSRSDEEFSARNRTLNKRKIAIAFGKAMPLHSKKDEVKAKVFELSFMAWKSQCEAMHTIARAWI

DTAKKNLNQIAIIDTLAGDISYRKMLTLSLFLNFFIKRKSKELNINPQRGSYAPKEEAIGILLPASFASS

LTNLSVLIAEKIAVNLNFTAGEKALKAAIKNAQISQIYTSKTFLEKLANKGINLNFDTNIHLIYFEDIIE

DFKMQKTKIFSMMLAVSIMPSFILKSIFTPSKNNLAIAAILFSSGSEGSPKGVMLNNRNILSNIAQISDV

LCTRNNDVILSSLPPFHAFGLTVTTFLPLLEGIKSITFADPTDALGVAKAVAKNNITIMCGTSTFLGIYA

RNKKLDALMFESLRIVVSGAEKLKNEVRTAFEMKFKKSIFEGYGATETTPVASVNLPNRFDADYWLIHRA

NKEGSVGMPLPGTAVRIVDPNNYENLKTNEDGLILIGGHQVMVGYLNDKEKTDEVIKEIDGIRWYNTGDK

GHLDKDGFLYIVDRYSRFAKIGGEMISLGAIEEEITKFVDTEVVKFCATSLEDEKKGEQIVLLIECNNEI

FERVCEAIKNSNIPTLFKPRYYFQIEKIPLLGSGKVDLKKVKELAKNLAL

>WP\_002869368.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>WP\_002869364.1 MULTISPECIES: MATE family efflux transporter [Campylobacter]

MAKKQLSLTRLSFPIFWDLLSKYLTVIINTAMVSHYSNFLVGAMGAGNQILDLFITIFSFLSVGCSVLIA

QAIGAKDHVLARKVIHQSLFLNALLGFVCGVLILWHGEYLLYLLKIPQELLKDSEIYLHMLAICLFFDAI

GIVLAAIVRVYNMAYWVMFIGFLMDIVVICGNYYVLHYTKSELFGVGLSNIFARIVAIVALFAILFYKLK

IHLKIKEMIKLEKEVLKKVLNIGGFSAGENLLWIVQYTIAFAFVASLGEASLSVQTIYFQISMLIMLIGQ

ATSIANEIIVGKLVGARYENIAYKHAWRALYFSVIASALVAFLNYLCQDFTMQILGLKEELKNLMIPLFA

LSIFLEISRTFNIVMVNSLRASGDAKFPFFSGLVFMMGVSLPVGYVLCFHFNLGILGVWIGFCADEFLRG

MVNSYRWKSKKWQGKALV

>WP\_002869361.1 MULTISPECIES: carbamoyltransferase HypF [Campylobacter]

MYHLGYKIKISGLVQGVGFRPLVYELALKSKLFGEVRNDGFGIEIILACTQKECENFIENLKNHLPPLAR

IDQLIITQISILNYENFSITPSLENTKSTPMLSDFALCKECKKEFFDEKNPRFLYPFITCTHCGPRFSII

KSLPYDRFNTSMQELLMCEFCKSEYEDPKNRRFHAQPISCPKCKINVFLKNPKGEILAKDQEAFIQSAKF

LKEGKILAIKGMGGFHLMCDAFNEEALKTLRLRKNRPKKPFALMCKDLQSTKELAFIDEKEEALLGGVLA

PIVILKAKKAFSLIAPDVDKIGIMLAYTPLHLLLFEYFKGNLVATSANLSGESIIKDEFNLRQKLDKVFD

FYLDYDREIINASDDSIAQVVNGKTMFLRTSRGLNPFYLERNFNKKGTFLALGAELKNEFVIFYENKLLI

SPYIGDLKSLDVHERFFKLLEFFKQNYDLKFDAILCDKHPHFSYAKEFEERIKISHHYAHFCAAYFEYEE

NFAKDEKALAFICDGTGYGEDGKIWGGEVFVGNLKEYERIAHFENFTLINSDIKNIQNLALSLIFHYDLE

DKAKEFLAKIPKIELENLKKIYSHSNLQTSSLGRIIDAFGSIVFNLEKSSYEAQVGLMCEAFYDKNLDFS

YKLFVEKGQVNFKNLILGALQDEKTKAITGMFNALANFIIDFSKDYDLKVLLSGGVFQNKTLLEILKAKN

FDFFIPLKYPCNDSSIALGQMVHFLKKE

>WP\_002869360.1 MULTISPECIES: hydrogenase formation protein HypD [Campylobacter]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNLNKNIIFFAIGF

ETTTPMSALLLQKIIEEKINNVFFHINHITVPAPVEAIMNDENVKINAFLGPSHVSVITGYGIYEPLAAK

FKTPIAVSGFEPVDILESVLNIIKQSNEGTFKVYNQYKRAVSKEGNIKAQNLVKKYFRVCDFEFRGLGLI

KDGGLELKEEFSAYDASKKFDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNV

>WP\_002869358.1 MULTISPECIES: DNA polymerase III subunit delta [Campylobacter]

MYRKELQTLLSKDSIPNFFFLYGADNFQSELYAEFIKEKYKPDETLKLFFEEYNFTRASDFLSAGSLFSE

KKLLEIKTSKKNPTKDLKILVELCKNNTNNFFLLELYDENSKQSDIEKIFSPHFARFFKANGAKEGVELL

SIKAKQLGVEITQNALFTLFTSFDENLYLAASELNKFSGLRVDEKTIEQYCYSLNTGSFESFFEKILKKQ

DFKSELEKILDNFNEIALINSLYNSFYRLFKIALYAKVNGKIDFKDLLGYTPPPQVGQNLSSQAFSLKIE

QYKEIFTLLLKCEYELKTNSKLVKKEFLISNLLKLARILKIN

>WP\_002869356.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKKKLVQIQRYLIIAILFLLCIALALGILVKYQNSQDVFSVKPDYFIDKQEDLISSNKDHYEIGIFQEN

EFDNNKSVSILEQKIQEIDDLNTSLNEQNLSSVEQNLSLEQNQSLEQNFIPKDTNLTQDQNLTFDEDIHL

NKISKKPKLAIIIDDMANASQVRGLKALNLKLNPSFFPPDKNHSETPKLALKFDFYMVHLPLAAINYNKP

EIDTLNPNDSKERIFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSK

ANKIAKELSMPYIQRDVFLDNEDDVNYVKKQLESAVKLAQKKGFVIAIGHPRKNTFKALEQSKDLLKGVD

LVYLSEIYGK

>WP\_002869353.1 MULTISPECIES: GTP-binding protein [Campylobacter]

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>WP\_002869336.1 MULTISPECIES: toluene tolerance protein [Campylobacter]

MKKIFLILALFFNAFALQLDEISSTMQKNIDASLKLLQDSKEDKKQAADGIFKLFDSIIDYKLMAKLSLS

KNYSKLNPKEQEKFTTAFEASLKKSFTDKLSLYKDQVLKVKNGELKNEKRYFLTTSMVVDGEEKNIIFKF

YNDNNNWLIYDVDVLGVSIVQTYRSQFRDILANQGFDALLQKLESIVIE

>WP\_002869335.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIKFISFILIFFAIFAFAKEQNSDDFEQEYQNYQVNDPLSGYNKAMTSFNVALYDYGLRPVLKGYNAIT

PEFIRLGVRNFFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFGGLMDVASKMSLKKHPADLGTV

LAHWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSK

>WP\_002869334.1 MULTISPECIES: nicotinate phosphoribosyltransferase [Campylobacter]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDDTKKLDTIE

IFNIPDLSKYKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDF

YWDINLD

>WP\_002869326.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIFLTILFFITSIFALDLDFSVGENGKSLDDNNTVLIFGGIQGDEPGGFHAASLLLSDYNITKGKIIVA

PNLAFDSIIKRSRGNNGDLNRKFASISPKDPDYKTVQRIKELILLPEVSMVINLHDGWGFYKPTYIDAMQ

NPKRWGNSSVIDTSEINASKYPDLENIATQTVNSVNSSLADPKHAYHLKNTKTQELGDMEMLKALTYFVI

SNHKAAFANEASKNLPVNLRAYYHLLAIENYLKTAGIEFSRDFELTPQGVDKAINKELEVKLFNDRILLS

LKNPRKVINYVPFPVNKELNYNTSNELTAVIAEGNSFYIQYGNRFQTRLYPEYLEFSDAFNEVTFQVDGN

ETTVPFGTKVKVKENFLIPKIANVRVNIIGFDHGKDESGILVHKKNMQTQYSLDMAGKIYRVEFYELRGA

NLQQLLEANTNSKLIKNAKNLDLNTLKMARSKDKFLGSILVEFE

>WP\_002869324.1 MULTISPECIES: phosphatidate cytidylyltransferase [Campylobacter]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSHK

ALLFGILALLLVVGSLVYKKASLKPALIYIYPSLPILALWQVYLDQGMFALFWLIIIVAACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFWLSLLCSFFVAIFAVIGDLLESYFKREAGV

KDSGDLIPGHGGVLDRIDAVIIAAFVMVAFL

>WP\_002869322.1 MULTISPECIES: iron ABC transporter permease [Campylobacter]

MFFKHILSLKVLIALLLFFGMISLFIGVISINVKDILNLNSTQLEIITLTRIPRLIAILLTGMSLSICGL

IMQQLTQNKFVSPTTAGTMDCAKFGILISLIFFAGASFFTQAIIASVFALLGSFIFIQILRKIKLKDVIF

VPLIGLMFGGIISAITTFFAYALNYIQNIQGWLQGSMANVMQGNYELLYISLPLFILAYFLAHKITIVGM

GEDIALNLGISYNGILFLGLMIVSIITSLVIVSVGIIPFLGLIIPNLVALYLGDNLRKNLIYIALCGALF

LLVCDIISRLVIFPFEMPLSITTGVLGSLIFIFLLLKRKAYA

>WP\_002869316.1 MULTISPECIES: phosphoribosylformylglycinamidine synthase I [Campylobacter]

MKVAIIRFPGTNCEIDTAYAFEKLGVKTQIVWHEEKEFDADLVVLPGGFSYGDYLRCAAIAKLAPAMQGV

FNHAKKGGYILGICNGFQILLESGLLKGAMKHNNNLSFISKNQSLRVVSNDNAFLKNFKKDEIISLPIAH

GEGNYYADETTLKELQDKDLITLKYEPNPNGSVFDIAGICDENKKIFGLMPHPERACEKILGNDVGLKML

KGFLF

>WP\_002869315.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKILLTLIFSVVVLFGRGEISVFSGQDENMQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGS

LVLTNDEYPSKVYVGEVFPITIYARTTENTKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNS

NASLSKISIKLLRNNEAFQEADINLNPIKFENTLFNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNA

TNTNLKSFFIEGIQKQGIENLKGDFNASSAFYYAILPLSKTNFEFSYFNKDSKKLENINLKLKISDDEIS

TQSDLNPVNKDLNIYKQYALWFLAVLFGVLFVWRKNYIILALAVVCFALSFLVDTNTQNAIIKAGSRAKI

LPTEPSTYFYTANADEKVEVLGKRQNYIKVLFSDGKIGWVNKDDLQKN

>WP\_002869314.1 MULTISPECIES: molecular chaperone HtpG [Campylobacter]

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKDDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEIDDANKEEQGTSITLYLKDDEFANAYKIESIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKPDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNESFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>WP\_002869313.1 MULTISPECIES: Na/Pi-cotransporter [Campylobacter]

MQEERNSLKYFKFISWSIFTLVLIFILIRYDELANLLAGVAILLIGMTNLGIGFKAFSGGLLEKILAKST

DTKIKSILFGTLSTLIMQSSTLVSIITISFLSAGLISLGAGIGIIFGANLGNTASSWLIVGLTNIKISML

AIPLLIIGVLFFFQKDSVLKGLGNIFIGIGFFFLGVDYIKSGFENFKHIIDLSRFDFAGFKGVFVFLGLG

ALLTGVIQSSTATMAIIVAALLAGQISLENSLAATLGTSVGGVVTAVLASLSTNIEGKKLAFANCIFNFG

IAFLIVLIFPYFIHFLNFLSIVLNIEDIALKVALFHTLFNLIGVVLFSFFTPQIVLFLNKIVKAPKDKNK

DKPLYLDSSLVKFSDTAIESLRKESEHLYNNTYAIVAHAIGFSRKDIQSDKSFKEILENKKWFSKNVDLD

YLYQTRIKVLFEAIIDFSTKAQVYINDETKNHKIFTFKMAAKNLAETTKNLKIIQANIKKYSSSSNEFLA

LEYNKIRSNLGELLRSIEELRVVEDREKLYLIIKNLQKGKEILKEIDTLTLSNVEHLISVRKITTAEGIS

ILNDTTFAAKIAEELIGAVEVIFSKDISN

>WP\_002869312.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKKILYIVVFFVVLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQ

THSSDNASTEILKITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQRQNKELI

ADIKKLLLKDYDLNIDGNLSINTKSEFYYFQGRASGELFDFNASISYKDKNLAYKIEDLNIRNITEIFKR

VNKRIELPQSLNLWVAYRAKGEFYHLDYLQGFIDFTKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKL

DLNLNKQKLDFVFNKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFY

QKSGKIKSDLELKIDFHDKGEISYSGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADF

NAKFDLQKQQGNFNTQISRLYFDNGELLDLKNQNAEVKLDYSQNVNISIPQWNLILNFKDGLEANLNNPK

ILFSFSPLLKKFGFIDAKNVYYKTLNFEDFNASVNDAYFKNNLLINGQTPYENDSFDIVKNKGIMEIHTQ

SDTASAKISSDNKEIHLKNLSYIYKKDSNSSNSTFDISTNTQNISFGGANVALILPDSNKTLAFDRVEAD

LKGNALDLKGSRGNAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLSIKGSGLEYFDGQIDF

KNTYVKDLRGINQLISFIDTVPSLLMFKSPTFNQKGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGL

GSANLRLNTVDFSLELKTLKSASEAISKVPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTP

FNLIKNIIQLPANLLN

>WP\_002869310.1 MULTISPECIES: succinyl-CoA ligase subunit beta [Campylobacter]

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>WP\_002869309.1 MULTISPECIES: 2-oxoglutarate ferredoxin oxidoreductase subunit beta [Campylobacter]

MAFNYDEYLRTDKLPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVVDKSKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>WP\_002869306.1 MULTISPECIES: menaquinone biosynthesis decarboxylase [Campylobacter]

MKEFIQILKENDLLRVIEEPVDVDLEIAHLAYIEAKKGEKGKALLFKNPIDKKLNKQYKFPVLMNTFCNE

KALNLAFGRDYEEVAEEISKLTKLHIPTSFKAKMDFFMNLLSFKNIPPKRLKKNKALYDYEILNSLEELP

ILKTWEDDAGKFITMGQVYTQNLDKTQNNLGMYRLQMSDKNELLIHWQIHKDGANFYHEYKNVGFKKMPV

SIAIGGDPLYIWCSQAPLPKGIFELLLYGFIKKTPAKLTPCENGIFVPYDSDVVIEGYVDLEEFKIEGPF

GDHTGFYTPAELFPVMKVEKIYAKKDAIYQATVVGKPPLEDKIMGLGTERIFLPLLQTSVPDLIDYNMPE

NGVFHNLILAKIDAKYPAHAQQIMHAFWGVGQMSFVKHAIFVDKNAPSLKDYDALIPYMLDRFNTKKILI

SEGICDQLDHASPNSCFGGKAGLDACEEIQVEELEILEDEKLLELFKTKVELLNLKQFYKESKSPIVCIL

LDKKEKIEQSFDKLLEFKKHFRILVFLDVENKLENSYMLVWRVVNNIDAKRDIFIKEERLGVDASAKGEA

EGYLRAWPKQTDCTKSVIEDLILRNILENNPDLFNKFEIF

>WP\_002869302.1 MULTISPECIES: replicative DNA helicase [Campylobacter]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDISPKDFSLKAHQDIFKAVIACSNNKEPISVSFLRKHKKI

DEQILAEILATPSMIDLPAYVNELHEKSVKRQLLSFAHLLPTRINEDRAVSEIADEIGKEIFSITNRVNS

RDIKDVDIVISELFEEFKKQKTLENKGIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KVLRQKKGVALFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKAYQRLFIPNPMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYETTEFTG

>WP\_002869301.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>WP\_002869299.1 MULTISPECIES: LPS biosynthesis protein [Campylobacter]

MENNINNILLKLDKNRHFCFLKDNINYENKKDIAIFRGAVYQKHRKEFFDSYFGRTFCDIGDTSKQPSQW

KKNFLNKKEQMKYKFIISLEGNDVASNLKWAMNSNSLVLAPKITCETWFMEGTLKQNYHFALIDNENLSA

VIEYFKSRPKDALEIINNAHQYIKKFLDKKKEFHIGILVLTKYFYYSRQLELNKKRDILELIK

>WP\_002869298.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTMLDIFEIVFITAVVIIGFGGIVFVVTKEKK

>WP\_002869296.1 MULTISPECIES: purine-nucleoside phosphorylase [Campylobacter]

MIVCAGGNENFSFAKAIGIGLVESAFHLGQLCFKEKPSKLIFIGTCGLYDKGEILEIYRSSYAFNVEFSK

ISHAFYTPAKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLNIDAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKYHYI

>WP\_002869290.1 MULTISPECIES: hydrolase [Campylobacter]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>WP\_002869289.1 MULTISPECIES: MFS transporter [Campylobacter]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>WP\_002869278.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIFWAFLVVIGAIYFGNMFFGQYSLDALLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>WP\_002869275.1 MULTISPECIES: AMIN domain-containing protein [Campylobacter]

MKTRILAIFFIFTSLLYADENPFKTDQNITLVAPPEFQKEEVKFNSSARILKSITFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDISVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVYKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHKGYYRLVIYLDGTYNYNIQK

DATGYMINLL

>WP\_002869266.1 MULTISPECIES: acetyl-CoA carboxylase carboxyl transferase subunit alpha [Campylobacter]

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYALDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKVMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>WP\_002869259.1 MULTISPECIES: orotate phosphoribosyltransferase [Campylobacter]

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>WP\_002869244.1 MULTISPECIES: alanine--tRNA ligase [Campylobacter]

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>WP\_002869243.1 MULTISPECIES: ferrochelatase [Campylobacter]

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>WP\_002869242.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIKAFSLLEFVFIILILGIVFNLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNLTKRFGIEKVEFKGSCSGFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYVYIPDFKTLKSQFVNIKNKNYECSKI

>WP\_002869241.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFSHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGASISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYHLTFQKYKNLLWFLMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIFLIFCYFLIVANQLLYYFINNSNRHFANNYHFAKELALELKKQDVL

ELATAPSLQKRLRFYGIKNSNKFYLKALKQADKHDMDKKIVKVKLGKYEKVYQILNYD

>WP\_002869237.1 MULTISPECIES: GMC family oxidoreductase [Campylobacter]

MAEVLKKVDVVTVGAGWTGGIVAAELTKAGLNVLSLERGHMQSTENFNYIHDEWRYGINYGLMQDCSKDT

VTFRHDPSGLALPYRKMGSFLLGNNVGGAGVHWNGWTFRFMPYDFEIQTLSKQRYGNKLGNDYTLQDWGV

TYKDMEPYYDRFEKTCGVSGEPNPLAEKMGAFRSSPYPQEPLENTKMLKRFESAAKSSNLHTYRLPASNS

KGGYTNPDGQDLAPCQYCAYCERFGCEYGAKASPLNTVIPKAMSTGKYTIRTYSNVTQILKKDGKVTGVK

FVDTRTMKEYIQPADIVVLTSYMFNNAKLLMVSSIGEQYDPKTGKGTLGRNYCYQMNMGTTAFFDEQFNT

FMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGTRPIQSAPLPAGAPTWGAEFKKALNYNFTRAI

TVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTDQDRALHKFITDKTAEVAKRMQGVKSIKKGAY

LKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDADNLFVVGAGNFQHNSGYNPTDTVGALAYRCAE

GILKYHKSGKSLA

>WP\_002869225.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>WP\_002869224.1 MULTISPECIES: dimethylsulfoxide reductase, chain B [Campylobacter]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>WP\_002869202.1 MULTISPECIES: outer membrane protein A [Campylobacter]

MKKILLCLGLASVLFSADNNVKFEITPTLNYNYFEGNLDMDNRYAPGIRLGYHFDDFWLDQLEFGLEHYS

DVKYTNTNKTTDITRTYLSAIKGIDVGEKFYFYGLAGGGYEDFSNAAYDNKSGGFGHYGAGVKFRLSDSL

ALRLETRDQINFNHANHNWVSTLGISFGFGGKKEKAVEEVADTRPAPQAKCPVEPREGALLDENGCEKTI

SLEGHFGFDKTTINPTFQEKIKEIAKVLDENERYDTILEGHTDNIGSRAYNQKLSERRAKSVANELEKYG

VEKSRIKTVGYGQDNPRSSNDTKEGRADNRRVDAKFILR

>WP\_002869192.1 MULTISPECIES: flagellar P-ring protein [Campylobacter]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>WP\_002869170.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MLKFKILIIEDDIDLNELLVLKLKSSGYEVISLADFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLSFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>WP\_002869169.1 MULTISPECIES: phosphoglycerate dehydrogenase [Campylobacter]

MKKKIIVCDAILDKGVDILRKAEDIELIEAAKVPKDELMQMLSDVEVAITRSSTDVDVNFLNHAKKLKAL

VRAGVGVDNVDIPECSKRGVIVMNVPTANTIAAVELTMAHLLTSARSFVNAHNFLKIERKWEREKWYGIE

LMNKTLGVIGFGNIGSRVAIRAKAFGMKILAYDPYISASKITDLDMEQAKNLDEILEKSDFITIHTPKTK

ETNGMIGKQEIAKMKDGIRLINCARGGLYTEEALYEGLKSGKIAWLGIDVFDKEPATNHPLLDFENISVT

SHLGANTLESQDNIAREACEQALSAARGVAYPNALNLPIKTEDLPPFVAPYIELVSKMAFLAVQIDKNPI

KSIKLEAEGIIGEYANSMLTFAAVGALGGILGEKINYVNAEFVAKEKGVELSCETLPNSGYNNKLSVKII

TENSNISVSGTVFNENEQRIVGLNGFKTDFKPKGKMVIFKNKDIPGVIAKISSVLAAKNINIADFRLGRD

GFGYALAVVLIDEKVQKEVLDELKQLEACVFVQYVEI

>WP\_002869168.1 MULTISPECIES: 30S ribosomal protein S1 [Campylobacter]

MSEVNKKVQGGVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQGDN

SKLLFNVGDSIKVAVMGSRGGRSLLSHKKALRKEKVIEFIKNYQENQDDIFTVKVVGKNKGGLIVVDEND

VEFFLPKSQYGFKETNNIIGKTFKVKIIKIDKDEQSIIVSRKKTLDDERRKRKELINNIAQQEDLIEGIV

KKITTYGMFVDVGGVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSIKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPNE

RRLRVSLRNLLSRPFDGFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDDIEAAIVFIDEKKNRIRLSVKNLVRMKEREVLNEINNDDKVTLGDIIKDQLA

>WP\_002869166.1 MULTISPECIES: phenylalanine--tRNA ligase subunit beta [Campylobacter]

MIITKSWLNDWLELEEISSDKIAKTLNSIGIEVDRVGALKAPDKVVVGYVKEKIKHENSDKLSICQVDIG

SETLQIVCGAANVDAGQFVAVATKDAIMPNGMEIKEAKLRGVDSCGMLCSSLELGFEKINEGIMLLDESI

GKLELGRALNTYEIFNDELIEVELTPNRGDCLSIYGIARDLATALNLNLKEPKPFKESENVLGIGRILRL

AAEKELNGLYNYRAIELKEEIQTNLLLSLRLAQIEGLGKNSIENLLNYATHSTGVLFNAYDLSSFSEKDE

EFTINLSKQVHGETKVSCKDKLLSFSGIFQNNESRCKDDSKIIIIEANYTDPLVIADAKIYHKDQDEKML

YRSFRGSEPKLNLGMDFLLSIFEQIPNLVIYSSSQQILTDKELPIIPISIESIGDIIGQNVDKDEVLKIL

KKLGFELILSGEGLINVKAPLHRPDIKNLSDICEEVVRIIGIDNIASKGLEFIEKNRLNSAYKNYIEFLN

LRKRAVASGYFESLHYVLDNEEELKRLGFDSVKLKLINPITAELNTLRTTLLNHLLNAASLNAKNSKKII

KLFELGAVFNVNNQELNRIAFIHSGLKEEAKISNKAKPESVQFYDFLLDIKNIIGDFKLKSSKYNILSPY

EQADIYLSDIKVGFIGRLHLKIENERDLPKTYICELDLDLIRQDFKIAKPYSKFPAITRDLSVLIPKGFE

YNQIKNCIEELNLEILENFRLVDIYSDENLKEFYSITISFSFRDINKTLEDNQVNECMDKILNTLKNLGL

DLR

>WP\_002869164.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIRNFFIGMSFLGILFLAFYALYDKKKESVFSLNTCQPLTCNLNLQDCVFSFNKKNIEVSAYPKPIKIFN

KTTIKIKNFPHYSNLKIKIYSLNSYIGNIIPKFNIVNGDILINFIGRSITDDSRFRVEFLNNNAPTGFFF

DFDVTMQKNFQTGNTH

>WP\_002869162.1 MULTISPECIES: leucyl aminopeptidase [Campylobacter]

MKFELNDKKLDAIKADFELVFIQDKNLKNFNKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLSSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLERFIISSEELNGK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVHPPRLIHLSYKAKNAKKCVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDILISREGISIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVIGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>WP\_002869160.1 MULTISPECIES: argininosuccinate lyase [Campylobacter]

MKNEMWSGRFSSASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIIKGLEQVKSE

IEQGKFVFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEYAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELADFLPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFALDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGIFDSVKTAKDSLIILNAMLKE

IQINKENMLNACKKGHMLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPVFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILEGFIQNL

>WP\_002869159.1 MULTISPECIES: biotin attachment protein [Campylobacter]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFAMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVPFYEKILKEILAAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVDGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGFEEEKILKYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDTNIVELASKQLNLEPTTELAINIADKDE

GKSIAYTKTLLEKEGIETSEENIFIAAACKEKGIAFLKGEAKVNIRKLASMPKPMSVDENKFTVAVNGNK

YHVEVSYGFDKDVNVKSVKKVEENKNIISSNSTSSVDAENEVLAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>WP\_002869157.1 MULTISPECIES: glutamine ABC transporter substrate-binding protein [Campylobacter]

MKKILLSVLTTFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIALAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTQTPERAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQDYPNIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>WP\_002869155.1 MULTISPECIES: dihydroorotase [Campylobacter]

MILKNPLDMHLHLRDNQMLELIAPLSVRDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLYSAKDEIFGIKLYPVGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKHFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLIITLDDVIGGKMNPHLFCKP

IAKRYEDKEALCELAFSGYEKVMFGSDSAPHPRDTKECCGCAAGIFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMAGEILKFQLKH

>WP\_002869154.1 MULTISPECIES: exodeoxyribonuclease III [Campylobacter]

MKLLSWNVNGLRAICDKNALDWIAQEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRAGYSGVMS

LCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYADFLVYLDKLLKDGFEI

IICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFIDTFREINGEIKEKYSWWSYRMKARER

NVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>WP\_002869152.1 MULTISPECIES: DUF493 domain-containing protein [Campylobacter]

MVNLCDLKKEPQINYPTFWDYKVIFEVHVRASEIFQEILGQREYKFEHSNSSASGKYQSYLLNVYVDSKK

DRLDIFDKLKAKAKFVL

>WP\_002869147.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>WP\_002869146.1 MULTISPECIES: aminofutalosine synthase MqnE [Campylobacter]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>WP\_002869134.1 MULTISPECIES: membrane protein [Campylobacter]

MDREVFYIAGYDPKSYRFYYDLFKKNLKDYSHTFNIKADLSKIEKNEQFPFFKISCEGVQTKYHFLTWND

IVKKNWSENYKDALADCYSFFRIYTITGLFIKFGKESIYQLITGYYPFFYVLFSLLFSLVLAFGSFAFLQ

NYMHFSLAIIIGCFLGFLLNHFLFKLGKKLAVFWIARICAFCATWQDKKTGTMQERIKLFANTIVDKLKQ

NENKQDYELVLVAHSVGTIVCIEVLECILRQNLDLSLLHKLKILTLGECIPLVSYQKKADEFRKKLEFVS

RFDLKWYDYTSIIDGACFPQVDFFRTSGVNAKFTPPFLSAKFHTLYEKHEYKKIKRDKNKAHFLYLYSIS

VKGDYDFFSFIIMPKFLEEKVKI

>WP\_002869133.1 MULTISPECIES: cytochrome P450 [Campylobacter]

MSECPFFPKPYKNKASTLLTFLLKRRSWLDGLYERSYKMQTGYVKMPNFDLYVINDTKEVKRMMVDEVRE

FPKSAFLHELLSPLLGESIFTTNGEVWKKQRELLRPSFEMTRINKVFNLMSEAVADMMDRFSKYPNHAVI

EVDEAMTFITADVIFRTIMSSKLNEEKGKKILNAFVTFQEQSVHTAMRRMFRFPKWLSYVLGDRKRAKAG

DVIRQVLSDIIKPRYDMADNAEFEDILGSLLLVVDADTNKRFSFEEILDQVAMLFLAGHETTASSLTWTL

YLLSLYPKEQEKAYEEITQVLQGGAIEISHLRQFKYLINIFKESLRLYPPVGFFAREAKKDTQVRDKLIK

KGSGVVIAPWLIHRHEEFWTNPHGFNPSRFEGEYKKDAYLPFGVGERICIGQGFAMQEAILILANILKTY

KLELEEGFVPDVVGRLTVRSANGMRIKFSKREL

>WP\_002869130.1 MULTISPECIES: adenylosuccinate lyase [Campylobacter]

MTGISVFDHRLLADSWSTQEMRAIFCEQNRIQKWLDVEAALAKAQAKLKIIPKKAADEIAKKAHYKFMDM

DFIFAEFKKTKHPLVPTVRGLEKACDNNLGEYVHFGVTTQDIIDTGLVLQFKEAMTLIKSELKAIAKALA

KLAKTHKNTAMMGRTLALQALPITFGHKVAIWLSELERHFERILELEKRLYVGSIVGAVGTKASLSDECN

EVEKLTLENLGLDVPNISWQPARDRFIELGFVLGNINTTFNKIAHEILILSHNEIDEVAEPFGKGQVGSS

TMPHKRNPAVSENAVTVSNAFKANLAILSDIERHEHERDGQVWKMEWKLLPEMFLMLSVVLANMKFALSD

LEVKKDKMLKNLNTLNGFVLAERVMFALSDHYGKQHAHEIVYENAMLGIEKQKTFKEVLLADKRVSKVLK

EKEIDALLDATSYVGYAPKLVDEFLAKIKNSAILK

>WP\_002869126.1 MULTISPECIES: hypothetical protein [Campylobacter]

MERIVCLLIFLSFKLFAQDEFIFWAELSSKNFILFHQNQNLSLAMTQSENVEEQWVCEISYSDQDLKVLP

RTSLALIDDNMPKTIKFNFLNSHKDELSDCFIGARISVKDIVNTDLLHAQSETYVKILPLRFTVEFGEQN

AIIYYLKKK

>WP\_002869124.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPGGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEEQKVLNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDAIGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>WP\_002869122.1 MULTISPECIES: arginyl-tRNA-protein transferase [Campylobacter]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>WP\_002869118.1 MULTISPECIES: succinyl-diaminopimelate desuccinylase [Campylobacter]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>WP\_002869116.1 MULTISPECIES: membrane protein [Campylobacter]

MSRVFLYFLIILILALITFALREKLGKKTKPFFGILLVIFIVLAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>WP\_002869110.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNFLSSLKDKAVNASEAIKDKTIKTAEVVKDIGMEVKCGIGWHAGEYQNEKDKPKCFFSKICPDCGKYLT

KNQHDFEAPEILNPDNCYGYRRCTLCSIQVFDNFHNYYEIKKDAKCRMHEKCNLCGHERLGQTRHNWKYD

ENGQKICLDCKETV

>WP\_002869094.1 MULTISPECIES: UDP-4-amino-4,6-dideoxy-N-acetyl-beta-L-altrosamine aminotransferase [Campylobacter]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>WP\_002869093.1 MULTISPECIES: UDP-N-acetylglucosamine 4,6-dehydratase (inverting) [Campylobacter]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>WP\_002869088.1 MULTISPECIES: bifunctional tRNA (5-methylaminomethyl-2-thiouridine)(34)-methyltransferase MnmD/FAD-dependent 5-carboxymethylaminomethyl-2-thiouridine(34) oxidoreductase MnmC [Campylobacter]

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIIAESGFGIGLNFFLTLKRFLQ

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLGFYEEFKELLEQFLKFYPKAKEGIYRFYFEDCFLDLVF

EDIAVLKELDFKADIWYLDGFSPNKNSQMFDGNLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKPKVNLGEFSELSFIEASRFYRQILDLKFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLNTPFPLSSKAYICPVKDDLQVIGASYDRLDTSLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEVFYKEEYKALLWTKNKEQKLAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLIRKLKKGL

>WP\_002869086.1 MULTISPECIES: hydrogenase [Campylobacter]

MKFLVLGIGNIMFADEGLGVHLCKQLEKNYKFTHSEFTLDFVDGGTLALQLSYIIARYDRLIVLDCIEAQ

GASIGDVFSFPYDAMPNKISWSGSAHEIEMLQTLQYMELAGDLPKTHILACVPKRIEAMSFKLSDELIQG

AKIMEKTLLDFLSKEGFTYEKIADFSLQELADISYKNY

>WP\_002869082.1 MULTISPECIES: DNA-deoxyinosine glycosylase [Campylobacter]

MSEFLTHPFEPFFDKDSKILILGSFPSIKSRQDGFYYQHPRNRFWPILETLFDVKLENIAEQQAFLRKKH

IALWDVLQSCKIKNSDDKTISYAKANDLNLILSQTKIQAIFTTGQSAYRFFVKFHPRLEAIALPSTSPAN

LNFSFEQLLQNYEIIKKFTK

>WP\_002869081.1 MULTISPECIES: polyribonucleotide nucleotidyltransferase [Campylobacter]

MQYSIEINKNTEIFDIDKVAKQAAGAVLMRQGKSIVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPG

GYVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPM

KAPVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQT

TSQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKEA

INQMAKSERASELNKIAKEILNLEITKDWSEESVLNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISI

ETNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPG

RRELGHGNLAKRALYPSVDENYPYIIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLI

FEDNKHAVLTDIMGLEDHDGDMDFKVAGSKDGVTALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEE

AAKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAK

DYIINITSSQKGTKKGSKDKDISGFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKSKHLNLSENQS

LKVKISEIKNGKISVDLCE

>WP\_002869079.1 MULTISPECIES: phosphoribosylamine--glycine ligase [Campylobacter]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIKETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGAEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIEDPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLEDGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>WP\_002869076.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGKRNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDENLSKNSYLELSKGEFKNC

FKDEKLFKKFEDLRELIKKGSNLD

>WP\_002869074.1 MULTISPECIES: hypothetical protein [Campylobacter]

MILAGIIFIFNLILAYLSIDISKLDSVAEQLKIGMFSSIFVLSLTLFIFAFRQNRNINKIYQKIFYMQND

FLNFQKKIDVDSVLDLLKEKFETTGQNLTKTSHEKDRYLHLLEENLYQLGNISNAMRCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKIFNKNVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLITLLRKYLPKA

>WP\_002869073.1 MULTISPECIES: radical SAM protein [Campylobacter]

MKILFGPVSSRRFGRSLGIDLSPSKKQCNFDCVYCELDPKKAQEKQDEIISIYKIISEVKAMLEKNVEFD

FLTLTANGEPSLYPHLNELILSLRSIAKDKKLLILSNGTAVLDEDKFNALLKLDVVKFSLDSAVAKTFYR

IDRALKNIDLEKMIEKMADFRARFNGDLIMEILVVKDLNDNEEEFEALNQALKKIMPLRVDLSTIDRPPA

YAVKKVSEEKLLELSKLIDSTPVLLAKRHYEGEKLSFNEEELLKMLHLRSQSEIDIEVKFDEQSKTLLNQ

LIKEKKVKILDLAGVKFYKA

>WP\_002869072.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKFSDFFHAWLHESYYKNAVSIGKNGDFFTAVSVGNLFGTLLAKHFLNLIDKKILQPPLELVEIGANEGY

LSRDFLAALLELRPEIFSQISFFVIEPHEKLKNLQKKTLEGVEFTHKNSLKECHFKNAFFFCNELFDSFT

CELINHDKIAFVENFKLIFKNMDENLITKCKALNLTKGELSLELEKFFKDLDQACERFIFAGFDYGTFNA

QNFSLRIYQKHEVFSPFEVSLKDFFGKSDLTYNVNFTHLQKLIKEYDFKPLAFKKQSLALMDFGFEDLLE

YTKNKNIKTYESFLSQAKILFFNFDEKFHFFEFQKN

>WP\_002869067.1 MULTISPECIES: threonine--tRNA ligase [Campylobacter]

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFRVESKIGEEDLVKIEKKMKELAEAKIEISKYEITKSEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHAPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLTIIEEAKKRDHR

KLGTELKLFTFDDEIGGGLPIWLSNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKIYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEIATKALKEALNEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTVQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVVKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVHF

>WP\_002869065.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KINLKFNNYFFLNKIIKGNFTNPFDFLDKVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEALMNKNLEIKNIKIHFDMINFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSKSQQQINFDYLVLD

NNKINSFYSKNLVNFNEENSTINLNIQGKSNEIDIDLKSLLGQNLNFDKTKFNITINKFLNSNFNISHFI

QKNLDLEIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKENNNFFL

NLSYDSLANPQLKINGSEFSNMDLN

>WP\_002869062.1 MULTISPECIES: ATP-dependent Clp protease proteolytic subunit [Campylobacter]

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>WP\_002869061.1 MULTISPECIES: peptide deformylase [Campylobacter]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFNENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>WP\_002869059.1 MULTISPECIES: phosphoribosylglycinamide formyltransferase [Campylobacter]

MLVKLAVLFSGNGGNLENILEKLHKKTIGENTYEVVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYNTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESDMKVAGVSVH

WVSEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>WP\_002869056.1 MULTISPECIES: iron ABC transporter permease [Campylobacter]

MYKTLKYYKLGAILLALFLALPIFGIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISMGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLALFI

KKRKLNPIKQILSCIYCFMIAFVGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALVTALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYVIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRTSYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>WP\_002869054.1 MULTISPECIES: saccharopine dehydrogenase [Campylobacter]

MKNLLIIGAGGVSRVTTVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDADDSNAVVE

LIKKTEAQILLNVALPYQDLSLMDACIKARIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGVTNVFCAYAQQNLFDEISYIDILDCNAGDHGYAFATNFNPEINLREVSAKGRYWENGKWIETQPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEECYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPSLGE

>WP\_002869051.1 MULTISPECIES: NAD(P)H-dependent oxidoreductase [Campylobacter]

MNFKELISKRRACKLFNDKKINEKDLHFILESGVLAPSSHGFEPWKFVVLEQKEHNLKLSTLCYNQQNVA

SASHNIIFLARKDLQSKDEFAQKQVRRFSGSSEENFQKILEIYTHKTNAMNDNELYHYAQLQCYLAMMQM

SLAAMSLGIDSCMIGGFEKARVDNFLNLTYPFETAVILSLGYKAHEPKYSTQRLNFNEVVEFYKEK

>WP\_002869050.1 MULTISPECIES: pyrroline-5-carboxylate reductase [Campylobacter]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALAKEGFKTLLYKDFNIEGKDVILAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIIPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEIQMNAAMAISGCAPAFLALIAESIANAGVYEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSAK

>WP\_002869049.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQAKQENKECL

DNIYFNYAKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>WP\_002869047.1 MULTISPECIES: bifunctional hydroxymethylpyrimidine kinase/phosphomethylpyrimidine kinase [Campylobacter]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFYAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>WP\_002869045.1 MULTISPECIES: methionine adenosyltransferase [Campylobacter]

MYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKADYDNLV

KDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGETGAGDQGIMFGFASCEAEEYM

PAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMKIEDLR

SLVMKLILDSNLPKELFDPNKTRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQSSKDYT

KVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQNFSLTP

NWIRDQFHLDKPSKETFLYADVAARGQVGQKDYPWEKLDALEQFKKLL

>WP\_002869044.1 MULTISPECIES: aspartate carbamoyltransferase [Campylobacter]

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>WP\_002869043.1 MULTISPECIES: oligoendopeptidase F [Campylobacter]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYTLDANEFLQALKDYENLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIMLYLSNTGANAFSRLFDESMSALKIPFEGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFNLVSQFYKRKKQILGYELKDYD

RYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFVL

LNYTNKRRDLFTLAHELGHTIHQKLSYHVSYLNQNTPLTTAETASVFAEMLVFDFIKDKLKKEELLSLYA

NKIEDIFATFYRQINFTCFERRLHAQENELSTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIHS

PFYCYAYAYAQLLVLALYGLYKSKKCENFKELYIKMLSLGGSVSPKELVGMFGFDIEDENFWEIGIKEIQ

KLINEFMELQSC

>WP\_002869030.1 MULTISPECIES: magnesium transporter CorA [Campylobacter]

MLYIYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSAAEIAFISSEFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLVRDLKNNEEDRNLIKLRTEIVTFATAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLNILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLIGTVYGMNFKFMPELELHYAYPIVLGVMVISIILPLVVFKKKGWL

>WP\_002869029.1 MULTISPECIES: ABC transporter substrate-binding protein [Campylobacter]

MSKKFFLSLGLVALLFSNSQAIDENLIKAAQAEGRVNSLAMPDTWANWKDTWADLKNLYGIEHSDTDMSS

AQEIAKFKAEKKNASGDIGDVGASFGEIAVKQGVAQPFKTSYWDQIPTWAKDKDGNWLLAYTGTIAFIVN

KDVVKDIPKTWQDLLKGNYKITVGDVSVAAQAVSAVLAANYALGGDEKDLSPALAFFNTLAKQGRLVNND

VSIANLEKGEVEVGLVWDFNGLGYRDKVGKDRYEVLIPADGSVISGYTTIINKYAKHPNTAKLAREFILS

DKGQINLAKGYARPIRIDHIILPDDIKAKLLPSEQYKNARAIKDQKAWEKSTKELPQLWQEKVIVDMK

>WP\_002869028.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKVILTSAMLCSVLFGVQEYEANLAGHIIIDSKSTVKPPKDAPDFFKTYGKFANITREEKIGTFKSKGN

RETDFYLPFKNQPIQGHSGIKYIPKKDVFWVISDNGLGKKYNSYDSMLYAHEFKFDFKNSKYELLKTVFF

KDSDKKYPYPITTETTKERYLSGADFDTESIQVINDEFYIGDEFGPYLLHFDKNGNLKEVFDVYVEGKKL

ISPDNPSLKFSDKPDGENEKFNIKRSKGFEAMASSKDGSKLYLLLEGSIYNNNAYENEKGKEYLRIIEFD

VKNKKFTGKTYKYFLEDKSHSIGDFNMIDDKYGIIIERDQKEGTKDKACKEGEDTKHCFNNVAQFKRIYK

VKLDDKTHEAQKISYIDLLNIKDRNKISKKPLANDKFVFPFETIEGVDIVDDSHIVVENDNNFPYSSSRE

PNKTDDNEFILLEVKDFLKSK

>WP\_002869026.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MKEKFLAFLSILPFFIVFTFFMIAPLIWIVFNAFYVEEDEIYSLANFIHIFESKFYLQSIINSLQISFIS

SIFGLLIGLLASYSLFILAPSKICNFLFSLNTMISNFSGVPLAFAFIIVLGSNGVVNVFLKNLGIEPFVS

VYANFGVNIVYVYFQIPLAILLLLPAFKSLENSHLNACKMLGGGNFLYWLKIALPLLAPALFGVFVILFA

NAFGAYATIYALSSGNFNVAPVRIAALIAGDINLDPYMASALSIIITIIMLVVTFMANFLSKKYNFKVL

>WP\_002869021.1 MULTISPECIES: alpha-2,3-sialyltransferase [Campylobacter]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>WP\_002869020.1 MULTISPECIES: N-acetylneuraminate synthase [Campylobacter]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>WP\_002869014.1 MULTISPECIES: lipopolysaccharide heptosyltransferase II [Campylobacter]

MKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTALFKEFPNSKIIIENKQSRYKQALSLRK

ELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLSIKAHFKDLKLPFKLK

FQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSHEILIFGAGKAEQELCNEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENAKLVHLDL

ACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>WP\_002869013.1 MULTISPECIES: lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>WP\_002869012.1 MULTISPECIES: phosphoheptose isomerase [Campylobacter]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>WP\_002869011.1 MULTISPECIES: bifunctional heptose 7-phosphate kinase/heptose 1-phosphate adenyltransferase [Campylobacter]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>WP\_002868998.1 MULTISPECIES: 3-isopropylmalate dehydratase small subunit [Campylobacter]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>WP\_002868995.1 MULTISPECIES: 2-isopropylmalate synthase [Campylobacter]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>WP\_002868980.1 MULTISPECIES: sodium:dicarboxylate symporter [Campylobacter]

MDKQFFQDFLMLSQAHTITTLAMLCVVFYALKKMRDIKINFSLRMLFALLMGLGFGFALQYLANFPDAKE

ASNILWYSETKHWFAFVSSVFVAFIKMLVVPLVSICIIKVIIEIDKNIKISSLLGISLFWILFSTAIAAT

LGIFLGYSFDLGSNFAIYEGNKQIREIQTFSNIILGLIPSNIIAAINKENIIAIVIFSFFIGISAKKISK

KEEYEQAFKSFHNFILTFYNIMMNMTATVIRFMPYAVVCMMANVLLSNGFEAIKTAGLFIMLIYIAMLIM

FGVHFLLLASQGLNPIKYAKKAFPVWLFAFSSRSSLGTLPMTTSTLQNKFGVNSAIANFVASIGTTTGLN

GCAGYFPALAAVFVAFATHTHIDFTFALMIVLVAVIGSLGIAGVPGSATMAASIMLAGIGFGNNFVMLSL

ILAIDPIIDMARTASNVSGAMTSALCTAKNLKALDKEIYNS

>WP\_002868979.1 MULTISPECIES: single-stranded-DNA-specific exonuclease RecJ [Campylobacter]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIIRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMCKFLELLAIAIVADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLVLTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGMVTPQFVIKEIL

>WP\_002868965.1 MULTISPECIES: tRNA uridine-5-carboxymethylaminomethyl(34) synthesis GTPase MnmE [Campylobacter]

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>WP\_002868959.1 MULTISPECIES: protein translocase subunit SecA [Campylobacter]

MFLNTLKAVFGTKNDREVKKYFKRVTQINALEGKYQNLSDDELKAEFAKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVILSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKVEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPAKPEGDFVVDEKNRNILITEAGI

AKAEKLFGVENLYSLDNAILAHQLDQALKAHNLFEKDVHYVLRNNEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLVKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDVRAKISQNIAEYSANVMNDYILDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNAWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQEEVQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>WP\_002868942.1 MULTISPECIES: tRNA-dihydrouridine synthase [Campylobacter]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNEMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFISIHGRTRKQLYSGKADYESIASAKASVSIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDEVNRINDAKIMQEKIESFF

>WP\_002868941.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIKLFLLASFIYIALIFAFAWHLELGSYTLNISTYTFELPIMIWLVIPLFIYMILAVLHIAFYGFLRYL

KFKHFFKDAAKFEAYTQDLLLEKDLKTTFQTKEFRAVAQLFKTIKTHEKIPHSNKINEILDLIDGLNKNE

FFNLSKFKLENNNVLYLQNEKNHLKNDANYAYNKLKNLNEIKDEFEEIAFNTLIEKASYEQIKNVKIPKK

PSEVLTLIKRFKEGNLELSVAEYEVLLSHNTLSEKDYLNAAKLSTKLLNPDAILGIFNKIKNEKSEALRA

HLYLLAEFGLLDELREQIHNDDKKFNDFKAFLVLREKNIKIDLNQLIQ

>WP\_002868934.1 MULTISPECIES: ribosome maturation factor [Campylobacter]

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>WP\_002868932.1 MULTISPECIES: ATPase AAA [Campylobacter]

MIVLSSDDKKRFKKYLVDFFHNAYNGNKLSSKDEVVNFNFFKKYDFYVDLSYGKGNVAKIPWIIFIRMDT

QEYKASYGVYVYCGIKRENREIVVCIGESEDKTVNYLARNKVDEYNAQFNHQVYNYSNLSNDINLIVDKI

ILNMQWFKELPLNEIQDININTLESKSLEVENNVQQISSKMENKNMPLNQILYGSPGTGKTYHTIDKALE

ILGKNLESRDDKKAKFDEYVKKGQIVFTTFHQSYGYEEFVEGIKPRIDSKENSKEIEYKIKDGIFKELCE

KALDNYENSILNADELNKKIELKEKVENFLNWLLETNEPIGKTKGGNFFVVEIDNKTIVIYSEGVERFDG

IFNLNLSIFMELLKCKDEFNNATEMFKKVFNRDYADRTHTYYFNLVKKFKAYEEKQLAAKIENNKNNDNS

LKPYIIIIDEINRGNLSKIFGELITLIEPSKRIGEKEELKVTLPYSGEKFGVPKNVYIIGTMNTADRSIT

SLDTALRRRFEFVEMMPDVSKLSIDCEGINLQELLKAINTRIEYLLDREKTIGHAFFISVENLESLKKVF

KNRIIPLLQEYFYNDYALIDAVLNKNGMLEISVENKDYLKNMTEFIESDKIVYKFSDSNNWNKDTFIKIY

K

>WP\_002868919.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRLLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKEL

NSQLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVPTTTANNSQELMPKP

KSTSLEGYDYTNYILVMLILVILLIVLWWFKKTMVYKNNNVSRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLIEQRQKGKKS

>WP\_002868918.1 MULTISPECIES: tryptophan synthase subunit alpha [Campylobacter]

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>WP\_002868914.1 MULTISPECIES: nucleoside hydrolase [Campylobacter]

MRLILDTDIGNAIAGANTDDGLALALILSSKEIKLEMLSTVCGNVPSLVAYSVAKDLFKRLNLNIPVYLG

ANEALKEPSKAWRQRLDESVKNFKLEYLWENIKSPEILENINPDAIFKMGELVSKNPKEISICAIGPLTN

IAMTMKIFKDFDINLKELFIMGGSFDMPYYTKDTNFGFDPEAASIVLNSRAKITLIPYNATMQTLLTHED

LKELQGKNILCDFIVETLGVWIDYASKTRGTKGTWMHDALTIAYALDSSIADFDECYADVICDSSLARGM

SWRCFKEPKMSMGVDLSTKNCVKILKNVDNAKLLKLIKERFLKGVCYENYESITT

>WP\_002868909.1 MULTISPECIES: phosphate ABC transporter, permease protein PstA [Campylobacter]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGFPAFKQTYIFVEANRNSPSYDLLSRAEQR

KIRTGQIAEKSWLLANSEVDQYMKQKYNRLSEKQRTLVDDLVQKGEIELKFNSNFFLNGDSKSPENSGIL

SSVIGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>WP\_002868908.1 MULTISPECIES: phosphate ABC transporter substrate-binding protein [Campylobacter]

MKKILSLSVTSLALCGALNAVDLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKAGVTDIVGMMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>WP\_002868898.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRRLSILLTILIVINITACDSKTENYYKNHPSEAKEKAKECKESGTLSEDCINALKVGVKPTNEESKYSP

NTPKKSDNQILETLKQNDLKKEKTTKDINQSSENNESIIIPPITETPSEIYPSKTTENNQSSIFSDDVNI

TQEKLP

>WP\_002868890.1 MULTISPECIES: TonB-system energizer ExbB [Campylobacter]

MEFLKDYIDLIIFLILGIMAFIAFWCVIERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKVSLLSNAYKANKN

A

>WP\_002868888.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDFFFVEYRDPLVGLIILTILVFVVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIALEKCKDKQEREFIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIEDNPMLG

RLVFEKYHMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>WP\_002868887.1 MULTISPECIES: DNA primase [Campylobacter]

MITKESIENLSQRLNIVDIIENYIEVKKQGSSFVCICPFHADKNPSMHINPTKGFYHCFACKAGGDAFKF

VMDYEKLSFADAVEKVASLSNFTLSYTKEKQENKKELKSILPSLNAYFKDNLKHHKEVLTYLYQRALNDK

DIAKFELGFAGASEDSIRLLRNQKIPLEDAMSVGALKKDENNEFYASFIWRITFPIYDHKDLLVGFGGRT

LNPNVPAKYVNSPQNILFDKSRIFYAFNIAKENIAKKKEIIVCEGYMDAIAFHKAGFNNAVAVLGTALTE

HHLPLIRRYDAKVILCFDNDEAGLKAATRSAFLLSTNKIDGKVAILQGGKDPAELVAKNESTKLHDILDE

GIELGEFYIRRLISTHSIISALDKQKALETIQKFTFNLEPLVANSYTSLVSNLLKVDEKFIVLSQNSKKT

IHTPLISQNKYNFPKEKIHIAELELIAFLKQHPDICNDFKQISDSVCFKHKILLDKILEKKGYEDSDIRE

FENKNIRKNLNYSEFLLGICKVNLAFLNNVKIKNSTLALKKQLFTLIDKNLNLLIKNLNTEELNNFLKEY

LSFLKYEKNEEILQQSFRNLNGIFSNKNFTAYDLGFSTQDNDEPF

>WP\_002868884.1 MULTISPECIES: transketolase [Campylobacter]

MDIQILQEQANTLRFLSADMVQKANSGHPGAPLGLADILSVLSYHLKHNPKNPTWLNRDRLVFSGGHASA

LLYSFLHLSGYDLSLEDLKNFRQLHSKTPGHPEISTLGVEIATGPLGQGVANAVGFAMAAKKAQNLLGSD

LIDHKIYCLCGDGDLQEGISYEACSLAGLHKLDNFILIYDSNNISIEGDVGLAFNENVKMRFEAQGFEVL

SINGHDYEEINKALEQAKKSTKPCLIIAKTTIAKGAGELEGSHKSHGAPLGEEVIKKAKEQAGFDPNISF

HIPQASKIRFESAVELGDLEEAKWKDKLEKSGKKELLERLLNPDFSKIAYPDFKGKDFATRDSNGEILNV

LAKNLEGFLGGSADLGPSNKTELHGMGDFIEGKNIHFGIREHAMAAINNAFARYGIFLPFSATFFIFSEY

LKPAARIAALMKIKHFFIFTHDSIGVGEDGPTHQPIEQLSTFRAMPNFLTFRPADGVENVKAWQIALNAD

IPSTFVLSRQKLKALNEPIFGDVKNGAYLLKESKDAKFTLLASGSEVWLCLESANELEKQGFACNVVSMP

CFELFEKQDKAYQERLLKGEVIGVEAAHSNELYKFCHKVYGVESFGESGKDKDVFEHFGFSVSKLVNFIL

SK

>WP\_002868880.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKQLFYILTFIFMLCGCSLRHETINKNENIILKDEGIDSNIFFKKTGKILKIRNANAPLYLNSRAIVYI

DNGFSNKYAHYFWGDLPSNLYSFLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>WP\_002868877.1 MULTISPECIES: glutamate racemase [Campylobacter]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQIDMLIIAC

NTASAYALDALRTKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLSQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGCSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>WP\_002868875.1 MULTISPECIES: Na+/H+ antiporter NhaA 1 [Campylobacter]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>WP\_002868874.1 MULTISPECIES: hypothetical protein [Campylobacter]

MILVTPCGVMDTTNFGKSEVNKRTIDFSLKFQEKKEKVEAKAEKEEANKDNSNSTNTDTNKKDKLLDISA

>WP\_002868873.1 MULTISPECIES: iron permease [Campylobacter]

MKIFKIIFLIISIFLSSSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQINALIDSLYYDLDEVAPILQNGYRLKAEASDTNYDKAKA

EKSSLEANAKREADAEALIAQMMGVDKKDLAQSSLTTQASTPANNDTSKLTDDNAGTDLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNYQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKGLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALSIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGIAMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSAKTLWITVFLAVY

REGAETVLFYQALLFDAKTSTDFGAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLTMLIIGILITKQISKKGVKS

>WP\_002868868.1 MULTISPECIES: DUF411 domain-containing protein [Campylobacter]

MKKIILTILFLLTLTQAKEIQVYESPTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYSEKYPVILMKKDGSYELYGYFI

GDKKL

>WP\_002868862.1 MULTISPECIES: methylenetetrahydrofolate reductase [NAD(P)H] [Campylobacter]

MCSFSFEVFPPRKDENIKNLHAILDDLGQLSPNFISVTFGAGGSINSQNTLEVASLIQEEYQIPSIVHLP

CIHSSKEKITQILQKCKEKNLNQILALRGDICENLEKSKDFSYASDLISFIKKQEYFEIYAACYPEKHNE

SKNFIEDIHYLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFVKILEKYENNALALEDAGIAYACDQIVDLITSGVDGIHLYTMNKSKAAIKIYEAVKHLLKEEL

HA

>WP\_002868861.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIYILEFFKGASLALMLFGALFFFFKYNSFFYLCLGIIPGLLLSLIFVLLIENHKLKNEIKLR

>WP\_002868857.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIFYGVIAFVVVLLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLQGALSPFKLGFDLDYLISLKQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGRGYLLGSNVLLNAR

MYNYSPVALNLDAQNLKIEEILHLLSYPSYAKGFLNAQAKISAQNLKPDGNIIIKLDTSYINYEAIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDMSKNILSTDFNLNIPSLAKLEKLTKT

RLNGSLGVIGETSVVNNALSSLNAQVIGLGGEVKASLKNNKIFADINEASLEKLLALAGYGALVSGNLNA

KLLNADLDFSNFDLEAKINNAKINTNELKKIAKIGLPNTIFSLDAKANAKNSNISYNALLASNLLNIKKL

QGTYNLKNSELNTDLNAFIDDLSQFSAIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVIAGMPNYASGVVNAKVNLDNIDFNNLNGKANLEAKGILNAATLSKILNKNFPN

NISYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDISKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKNLNFVVNSPNLFEGRLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKTDVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDITNDVYRTANAKALIKKENIKLDLNMQADRSYILVQSGA

LNSKSGALNLPFDIKLDRANFKGSITGTTENPKVNLNAGSVLNSIKNVVGGGVSDGAKSTGDKVDKAVNK

LLNKIF

>WP\_002868854.1 MULTISPECIES: serine endoprotease DegQ [Campylobacter]

MKKIFLSLSLASALFAASINFNESTATANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDIEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKIDRGFL

GVTILALQGDTKKAYKNQEGALITDVQKGSSADEAGLKRGDLVTKVNNKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQASFILKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGVGQSEIKNLKDLEQALKQVNKKEFTKVWVYRNGFATLLVLK

>WP\_002868850.1 MULTISPECIES: anaerobic C4-dicarboxylate transporter [Campylobacter]

MDFLTSLSEGGQFAIQIIIVLICLFYGAKKGGIALGLLGGIGILMLVFAFHIKPGKPAIDVMLTILAVVV

ASATLQASGGLDVMLQIAERILRRNPKFLTILAPFVTCFLTILCGTGHVVYTIMPIIYDIAIKNGIRPER

PMAAASISSQMGIIASPVSVAVVSLTALLLNANHKLAGFDGYINLLQITIPSTLFGVLCIGIFSWFRGKD

LDKDEVFQEKLKDPEFKKYVYGDSKTLLGVKLPKSNWVAMWIFLGAIALVALLGVFDFLRPNWGQVVKNG

IPQVDALGNPKMDVLSMVSVIQMFMLLAGSLIIIFTKTDAKKIGSNEIFKSGMIALVAVFGISWMADTMF

AVHTPMMKVALGDIVKEHPWTYAVMLLLISKFVNSQAAAISAFVPLALGIGVEPGVIVAFAAACYGYYIL

PTYPSDLATIQFDRSGTTHIGKFVINHSFILPGLIGVITSCIAGYFIAMAAGYL

>WP\_002868837.1 MULTISPECIES: A/G-specific adenine glycosylase [Campylobacter]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFEAKLPKEVEDLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNLNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFHTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDKLYKGMYNFPFFKEGEYKLSK

DMGFVGEFKHSYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>WP\_002868833.1 MULTISPECIES: phosphatidylglycerophosphatase A [Campylobacter]

MQKLFLTFFYSGSIKKASGTFGTIAALIPAFFILKYLGINTLFLLSILIFVASIRVIDDYEKKTGIHDDK

HIVIDEVAGVFLACAIAASVENSIVNFVLAFVLFRFFDITKPSIIGKIDKKVKGGLGVMLDDMLAGLFAG

LLSAVIYGFLLKFNLVFWDINLKDLF

>WP\_002868832.1 MULTISPECIES: sulfate adenylyltransferase [Campylobacter]

MKSARKNKNITIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLMLDEKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIEKIKENFQ

QIKNNLNAQKITAIVSSFDPLHRAHERMFRWTIDKADLVVIFLVESFDVNGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIYQMSYMV

>WP\_002868830.1 MULTISPECIES: 2,3,4,5-tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase [Campylobacter]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDDEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLSH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISVGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>WP\_002868828.1 MULTISPECIES: 1-(5-phosphoribosyl)-5-((5-phosphoribosylamino)methylideneamino)imidazole-4-carboxamide isomerase [Campylobacter]

MTQIIPALDLIDGEVVRLVKGDYEQKKVYKYNPLEKFKEYEKAGAKELHLVDLTGAKDPSKRQLALIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKNATLCLEILKEFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPNICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSIEEGIRCLAN

>WP\_002868827.1 MULTISPECIES: imidazole glycerol phosphate synthase subunit HisH [Campylobacter]

MKIIIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHMGWNQVHSSHALFKGLEGAYFYFVH

SYCAGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGENLISNFIKDIG

>WP\_002868826.1 MULTISPECIES: ATP phosphoribosyltransferase [Campylobacter]

MQENTRLRIAIQKSGRLSKESIELLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELERQSLGENPSYKLLKKLDFGYCRLSLALPQEKKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSVEVAPRANLADAICDLVSSGATLQANNLKEVKVIYESRACLIQKENALSKEKQTLV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>WP\_002868825.1 MULTISPECIES: MBL fold hydrolase [Campylobacter]

MFNFITTLLKTNLYFLEEKTTSKSSNQTHIISLKQSDDEFLNLLFSFLVPQSDEDKNFIGKTRTKIKRNE

HNIALIKNPNFNALIDTGFLDTIDTLKEKLHIHKTDFKDITHIILTHAHPDHIGALMSEENLFPKAQILI

DKKEYDFWIKSDRQEIKNTLLKLKNIEFINHSKDLIFQNSGIKAIPAYGHTPGQNAIIIDDKIVFWGDLL

HLYDIQIPKPKIAIKFDIDQNEAIQTREKLLKQFKERKLKVIGTHVPFIEPKFLD

>WP\_002868821.1 MULTISPECIES: para-aminobenzoate synthase [Campylobacter]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLTDYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFKFHSKMNSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKTKLFEIQSHPTLHQMTSSVQGKLKKNISLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHKLFKDFYNILNQKSSYKEYQNFTLF

KLDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGRYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTFYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>WP\_002868820.1 MULTISPECIES: glutamine amidotransferase [Campylobacter]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEIFGGKVSKMQNPMHGKISKLYFKKDPIFKGIKQEIEICLYHSLHISSMPE

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>WP\_002868814.1 MULTISPECIES: phosphatidylserine decarboxylase [Campylobacter]

MSFSKESSRLFGFVAGIKFPKMIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLHIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSIEELLKDSFEKDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSATYTSGALYSVNEKHLERISNLYVKNERVSLKCQNEKGIFWLVFVGAQNVGKMRFNFDASIQTNAK

ISHNFTRKYENLNLKKGEELGNFELGSTIVLISQKGLLTFNLKAGQGIKFGEKIAD

>WP\_002868812.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNNKKEITQAVKKGAYAIITENDITIEDKD

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHSLKDANFTLLSRSSFFFTTLICENLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>WP\_002868809.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKLLFTSFCCFASLMASDAINCDNIKNNKTLLNESSNLDYLNCKESLKNQDFTKKLYAISNEIRGGNSSC

NGIAYLPKLQQFNLLLLKIAIDPITYQKTLDTPENLEKKYDILKSYFRYWAYQSIGNFRLYKAFWQEYNN

AIEPLEKYFESNFNFDKGSNIYYTSNALNEFLNWAVGETKIYKDISPLAKIMSNKNYSVSYIQDFIFSNN

PSQDDLTIALQAALLNQREKEILELLIRFGTRIDEGYESAIFYALENYENTNFLIQNGANVNQANAFGKT

PLFYAIEFNRLDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITFCALEHTSKNVLMHAAAYGN

VEILKLLISKGANFNAVDDLGFNALDFALSAGKKENADYLKSLGLKANENLFYGGSLE

>WP\_002868807.1 MULTISPECIES: sodium:proton antiporter [Campylobacter]

MNKFLVLLFLPLVAFANSSEAAANANLFGAFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFFVVMTAIMGREFGSMYKAEVRARTTGQIAPLPKS

GTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAILGFYFNGLSTLEGEELAKASANPLSFETFRAA

FGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVETWIYGWKTMIFTIVLLLFAWSLSSIVKDLGTS

LFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMGILMPLAVPLAHEIAKINGMDANAMHHYMVIN

ISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQIPYALFICGISLIAGYIPVSLGISVWFVLPL

NFILIALLLRLIGKKVP

>WP\_002868806.1 MULTISPECIES: tRNA (uridine(54)-C5)-methyltransferase TrmA [Campylobacter]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>WP\_002868805.1 MULTISPECIES: CoA-binding protein [Campylobacter]

MNEKETISYIINTSKNIAIFALSPDKTKASYRVAEFLQRKNYKIFPIYPKEEFILNEKVYRNLDQIEEKI

DTLILFRKGKVALEILPKLVEKNIKNLWLQLGISNETAKKECKKLDINFIQNRCIMLEYPYFKTKEK

>WP\_002868801.1 MULTISPECIES: bifunctional N-acetylglucosamine-1-phosphate uridyltransferase/glucosamine-1-phosphate acetyltransferase [Campylobacter]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>WP\_002868800.1 MULTISPECIES: flagellar biosynthetic protein FliP [Campylobacter]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>WP\_002868799.1 MULTISPECIES: amino acid ABC transporter substrate-binding protein [Campylobacter]

MKKIILIFISFFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGL

IPALKTAKIDLIMSSMTITDERKKVVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHL

YAVKNLKNATINLFDKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQK

GNAELKKELDEFIAESKKDGLFDSLGEKYLKDVKDTFKKNNLEFFF

>WP\_002868797.1 MULTISPECIES: phosphomethylpyrimidine synthase [Campylobacter]

MKTQMNYAKEGIFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQINA

KDFLDVVYHHAKSGVDFMTIHAGINSRAAHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGIQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVIDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLA

>WP\_002868796.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTYSFIQPRKKPIFTLFDKIWLGLFGFSISFILLVYFTYTIKIALINSSINNEKQQVIVLQNQTKQNEML

YEILFDQSQIAKNFNTQNQIVKESLRNLFDIIVKTDNITLESVEQDEYSLKLIGVTPTREMFTLLLETPL

KSIFDQSYTTYYRLDNGWYRFVSISKQIPGVADER

>WP\_002868795.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLFLLKKIFPQLFISIILEDKKNIVKASIYRGNKLISSNEKTFDKSENLLEYVKNLSKHFLFYHTALFLD

AKEQGLIPSTNIQDCEHFNIGKISLQHILFNNALVYTATEHVEYYSELFEEYRGLDFLYSPFALLYYNMQ

KEKQPDDQILLYGFKQGHLLAIIVAKGNTILYGDFKIFEQELGLELELPSEDNQEIENNNDDTEVTLDNF

NEALNNKFDLLDQENNLETLDNNDNFNLDELNQFSNDMELCRYIITSIEKFYNDDKYAGVFINGILLYSE

SDINISAIDFLESETFLEIKTKQINTLDLMIELMQKELK

>WP\_002868793.1 MULTISPECIES: MFS transporter [Campylobacter]

MNYIELLKNNKNIRILASVQFIVYFGAWFSQTGVFTLLVELNAPTWATATSAMLAFLPGVLLAPINGVIV

EKNKPKKLLLSMISIELISIFCLIFVTSLSMLWLLFILIFIRLCVASIYFQAEMSLLAKILTPQELKLAN

EMHSVIWAISYTAGMASAGIFIYFLGVKTTFLFDCILILIGISFLVRLSIPDFHQKTQSRFFTMIKEGFF

YVLNNKIIFHLILLHAFIGLTAYETLVTLLAQHQYKEVLSAALVIGFLNAVRACSLAIGPMVLSKFINDK

NLFYMYLGQGLGIILWALTQFNFYISFLGLIGAGFFTSALWAYTYTMIQKNADKEYHGRVIAYTDMIYLS

FSAIISMLMGFLFEIGLSLELITGLLGMIFIFAAFYWKWFYKKYL

>WP\_002868792.1 MULTISPECIES: dehypoxanthine futalosine cyclase [Campylobacter]

MKRLDKKEALDLLHHASLTELGEMAYKRKLELHPEKITTFVVDRNINYTNVCCIDCSFCAFYRHHKEDDA

YILSFEEIGKKIEELEAIGGTQILFQGGVHPKLKIEWYEELVSWIKEHYPNITVHGFSAVEIAYIAKASK

ISITEVLKRLQAKGLFSIPGAGAEVLSDRVRDIIAPNKCDTATWLEVHRQAHKIGMKSTATMMFGTVEND

EEIIDHFEHLRKLQDETGGFRAFILWSFQSDNTALIQKHPEIMKQSSNKYLRLLALARLYLDNFKNLQSS

WVTQGSLIGQLALKFGANDLGSTMMEENVVSAAGASYRMNQDEMIRLIRSLGENPAKRNTAYEILERF

>WP\_002868791.1 MULTISPECIES: ATP-dependent DNA helicase RecG [Campylobacter]

MKIKESDFEFFKKLKIRSAIDLALLLPKKIENLNPSKNPKENEICTQKITIKSVSSRKNQLFGLGFCEEW

QENISFVFFHPRAWHFGICKVGKELIFNAKLSHFNHTWQFNNPKILTSFEGFSPKYQILGLKDTKIAAFI

HKYLNYVNLKESGIEDKYIHFLLNLHAYDEKSFFMFENLQNFSKDLKYIEIYNFLKRLKAKKTHFKAHQI

NVFNIANWLKDLPFSLTKDQLNALKDIEKDLHSKEAKRRVIMGDVGCGKTLVLLGAALMVYPKQAILMAP

TSILAYQLYEEAKKFLPDFMNILFIKGGKKEKDLEQNIQKANLVIGTHALIHLESHNAVLVMIDEQHRFG

SAQREKIHSLNKQEFTPHFIQFSATPIPRTLSMIQSELLNFSFIKQMPFEKDITTYCIQNEGFSKLSEKI

KEEIVKNHQIIIIYPLVSASDKIPYLSLEQAKEYWQSHYEKVFVTHGKDKQKDEILERFRDEGNILLSTT

VVEVGISLPRLSMIVIVGAERLGLATLHQLRGRVGRVGLKSTCYLYTKLKEIPSRLKEFASTLDGFKIAE

LDLKNRLSGDLLDGFMQHGNEFKFFDFSKDEEILQKVKKDLAKKLPN

>WP\_002868790.1 MULTISPECIES: group 3 truncated hemoglobin ctb [Campylobacter]

MKFETINQESIAKLMEIFYEKVRKDKDLGPIFNNAIGTSDEEWKDHKAKIGNFWAGMLLGEGDYNGQPLK

KHLDLPPFPQEFFEIWLKLFEESLNIVYNEEMKNVILQRAQMIASHFQNMLYKYGGH

>WP\_002868787.1 MULTISPECIES: elongation factor G [Campylobacter]

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVPNIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKTVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFDHYDEVPKNVADEIIKKRNG

>WP\_002868784.1 MULTISPECIES: hypothetical protein [Campylobacter]

MYRYLLFVLAAFFLVACGSSKINVVYPDYTKYKSNDFDLRVMKAYNYEYYKQYKEARDEFLSLYQDYNNT

NFLENAFLLTLANNLDRQAELNNLAKPYLNQNDNLKRLSALYALNSNDINNAQKLMKELLVKKDSDPRNL

ELYGDILVKKNDLKNATKYYRSAYNQVQNEEILFKLIGIYAILNDTLNIKNVLEFSRKTNGCTLKTCVLL

AKIYFDEKNIEALKSIYKELYQLTKNKSFALALVELLNSQGKTEEALKISLQYDLDDDIKFALYQNLKRF

DDAKKMSLALYHKTKNKEYLLRAAVFEFEAANEAKKITPKVIDSVKEKFEQAIDKDSNALYLNYYGYLLI

DYDLDVKKGIELVKLALEKDPQNLYYLDSLAWGYYKLGDCRQAWEILKQTLDDKEFANSDESKAHIKAIK

ACVKP

>WP\_002868783.1 MULTISPECIES: indole-3-glycerol-phosphate synthase [Campylobacter]

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKATAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPQIP

NSKIIIAESGLENKEFLEHLQNLGVDAFLIGEYFMREEDEGKALKALL

>WP\_002868764.1 MULTISPECIES: energry transducer TonB [Campylobacter]

MKNYGLSNLNSFLLALAIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQVDIEKLFAQTTNKTVKTEDIDQKASNFNELFGNIKEIQEEKTTKIQSSAKSGASSAPKPQASELV

KQLNDSLLQEESSTQGQSTKAQKIGIYDEFLGKVVRIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDAKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>WP\_002868763.1 MULTISPECIES: translocation protein TolB [Campylobacter]

MKKIVAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGSSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLASVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDKPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGVQSALGVIRVNANKTFYFPLRVGKIQSIDW

>WP\_002868759.1 MULTISPECIES: tRNA 2-thiocytidine(32) synthetase TtcA [Campylobacter]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQAHAPFKFELEAVTLSYGMGED

YSHLHAHCEEHGIKHSVLDSNIYEVSGDTIRENSSFCSYFSRMRRGALYTYALEKGFNKLAIAHHLDDAA

ESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRDNATQNELSVIGNEFCPGMKLSEKNVKFP

HAREEAKQLLANLEKNHPKLFTSLKTAFANLHTESFWLEKE

>WP\_002868758.1 MULTISPECIES: hydrolase [Campylobacter]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>WP\_002868752.1 MULTISPECIES: 3-phosphoserine/phosphohydroxythreonine aminotransferase [Campylobacter]

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKAAMLYECIDLSNGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQIKTLCEFM

KEFQGKYA

>WP\_002868751.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVYEIQKNFLLSDCTLLGNLKKDNIPFRNSKFETFYTQITSNHSVKFQSFCNEFYKITKFNNSILEQNQE

EKISKKKFEKARKKIIGKSIKKERFEFKFCSLKSYIDMYEEPKICILKIFFPTLDSSNEFKIPKDFKIQK

ELHHDLNSKHIVLYGFEYQNFDIEKYFKIIEKNQNFSLDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLE

RKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILALKFKDITKKTQDILASENSNQDLLLFLSDEKIQ

DLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKIILFRKNILKNFDLELFENSFFELAIFLEYFYRF

LEIKNLNKLYEKYCKDRDKNIFSKIINNKNKFCKLLKKSSKNLKIYKG

>WP\_002868749.1 MULTISPECIES: histidinol-phosphate aminotransferase [Campylobacter]

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>WP\_002868748.1 MULTISPECIES: diaminopimelate decarboxylase [Campylobacter]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAGAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIARKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIHEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECESDLYDYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFENQIALEEKFLKA

>WP\_002868732.1 MULTISPECIES: rod shape-determining protein MreC [Campylobacter]

MKNKIFYVLVLAFLVFISFYYGGLIKQNVLRVNDFVIGNFYNIKDYLGKKISEHFNQANQIQQLKARNKE

LEDIAVKVTSFANQLNRILEDQNSTKYLPQVSLTRVISYVQLNDYKKLWLDWSKIPVGKNRGLIYQGYAA

GIAINKNGRAMALLQGDDQCVFSVYIGKSKAPGLIQGEDGRIVVKFIPKWAKINTGDEILTSGLDNIFFS

DIPVGIVNRVNDEDMYQSVEVKPYVKISIPAYLYVVDNL

>WP\_002868731.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSSVNKQILPASIEARIALYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPVKSHILFYSHFKNAYTRFSLDEESLKQNLKEGFYRS

TKDEMVFVEFWRFNAFFKNKWKNFEDFLKKPLSIQAEVRWRNQVFGAYNLSPVIILEEIFPSRYEVIAKS

EIYHDNQEVLAKI

>WP\_002868630.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAIFNKGGISPTSSSSSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGRFNGTSKIKEDTIKLIENNNEE

>WP\_002868169.1 MULTISPECIES: phosphate acyltransferase [Campylobacter]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEASEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>WP\_002868022.1 MULTISPECIES: mannosyl-glycoprotein endo-beta-N-acetylglucosamidase [Campylobacter]

MKPIIIFLSLFLIPLFADDLKSGFGEEYYKLDIDQKRQIFFIKMNEMFDQSFKKIEQERAFIEAFFKDAY

KTGFRTSNQINLEKLITIKNKYRIENLYDFAEYKKRIQKIPKSMGIAQALVESATGTSRFAREANNLFGE

WTWGEKGLIPDLRHPDKKHKIKIFDSLQDSVDSYVLNLNRHFAYEKFRDARAKFESEGKEITGLEAIKTL

DSYSERKGYYINLITKIIKRYNLEKYDTNSNNT

>WP\_002867956.1 MULTISPECIES: 4-hydroxy-tetrahydrodipicolinate synthase [Campylobacter]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>WP\_002867954.1 MULTISPECIES: cysteine--tRNA ligase [Campylobacter]

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKPRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>WP\_002867949.1 MULTISPECIES: UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase [Campylobacter]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHTPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFTILALRFSFLFNLFSLPFALLSLKIYEFFTNLY

YKKQAKAKLRANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINNNLSQDTQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILSTKLEALNSKRLEKAFLHSSTQKEG

DKLISLYDEKLSLIHSSLEGLEFKVDIENKSYDFKSQILGDFNAQNLCVCILCAHYLGIKLEKIQKQVLN

INSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYKLCKSYKGRKVLVSPGIVEVSEEENIKLAKIINECF

DLAIISAQINAEIFKKELKIKTIILKEKSQLVQTLAKETKHGDLILFSNDAPSFM

>WP\_002867836.1 MULTISPECIES: basic amino acid ABC transporter substrate-binding protein [Campylobacter]

MKKILSIALVALVGLFLGACSDSKNKESNASVELKVGTAPNYKPFNYKENSKLTGFDTDLVEEIAKKNGI

KIVWVETNFDGLIPALKAGKIDMIASAMSATDERRQSVDFTKPYYMSKNLYLKLKNNDSLQTKNDLEGKK

IGVQLGTLQENTAKAIKNAQVQSNKDLNIAVLALKNNKIDAIVADQDTAKGFLAENPELVSFYQETDGGE

GFSFAFDKNKQKDIIEIFNKGIDEAKTDGFYNTLIKKYELE

>WP\_002867748.1 MULTISPECIES: haloacid dehalogenase [Campylobacter]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYVIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLKPCKVAAFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFVDFASMIELARREVRFIAMHETS

IYKKDGRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRKQNSKIDFEDIKIISDDFRGDLLK

AKELGMKTLLVLSGKISDTKGLDTDLLDGVYPSVFEFLKELKCQI

>WP\_002867533.1 MULTISPECIES: thioredoxin [Campylobacter]

MGIFRIQAYFFALIIALFFVACDSGENFKALNSDKTYNFAYNGFEKSLKLNDKAQNFALIFFTKDCGVCK

EQIPILQNLAKNYDFNIFVVLGDANDANDAKAWADEKGLSNLAMFYEKRAAKYLSSAIGEIYGVPVLSFF

KEGKMDEKFIGLTPYSILEKEIKKVKS

>WP\_002867459.1 MULTISPECIES: 4-hydroxy-3-methylbut-2-enyl diphosphate reductase [Campylobacter]

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIQALSNEKKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEVVIFGDENHPEVKGVKSYVSTKAYVVLDK

KELQNIKLPNKIAVVSQTTKKPEHFMEIVNFLILKTKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIKNFKIN

>WP\_002867436.1 MULTISPECIES: helicase [Campylobacter]

MLDKLEKILAYDNVFLSGGAGVGKSFLTNELIKSYRKQKKLAIALGSSALSAFNIGGVTLHSFFCLGYCD

DMMKLSALDRNQKQKEKLTKLKELLKTIELIIIDEISMVSANVFEMIGFRLKNSQFNGKILVVGDFFQLP

PVIKEKKETLFNHSYYAFSSFFWQDLNFKNIKLSQPKRTQNMEFYNHLSLIRQGFLDEKILSFFESLRID

YKELENLEDDYTLLCGINKKVNNINQEKLSKLETPLVCFKAQVKKEDKRIKDEELDSWIRSLNILEELNI

KIGARIIFCVNNWDKNYYNGEQGIIEDILYEEEKIYISIIKNNGMKILLEPYTFFMEELEQSGKDFVVNI

LASVTQFPIKLAYAITIHKSQGMSIEKLVCDIDHIFENGQLYVALSRATNPNTLKIYSTKKINFGFYFAN

ILKIDSNVIEFYKKHNFLDLEIQEQII

>WP\_002867117.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKSILFASALLASSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGIPATPNTQAIPVARKIEIQCYKKAY

>WP\_002867071.1 MULTISPECIES: dephospho-CoA kinase [Campylobacter]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKILENFTHPKIRAKILEQMQILDKENKAFFVEIPLFFESGAYENLGKVIVIYTPKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>WP\_002866909.1 MULTISPECIES: ferredoxin-type protein NapG [Campylobacter]

MKGRREFFVSAFKAACLCTGGGFLANLALKADDNYALRPPGAEDEARFLSKCIRCGLCVKACPYDTLKLA

SLLDSPKNGTPFFKAREIPCYLCKDIPCIRECPTDALDKKHLEQGIESLKMGIAIVDSASCVAHWGIQCD

ACYRACPLIDRALKLELKRNERTAKHAFLLPSVDHEVCVGCGLCELACITEKPAIRVLPREYVLGKAGSH

YVKGWDEKDEGRIKNADTSKHFDAKKATNYLNDGEL

>WP\_002866741.1 MULTISPECIES: outer membrane protein assembly factor BamA [Campylobacter]

MKKHLISICALVAIANAATIKDIKFIGLNHLSNTSAINITGLKIGEEINPAKINTAILNLYKQNYFENIA

VENNNGILEIIVTEKPTIAKVTITGIASNDRKQVESILGIKRGTLLDEGSIKEAIERIKAYYEAKSYFDT

IVEYKKKTLENTDGLELEFIVNRGENIIIDNVHLSGAKKFSYSDIEPAVVNKEKEFMGWMWGRNDGKLKV

FELSNDSSRIADEYMKKGYLDVQVSSPYLKTYTDTYQANLTYFIKEGKPYKIKSISIENPLFDDKQNAQT

VKDLRSSAGKTINIEDIRKDVKTIETQSADLGYAFVEVYPDIQKNDQTQEATVVFKVIPHDKVYIRNVII

SGNSRTVDRVIRRELYITEGNLYNRTDLSESKNALKRTSYFDDVNIKEEKVDDTHIDLIVDVKEASTGAI

SGGIGYGSSDGILLNASLSDTNIFGSGIKSSVSVDKSDDTLSGRISLINPRVLDSQYSLGGTLYSNDYEW

DNYSEKNYGFDITVGRQFARYYNVSLTYNLEQSDIYHLSPTLLRTGYELGKSIKSSITPAITFNNTDDYY

LPRSGIIASTSLEYAGLGGDQEFISSSSKFNFYQGLQDYIGYDLIYRYKASFYKVWDEGYLPINQRIYLG

GIRSIRGFESRTVSPKNQWGDEVGGTIAFANSVELSFPLIDRIKLRGSVFFDYGMIGRKNLDEIKRMSTG

IGIEWITPIGPLQLVFAKPLNDKKGDDTNSFEFNLGTRF

>WP\_002866740.1 MULTISPECIES: inositol monophosphatase [Campylobacter]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KASPKQMILDPLDGSSNFVSKIPFYGTSIALMEKDQAKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFSKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFVLILGKTRIFDTAAALAIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>WP\_002866340.1 MULTISPECIES: transporter [Campylobacter]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

TTLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>WP\_002866270.1 MULTISPECIES: glutamate--tRNA ligase [Campylobacter]

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFEDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPKFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNAHYIKTLPFEEINRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDQKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIDNFLKVRGK

>WP\_002866237.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVVDNTQKTSNAIFSTTTKVKEKNTSADEFQATLNEVKNKEEKEEEKTSSSKFTNEDIDLGAVREDFRSY

AWQKMREDQYKKNEETLLNKLFATIDAGNATNNTKA

>WP\_002866103.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTALHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISTNFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLNQQGLISKNISSFNLQNNKLKICLKRQT

KYCLEKRILL

>WP\_002866019.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSTLQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFAGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIAHAISPDTGSMHLGATIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIALGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>WP\_002865915.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FSLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>WP\_002865903.1 MULTISPECIES: major cell-binding factor [Campylobacter]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>WP\_002865902.1 MULTISPECIES: polar amino acid ABC transporter ATP-binding protein [Campylobacter]

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>WP\_002865901.1 MULTISPECIES: chemotaxis protein methyltransferase [Campylobacter]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>WP\_002865608.1 MULTISPECIES: threonine ammonia-lyase [Campylobacter]

MLELNKIYKAKQQISGFVNKTPFIYSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSTEQKQHG

VIAASAGNHAQGVAISAKKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNL

SFIHPFEDEFVMAGQGTLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMY

ESFHAKKIKNAKSVRTIADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAA

SVATLLHQKINTQNHKKIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIA

NANIVKIDYDRFSTKLDYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>WP\_002865312.1 MULTISPECIES: cytochrome b6 [Campylobacter]

MKKIIMILCLSYANIVFAVDMITPIPNSISYDKEKAKLGKSLYMDKSLSKDGKVSCNTCHRLDQHGVDGL

EFSIGVDNQLDKPFNTPTTFNSVFNFVQFWNGRAKDLAEQATVPFFNPKEMGLSPELLLQKVNSNENYVK

TFKKLYGEVTVENIALAIAEFEKTLITPNSPFDRYLSGDQNAISAQAKKGYEDFKANGCISCHQGQNIGG

NMFQKIGIFEEYPNQEDLGRYEITKREADKMVFKVPSLRNIAKTAPYFHDGSIPTLDACVQFMAYYQLGK

FLDQETVDNIVAFLESLTGEYHDK

>WP\_002865088.1 MULTISPECIES: adenylosuccinate lyase [Campylobacter]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLIDDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLSDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>WP\_002864610.1 MULTISPECIES: MFS transporter [Campylobacter]

MENFNRTLLVCWFGVFTTSMGLSQIAPILPFYIKELGHVDTSEIAFYSGLAFGITPLFMAVFSPLWAFLG

AKYGYKNMLLRASFGMSVLTLWLSFAHSALEVVFVRGLTGIISGFTSAAVVFIAVIAPKEKVAYALGTLS

TASISGSLLGPLFGGFVAEFFSISAVFDVVAFLIACSFVTIYFFIHGRKIQKEAKKNTQKVKENKTLIIV

LFITTFVIQFGTFGVMPILSIYVEQIHQGGNLALWAGIVVAANGISNLFFAPKLGKIADKIGPSKIIFGA

LIFCGICFYLQAVASNVYTLIFVRLLIGVGLGGLLPCVNALLKKSVSAKNLSVIFGFNQTCQFLGNFCGA

FGGGLMASHFSVEFVFTFVCLIFIINAFIFLAFEKKYIFSNQGL

>WP\_002864607.1 MULTISPECIES: molecular chaperone DnaJ [Campylobacter]

MEISYYELLEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGEGFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCSDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNGTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

ESIKVPTIRGEATLNLPKGAKDGQRFVLEKEGVKDVHSSRMGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKITNWFKS

>WP\_002864546.1 MULTISPECIES: tRNA uridine-5-carboxymethylaminomethyl(34) synthesis enzyme MnmG [Campylobacter]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>WP\_002862237.1 MULTISPECIES: globin [Campylobacter]

MTKEQIQIIKDCVPILQKNGEDLTNEFYKIMFNDYPEVKPMFNMEKQISGEQPKALAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEHYPIVGACLLKAIKNLLNPDEATLKAWEVAYGKIAEFYIDIEKKLYDK

>WP\_002861373.1 MULTISPECIES: flagellar L-ring protein [Campylobacter]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>WP\_002860956.1 MULTISPECIES: prephenate dehydrogenase [Campylobacter]

MKIAIIGLGLMGGSLGLCLKENKLISCVYGMDLSKENEKDALRLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNVTIIELGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>WP\_002860887.1 MULTISPECIES: cytochrome c [Campylobacter]

MKKHILLLGLCLSLSLSAKSVSDYKVGEELSDKEGVEYFKELSKRPVQEWPNKNLSINDVPKGKQGDLIR

YGIELLSKTESTLGPYSKLKKTSNEVNCISCHMDNDGNGLPGTKKYVIPFLNVLNNYPRLDIETMKIISV

EDRIRGMGGTDSHRFPNDSKEMKAILAYFKWLKEAYGIKDGVKLEGDFFAKMNFPNRPADPVRGKKLFEE

NCVACHGERGLGVKNDNYEQGSGHLYPSLLIYPDGGHMAMIPFLARFLKSAMPFGASADNPILSDEDALD

IAAYVNTGFVRMPITTTENRAGLDTAYSKSPSLKPEYFASPQQNLDPKEYIKVKYGPWKNPNHFPGE

>WP\_002860827.1 MULTISPECIES: preprotein translocase subunit SecY [Campylobacter]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>WP\_002860429.1 MULTISPECIES: inverse autotransporter beta-barrel domain-containing protein [Campylobacter]

MRGIFYIIALFSLLNGDELTEALAKNNNQNSWEHFDYKNTKEAPKIQEENVDFKSTFDSLLSKTLENNNG

IDKTDGNLDFQNENVQVKNLSSLYEGENNSLLFQKELFVAQNNYNYSGGLINRYEKDDFLFGVNGFIDKQ

KEQKDTKSFGTEFGYSKFIKAYSNYYIPNEAEKNLQLGMSFVIPTYTAFAFDISKDNDKTNYQVSYSPYS

VFSLNLLRRDYSARETVDDTVVQVGFSFNFNESFLKQFRKKDNTLEEVNRYDFLQRTH

>WP\_002860355.1 MULTISPECIES: capsule polysaccharide transporter [Campylobacter]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGILSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>WP\_002860117.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKITIAHSPDADDIFMYMAIKFGWIGNDFAYENTALDIQTLNEFALKNEFDATAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKDTHLKRNFKVALSGANTTNALIFRMKYPEARIIYKNFLDIENVVLSGEVDA

GVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALRRSLPLSDAIKIERDLTNAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIHVNDYLIPSEY

EEARNS

>WP\_002859933.1 MULTISPECIES: glutamyl-tRNA reductase [Campylobacter]

MYYCISFTHKNTDIALREKLSFSNEAKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNNFCGVHLSRAV

HSAFKCAAKVRNETQISKNSISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLVEELSYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHTPTVNLKHLQGKMQSDTVINAMRYVFDLQNNLEGLNQYK

CEFDMENNDEIY

>WP\_002858743.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MQINLLNDFIKAYENTYSVSFDDSFKGRIQELCKELNEPFMHASYALENELKELVFSLDKNVNIAIIGQF

SSGKSSLLNLILGRDCLPTGVVPVTFKPTFLRYAKEYFLRVEFEDGSDIITNIEKLAFYTDQRNEVKQAK

SLHIFAPIPLLEKITLVDTPGLNANENDTLTTLDELKNIHGAIWLSLIDNAGKKSEEDAIKANLELLGEN

SICVLNQKDKLSAEELDNVLNYAKSVFLKYFNELIAISCKEAKDEQSYEKSNFQSLLDFLTQLDTTVLKE

KFVKRKILNLCEILEDENQLFVGIFDRLLNQFQSYEKHLLLAYENFLKEIEILNHQILEQLKSISERISS

EIFASVKEKDAYFYKESKGFLKKDLYTRYDYKAPYISSDDAFLAMFYNSDVMSKEFKKIKNELYKSFEEI

KMKLKDFINILEREILLFKAEFSNIQKDHIFQSDKNFSELRAFCNASDEYFLKDFKELLFKSILELDLFF

EKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEFVLFYPKKSEIYERVLNELNVYEFETLLINK

PILTKIAKNFLEQSQNLIQEKNKFLDLKKAELQKRRAQILNVRESIKED

>WP\_002858514.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTQEELDALMNGDVDLDSETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEVLELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>WP\_002858452.1 MULTISPECIES: serine protease [Campylobacter]

MKKFFCLTLVCKLFALSEFELHHIDKVHKLGYSGDTIIIGVADDAFNQDHISLKDKILKSTYPTDTAGKQ

LIPDLKKSTHGSHVAGIAVGAKIGDSKPYGVAYGAKFYGAGVFPNGSYTQIPDIYNFFKDVSIINNSWGI

NFYPYFNLKASNSGLVDCTQTNQGTSYNICNTPLEYVMKADKVANDMMRLSKDKGVLNVFAAGNEGILSP

ALHAILPSYDESLRAWLAVGALDANEITLESDGTLIIKSQGLADFSNGFKGATNFSLVAAGVNINNVDSS

TNDKFTKKSGTSMAAPMVSGTAALVKQNFPFLDGKQIADILLSTANKNYKAPKFTVKQVTDGTNQPKFLI

VYISQDPPGIEDEIKRDLKQLYNGIQVQVNGQWIDYSDYIWDNRDSAQSQKLNTSTISSINGVVRVEKEE

LFGQGILDAQKALKGLSILDANRLSDQDVLKYEQEPNTAYYTINTAGYDAEFSNDISQRKWDESTHLSSA

INKPTHLANLNIGLSKEGEGILIISGQNTYEGATLIKQGELKLKGKVKNNAYVEQKAILSGNGIVGQNLN

NKGIVRPGNEDLNDLTVQGTYTQEGVDSKLQLDFGNYKNSKLIAKTYDIKSGNLEYIPLPKYYILNKPVK

INLGDLEKSLSSFNHVLIQNTYALNFDFVLSDDLVSINKTLIKPNLKPNAYEIPNTSLGNALRQLRSRAD

LSQTYQEFFASLDNGIDVKTKLNRIEGSGYLSTFSNHNQSNLMQNNMLFTLHPLNINNFAQNNNILLAST

YLPRIFSNEEYFWHLTPSYKYYKDKDFSGQKTGANISLGENFSSGFLAYALSLSSAKFNFNNGSDLKSYN

MDLLLNYNHDLDFIKILSGLGIGVGFNTLNRFVVEQPIEGKYKTLQTSAQLGVTKDIILGQDFIFNPLMY

FTHSFFYQEDFKENKSPFAKNYESLKHHSINANLGFNLAKNIEQDDYQASFSTFVIFEKRIYGRTLENKA

SFVDFPIAFIQKYKLKDNILSQGFNSEFLYKNNVFWQFMLMNRFSHNAYELHLMSSVGKRF

>WP\_002858136.1 MULTISPECIES: NADH-quinone oxidoreductase subunit M [Campylobacter]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGVSFDYNLSFKILKFFSFHVGV

DSIALVLILLSSLMIFLSFLFLKLEQKALISCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFRAGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNASAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPILVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYRAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYMFAVFRKIF

FMQKQSFIEGFSLLFREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>WP\_002857785.1 MULTISPECIES: GTPase ObgE [Campylobacter]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKNFNN

LGSVLY

>WP\_002857777.1 MULTISPECIES: biotin--[acetyl-CoA-carboxylase] ligase [Campylobacter]

MEKGLKVKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEED

LPKDLPLASVSIYFAYLLKELLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFSPQN

TALCDIEILLKDLVSEFLQKVEKKILWKNIFSKYMLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGD

KRVYSLR

>WP\_002857765.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIKVGLIFSGIVCLFLTACVNQVKQNTTFENALTQKYCGDDFFNQNLEKIKKNDDVIYTGLNAGLIARN

CGDFNKSNVFFDAAEESYKYDVDLENVGSKAAKFVGTTLLNDTIVDYDGSLYERIMVNIYKALNYMEEDD

YENARVEFNRALMRQDKAKEYFAKEIEKNRADLDKAKEDKNYDKNMNENSKVIEAQYDNLFKEFDTTKNF

INPYATYLASIFFFMDKDYRKATDLFREVAIIYPKNKTIKKEAKIFKEYATKIKVKKAKKYVFVVYENGF

GVVKDEFALTLPFIVDKKIISTNIALQTLKKREASFANLNINGQNTNDFVDLDNIVATEFKINMPAMIAK

ALAQTIIKTTLNVAVANNDSTGGWLSLATAVATAATNKADVRSWRGLPKSIAMATIENDGNLEIKDPQGN

ILFQKSLDKNKNALVIVRSFAPYLPASVAIMEK

>WP\_002857754.1 MULTISPECIES: chlorohydrolase [Campylobacter]

MFIVAARYLFLCDEDFTILENQAFVFEDKILELGELDNLKKKYPKAKIIKTPKNSVILPAFINPHTHLEF

SANSTTLHFGEFLIWLKSVINSRSILNAQAKEELILQSIKKMQKSGIGTIGEISSFGSDLDPCLKASHKG

MRIVFFNEILGTNENQVEDKKQEFLKRFENSLKFKNDFFIPAISIHSPYSTHPSLAYFALDLAKKQNLLA

STHFLESKAENIWLRESKGGFKKWLENFTLHPKPLYTPKDFVKLFKGVRTLFTHCVYLKEYEWLDKNLHS

ITHCAFSNRLLSQKSLDLKTALKSGLNIHLGTDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMV

TLYPARALNLNLGELKKGKIADFSVFELGECDKKQAPLQFILNAKEVDKLFIKGKECKF

>WP\_002857753.1 MULTISPECIES: penicillin-binding protein activator LpoB [Campylobacter]

MKKTKILGTALIGALLFSGCAQTAYTDGKASQVKKGDALTLGLDRQDFESAAETMINSMLSDPAFANIKP

GTRKVIAIGRVVNDTPQRIDTEKLTAKITSALRKSGKFVLTSAVAAGGALDSMSEDVRELRDNDEFNQKT

IAKKGTLVSPDFSLAGKIRQDNVKLSNGKTQVEYFFLLRLTDLTSGLVYWEDEQTIDKTGSSKTVTW

>WP\_002857751.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKILFIGSLVMASLLYAQGSQPVEITQQDINTQNEMSDASTKDITPKSIEDFFEEFADNFGIEYGITKD

GKTFYTGKSTVAVNDTDPQFAQALQNAYQKAMLNLQSEFIRDVFGRIATSRIQNYEADNSTNAKEFDELP

KGDKVDQILNKLTQLAGAQLDKALKDLGIDTNSLSEDRKKTLLKQEFLNKTMTNAIGSMSGLVPVQTIVT

QRRGEYDVGVIAVISNKTRQLAKDMALARQSAIKGKGKAISEYLPKDTKGFLNEYGIRLVYDENGAPIIL

SYGNWGYVADPSNAKKTNILEDRAKETALTMADAAIIEFINTNLSLKDERTTGDTYEEIIKQSINVNDSS

TQEQTQNITNIIDKVNSKIKASASGKIRGIRTLKKWSYTSENGIEHVGAVRFYSYENLANTNEALNSKSN

ATKNEAKKSSSIQRSSNVVNSMDDF

>WP\_002857732.1 MULTISPECIES: ATP synthase subunit alpha [Campylobacter]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>WP\_002857730.1 MULTISPECIES: chromosome partitioning protein ParB [Campylobacter]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLGQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKKLKQILNRFGFDCKNKNNDFVIHLENIDKIKKLIKMLEKL

>WP\_002857726.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFLTQTFIYTLTPKFDILISGGGSYARQEYTNFFTNAYSHKDRIGFDNLWLGFIYTGDSIADLIPQITFQ

TTVVQREKAINQTKNFYLKSQSLQASLRGYSDPVVYSIYTGFGYNQSRKFKTLKIEYGNSIYVGGDLSII

LSPKITLDLGAEQRFQMKQKINGYQNSEVRSIPTLSLGSTYSINSDTAVSVNASFGGSSASPDSIFGISL

WKKF

>WP\_002857724.1 MULTISPECIES: flagellar biosynthesis protein FlhF [Campylobacter]

MGQLIHTFTVEDTEQIIPKVKEDYGNKALIITNKQIRPKTLNRSALYEVMVAIEESDYEEHLKKQGKSLP

AKKSSPKPSSTSLAEEKIRSQIPQEDEDVVLDFSNTRLNTNLNTVKNNDLTKKTYQDFPQNKINPHQNKT

LGFDDFKEKLSEVSNEISKVTNTPLENYTPNPNYNKKIENFEKQFEKQINKLNDKIDLLADMMWDDKAEA

RKNLMIPPEFASIYKQAKESGMLENHLEAIMKATIENMPAAMKTNKDAVQRYFHSLLRNILPCRVESDIK

KQKIMMLVGPTGVGKTTTLAKLAFRYAYGDKRYKTGIITLDTYRIGAVEQLFQYAKMMKLPIIDSIEPKD

LDEAIKSLNNCEVILVDTIGNSQYDQSKLAKTKEFLMHSNAEIDVNLVVSANTKHEDLMEIYKNFSFLNI

DTLIITKFDETKVFGNIFSLVYETNIPLSFFSIGQEVPDDLEVANSDFLVHCILEGFNKGKNNE

>WP\_002857723.1 MULTISPECIES: F0F1 ATP synthase subunit B' [Campylobacter]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAIAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>WP\_002857720.1 MULTISPECIES: methionyl-tRNA formyltransferase [Campylobacter]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNARMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>WP\_002857612.1 MULTISPECIES: polyisoprenoid-binding protein [Campylobacter]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>WP\_002857609.1 MULTISPECIES: dihydroneopterin aldolase [Campylobacter]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPNLTNLNIKIFKPHIIKNATVGVKLKKKY

>WP\_002857599.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLAYQDGEYFTADNNGNLKIFDNSYNEIYNFQFDASVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQIIKDVVISAENFFNNAIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFVKSNIYN

NYLYIFEKTGYLIKMNLNLDNTQVFKLSEAVDKISFMGNGKFYYGNKILDLL

>WP\_002857583.1 MULTISPECIES: membrane protein [Campylobacter]

MLNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFVKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITPKLDAYSQKSSNAWPFLIVLIVLVIIGSGIYYFDTLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTPKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>WP\_002857569.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQVNYRTISSYEYDAISGQYKQVDKQVEDYSSSGKSDFMDILNKADEKSSGDALNSSNSFQSNAQNSNSN

LSNYAQMSNVYAYRFRQNEGELSMRAQSASVHNDLVQQGANEQSKNNTLLNDLLNAI

>WP\_002857551.1 MULTISPECIES: tautomerase [Campylobacter]

MPLVNIKLAKPSLSKEQKAELIADITELLSTKYNKSKERVVVVLEDVENYDIGFGGESVEAIKAKANK

>WP\_002857527.1 MULTISPECIES: DNA-directed RNA polymerase subunit beta' [Campylobacter]

MSKFKVIEIKEDARPRDFEAFQLRLASPEKIKSWSYGEVKKPETINYRTLKPERDGLFCAKIFGPIRDYE

CLCGKYKKMRFKGVKCEKCGVEVANSKVRRSRMGHIELVTPVAHIWYVNSLPSRIGTLLGVKMKDLERVL

YYEAYIVENPGDAFYDNESTKKVEYCDVLNEEQYQNLMQRYENSGFKARMGGEVVRDLLANLDLVALLNQ

LKEEMAATNSEAKKKTIIKRLKVVENFLNSNLNANTDSDEAVPNRPEWMMITNLPVLPPDLRPLVALDGG

KFAVSDVNDLYRRVINRNTRLKKLMELDAPEIIIRNEKRMLQEAVDALFDNGRRANAVKGANKRPLKSLS

EIIKGKQGRFRQNLLGKRVDFSGRSVIVVGPKLRMDQCGLPKKMALELFKPHLLAKLEEKGYATTVKQAK

KMIENKTNEVWECLEEVVKGHPVMLNRAPTLHKLSIQAFHPVLVEGKAIQLHPLVCAAFNADFDGDQMAV

HVPLSQEAIAECKVLMLSSMNILLPASGKSVTVPSQDMVLGIYYLSLEKAGAKGSHKICTGIDEVMMALE

SKCLDIHASIQTMVDGRKITTTAGRLIIKSILPDFVPENSWNKVLKKKDIAALVDYVYKQGGLEITASFL

DRLKNLGFEYATKAGISISIADIIVPNDKQKAIDEAKKQVREIQNSYNLGLITSGERYNKIIDIWKSTNN

VLSKEMMKLVEKDKEGFNSIYMMADSGARGSAAQISQLAAMRGLMTKPDGSIIETPIISNFREGLNVLEY

FISTHGARKGLADTALKTANAGYLTRKLIDVAQNVKITIEDCGTHEGVEINEITADSSIIETLEERILGR

VLAEDVIDPITNSVLFAEGTLMDEEKAKILGESGIKSVNIRTPITCKAKKGICAKCYGINLGEGKLVKPG

EAVGIVSAQSIGEPGTQLTLRTFHSGGTASTDLQDRQVSAQKEGFIRFYNLKTYKNKEGKNIVANRRNAA

ILLVEPKIKTPFKGVINIENIHEDVIVSIKDKKQEVKYILRKYDLAKPNELAGVSGSIDGKLYLPYQSGM

QVEENESIVEVIKEGWNVLNRIPFASEILVEDGEPVVQNIKAGEKGTLKFYILKGDGLDRVKNVKKGDIV

KEKGFFVVIADENDREAKRHYIPRESKIEFNDSEKIDDANTIIASAPKKERKVIAEWDAYNNTIIAEIDG

VVSFEDIEAGYSADEQIDEATGKRSLVINEYLPSGVRPTLVIAGKGDKAVRYQLEPKTVIFVHDGDKIAQ

ADILAKTPKAAAKSKDITGGLPRVSELFEARKPKNAAVIAEIDGVVRFDKPLRSKERIIIQAEDGTSAEY

LIDKSKHIQVRDGEFIHAGEKLTDGVVSSHDVLKILGEKALHYYLISEIQQVYRGQGVVISDKHIEVIVS

QMLRQVKVVDSGHTKFIEGDLVSRRKFREENERIIRMGGEPAIAEPVLLGVTRAAIGSDSVISAASFQET

TKVLTEASIAGKFDYLEDLKENVILGRMIPVGTGLYGEQNLKLKEQE

>WP\_002857491.1 MULTISPECIES: malate:quinone oxidoreductase [Campylobacter]

MSQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGLMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYVKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIIHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

VDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLVCNYLGMEFNEDKFSSELL

>WP\_002857486.1 MULTISPECIES: membrane protein [Campylobacter]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLG

>WP\_002857472.1 MULTISPECIES: colicin V biosynthesis protein [Campylobacter]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQAAEFIQSTFYKIENQSLAGFA

GFLAILIIFWIVCLLAGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFA

KNSYTLNLLKETGSFIMNQPLTENSLDHANEKLQDIVSDLNNTQKGE

>WP\_002857466.1 MULTISPECIES: ribulose-phosphate 3-epimerase [Campylobacter]

MYVAPSLLSANFLKLEEEVKAIEAAGADLLHIDVMDGHFVPNLTFGPCVIEKISTISKLPLDVHLMVKDV

SKFIDLFIPLKPKFISFHIESEVHPIRLCEYIRSQGIHPAIVLNPHTSIDSIKHMLEFVDMVLLMSVNPG

FGGQKFLPLVHEKIKELRQMIDKKNAKVFIEVDGGVNGLNASDLEESGADILVAGSYIFSSNDYKTAISS

LKLEF

>WP\_002857444.1 MULTISPECIES: transaldolase [Campylobacter]

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>WP\_002857441.1 MULTISPECIES: 23S rRNA (guanosine(2251)-2'-O)-methyltransferase RlmB [Campylobacter]

MIVYGKQIFFYILEYHKDCINELYLAKECDKITFSKIAKSGFKIKKLDFKTAQAYAKGGNHQGFLLDIKE

SSFANLNEIKKNDFIVMLYGISDVGNIGAITRTAYALGVGALIFIGEKLAMEGVIRTSSGAALDLPIVIS

NDALSVINELKQVGFYFYASDGSGKEIHSVKINNGKKVLVLGSEGFGLSSKIVKKCDECVGIAMKNNFDS

LNVSAAFAILCDRMLNA

>WP\_002857440.1 MULTISPECIES: chemotaxis protein [Campylobacter]

MFGSKINHSDLQKLEEENKNLAHKIEKFQSENLELKNKITSLEQAALESKLKTDLLNVLLTGVLKNITIV

QGDMLENVNKAEVISSYSKTSLAEMDELNHIANSINASLGDITESANKTRDVAGTLHRSVDEITNVINLI

KDVSDQTNLLALNAAIEAARAGEHGRGFAVVADEVRKLAEKTQKATTEVEMNINLLKQNANEMYTQSEQV

EKISIDSNAHIMSFSEKFTHLVNEAHSTNSNAVGIASEAFVSLAKLDHIAFKLNGYKEIFSKSGKQLADH

TSCRLGKWLASTGKERFGQNKSFLKINEPHEKVHENMNNAITIANTEDISKDITQHSIINKCEVAENASL

DLFNVFKEMLDESDH

>WP\_002857432.1 MULTISPECIES: diacylglycerol kinase [Campylobacter]

MKPKYHFLNNARYALEGLFALFKNEMAFRIELCIIIPAIVFSFFLKVSFLEHLLLISVLILILIVEALNS

AIEACVDLITNKWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>WP\_002857427.1 MULTISPECIES: pyruvate kinase [Campylobacter]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKNLDTIRKVAKELHIRIGILQDISG

PKIRTGELKEPFELKKGDRLDFYRETILGEKIAQNHYKISINQKSILDMLKIDEYIYLYDGSIRAKVVNI

DDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFVQNAHDIDEVREIL

AQNNAKISIFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQKANNASKPVITAT

QMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVGIMCQTIIETEKRYPYNKFNDFN

DLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLNSLSIVWGVNPAIL

VNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGTSNLIRILNKEQIAYYLQ

>WP\_002857354.1 MULTISPECIES: lipoprotein signal peptidase [Campylobacter]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>WP\_002857332.1 MULTISPECIES: ArsR family transcriptional regulator [Campylobacter]

MKFENLIREILGKKRFELLKFLCENADENGFIMIKISDLEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGGKNDT

>WP\_002857319.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVNKDNYERYFLLKEFQELCKKIDLRVDIFSMQ

NAQICILNLFKSGFISKQDLLKALKILEKISKNTEIFDFILQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKSRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLKNNISIVDTPGLDDVVVQREIVTNEYLRESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIVLTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQEFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLKEAQDEISNSIAKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNLSRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGISKNIDSIFQSEKFALLRLKIEKLSNL

KSDLYELETNLDTVIFDTFKEFKMSEILNSLNINGAFFEFLNDKLKHYEKNQKSKLESLEKVLQSLKNQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>WP\_002857318.1 MULTISPECIES: phosphoglucosamine mutase [Campylobacter]

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIAALQFS

ALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>WP\_002857306.1 MULTISPECIES: HIT family protein [Campylobacter]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREAIKLDLPKFEEFVKFLNSKIF

>WP\_002857304.1 MULTISPECIES: glycerol-3-phosphate acyltransferase [Campylobacter]

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>WP\_002857300.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVKKIIILTLWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYINNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTPKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>WP\_002857292.1 MULTISPECIES: lipid A/FlgG phosphoethanolamine transferase EptC [Campylobacter]

MLRLTWFQFTFFNSLMIVLLNFNLFYFVYEKNTQNWFITFVFIVAYFALVHVICSLLFIKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVKDLLNLKLILFIVLALLLVFYVVKVKIDYYGSFKSH

IKIKIINIISGLIVVCAVLIPLSKTFLPFFRNYNEIRMYNTPFYQIYAVYRYYVRFVKAKPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGVCDRLAYKQKLSSDLDENLLIPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDEKLMNLAKEHKGLKLSQDNLFSTLLGYF

NVKTSVYEPEYDLLNPKLKANP

>WP\_002857291.1 MULTISPECIES: acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase [Campylobacter]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>WP\_002857284.1 MULTISPECIES: heterodisulfide reductase subunit B [Campylobacter]

MQKEYAFFPGCVLSQAAKESKISLEAIAPILGWKLNEIKGWSCCGASQAQCVDPIATLVANARNIALAEE

MKMPMLTTCSTCMLTLTKAKNTLDKGAKERINTFLAKGGMKYQGSTPITSLLWELYEDLDNLKSKVKKPL

SNLKVALFYGCHSLRPEDTFGKKESSTNPKSFESVVEVLGAKIVPFEKRLDCCGFHASYPAEKSVKKMSS

QIVNNASENQADCVVTPCPLCQMQLDIYQERFQDYTNSKARLPIIHLSQLVGLALGLSKEMVGLDYNIID

ASKIA

>WP\_002857271.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTSKEGEIEARVDKFGVIVLKTEFLKKI

>WP\_002857238.1 MULTISPECIES: tRNA 2-selenouridine(34) synthase MnmH [Campylobacter]

MLSEVEFAEFQKENFSLLIDARSPREFLHSHLIGALNFYALNDEEYQEIGTIYKKNQALAKARGASYICQ

NTAKHILKITQNFRIGEKVGIYCSRGGLRSKSIAVILSELGFRVVRLKGGFKAYRTFVTHYFENEINFDF

FTLCGNTGCGKTELLEQLPQAINLEKIANHLGSSFGDILGKQPTQKAFEAELFHNMQNLENFAFIESESR

KIGDIILPLKFYEKMQKAFKIYCFCSLENRVKRIQKIYQEKMTPLKFQQCVQKISPYISLNLRQDLLQSY

ERKEWQKLIVMLLEYYDKTYKKPDKIDLELNTDDILKAKEEILRYFKLKNYILI

>WP\_002857228.1 MULTISPECIES: thioredoxin-disulfide reductase [Campylobacter]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELTKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPSTVEKVKKNEKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTSVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>WP\_002857174.1 MULTISPECIES: serine O-acetyltransferase [Campylobacter]

MNFWGIIKEDFSQPKAQDPAFNSCIELFFNYPGVWAVVNYRFAHFFYIRNFKRIARMISGISQFLTGVDL

HPGAELGRRVFIDHANGVVIGQTAIIEDDVLIYQGVTLGGTSLEKGTKRHPTIKKGVIIGSGAKVLGNIT

IGENAKIGSNAVVVKDVGANLTAVGIPAYIIEERKNKNIRAIDANCDDKLEKLEKKILELENLILKQLES

QK

>WP\_002857170.1 MULTISPECIES: endonuclease III [Campylobacter]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKAYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFGGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTGIFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>WP\_002857165.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRKIIFILAFAFVIVILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCTYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>WP\_002857155.1 MULTISPECIES: NAD(+) synthetase [Campylobacter]

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFALLMPTQISNKANLEDAL

RLCADLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSALKNSLVIGTSNKSELLLGY

GTIYGDLACAFNPIGSLYKSEIYALAKYLNLHENFIKKAPSADLWENQSDEADLGFSYAKIDEGLKALET

NDEKLLRTLDPSLIAMLKNRMQKNAFKGKMPEILEI

>WP\_002857133.1 MULTISPECIES: peptidase M48 [Campylobacter]

MTLIAILCLYTALLSWISYAQIRFLEREKDKQAQILSEKDYQNAADIAIENEKFKLFSNFYNLIISIAWI

GFGFLYLKELLILNNTRFENTLFLLSFLIITSILNLPLSIYESFIKDKAHGFSNMTVKLFIKDTMKSLIL

TLIFGFLILYALLFCYDFFGTFWWIAAFIFAFCIIVIINLIYPTLIAPIFNKMEKLDDENLLKKISSLMK

QCGFSANGVYVIDASKRDKRLNAYFGGLFKSKRVVLFDTLLKALNERELLAVLGHELGHFVHKDIIKALF

NGAITMFLLFFVFANLPEFVYLESHLEGVNGGVFALLFIFANIFSFLISPMLNALSRKNEFAADQHGAKV

TSKEDMKNALIALARENKAFIKTSKIYTFFYLSHPSISDRIKALS

>WP\_002857128.1 MULTISPECIES: glutamate-1-semialdehyde 2,1-aminomutase [Campylobacter]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>WP\_002857113.1 MULTISPECIES: 2-oxoglutarate synthase subunit alpha [Campylobacter]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASVAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIEIINRKKFTGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGAIVKKNMERLIGKIKNNQDDICTYEEYMLDDAEFLIIAY

GSVSRSAKEAINRLREEGIKVGLFRPITLYPVAEKKIAEVVNKFKKVMVSELNMGQYLEEIERVSSRRDF

ISLHRANGRPITPSEIIAKVKENI

>WP\_002857090.1 MULTISPECIES: membrane protein, partial [Campylobacter]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVIMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

GEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETSQMMSKLSGDENQNKGNETKQIEDFSESKTEENQDEIQAEISKQESNDELKNEDKENK

>WP\_002857088.1 MULTISPECIES: penicillin-binding protein 2 [Campylobacter]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKIEFLPPVRGQITDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELTNLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLLEGNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSVVKMGVGLSFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKHAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPHFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDKNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>WP\_002857064.1 MULTISPECIES: ketol-acid reductoisomerase [Campylobacter]

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>WP\_002857007.1 MULTISPECIES: formyltetrahydrofolate deformylase [Campylobacter]

MISVLKICTKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMLGQEAL

IELCEKRKKDIVVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGANPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVLPVNHEFTWQDMQQAGRNIEKDVLSKALDLVFEDRIFIHNNKTIIF

>WP\_002856972.1 MULTISPECIES: histidine--tRNA ligase [Campylobacter]

MINALKGMKDLLDKDAYCYEKVIKTCEEVAKNYGFTFINTPHLELCTLFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLKCMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGVGFAMGIERIIAILEQKEEKVQREGIYLCAMDEIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEAQNESLFYKNLAKKEEKMIKISDLKKVL

>WP\_002856966.1 MULTISPECIES: HrcA family transcriptional regulator [Campylobacter]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>WP\_002856965.1 MULTISPECIES: class II fructose-bisphosphate aldolase [Campylobacter]

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>WP\_002856956.1 MULTISPECIES: MBL fold metallo-hydrolase [Campylobacter]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKKHVKKPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDDFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIVGKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQVHLPSWLRYF

>WP\_002856955.1 MULTISPECIES: DNA repair protein RecN [Campylobacter]

MINRIFMKENLGFKKAELEISKGLTVFTGLSGAGKSVLFKGILSAFSLSESEAKIVEIELDDKLDLESFG

IESEEENVFKLLKEKNTKYFINNQSIAKKSLQNLSKTFIKYLSAKENNEFGNEKFLNLLDALEMQENTNF

ISFLEDFKKDFNAYSQISNELNAILEEEKKVEELKELARVQIEKISSINPKIGEYEELLILKKKLSKKDK

LEEAWSKAERIFELEKVVIEALNLSEVDASFFSECLNELRVICENQKMEDLDFDVETLLDRIENLSYLIK

RYESIENALEVLKQKKHELEHYENLSFEKKELEKKFQELKQKLEEKAQILTQTRKKNLKKLEKCLNNYLK

DLYMKDASLTLKENEKISILGKDEMMLDINLAHLKNLSSGELNRLRLAFIATECKILNAGKGILFLDEID

ANLSGKEAMSIAKVLEELSKFYQIFAISHLPQLSSKAHNHFLVEKNGEESKVKKLDQEERIKELARMVSG

ELVSDEAIEFAKTLFKD

>WP\_002856936.1 MULTISPECIES: metallophosphoesterase [Campylobacter]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVLFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLAWDFIKLILALIGKRDKKYNLILRLIFELSLIVLSVFLIYISINNALKIPEVKSV

DVEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLKNYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLLRKHTNMKILVNQNLDLGFINIAGLGDLAGLNKGLYAPDLARIKVD

LNTSKASILLTHQPKTALLYDLSDFDLVLSGHTHGGQIFPFMFLVKLQQGFVHGLYNLGEKTKLYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>WP\_002856914.1 MULTISPECIES: fructose 1,6-bisphosphatase [Campylobacter]

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>WP\_002856908.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSMINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKRPNFK

PFEEGLALIIAILQDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRA

KYLEIYLYFSVFGALKILIDSQGISVFTPFAKVQKFLNEHLDFNVSQENKIEPLFVFKRLFDFKG

>WP\_002856897.1 MULTISPECIES: thymidylate kinase [Campylobacter]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>WP\_002856890.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MALIDLIEASKKFGDKIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGTLPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEEPNNKDYLKKIDTLMTLIDSKDAWNIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCILLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRRGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRAALNFNGEKTINRKKMLFELKNISKNINDKNLFKDF

STRILQGERIAIVGRNGCGKSTLLKILLGQIKQDSGEIKRGELKIGYFDQARSLVNSDKSLLEIFCPNGG

DRVEVRGKNMHVYGYLKNFLFPKEFLDKSVALLSGGEKNRVALALLFTKEYDVLILDEPTNDLDIATINI

LEEYLLSFEGAILLVSHDRYFVDKIATKLYAFEGDGYINILHTLYTEYLENEKEIEELDNFALELQTQEQ

NNNQKEKSSKKLSYKENEILKNYPEKIDFLEQKIAKLNQDLSDPNVYQEIGINKLYQELEVMQKELEILE

NEYFLVLEKSENL

>WP\_002856863.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKRLALLITLSSLMLHASDLVKIYLNQGLDAVGVAIEKELTQKDFWLSEIGDKNISLGYYDDNVAIVLT

NKTDKILRVYSYEDGKIRKDFEQKEIITGLMGDKKIEGDLKTPVGFYELGRKFNPGDPYYGPFAFATTYP

NLLDKVQGKTGGGIWIHGYPLDGSRLDEFKTRGCIALFNNNLEKFAQVVQDKKVFVMTEEKEKIRAKKDQ

IASLLADLFTWKLAWTNSDTNTYLSFYDEQEFKRFDKMKFEQFASMKKSIFSRKEDKKIKFSDINISPYP

NLENETMYRISFYEDYYTKNYQFRGDKILYVKIDSKGKMKILAEQ

>WP\_002856855.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSDIRDEFEQDMDKKKEILLSCQNSKNLNSCYNCDEIFNCQTRKNYVDAVYNSMSKGKTEGGFDF

>WP\_002856853.1 MULTISPECIES: integrase [Campylobacter]

MKYPLDCEENFEKSFLFWLAKYVKFKLNSLSNKELKNPQALAEVNFTLTKGVKNIDELDALAKKARNAGL

SGVNTYFNPLKKVFEYLNFYKLYSLKQIDEELIVEVLASITGALSDASKKNYRIAVINFFDFLDKQNEED

EKAHIFDINLKNWAGIAGSKGVKLPEFMSEEELKKFLDAIENADFKNNTIRNKLIIKIIIFTGIRVSEAI

NIKMGDISEENDLYIIRIRAKGNKYRVVMIKKELIYDLLKNVSINYMSKDALLFVNKKGTPLTQSYVSRI

VEQLLFRAGIRKQKNGAHMLRHTFATLLYKKQKDLVLVQEALGHASLNTSRIYTHFDNDKLKLAAQVAKE

LSDS

>WP\_002856849.1 MULTISPECIES: methionine ABC transporter ATP-binding protein [Campylobacter]

MIKIKNLKKYYGKELVINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQ

KKSKELRVLRKDIGMIFQNFALMERKNVFENVAMPLRTHYTQCKFHAKLFNKEYMSEKEIAQKVNSLLEI

VGLDHKNKSYPRELSGGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLV

THEMDVVKDIAQKALLLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVI

THMARTLNIDFNIVWGKIEKLNGKALGNLVININENDKDKVLDYIEKSGVLWEVAS

>WP\_002856846.1 MULTISPECIES: DNA polymerase III subunit alpha [Campylobacter]

MSQFTHLHLHTEYSLLDGANKLKELALTLKEQGATSVAMTDHGNMFGAIDFYQTMKAQGLKPIIGMEAYL

HNHDELDDKSSRQRFHLCLYAKNEIGYQNLMYLSSQSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGE

VNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFKDDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIA

TNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRHSVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCN

LDLNLGNPTPPNFKFTREYAKDHNIILPEETKEFSFDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRL

EVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGPGRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPE

RVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQVITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPE

ELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARALEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKND

ERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNAIKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLG

IFQIESGGMQSLNARLKPERFEDIIAVLALYRPGPMESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYG

VIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDPEKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFA

GYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALLTSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIRE

FSALEQDGKDAIIYGLGAIKSVGIPAVENLLEARQDGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDE

FGFTRKALFDNMENLSEASRKMAEVRKNAASSLFGEEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIY

VSGHPLDRFYEQINAIDYVKSLDFESLKNNGEILSIGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVF

ESNVEEIENIIKDENLKNNAYGFVLGFKAEGGEKPSFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEE

NHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIARNAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDS

IVEEISNKYA

>WP\_002856825.1 MULTISPECIES: SCO family protein [Campylobacter]

MKKNIILFIVIVAIILGVIFFIKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSL

VGKALKQINNPKAHLLFISLDLNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLN

DSFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>WP\_002856800.1 MULTISPECIES: glutamate--tRNA ligase 1 [Campylobacter]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>WP\_002856797.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENVQNANLALKISD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAEILREFLMNEFE

KLKG

>WP\_002856774.1 MULTISPECIES: peptidyl-prolyl cis-trans isomerase [Campylobacter]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>WP\_002856736.1 MULTISPECIES: 3-deoxy-manno-octulosonate cytidylyltransferase [Campylobacter]

MIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKDHESG

TDRINEACKKLALKDDEIIINVQADEPFIECENLLKFKEFASSCLDKKAFMASCYKKITQEEAMDPNLVK

VLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAIENGKK

IKMLEISTTSMGIDTKEDYERALKIYLEK

>WP\_002856716.1 MULTISPECIES: valine--tRNA ligase [Campylobacter]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMRTLGITPAWSRL

RFTMDEGLVNAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSDEFLV

VATTRPETFFGDTAVMVHPDDERYTKFVDKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLDFISVFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFIEKIEEHNNQIGYCYRCNNIVEP

YISKQWFVKKEIAQESIEKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSEKDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTELKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNDKKIKDEIKAYMNFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENVDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>WP\_002856631.1 MULTISPECIES: serine/threonine transporter [Campylobacter]

MNTPKWTSHDTRWVLSLFGTAIGAGVLLLPISAGLGGLIPLLVILVLAFPMTYLAHRNLCRFVLSSSNPK

DDITFVAESYFGKGGGFLITLLYFFAILPILLVYSANLTTTLLEFLINQFNFNADLTHAARWWVSFLIVG

VLVLISILGENVVTKAMSFLVFPFIIFLFIFSLLLIPQWNSSLFTNVDFSVISTSNFWVTLWLVIPVMVF

SFNHSPIISSLACYCKKEYGDYAEPRARKIISLAIILMVFVVMFFVFSCALTFTPEDFASAKDQNINILT

FIANKFPEVSLLAYVGPIVALVAISKSFLGHYLGSQEGLNGILYKASNGKIQGKFAQTLTAIITFAIAWL

VAYKNPSVIGIIEAIGGPVLAILLFLMPLYCIYRFDILARFRNKFLDLFILVMGIVAISAAIHDLL

>WP\_002856612.1 MULTISPECIES: membrane protein [Campylobacter]

MSIDFLAIISVAFLSSFGHCYSMCGGFNLLFINLNSKSNNLFLLTFIYNLFRIFAYIVLGIIFGTFGNIL

AINAKVQSLSFFILGIFMMILGFALIFRGNMLSFIENNVFFDSFVKKIIKKSKNFKGLKSAIFLGFSNGF

VPCGLVYFFIANAMSKQNIFEGILVMMIFGISTLPAILFFSKISQFFSDFLKNLFNYLSYGVIVCYGINL

AYIGFKAFQ

>WP\_002856604.1 MULTISPECIES: MFS transporter [Campylobacter]

MQNYKKALFALALSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSQNFYLTAFARFVAGTQHGVFFVIATLAVSAIVPNDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFKVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLTMHSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGIVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSLKKI

>WP\_002856602.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKAKLTLLALLGATVLLAKDMVVPASELPNNAKEFISKNFKTAQIGLVKKDIDSYDVILNDGTEIDFMIN

GDWKEVDGKYKALPHTILPSVMKKVSATQPNAQILEIDKEINGYKFKFNNNMKVYTDMQGNVLGQKLD

>WP\_002856549.1 MULTISPECIES: thiazole synthase [Campylobacter]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>WP\_002856548.1 MULTISPECIES: dihydroorotase [Campylobacter]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSVRVKDTNGKLKNLATLLNKGACALELDSSLD

ANTLKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

IFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFDEAAFGIHSVCEFISLCYTFLIKEGFLNWQELCRFTSKNPSEFLGLNSGVIEVGKE

ANLVLFDENEEIFAPKSSLYSEDKLFGKIKMHIIKGKNILEK

>WP\_002856546.1 MULTISPECIES: polysaccharide biosynthesis protein [Campylobacter]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIYEYCESDVLNTYM

LFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>WP\_002856545.1 MULTISPECIES: apolipoprotein N-acyltransferase [Campylobacter]

MKLKLNFLPYFSFIPKKLNTNSIIFKIIKVFFIAILLSNSIYLSFFENIFTQTISPFLAIWGLVLLLKSK

NSKQYFWIGFFVGILWFWWIGLSSIYFNLNYLVPIIPIIIGFIYGLLFRLCYLLKFDFLRLCGIFCISFI

HPLGFDWLNWGIFTVYGFFDPSYRGIICIFLIAYFIYEGYISRYYKIAIVLILFFSGFQYNEKQAQTLNL

NYKLINTNISQDQKFLQENLKSNSDILIQDILQAINEKKELVILPETAFAFDLKNTKYELMLKELSYKIT

IITGAFHVEKEHTYNSTYIFKKGNVYILNKHFLVPFGEEIPFFKDLTKKYFLKNIEEFSKGPIQSKYKLD

NQIITNAICYEATKEQNYQNSQIIIALSNNAWFNNSSEYKLQQLLMKFYASKYGVSVYHATNGKENIVIL

PKKLLSKDWKNLSKEIFNDKK

>WP\_002856543.1 MULTISPECIES: pilus (MSHA type) biogenesis protein MshL [Campylobacter]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIQESLDELAKYCSFSIIVKDKIAKEKLEILQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGINTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEAKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLNENHSSGINWQNFNIGLNSQVNNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>WP\_002856541.1 MULTISPECIES: ribonuclease P protein component [Campylobacter]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>WP\_002856539.1 MULTISPECIES: ribose-phosphate pyrophosphokinase [Campylobacter]

MRGYKIFSGSANVEFARQVSKYLSLPLSDAGVKRFSDGEISVQIDESVRGKDVFIIQSTCAPTNDNLMEL

LILTDALRRSSANSITAIIPYFGYARQDRKANPRVPITAKLVANLIQAAGIDRVATIDLHAGQIQGFFDI

PVDNLYGSIVFNDYIKAKHFKNAIIGSPDIGGVARARSVAKHLGLDIVIVDKRREKANESEVMNIIGDVK

DKEVILVDDIIDTAGTIVKAAEALKEKGAKSVMACCTHAVLSGKAYERIASGALDELVVTDTIPLKEQLP

NIKVLSVTPVFAEVIRRVYHNESVNSLFI

>WP\_002856507.1 MULTISPECIES: uroporphyrinogen decarboxylase [Campylobacter]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>WP\_002856501.1 MULTISPECIES: quinone-reactive Ni/Fe-hydrogenase small chain [Campylobacter]

MIDYHQIESRLSALEKLPSLKDNDSITKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADR

LPVVWLHMAECTGCSESLLRSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVE

GGIPMGDTEHFLTIGAHGKTGYELSKIASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVIN

VPGCPPSEKNIVGNVLHYLLFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFC

LYKVGCKGPYTFNNCSRERFNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVS

DKIGIGVLTLTGVAIAAHAVISSMQKDKE

>WP\_002856483.1 MULTISPECIES: ADP-glyceromanno-heptose 6-epimerase [Campylobacter]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVGK

DEEPKNPYAFSKLMMDKLAKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPRLFEGS

DQIYRDFTYIKDVINANLIALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>WP\_002856454.1 MULTISPECIES: C4-dicarboxylate ABC transporter [Campylobacter]

METLSQTLAERKPPLYKRIIKSLGFWVIIGIIAGIVLGYIDKELAIASKPGVDYFIGALKVLIGPIIFVT

LVLGIISLESLKKVGSIGAKAVIYFEVVSTLALAIGIFMANVMQPGHGMNLNPSQLDTKSVQKYISQTTE

VSASSEIMHILKDAMPTDIITPFTEGKTIQVLVIAIITALIISLMRTEDKQAIQRVFEVVQNFVFKILQI

IMYFSPIAAFSAMAVLIAQYGIGSLINLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVL

IVFATSSSESALAPLMRKLEKAGLSKATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEIS

ILIVLMIASKGAVGVTGSGFIVLGSTLAALGNMEISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNL

CGNSVAALIVAIWDKQIDWEKFRYAMDNPEKFHNAGMN

>WP\_002856444.1 MULTISPECIES: aminoacyl-histidine dipeptidase [Campylobacter]

MQNVIENFKQLCKIPHCSYETEQMKEFLSSYAKDKGFKVSVDKAGNIHAIKGKPKICLQSHYDMVCMGDA

PNLEVYEENGFLRAKNSSLGADNGIGIAIMMSAMAEFENLECLFTNDEEVGLMGVNSLEHTLESKMLLNL

DHESDDEIMIGCAGGVDIEASLSFNTLRKKGKIYELCAQNFKGGHSGINIIRNEKSSIKEMAKFIQENEG

EIISFEGGERINSIPKHAKALVHFKNEVKSNNWIKCEFKEEGEFEICDQSKKLLSLINSFTHGVRAYDEN

LGMVQTSINLATLRMENQQIKFALFARSNILDGLKQVEFETLEFFKAFDFKVRSFNFYPPWEGKPNTLSD

MVFKALKKVSPNAKVSAIHAGLECGIIEKKQELLCASIGPNIHNPHSTDEHCEIASVEKISKVVFEVLKD

NA

>WP\_002856425.1 MULTISPECIES: hypothetical protein [Campylobacter]

MHLNEAKGFMEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKR

GIGNVETFSEAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVS

TNNIDNTLNVVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNN

TTMPHAAGMNFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVML

LGKLLKIGILLEKILLLFKQKAL

>WP\_002856406.1 MULTISPECIES: 1-pyrroline-5-carboxylate dehydrogenase [Campylobacter]

MIQKALALAEELQGQIEANISNSEKEFHAKMQKLLNNPKNKVMLIELLDRSFRCKDKNASFELIEYTLSK

YGIADFFSTFEKFLLFSFLNFGKFAPNLSVPFFVKHLREDTKAMVLDANPSVLEPHIKKRKEQDKITLNV

NLIGEEVLGEAESKYRMQKYEEALKSSYITYISIKITTIFSQINIIDFNYSKEEVVKRLDYLYALALEEE

KKQGVSKFINLDMEEFRDLELTVAAFMESVAKFDIKAGIVLQAYIPDSYKYLKKLFAFSKERVLKGMKPI

KIRFVKGANMESEETIASQRGWELPTFYKKIDTDSNYNKMLDFILEGDNYKYINIGIASHNIFEIAYAYT

RISEVGALDSFTFEMLEGMSLQCSYELSKMHDLILYAPVCDEAHFNNAIAYLVRRLDENTSEDNFMRYFF

NLKVGDKNWNIQKELFLKSLEGIKTLDNTTHRKQDRNKESNIISSYESKKFSNESDTDFILAQNRAWAKE

IKTKYENLKDYDVYPVIGELDFKAENLNVLEVKDKIEDRVIGKAYLAGEKEIKQALEVAKNSKFTQKSHD

EIYQILAKSAKLMRERRGDLIGLAALEVGKTFLEIDPEVSEAIDFIEFYPHSLEELKKQNPKVTFTPKGI

GVTIAPWNFPIGISVGTIAAPLAAGNVVIYKPSSLSTLTGYMLCKCFWDSGIPKDALIFLPSKGSDISKY

LLIDEAIKFSILTGGEDTAYAMLKANPTLLLSAETGGKNATIVSKFADRDSAIKNIIHSAFSNSGQKCSA

TSLLVLEEEVYHDEEFKKTLVDAASSMAVGNPFEFKNKLGTLADKPSSKVQKALDELQPYEEWALKPKFL

EDNPYLMTPGIKYGTKKGDFTHMNELFVPILSVMKAKDLKEAIDIVNSTGYGLTAGFESLDEREWEYFHT

HIEAGNIYINKPTTGAIVLRQPFGGIKKSAIGLGRKVGIYNYITQFLEIKQEDFDDHLIEDKFSKKLAQI

DLKEAQDFMNNLIKMSQSYAYHYKNEFSVSKDYVNIRGEDNLFSYTKIKNMVLRLCGNESLKDVLGVVLG

ANIANIDLSISYDEQDVSMIERIVQSIGAKVLFLKENKENFIKSIKEYERVRYLAKPDVNDEIYKEAAKL

AKIIIREKPLLNGRFELLNYFNEKALSISFHRYGNLGIRAIS

>WP\_002856400.1 MULTISPECIES: thiamine phosphate synthase [Campylobacter]

MKNKLDLSLYLVASQGNKSEECFLNTLENAIKGGVSIIQLREKELNAREFYKLGLKVQKLCKAYKIPFLI

NDRVDIALALDADGVHLGQEDLEVKLARKLLGDEKIIGLSLKKLEQLEFIQGANYLGCGAIKATPTKESS

LLSLELLSQICDKSPIGVVAIGGVDKAVLDELKGINLSGVAVVRAIMDAKDAFLAAKELKRKIYENLPLK

>WP\_002856393.1 MULTISPECIES: oxygen-independent coproporphyrinogen III oxidase [Campylobacter]

MRDYKAFVKYSKAGPRYTSYPTAVEFNANFKYEEYIEILKKQDRSLSLYFHLPFCRSACYFCGCNVIYTA

KEESKERYLTYIFKELDILSTILDTKREVVQMHFGGGTPTFFSAKQLQNLILKIRSVFGNFSKDAEISCE

IDPRFLNGEQATVLTQNGFNRISFGVQDFDEKVQKEIHRIQPFELTQNALNLVRSKGIKSVNMDLIYGLP

YQNLQSFTQTLEKVMLLNPDRLAIFNYAHVPWLKKNMRKFDENTLPSPDVKLEILEFCEKFLSKNGYKMI

GMDHFAKENDELFKALENGTLHRNFQGYTTKGGADLVGVGLTSIGEGQRHYAQNFKDMSSYEAALDRGVL

PFERGVALSDDDELRKAVIMELMANFKLDIKSIEKEFCIDFQEYFKEDLKALEEYKDFINFDENFIKVNE

TGVLLIRNIAMCFDAYMKNISEDKKVFSKTV

>WP\_002856386.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MPNLIQANKLTLGYDELVIKEASFAFKDDDFVFITGKSGSGKSTLLKSFYGDLEPISGKLEVCGSLMNKI

GNLELLKLRQRIGIIFQDYKLVQEYSVEKNVMLPLMIKGYSKKVCHDQAAKLLKHVNLTFKADKLPNQLS

GGEQQRVAMARALAHNPKLLLCDEPTGNLDEYSSDIIWTLLKSARELLGTCVIVVTHRIPSNLRVDYRRF

NIENGKMNEIF

>WP\_002856370.1 MULTISPECIES: UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>WP\_002856369.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIKFLSIITILSLSLNADIIISADNLPSVSKEFLQHNFKAPIGIVQKDKNSYEVYLSDGTELEFDIDGT

WKEIENKAFPFDLDFLPQNLANIIKNEFPNIKAREIERKINHYKIKLDNDVKILIDFNGTILHKEIDD

>WP\_002856363.1 MULTISPECIES: DNA repair protein RadA [Campylobacter]

MAKNKALFECQACGNQQSKWLGKCPDCGAWDSFVELKAERIKVLKELAQVSMKTSEAVCIEDVELEHFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQGKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTAKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLGIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

IPSKPLEDIGLKCFVAKELSQVLEWM

>WP\_002856336.1 MULTISPECIES: ribonuclease 3 [Campylobacter]

MKNIEKLERSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFAKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLIE

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGAL

>WP\_002856319.1 MULTISPECIES: glycine--tRNA ligase subunit beta [Campylobacter]

MSELLIEIGTEELPAIPLLKELANIEKKWKNILEEYRLVSDFKFYYTPRRLVFFHENFAEKQEDSFAEFI

GAPKNVAYKDGVLTPAGQSFLQKAGISENELTFKEIKGKEVLYHQKAIKGLQSQEILGEMIEKFLKSLSF

GKSMRWGANSFEFIRAIRSIACILNDELVNFQSYGVKSAKKTFIHRSVSYDLQDFNNAKEYFELLEKNYI

ILDPIKRKEKILEQFKLIESQKNIQIGEDEELLAEVVAITEYPNALLGSFEEEFLEIPSEVIITSMRENQ

RYFAVFNDKGLSNHFIVVSNAVCKDYSKIIHGNERVLRARLSDAMFFYQNDLQNGLKPEKLAKMTYLEGL

GTMQDKSLREIKIAEILCQMLHNDKIENISTALKYAKADLATQMVYEFTDLQGIMGSYYAQKMGLDYEIC

LAIKEQYLPNSEQAPLPSTEFSSIVALANKLDTLIGLFSIGKIPSGTKDPYALRRAANGIIKIALNLNKE

FDIQILLEKLSSHYKSFDMQILKDFIFERLYTFYTVNASFVKAVLSSQNTDLIHINQSVNALIELSKKDN

FNENFATFKRLANIATKNPHKVDESLFVQEAESKLYKAFQEKTKANSLQEKLENLFALKPFIDEFFNQVM

INAEDEKLKNNRQALVYEIYAEFLKIADLKELSL

>WP\_002856298.1 MULTISPECIES: uroporphyrinogen-III synthase [Campylobacter]

MKIYLLNETPFKGVENLILNEIIFYDFSIDLSLYDALICTSKNALKALQNAKITLNFKLNLYAVGQSTAQ

YAKNLGFKKIKIPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNVGVDLDEVIVYENVFKKG

DKKLTHPAIFIFTSPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>WP\_002856266.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNNFKEIAKLVRKYKERNNALYEFLDKEDVSEYFRSLISLSELKQDKTTMLAILRRLIDLKEENLVQEWK

KNNFKEDKIIELKHKFYEEVRKFYEKEHQNLINEIKEKKLLNNFYQSLIQGVHNIGLIMNIFEISWTKEI

IEKNNKILSTQFPNLDDAMEFLRKNHLYQKTPEGEICERSYGVLVRIGNLWKFVPYARFFENEILKLEFA

FENMIDQLKIFASSKEEKAYIEYFEKLKLAFCEKDEDRVIKAWQEAEFAWMKVKSPLQVGHPLEYYEDNY

THAVALEWDIRIEDENDFDVLKFGSEIKESFEHVYKNIGLEDCELEKEVLSNIEKTQLYICTPMIFYGAE

LKGLFSAQVVPNDEFVSSKAGKKIFAFINFVYENAKTKPFMKISSEVFDKEFLDFGRNILFYQEKIWKRV

YEVSTIGHEFGHIFFIANDTEKTMNQSGFFKNIEEYKATTGGLINFFYHEQDDLIMPVFHELIKRAIGLI

SWQRVDEVRPYYTEGLIHLSLLFESEVLIFENNNLKINFDLGHYEKFKELTLKNYHELAKHYALRLDAKE

FLSRFCEIEDNIFLPIMPKCKEFVKFYYDLYEKIGNEIDNSGEFERYKKK

>WP\_002856264.1 MULTISPECIES: deoxycytidine triphosphate deaminase [Campylobacter]

MGLKADNWIRKMALERKMIEPFCEANIGKGVVSYGLSSYGYDIRVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>WP\_002856218.1 MULTISPECIES: signal recognition particle-docking protein FtsY [Campylobacter]

MFNFFKKGLAKTLENIVGVKGENKKITKDLLEEILLEADVSYEIVEEIIYYLPPQNEVKKEDLKRVMGSY

FLYEKKETNQEKPFVELILGVNGAGKTTSIAKLAYLYKNQNQKVILGACDTFRAGAIEQLKLWAQKVDVD

IVLTAQGHDPSAVAFDTISKAKAKDFDRVIIDTAGRLQNQKNLAHELEKIVRISNKALEGAPHRKILVLD

GTQGNAGILQAKAFNELVKLDGVIITKLDGTAKGGALFSIARELELPIFYVGVGEQMTDLQEFNANAYLD

TLLDPIFE

>WP\_002856209.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MKALALFSGGLDSMLAMKLITAQGIEVKALNINIGFGSTSDKSEIMKKRAAMVGADFEMIDVRNSYLQEV

LFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRPMSQRSDAMAKVKKLALDEEDLI

LRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAVKFGLEDFESPGGGCLLTLDSFAKKIRDFI

EFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKYEVIELGDLIGAYSLVDEKISEK

DLELALKIALTYTKHEVGKSYELKFKNQAYTSIAFENKADINQFFIS

>WP\_002856191.1 MULTISPECIES: membrane protein [Campylobacter]

MKKIIILTFFVVFAFGDVNRTIINNINEKINTLNTVISASIWNIRYENFIKYQDINDELIILNLNLKKTS

DIHQQEELKRKIANLEEQLSLLKEYKDLNFAQSLSAPDNIETLSKLTNPLAIIGAFSHIKKLKGEKEEYI

FKFNDFKNLVDKIREKNSELKELVELKPSVENIEALKASDKKLEEFEQALNFASVSYSVYEKKIDEELSR

VSAEIKVQSLRAVNILVAIVIVIAIAFMLKFIAKKYIKDSERYYTATKIINFININIIFLILLFAYIENI

TYLVTILGFASAGLAIAMKDMFMSMLGWCVIIFGGSFRVGDRVKVFQNDTTYIGDIIDISFLRITLYEEL

TLETYNKNRRSGRIIFIPNNYVFTNLLANYTHHGMKTVLDGIDISVTFDSNLDKAQEIVENIVTRHAKGY

TELARKNIARLQHEYSIKNPKVEPRFFMFFEHWGMRISAWYMTNAYAALVLRSTISKEIIKEFNKHKDIK

IAYPSQNLYLGNLNQNHFEQHHENMHFHARNKD

>WP\_002856180.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKFKVKNVNCMNCVNLIKNSLEDEFGNIEVDLDQKILSLNLEENQVTNFTKEFQDLGFEIVERL

>WP\_002856179.1 MULTISPECIES: HrgA protein [Campylobacter]

MSSKLSYKELTLEILKQSDRPLSVNEIWQKALEQGLDKKLSSIRQTPIATLGARIYVDIKELQHNSLFIK

ASQKPTTFWLKERENELLKLDNKNEITNEKQEKNKFHERDLHPLLVKFLYENLDFNLNCKTIYHEQSKKG

KGGEDKWNYPDIVGVYFPYDDYEKETITLLENIKQNSYKLFSFELKIALNFSNLKECYFQALSNSSWANE

GYLVVLQEIDSEVLSELRRLNQSFGIGVIKLDIQTLNMLINKNPNFKEFIDDINKQIKVGKEAKIQANFD

EIKSDEEMEKYLKEKCILEK

>WP\_002856177.1 MULTISPECIES: 30S ribosomal protein S13 [Campylobacter]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>WP\_002856158.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLAFFKGLGIGFLCLLLFVAGVVFNVEFLGKKDSNHDLYFSRNIEVSNTLKPDILYANINFWANENLSSK

ITLDNSEKAEITNTFNQILERSKKENFCSGGSFSLEPNFSYKDGIQTPKGQRFDANLECEFKENQLADFN

KLLNDINSIIAKNNFISVSTPAIQTKFSKDTLNNNKENLYKELLKTSYEYEKTYSLDLNKTCVLKNLQVN

TNANITPRMLNAKSDNIELSSPIISEKEQILSAKALFICK

>WP\_002856145.1 MULTISPECIES: tRNA (guanosine(46)-N7)-methyltransferase TrmB [Campylobacter]

MPNFKSKKIKEINLPYSKDDVEFLWLAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKVQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWDKKPHRRVIGK

DFCKECARVLTQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECKNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

PEHCYLHLDKTIDFVFKEPFKIQENIKAINELKEILKVQFKI

>WP\_002856144.1 MULTISPECIES: elongation factor Ts [Campylobacter]

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQSNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSTEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKAQGKPEKIWDNII

PGKINSFIADNSQLDSKLTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>WP\_002856130.1 MULTISPECIES: chorismate synthase [Campylobacter]

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>WP\_002856100.1 MULTISPECIES: peptidase M23 [Campylobacter]

MRKNILIFFCFFLFVDISLANAINEKTKSLEENKRIQEQLNKKLEDLASDILNGEKSLKDLSLQIESLNS

QTSKLEASAKAQNQELNTLTSQNEDLLKSKSNMEGKLISLMAKDFAYDLPIPQGYIESEESFMAFEILGS

LNKVLNEEIFKISKDYEGVSRLIDDKQAQIKKINESLKDYNAQLAKLQSLKQKQISEINKQKTDRAIYAK

KLDDLQAQQEELRKTLNQLKIINDTEDANSNKNDTKIVKNNQKIRQLGSSYQGSSVKRYTGKKTIAPLDS

FTVKQKFGNYVDPVYNLKIFNENVVLRSNKSDAVVKNVLDGKIVFAKDTSMLARVVIVEHDNGIHTIYAH

LDKIAPNIKVGKNIKKGAVVGRIKNDLTFEVTQKNFHINPLELISLN

>WP\_002856096.1 MULTISPECIES: pyridoxine 5'-phosphate synthase [Campylobacter]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>WP\_002856089.1 MULTISPECIES: cation transporter [Campylobacter]

MYKFLSHEPLANKSCHHNHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IVLSILLLKWAIILLKQSANVLLESSPVDIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRVC

DLKEFEKLSQDLSHKLLHEFEIGHITIQPIRSENEI

>WP\_002856059.1 MULTISPECIES: TonB system transport protein ExbD [Campylobacter]

MLKLPKNEGLNIVPFIDIMLVLLAIVLSISTFIAYGKIQISLPSSENATNISNNKKKLLITIDEKNTFYL

NDKLADLNEVKNAIFSLDKKTIVELKSDKNAKFESFVKIIDFLKAKEHENFQILTEKNK

>WP\_002856047.1 MULTISPECIES: tRNA (N(6)-L-threonylcarbamoyladenosine(37)-C(2))-methylthiotransferase MtaB [Campylobacter]

MKEKVFFKTFGCRTNIYDTELLKSYVKDYEIINDENKAQIIVVNSCTVTNGADSGIKSYVNTMQKKGIKV

ILTGCGAVSKGKELLDKKQVFGVLGASNKDKINEFLGAKTSFYELGNLNFIDKDIVCEYENHTKAFVKIQ

EGCDFACSYCIIPSVRGKSRSVDEKALLKQVEILGANGYSEIVLTGTNIGSYGLKNGTSLGKLLQKMGQI

SGIKRIRLGSLEPAQLDESFLEILDEAWLERHLHIALQHTSEKMLRIMRRRSHTDNDLKLFNTIASKGYA

LGTDFIVAHPGESEELWQEALRNFKEFPLTHIHAFIFSPRNNTHSATMKDVINGTLAKERLNTLKSIVEK

NNYEFRKKNQVSLEVLVENQKDGFFEGYDQFFNKIKIKSNKDIAKEWIVISEYEVQEKSNFVNLKG

>WP\_002856044.1 MULTISPECIES: AI-2E family transporter [Campylobacter]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTTCMVLLF

FAPFVYAMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASS

FTKSGAKFLIDMVLICVFYFFANLYGTELVIYLKSIIPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITIFYGYDGILMGVIFAVSSLIPAIGGALIYMPVSLYEFASNNLNSALVIFIYSVIVISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>WP\_002856038.1 MULTISPECIES: ATP-dependent Clp protease adaptor ClpS [Campylobacter]

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>WP\_002856036.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNLEFSKETQHFLTNYCKDNNLSEKEVLELALSYLEHKIRIDGYKKDIELYKQGKLKTLDFDETFNDIRK

DLE

>WP\_002856033.1 MULTISPECIES: phosphoenolpyruvate carboxykinase (ATP) [Campylobacter]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>WP\_002856019.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIPNTNEIAKQTLIALKERKLKPTPENYTEIFEELSLKYGITSSNKAKLDKYKTLLLPIYQQELNSKTIR

SLEELISFLISVLNRQSGKQFSEFFDFLYTISKTLQISKDKKIRDLAKVTSIRISKTMDSESIYLLTKKW

KELERNYDENDLEEQARKYGISKYDDYDSVIKKLLVKLEERSYEHFSELLCLGLNPSLVEDLKIQGFIQN

LTQKPFVIGEENFKNELMEFINHRIMVDNMYVQKNLNFFNDNLKKIYELLVLLNKSNEKNMDFINTLKPD

ENGEVKLSFEDLKLKFKQLGEKITSLNNQIEFTQSLEEREAWSVLKELDKMDENFNKYKVNYSLALFSIV

NYRFIMEKYGMGSLNEIFVRFKKILKDSCSEFDELWMIDEKSYLIVSPGKSKDEITQLVNTNLKTIENFR

FIYKQDIITPKIHVAYLDKQSKPSINILDELIKQIAAVNEQYNES

>WP\_002856010.1 MULTISPECIES: putative motility protein [Campylobacter]

MVSDVSMGNANLMTAVNTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>WP\_002856006.1 MULTISPECIES: thiamine phosphate synthase [Campylobacter]

MWDKKIIAISDRKCVQIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLTKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKMGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINVVGVCMREILMKEKDLKKYLLECRQNLR

>WP\_002855997.1 MULTISPECIES: diaminopimelate epimerase [Campylobacter]

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>WP\_002855985.1 MULTISPECIES: histidinol dehydrogenase [Campylobacter]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIVKEVQEKGDEALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQDAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCEKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGATIDMQAGPSEVLVIADDLANEKFVASDLLSQAEHGADSQVILVCLSQDFAQKASN

EVQSQLELLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>WP\_002855981.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKYTLMILLALGISGCFVNERGISNRFYDDCKEYYDGSGTYHKDCPKNWVDIKMTP

>WP\_002855948.1 MULTISPECIES: leucine--tRNA ligase [Campylobacter]

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEFFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVAQKKMPGYYVKITAYAEELLKDLEELKDK

WPNQVLTMQENWIGKSEGLEFSLNLDEESKQKTKESSLEVFTTRADTIYGVSYIALAPEHKIVQNLLSQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFILADYGSGAVMAVPAHDER

DFEFATKYNLAIKQVIQTQENLPYTQKSGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIVPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFILFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNVKKGELVELKQENLNKEEKYARLKVYEALKKSFEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFEISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>WP\_002855944.1 MULTISPECIES: Na+/H+ antiporter NhaA 2 [Campylobacter]

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>WP\_002855917.1 MULTISPECIES: nuclease [Campylobacter]

MRINYKKIFNLRKLLSDPKKLFSVLIFTLVVVFIQNYIAQNSSFEGKVVRIIDGDTIEVNHENKLARIRF

FGIDAPELKQSFGKQSKEALSRILSGKQVEIIYKNKDTYGRIVAIVKLNDVDINRFLVSKGYAWADTYYS

NAYIKEQENAKKNHLGLWKESNPIEPYKWRKHNKF

>WP\_002855914.1 MULTISPECIES: 4-hydroxythreonine-4-phosphate dehydrogenase [Campylobacter]

MKKLAISIGDINSIGLEILVRSHEELSKICTPFYFIHESLLNKALKLLNLKLFNAKIVAFKDDKDYEFNF

IKKENSLEIYSFCLPLGFKVDENFEIQAGEIDAKSGLYGFLSFKAASYFVYEKHAHALLTLPIHKKAWED

AGLKYKGHTDALRDFFKKNAIMMLGCKELFVGLFSEHIPLAKVSKKITFKNLSIFLKDFYKETHFKKMGL

LGFNPHAGDYGVIGGEEEKIMEKAIAFVNAFLHSKKDEKFFKKALKDENLQKELLLNFKGKGVYLPYPLV

ADTAFTKAGLKNCNRLVAMYHDLALAPLKALYFDKSINVSLNLPIIRVSVDHGTAFDKAYKNAKINTKSY

FEAAKFAINLNSKA

>WP\_002855909.1 MULTISPECIES: chaperone [Campylobacter]

MQKLAIDIFINFLQNPPNHFLLEKLKKEEFWQNWFLKNNSKLQCTALKLLSSSNEDDKLIASDFTSLFLS

DVDYVKAPPFASFYLDENKEIYSDNSDKVKQIFAQNNFFSFFNEEPADSLINELLFISFLIKKQDDITLQ

KFLKEEFFIWFNMWSFDVINKAKTHFYKALTMLMQDFFNQLNTKF

>WP\_002855902.1 MULTISPECIES: DNA polymerase III subunit gamma/tau [Campylobacter]

MLQALAIKYRPKTFDELIGQKTVSVSLKYALNHNRLAHAYLFSGLRGSGKTSSARIFSRALVCEQGPSDT

PCGTCKHCLAALEGKHIDIIEMDAASNRGLEDIQALIEQTKYTPSMARFKIFIIDEVHMLTPQAANALLK

TLEEPPSYVKFILATTDPLKLPATVLSRTQHFRFKQIPQSEILNHLKEILLKENVKFEEEALKFIARSGN

GSLRDTLTLLDQAIIFCQNEISISKITDMLGFLDPQKIKAFYQAILTKDKEKVFAYLEELQDYEASNVID

EMLFYLKESFFAKSTEFSILIYERFFRILSKAKNMLCDDDGFTLCVMAFMMMEASHLKEIDAQIQEIKQE

NTTNITPRITPAPIIPNLEKKIEKNAYEILLDSIYDRDFDLAECFKQSTKFISFENNTLNISSNAQGQNR

DTLNKGFKLIQELFKTKFGENAKINVQKALTIDENKLQSLTQELPNNENKNIDIQSSINMLKEGAKKFDP

QEDLKEALKDCFGEPSIEN

>WP\_002855898.1 MULTISPECIES: L-serine ammonia-lyase [Campylobacter]

MSNLSIFKIGVGPSSSHTLGPMLAGNLFCKKVAKKLDEIDRVEVTLYGSLSLTGKGHLSDKAVIWGLNGL

EAKNLSAAIQDEVNKNAIENAQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGGLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNKKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANAFKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMVSL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>WP\_002855880.1 MULTISPECIES: signal transduction histidine kinase [Campylobacter]

MKEIVLSENALITSKTDLKGNIIYANNDFLKYAGYKVDELLYKSHNIVRHEDMPRTVFKCLWDYIQKGDE

IFAFVKNKAKDGNFYWVFANVSASFDTNGNIINYYSVRRAPNRKSLSIIEEVYKILLEKEQKSGINAGVS

ALMDIVSSYKMTYNELIFNLQENN

>WP\_002855874.1 MULTISPECIES: chemotaxis protein B [Campylobacter]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVASSFKPSVDLLFHSAVSLAKTNKILAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>WP\_002855865.1 MULTISPECIES: multidrug ABC transporter permease/ATP-binding protein [Campylobacter]

MPFIIELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVTLLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDTLIDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>WP\_002855863.1 MULTISPECIES: adenine phosphoribosyltransferase [Campylobacter]

MIKLTQEEQKYLFDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>WP\_002855861.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLIDLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKEAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>WP\_002855844.1 MULTISPECIES: phospholipase [Campylobacter]

MRKIALFLNLCVFIWASDLQQALEYEKQGDYKKAMEIYKKLALKNSSVLISQEQNNSSQTTQTQNSITIK

KEEKQDFSRLALANYLGENESFNPLGISSYKMNYFLPFAYSFNSLGTNNNKSEAKFQLSVKKRLFENLLG

LDEKYYIAYTQTSWWQIYEHSSPFRETNYQPEFFIDFPLYLKDYEFFNNLRVGILHESNGKGDENLQSRS

WNRIYVSTAILYNKFLFVPRLWYRIPESKKDDDNPAILHYMGNFDVNLAYLGDDYFINLMLRNNLKFHDN

KGAIQVDLGYDIFNNGIYWYLQYFNGYGESLIDYNKHLQRLSTGFLISY

>WP\_002855840.1 MULTISPECIES: lauroyl acyltransferase [Campylobacter]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARIAFHLNKKHRKIINTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFTTAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSQSRTQFDIELIDKKGGIRQMLSALKKERALGILTDQDCVENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPVYAYKEGGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKGAK

>WP\_002855823.1 MULTISPECIES: MFS transporter [Campylobacter]

MQKKYKNIIYASLGGILEFYDFVLFAFFLDIFAKVFFPQNDAFWMQINAYIAFGAAYLARPFGSIVMAHF

ADRYGRKNIFYISMLLMVLPSFALAFLPSYESIGIFATLILFTIRILQGLAVGTEVSGAWIYVSEFVKGR

QIPLALGFISATLTIGLLLGNIATLGIRSYFTPEEVQSYAWRIPFIIGGFFGILALFLRNKLSETPEFIK

VQNEKKILNFPLFEALKTHKMSMLVCFLMTMVLTSGVATLMILPKYFESLLAMSKTSALWVQNFAILAVI

FGALFQGFLASKWGSYKICSIFSIAFIIFGMFFSFYDENFLFYFLLACFAQGIITFAPVFMTQIFKSELK

FSGLSFAYNISYAILGFLTPFIVNAFYKEYLGIYLAIVGFCSLLCVFLLKRVFARSKIKELSIVF

>WP\_002855822.1 MULTISPECIES: transformation system protein [Campylobacter]

MKKAFILIESISAITIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIILQTSALKPI

VLQEQFVNDGIFQFQKLYFQDQNYSVYFKE

>WP\_002855770.1 MULTISPECIES: Ni/Fe-hydrogenase, b-type cytochrome subunit [Campylobacter]

MQNKEEKLQRKAEYEFSIGLRLTHWVRAIAIVILIGTGYYLSYVFQSPISNGEPVNFMQAKYRLVHQAVG

FVLIACIIFKVYLFFCDKVSAKERRSVWDIFNIKLWIEQVKFYIFLGKHPHLKGVYNPLQFVTYFFFYLV

MLGIILTGLILYTHTYHEGLGGLLYHILRPLEAAMGGLADVRTYHRILMWVIMIFVPVHIYMAIFNAVKG

KDGAMDAIISGYKFVKEEKH

>WP\_002855735.1 MULTISPECIES: potassium transporter [Campylobacter]

MKQFGLDRRTFKILLAGYIIIALFGALLLHSSWAHTTPIDFLDAFFTSTSAVSMTGLVVKNTAVDFTLAG

QIIILALVQIGGLGYMGIGLFVYILIRKKVGFSARNLLKESLFYPSMDGLFKFFKKVLLFIFTIELIGAI

LLTMRFALEMNFKKALWFGIFHSISAFNNSGFTIFEHGLIAYKHDIAINLIITSLIIIGGLGYFVLVELY

FFQRKKLQNLSLHTKMVVVASIFLIFSSTLIIFAFEYSNPQTIGHFSFFDKILSSYFIAINYRTAGFSTL

DMGHLHDASLFFGSLFMVIGGAPGGTAGGMKVTTVMVLLLYAYWSIRDGRVRIFGHEIPRETISKAFIIA

VGSAVYIVIAVILLSLLESKFDFIALLFETSSAFATVGISVGNGGTLSLCALFSDPSKVIIIIMMLSGRI

GVFAFLLSVFKQDKAIHLKFPEGKVNL

>WP\_002855734.1 MULTISPECIES: molybdenum cofactor guanylyltransferase [Campylobacter]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>WP\_002855731.1 MULTISPECIES: hemerythrin [Campylobacter]

MLPKWDNSYSVHNAKIDEQHKKLFKLAAKVEVVSDRSVSKNEVKELLAEFFNYMKDHFNDEEKYMQLIGY

PNLEEHRKIHKEIIQTMINLIKDIKSTNDLKEKLYIVAKKWLLEHILYEDMKVEKWRSSSLSTDDGGDIS

FEAAEDEDNEHPQFYLYTCNCPGKIHDVPYSIHQKIELQGHKFTCKTCKQAIKFYKKYS

>WP\_002855727.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQNYKKLGIEHFYKKDFKTAKMYFSMAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILSTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIINSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>WP\_002855633.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLFGFDDKQEFIPQIYRYLNNQELMLTFLTQYNASVDSALKIPLLYAKNTKSLKMIFGNFLHNIMHVSFG

KIQNINIKLNTYAFYFQKRKSLIFNTKISKNVDLLRLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLEIENEIYELLNLIKENNFEKFYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>WP\_002855360.1 MULTISPECIES: ATPase [Campylobacter]

MKDFFKDQFFKALEKNTIFSRADVQGNLIFVSDKLCQISGYSKKELIGKKHSIFKHPDVEECYIEELLKK

LSYKKPYQVIFKNIDKLGKTFYLETLLIPILDKNNELIEIVAFSHDVSNSFKLNEELALNHAKLRELSIN

LENTVKNHQQEFIQLGKKFEKKMQIALEKNEKDIKIAYEEILKSSLEQMISDIAHQWRQPLNELGIAMFQ

MKQNLKDEKGFAEIYSQSKDMIKNMSETIDVFRTLFNKGVEQCVFIKETLNKALEIAFETIEKNHVNINI

VSKSDYEVLAYENGLIRVFLNLILNSIEAFKNKKRKIITINFSKFGKNYLKITIKDNAGGIDKENLDKIF

QPYFTTKHPSQGIGVGLYISRQIIESFQGKIKVKNGKDGACFEVFLKLKERVE

>WP\_002855301.1 MULTISPECIES: membrane protein [Campylobacter]

MGFEHLDTIYYFILFFVALFAGFIDSIVGGGGLITLPALIACGIPAHLSLATNKLQSVFGSFTATLTYFK

STTLPHLAWGVFFTALGAAIGSYSVLFVKDEQLKLIILIFLTLTFLYTALRPNLGKHESEPKIKNIKIFH

LICGLTLGFYDGFLGPGTGSFWIFACVMLLGFNMRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLM

GVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGATIIKVAWDYFS

>WP\_002855276.1 MULTISPECIES: NAD(+) kinase [Campylobacter]

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>WP\_002855264.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MLEFLNTDTLLRLWQGLFVTLEISFISIIITSIGGLFLGILMSFKNTYIYAFCRLGLEFVRVMPLLVWLF

VVYFGFPRWFGWDLSSVSAAIIVFSIWGCFEMMDLVRVSLQSIPKHQYESASSLGLNTVQSFVYIIIPQA

MRRLTPMSMNLLTRMIKSTTFAYLIGAVELVKVGQQIIEFHNRNDFAPFIIYGLIFFIFFILCYPITLYS

RKLEKKWS

>WP\_002855258.1 MULTISPECIES: 1-aminocyclopropane-1-carboxylate deaminase [Campylobacter]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFVSYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKNNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGTGTSAAFLAKYSKFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEFLTSDKKYHFAKPYKEFYELYMDLKLKCNIEFDLLYDILGLSIALKQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>WP\_002855248.1 MULTISPECIES: membrane protein [Campylobacter]

MRRNLSAYKAKFNGAYVFLGFFFLIYQILGSTFIYAPLLYGIFFCYMFCLLEERERTFSKLDFRWYFSLF

FLFFTDITYNFFIFSSWLAFFIFYYLCADWIKTNLKIGKFIPVVFVLCAYGIILFLDMILSYIGDEKIKI

LGWAYIVSVFIECCLAYVFFKGKI

>WP\_002855246.1 MULTISPECIES: amidohydrolase [Campylobacter]

MKIDTHAHIFLKKLNTVANTRYKPDYDASFKDYKANLDHYDFNKGVLVQPSFLGIDNEFLLQSIEKDENI

KAIVVVDENIKFDELKKLKERKACGVRLNLIGKELPNFKSMVWTQFFENLSKLKMQIEIQRDLDNNLVDI

VENLIPYGCNIVIDHLARANANLTNLEDLICLKNSRIFFKISGFYRAKIDYANNEQAVKFAKKIYEILKE

HFPLSNFVFGSDWPHTNFEANINFSSALVAFNEVVVSKKEQEQILGDNACALFGF

>WP\_002855233.1 MULTISPECIES: GTPase Era [Campylobacter]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>WP\_002855215.1 MULTISPECIES: UDP-3-O-(3-hydroxymyristoyl)glucosamine N-acyltransferase [Campylobacter]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFTELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

ALITQSPHLSFAFLSKLFAKPLISTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAINFKEKSQD

>WP\_002855194.1 MULTISPECIES: 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase [Campylobacter]

MTELIFLDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIKI

LYQGIKDKLACAKEILQKLNLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAV

AQMIEILVEKNHLEEEWNKLWL

>WP\_002855192.1 MULTISPECIES: phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter]

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFLMPKFITWAKNKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLSCIKFDNIFAISALLCLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLTQIIAGLICI

LPLYFSSELSTELFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>WP\_002855174.1 MULTISPECIES: peptide-methionine (S)-S-oxide reductase [Campylobacter]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>WP\_002855137.1 MULTISPECIES: adenylate kinase [Campylobacter]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>WP\_002855129.1 MULTISPECIES: HslU--HslV peptidase proteolytic subunit [Campylobacter]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>WP\_002855124.1 MULTISPECIES: dihydropteroate synthase [Campylobacter]

MKFFKINPNTDFNLLCSFINPHKMGQKIMSEKTKIHFIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEE

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKVLDLIYEKNYYEQAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYGAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAGHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALAQAMDNIGV

>WP\_002855117.1 MULTISPECIES: DNA polymerase III subunit delta' [Campylobacter]

MFISKIIISEDFLGIKEEMINNFGIKKLRFFMPQNEFLLDDARAVEKESYIAETEEKIIVLMADSYRIEA

QNFLLKLLEEPPKNIKFLIVIPSKNLLLPTIKSRLICEKRKVEKEVKKLDLDLKRMDLRMLFDFLQKNEN

LDKNELMDQIALLAKECVKYKDFNAEELEFFYESYELAKLNSKSGVLLATLLLNYYTKK

>WP\_002855099.1 MULTISPECIES: ribosome maturation factor RimM [Campylobacter]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELINLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVIDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>WP\_002855063.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>WP\_002855039.1 MULTISPECIES: membrane protein [Campylobacter]

MAIKIFGILIALFTITFTILSLQDPYSLNLQTNALNFKNIEAKNLKAYESNTSIIKAYYKANSWVRYADR

DEFNDFITLNLDFNLSANRLEFFNKDMSKVLFEGNVTYIGSNNVKIISQEVEYQPKDKILHTNTNFKALI

NGSIINGNTLNYDVKNKILNIQGVNAWLQDK

>WP\_002855032.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNKIEVFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKTLVEHNYLALNEAKIENSHLKEIET

KLTKQIKTEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGNFK

DLLNFIQNLENLPIALKIDKIKLYNTQGLKLKLDLMFKFVNL

>WP\_002855029.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAA

RPMLPFVSLNSLCKKKVQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSRVQLG

>WP\_002854995.1 MULTISPECIES: type I glutamate--ammonia ligase [Campylobacter]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNSGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKMVAHLNGKTATFMPKPLYGDNGNGMHVHMSL

WKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFTNPSSNSYKRIVPGFEAPCILTYSCQNRSASC

RVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGIKNKTIPVGPMDENLFDLTLDEIREKGIEQLP

HTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVWPVEARPTAYEFKTCYSC

>WP\_002854980.1 MULTISPECIES: 50S ribosomal protein L9 [Campylobacter]

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>WP\_002854977.1 MULTISPECIES: beta-ketoacyl-[acyl-carrier-protein] synthase II [Campylobacter]

MKRVVVTGIGMINALGLDKESSFKAICNGESGVNKITLFDATDFPVQIAAEVKNFDPLEVVDGKEVKKID

RFIQLGIKAAREAMQDAGFNEELDKEEFGIVSAAGIGGLPNIEKNSIICSERGPRKISPFFIPSALVNML

GGLISIEHGLKGPNISCVTACAAGTHAIGEAYKSIALGNAKKMLVIGAEAAICPVGIGGFASMKALSTRN

EDPQHASRPFDKERDGFVMGEGAGALVFEEYEEAKKRGATIYAELIGFGESADAHHITSPTLDGPLRAMK

KALNMAGNPKVDYINAHGTSTPVNDKNETAAIKELFGNNIPLISSTKGQTGHCLGAAGAIEAVVSVMALR

DGVVPPTINQLVKDDECDLDYVPNISRKVDLKVVMSNSFGFGGTNGCVVFKKVD

>WP\_002854970.1 MULTISPECIES: 2,3-bisphosphoglycerate-independent phosphoglycerate mutase [Campylobacter]

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIENKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVNPKSGLNFIKDLKEFCENLGVHFATLCGRFYAMDRDKRWDRVKECYECLLGKAYKVPNLLE

YLQKSYDENVTDEFIKAVQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKIFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLIPSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQAKGVSKIKDNMGLSNIAASVLKILDLEIPKEMNEA

LF

>WP\_002854935.1 MULTISPECIES: aspartate kinase [Campylobacter]

MLIVQKYGGTSVGTLERIEAVANRVIQSAQQGNQLVVVVSAMSGVTNTLIEQAEYFSKTPNGKDMDMLLS

SGERVTSALLSIALNEKGYPAISFSGRKAGIITDSVFTKARIHHIDTKAIKSELQNGKIVVIAGFQGVDE

EGNVTTLGRGGSDLSAVAVAGALNADLCEIYTDVDGVYTTDPRIEPKAKKLDKISYEEMLELASLGAKVL

QNRSVELAKKLNVNLVTRSSFNNNEGTMITKEDGMEQALVSGIALDKNQARVTLRNVEDKPGIAAEIFSV

LANENINVDMIIQNVGVDGATNLGFTVPQNELELAKNAMQKILSSKTTIESDSAVVKVSIVGVGMKSHSG

VASKAFKALADEGINIGMISTSEIKISMIVHEKYGELAVRALHECYGLDK

>WP\_002854913.1 MULTISPECIES: signal recognition particle protein [Campylobacter]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDVKQNGIGQKQFLNA

IKVNLENILSVNGKNQGFVFASKPPTVVLMAGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKVVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEVLGISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAIIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>WP\_002854905.1 MULTISPECIES: tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase complex ATPase subunit type 1 TsaE [Campylobacter]

MKEFILAKDEIKTMLQIMPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISTIQIKISIKDDKRKYEIYE

>WP\_002854883.1 MULTISPECIES: malate dehydrogenase [Campylobacter]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNIDLLCAKDYTHTKNS

DIVLFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMLESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SLQEKDKLEKSLIKYQYKGE

>WP\_002854879.1 MULTISPECIES: flagellar basal body rod protein FlgB [Campylobacter]

MINPFKSKELVTGALAGRNLRNQLINANLANVDTPFYKARDIEFETALVNRANEIFKKNDNKELQLAVTE

EGHQKPWKFPDPSKSTIYLRDGHLARNDANTVDLDVETTEMSKNTVMITALDGVLRRQSNIFSSILDASS

KLS

>WP\_002854869.1 MULTISPECIES: argininosuccinate synthase [Campylobacter]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>WP\_002854824.1 MULTISPECIES: 50S ribosomal protein L19 [Campylobacter]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>WP\_002854816.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVK

SDGKVIRLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKN

YNDKIVQEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>WP\_002854811.1 MULTISPECIES: membrane protein [Campylobacter]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANITNYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGFIRENLSKELQSKLDNNITIDEKTGSISLPAEVLFDKDSYVLKNEAKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKLQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>WP\_002854797.1 MULTISPECIES: RNA pyrophosphohydrolase [Campylobacter]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>WP\_002854771.1 MULTISPECIES: tRNA preQ1(34) S-adenosylmethionine ribosyltransferase-isomerase QueA [Campylobacter]

MNKDLLLSSYDYTLANELIANYPANPKEDARLLVFDRKNKEIFHTTFKNLKDFLPDCAIFFNDTKVIKAR

IYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKARVVELLDDGLRKVQFFQNDKT

LDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSETMFENLRKKHKIYH

LTLHVGAGTFKGVECENIQEHKMHSEFFNIPQQACEIIDSKQAILGVGTTVTRTIEYYARTKTKSGFCDL

FLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYKLAIKEKYRFYSYGDAMLIL

>WP\_002854663.1 MULTISPECIES: hypothetical protein [Campylobacter]

MELTLFKAGFEAHLECCEIENNRFLGEYLKLGAISQILKWKKLALRIDFDEGEKIIFDLLLSLKEDILRL

ENSLDKNKELIPLKQKGVIESLNFEYLNFLDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKP

EDKMAFDAFVVEIQRNMIRNKKGQE

>WP\_002854624.1 MULTISPECIES: membrane protein [Campylobacter]

MHFTIFHIIAFIILLICFALICILIFLKVKQKEMALISYTIATIFTALLIYSIFLTINQFTTQADLSKLT

YTRDLRHESVIVSGKVQNLTKFEIRKCYLMLSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>WP\_002854553.1 MULTISPECIES: tryptophan--tRNA ligase [Campylobacter]

MRVLTGLQPSGDLHIGNYFGAIKQMVDAQEKSQMFMFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

PQKSVFWLQSDVKEVMELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMAADILLFDTQIV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEAKVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDFKNCNVFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELANAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>WP\_002854511.1 MULTISPECIES: serine/threonine protein phosphatase [Campylobacter]

MRILLVLRGNYYAGQEEFIKNNKLQNYTLDLNALRLLSGSVKNIVSEYKILNVKNDEDLSKILLKLLEMR

MQKGEFCIINAYNETLKIYKDLAKQYRYKMYVIVFDSSLKQCQEKNLLEAKKNGYIIPYALLEKTQDLLK

KNPKKYPILDSSDWKKCLYQMPNLSKYKKIHHIGDLQGCYSVLKEYIKTIKEDEFYIFLGDYINRGIENG

KVIKFLLKICEKENVCLLEGNHERHLIKWANGELSNSKEFNENTLKDFRKEKLTPRDARKLYPHLKECLY

YKFQNKFIFCSHGGVNFIPSKPEKISFIPSHDFIYGVGGYEDSQKVANQFCNFTSDNLYQIFGHRNKEKL

PMKIAKRVFLCEGKIDGGGYLRVVTLDKKGFECIEIKNQIYKKK

>WP\_002854440.1 MULTISPECIES: aspartate ammonia-lyase [Campylobacter]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKDVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMEAKK

>WP\_002854420.1 MULTISPECIES: restriction endonuclease subunit M [Campylobacter]

MKENPSFLKEQIITYLGNKRALLSFLNNGFKVAKKELGKDKFSFCDIFSGSGVVSRFAKAHSNYILANDL

EDYSKLINECYLANKDKDLLQNIKKYYKNLIQNLDFQKGFISELYAPKDDDDIKKNERVFYTFKNALYLD

TIRQKIENEIPKELRHFFIAPLIYEASVHSNTSGVFKGFYKGKDGIGKFGGEGQNALKRIKGEIELKIPI

FSNFSCEFEVMQKDANMLAKELDFFDVVYLDPPYNQHPYSSNYFMLNLIANYKKPEEISKISGIPKDWNR

STFNKSKFAQDALFELINDLKARVILLSYNCEGFVKKEIFLKRLSTLGKCRILEQKYNTFRASRNLKNRN

IHLHEQLYILVKN

>WP\_002854406.1 MULTISPECIES: GTPase [Campylobacter]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>WP\_002854344.1 MULTISPECIES: GTP cyclohydrolase I FolE [Campylobacter]

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVI

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>WP\_002854340.1 MULTISPECIES: 16S rRNA (uracil(1498)-N(3))-methyltransferase [Campylobacter]

MQFLYNKQAGEEFIQLQGENFNHLKVRRVKENSELNLRNLQDNFLYNYTITNLTRNSCTLKFLNKKSQNI

KQSELNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFIQKFPNAIMVDFQGKQQSHFDEKELYFIGPEGGFNNDERLLFNRKISLKSSNILKSQTAII

AIASKILL

>WP\_002854288.1 MULTISPECIES: RDD family protein [Campylobacter]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYDLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFARKDRLNLHDILTQSCIVTKA

>WP\_002854281.1 MULTISPECIES: uracil-DNA glycosylase [Campylobacter]

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>WP\_002854274.1 MULTISPECIES: ribosome biogenesis GTPase Der [Campylobacter]

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>WP\_002854177.1 MULTISPECIES: cytochrome c [Campylobacter]

MKKLISKGKVLTLLLGVGFALNVSSAENSNVLIQGEAAQDGDTKPRTLEGYVHQEDAFFKYLKEHHPMFK

YEKEGRIVGKYAISDREEEYVEFSNGPTFAQQNNLAHTSVTYRLGMESFLDFPNKFVGPKKCGECHPAQY

KAWERSRHAKTVRFPDEFEEVGNDLKKPMYNSQSTILPDGIYPDDVYAVIGTPRTKYGFIDRWLVRGTYH

VEDGNLSNMTGKIVAGGNQFSRLWSEFLTPEMTKKIAEFSPGFPTTMEQFGGNGSQVWGTNSYAAQYRKN

MLFQPASSYCETCHSFKFDFKSKEEFYKALGNTQELRKHTISKGISCEECHGAGAHLYGARGAGMPSNCE

RCHQRFSYNEEDAKKNPRKPFNAFFKSSCPACGTEGAQMYSSAHYDKGMRCSTCHDPHEVTFNDWKDGYT

KVGLKKTCTDCHDTQASFFKQGGIHSKDNCTACHMPNMMSCENFGAVQNPDKGGFDNVRASHIWKIKVDK

TAKTLNPPEGKERSPKTPGWTIARDDDGRFFLDLMWACGRTSFSDPNLMGPGASGCHSAVQSNLPKKLHF

TDQETIYDIVVGWQKPVKDGYENILKGVKEIDKAMAENPKLSVEKKSRVITLANQARAIAEKLQKDGSWG

VHGPVYSKKIVDEALVYIQEAKNILK

>WP\_002854139.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAKKDNFEEYAQLEEYASAEDISRVRAELLTCPELNTSLAGTIIEIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFFYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>WP\_002854065.1 MULTISPECIES: chorismate dehydratase [Campylobacter]

MIFGKIDYINLLPLHIYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNTSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYAKTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>WP\_002854063.1 MULTISPECIES: malate dehydrogenase [Campylobacter]

MNLKEEALKYHLGGKIDIVPSKPMATSYDLSLAYSPGVAEPCLEIAKDNELAYTYTNKANLVAIVSDGSA

VLGLGNIGAQASKPVMEGKACLFKKFANVNAYDIEINVHSIEEIVNFCKALAPTVGGINLEDIAAPKCFE

IEAALQDLGIPVMHDDQHGTAIISTAGLMNAMEISGKKFKDIKVVVSGAGAAGIASAKMYRNLGVENIIL

VDSKGVISKDRNDLTPQKLEFAVDSKEKTLKEVLKGADVFLGLSAPKILDDEMVLSMAKDPVIFALANPI

PEVMPEDVARLRKDAIVGTGRSDYPNQINNVLGFPFIFRGALDVRASKITENMKVAAAKALADLAKLPVS

DAVKKAYNLSTLEFGRDYVIPKPFDERVKAAVSTAVAAAAVKDGVAKVKNFDEKAYFESLK

>WP\_002854048.1 MULTISPECIES: single-stranded DNA-binding protein [Campylobacter]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNAPQQGGFGNNSFSNNNYSGNYENQSYDPYMSE

NQNFNKAKANPAPQRNQNPQHEEKLKEIDIDAYDSDDTNLPF

>WP\_002854010.1 MULTISPECIES: transcription-repair coupling factor [Campylobacter]

MQASFYEYLQNPKICELLLCKDEKQADLLAQVSRFKGLKTFVLPDFRAQFGDDLRAFSKELFDLCKILNA

YHKEEEKKILISPLNTVLKKLPSKKHLQNYHIDKKQNFDLKCFEDEISRLGYEFVDIVQDKGEISIRADI

IDIFCINEENPIRILLFGEEIESIRYFDLQSQKSIPNELEHFEICPFLKYFDKENYEIFKDKLEDFQSDT

LIHDINSLGFWCIDDFFNYLELDFLACEKFDINEYEKDISFVNAKILPQAKKFKELQSSYNKDFFEFHKN

KKITLLAKNEALFKALELEDTQNIHFVKSDLRLNLISPEELIISLNQKEKQKTRKKASLIIDELKNGDYI

VHEDYGVGKFLGLEMIVISGAKKEFVAIEYQNSDKLLLPVENLYLIDKYLGVSGSIPSLDKLGKTSFIKL

KEKLKTKLLAIASEIVIMAAKRSLVQAKKITVDLSRQADFITSAGFIYTSDQEKACHEILQDFQSGKVMD

RLLSGDVGFGKTEVAMNAIYPVVKSGFCAFLFAPTTLLSHQHYKTLKKRFDPFDIEVFKLDRFTSSAEKK

QVLQNLKENKACVVVGTHALLSVECENLALVIIDEEHKFGVKQKEKLKEITQNSHILSMSATPIPRSLNQ

ALSSIKSYSVLQTPPEDRMDVRTFVKENDDALLKEAIARELRRGGQIFYIHNHIASIEQCKKHLLELFST

LRILILHSKIDAKVQEEEMLKFENKEYDLLLSTSIVESGIDLPNANTIIVEKSDRFGMADLHQLRGRVGR

SDKQGYCYFLIEDKNAITKDALKRLVSLESNSFLGAGSVLAYHDLEIRGGGNLLGVDQSGHIEQIGYSLY

LKMLEDELNALSKNEVDQKENKLDLKLNVNAFLNSELISEDRLRLELYRRLSKCEQVHEVYEIEGEIEDR

FGKLDIYTKQFLSLIIIKILALNKFKSISNYEQNIQFTALNDEKELIKAKSKDDDDILEAILTHLRKA

>WP\_002854006.1 MULTISPECIES: ornithine carbamoyltransferase [Campylobacter]

MKHFLTLRDFSKEEILSLVNHASELKKEPKKLLQDKTLAMIFEKNSTRTRMAFELAITELGGKALFLSSN

DLQLSRGEPVKDTARVIGAMVDFVMMRVNKHETLLEFARYSKAPVINALSELYHPTQVLGDLLTIKEWNK

MQNGIAKVAFIGDSNNMCNSWLIAAAILGFEFSIAIPKNYKISPEIWEFAMKQALISGAKISLSHDKFEA

LKDKDVVITDTWVSMGEENEKERKIKEFEGFMIDEKAMSVANKDAILLHCLPAYRGYEVSEEIFEKHADV

IFEEARNRLYVVKALLCFLDNQRGRE

>WP\_002853965.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MSLFTQKNKDFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAIATYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIVFLRFLSTFYIELIRGTPLLVQVLLMYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQVFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLILTLPISIFSRYLERKCQK

>WP\_002853959.1 MULTISPECIES: cytochrome c [Campylobacter]

MIIRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDM

SPEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHN

IFLK

>WP\_002853905.1 MULTISPECIES: branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>WP\_002853878.1 MULTISPECIES: sodium-dependent transporter [Campylobacter]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMIGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEVSKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGVKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSASLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFEPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>WP\_002853852.1 MULTISPECIES: membrane protein insertase YidC [Campylobacter]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNTPNIQNTTTNTPSAA

LVSQDSVISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYVANASNLFVDENGSQVLKLTQNLSGLKIEKDITFYPKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVMDNKETIETYKDGDVEKDESANNVVMTSAFDRYYATFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFLHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKTSGA

>WP\_002853816.1 MULTISPECIES: peptide-binding protein [Campylobacter]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>WP\_002853792.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFKTIVCFLALNLSLFAVGFDLKPIKSELVKVDDIYGYIKDSDDIKLYSSGVVVQHFSNSQSIIARASVI

DKKNGLAKLEFSVFSALKQDALPLPNVLPKVGDEVVLNFLYDRGLVIAPDEQTYNELVREFPQIYFTHID

IFGAQLIRTATLSPKRSDFRQFCDDNAVGILVVALENQAEVVDCQDFNKLYEVPISKPTSVQVPFYSRIG

GYKSNFFDFNSQEIGNYYRYYDALINLPKVQ

>WP\_002853753.1 MULTISPECIES: outer-membrane lipoprotein carrier protein LolA [Campylobacter]

MKKTFLIFFIFIGQLFALELNFNTFSSNFTQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKN

QVTIVEHDLEQVIFSHLDNIPNLNEIFKKASLIDKDKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVI

INLNNQIKNPKINSDVFKAKIPQNYDIVR

>WP\_002853752.1 MULTISPECIES: NAD(P)H-dependent oxidoreductase [Campylobacter]

MKKELEIFSTRYSCRNFKNEKLKKEDLNSILEIARLSPSSLGLEPWKFIVVQDEKRKEELSKICNQQKHV

KDCAALIIIISRLDFLDYFEEKLRKRDMSETEMQKRLDTYMPFLKSLNQEQKISYAREQAHIALASILYS

ANALNIASCTIGGFDKEKLDSYLSLDIQKERSSLVVALGYCNDKKNPQKNRFSFDEVVKFI

>WP\_002853706.1 MULTISPECIES: sodium-dependent transporter [Campylobacter]

MRTYFSKIGFVLAVAGGAVGLGNAWKFPTLSAENGGFVFVLLYLFFTLTIGFSIFLAEVAMGRLSKSDLA

NAYSNLAIKYGNRWRYGGVFMLGGIFVLSFYLVIMGWVLKYTVVSLYYLPKTLDEAASNFQNLITTNLTS

SVFFFTLSFFLTLLIVSKGLIKGIEKLNVVIMPSLFLMLVFMLFYCMGFKQGFANAFSYLFYPDFSHFKF

SSIAEALGLAFFTLCLGIGCIVTYSSALDKKTNFIKSSVYIVLINLLISFIMGLIVFTFIFEFGADPHTQ

GAGIVFVSLMSLFNQLGALGYIFAFCFFLALFFAGITSAVSMIEPLTFYMINNYQISRVKALFLIGLFVF

VFGICCILSLNLNFFSMFSFFGKDFFTLLDKLTSNFLLPLGAIVCSIFVGFFMNKKQIYKIFSKFISRKI

FLIWLFFIRFISPIAIILVMCYQIFV

>WP\_002853705.1 MULTISPECIES: transcription termination factor Rho [Campylobacter]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPREFRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRVLDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNIADRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>WP\_002853683.1 MULTISPECIES: ATP synthase subunit C [Campylobacter]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>WP\_002853451.1 MULTISPECIES: RNA polymerase sigma factor RpoD [Campylobacter]

MNAKTQEAELEELFQENAKDYITYEKLVKYLTKQPSASTAKKVQALMKKHKVQLFSAAEIAQMKNIEDAK

RLQEEKQKLQDTSLENEFDLANENDLLEWSRSDSPVRMYLREMGQIALLNKDEEIEISKKIELGEDIIID

AFCSVPYLIDFILDYKEPLINRERRVKELFKSFDDEEKSDDKLDELDIDEDEENETELESDEENTKKNSK

KEDERTLKVIEKFKALEKAKKDWLKTSKDKESGDELLDKLSIAFKKNILKEKLMDLGPTSKLISEIVKSM

ETALKSDEEFDKELKRLEYRLPMFSDELKKRHADILKDITKLSKEEITERALETTMVSTYMEIKKLFQTK

EASEKSFDLEKSRLKEILEQIKRGKKISDEAKGRMAKSNLRLVVSIAKRYTNRGLPFLDLIQEGNIGLMK

AVDKFEYKRGYKFSTYATWWIRQAISRAIADQARTIRIPIHMIETINQINKIIREHLQKDGKEPDVSVIA

KEVGLSVDKVKQVIKITKEPISLEAPIGNEDDGKFGDFVEDRNSLSPMDHILKDDLKEQIDEVLDQLNDR

EKAVIRMRFGLMDDESDRTLEEIGKELNVTRERVRQIESSAIKKLKHPKVGRKLKNYIEGWK

>WP\_002853339.1 MULTISPECIES: bifunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/inosine monophosphate cyclohydrolase [Campylobacter]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>WP\_002853321.1 MULTISPECIES: lipoprotein [Campylobacter]

MKKMLQIALAATFFAGCASTSLTSSTSKGNNELVQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>WP\_002853198.1 MULTISPECIES: isomerase [Campylobacter]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQARKEKS

>WP\_002853180.1 MULTISPECIES: hypothetical protein [Campylobacter]

MTKNEEKALRVKYLRNLEKFFNGAISALKKEDFDKTKFEERMLKNAKFFEKNPAVNLNSTYAKNLEFFVN

ACLDFSKEKSELLNLANALDKQKKQGEKKEKHKNYLKDYE

>WP\_002853131.1 MULTISPECIES: molybdopterin containing oxidoreductase [Campylobacter]

MKQNDQKENRRDFLKNIGLGLFGISVLSNFSFENFLGSKALAKELPDFKIEGKKDLIYHGEKPLTAETEI

YALDSDFTKPENFFVRNNGLPPSLETIKERLHKGWTLEIDGESIINKKSYTIEDLKKKFKTYTYALTVEC

GGNGRSEVIPSTKGTQWGYGAVACGRWTGVRLKDILKDCGIKNDAVYIGYYGIDTKLNGEETSPISRGVP

ISKALQDETLIAWAYEGKDIPLVNGYPLRLVCGGYPASTSGKWLYKISVRNKIHDGEKMEGSYKVPVNPV

KPGDFNYKGEMKIIESMPIRSVITNIKNGSEIKANKKFEVRGKAWAGELEVSEVYVSNDYGVTWTKAKVE

KPLNRLAWQKWSAQISIPTKGYYEIWARAIDSQGNSQPMVLAQWNPGGYINNACHRVNVYGV

>WP\_002853081.1 MULTISPECIES: rubrerythrin [Campylobacter]

MRQYETYKCQKCGNEVEVQNVGGGKLSCCGEEMKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEG

WHAVARHFREAAENEKWHARAEFKAYHEIVDGKPLEVTTKNLVTAAEGENYEHTTMYPNFAKIAEDEGKK

AIARLFTAIGKVEIEHEREYLALKKMLEEEEFFNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFK

REFLG

>WP\_002852822.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLETILKNENFIHTMQKHCYEVISHLIEENIEFSIVANTNFIDFNPELPKELDIKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNDDFDSFVKVDLGAITQIQVENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>WP\_002852542.1 MULTISPECIES: bifunctional methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate cyclohydrolase [Campylobacter]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>WP\_002852330.1 MULTISPECIES: diguanylate cyclase response regulator [Campylobacter]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIVLTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIVKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVRERFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLVDKASKILSQAKDNGKDRVEVCS

>WP\_002852252.1 MULTISPECIES: organic solvent tolerance protein OstA [Campylobacter]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNRKPIRY

EAMQNARFKIVLKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDK

>WP\_002852070.1 MULTISPECIES: sodium-dependent transporter [Campylobacter]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLGNFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIINYIILKRGIIDGIEKSVKFLMPLLFICLIIVVGRNLTLDGAMAGVKFYLEPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFVLLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>WP\_002851840.1 MULTISPECIES: zinc transporter ZupT [Campylobacter]

MQFTFEQIFIAMLLTLFAGFSTAIGSIIAFFSRKDDLRVLSLGLGFSAGVMIYISFMEILPTALKDFKNH

YDSHWAELLGLACFFGGILISLLIDKLIPEDVNPHEPKEDLSELKICPLPQKGQNPPKFHPGEKLHQINT

KALKRTGIFTALAIAIHNFPEGFATFISSLDNLTLGIAIAIAVAIHNIPEGLAVSLPIYHATGDKKKAFI

YSALSGFAEPLGAFVGALILLPFIGDLTLAISFAVIAGIMVFISLDELLPAAKTYDKAHDSLYGLIAGMA

IMALSLNLLGQ

>WP\_002851763.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKNIVFFEVKGGSDKGEDGYRKDTMPMVNALKAKGWNAEVIFFEVGKKDEIYKYVKENFDGYVSRINPG

NLKEENEYFDMLRKLCADKLVGMPHPDAMIGYGAKDALTKLADTDLVPSDTYAYYDIKTFKENFPKSLAK

GERVLKQNRGSTGEGIWRVSVEGNVSGDSLPLNTKIKCTEAKDNHVEHRELGEFMDFCEQYIIGDNGMLV

DMTFLPRIKEGEIRLLMLYNTPVNVVHKKPAEDADAFSATLFSGAKYRYDKPEDWKTLVDMFLGELPKVR

EKLGNYDLPLIWTADFILDTDEKGNDKYVLGEINCSCVGFTSHLELADEVASNIINIVSKTKA

>WP\_002851440.1 MULTISPECIES: NADH dehydrogenase subunit G [Campylobacter]

MTVKINGIDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKHWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKESMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISNQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGMLLRYDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFIPHIHKNGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESINEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIIEVQRSVFAKNLGIDEDKLEDLLLKKANFTLVVGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDNNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINKGFSPIDFDHLDNFYTNAGDCKRGYELNLECFKQV

AKKEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASAINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>WP\_002851310.1 MULTISPECIES: NADH-quinone oxidoreductase subunit L [Campylobacter]

MQNLALISLFSPFVAFLFASCFALSEKKQFVGIICSLLVALSAFCSLYLLFCNEAFNVSLFEWFAGVNFG

FDIDAISLTMMSVVGIVATCVHFYSIFYMAHDEGFNKFFAYLGLFVFSMLFLVMSDNFLGLFVGWEGVGL

CSWLLIGFWYKNDTYSFAANEAFIMNRIADLGMLLGIFWLYLQAGTLKYDEVFSMAQSLDHNALILIATC

LFIGAMGKSAQFPFHTWLADAMAGPTPVSALIHAATMVTAGVYLVIRASTLYDLVPEVSYIIALLGAFVA

IFAASMALVVRDLKRIIAYSTLSQLGYMFVAAGLGAYGIALFHLATHAFFKSLLFLGAGNVMHAMNDKLD

IKKMGGLFKPLKITAILMCIGSLALAGIYPFAGFFSKDLILGYSFISFHHGIFLVLLIAAFLTAFYSFRL

LMLVFFTPARHDEHPHEASKIALLAMSPLMVLAIIAGFFEHSFFEYLSTKLVFIDAQNQIVMICASVAAI

LGAILAIFAYKNSWFKESIEENKIHKLLSNDYFIPQFYHQFIVSKYESLCAILKHCDLYIFDRIVEKIAL

YSQNISQKMIMPNSLNLMLRFLVAAFVILLILVWMV

>WP\_002851275.1 MULTISPECIES: NADH-quinone oxidoreductase subunit A [Campylobacter]

MSHIDASHPYFGIFLMLVLASVIFFGLVFLASKIGNNFAAKNRKKLGLGIYECGPIPVKQANKINSQFFI

IALIFILLDIEVVFLFPWALIFKDLGWFGFLEVFVFIVLLGVGFLYAYKKGAFAWQSIK

>WP\_002851253.1 MULTISPECIES: NADH-quinone oxidoreductase subunit B [Campylobacter]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>WP\_011271769.1 MULTISPECIES: phage regulatory protein [Campylobacter]

MSNKVIINKQEVQFDTQNNQIFCTSLDVAKVFGKRHFHVLRDIENILNDLREIGTSQDLSNFGETYRNTE

IRGFGKVKGKTRKDRCYNLTRDGFSLLAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLME

LIYPNLPQNDYKVSVIITDNPYSKEAKNVFSLNYLVDNRTPKDPKKLQ

>WP\_002851537.1 MULTISPECIES: Tat pathway signal protein [Proteobacteria]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>WP\_002851332.1 MULTISPECIES: 50S ribosomal protein L17 [Proteobacteria]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>WP\_002858478.1 MULTISPECIES: transcription termination/antitermination protein NusA [Campylobacter]

MEKIADIIESIANEKNLNLENVREKVATALINTAKRIYGQEYEFFVDPKNLNLYQKITIVADNDERLQNK

SESFIALSKAKSEAPDVEIGDELTYECSLENLGRTAVNTLHKELEYHIQKLLEQTIFEKYKNKVGQMVFG

TVVRVDNEENTFIEIDELRAFLPRKNRIKGEKFKIGDVVKAVIRRVYTDKGIKIELSRTSPKFLECLLEA

EVPEIKDGYVNIIGCARIPGERAKIILQANGTNIDPVGATVGVKGVRINAVSKELHNENIDCIEFTNESE

ILISRALAPAIVNSVKIEDKKAIVSLNSEQKSKAIGKNGINIRLASMLSGYEIELNELSSSQLNNAISNE

EAMKNLQDLFKI

>WP\_002854660.1 MULTISPECIES: succinate dehydrogenase/fumarate reductase cytochrome b subunit [Campylobacter]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQTTAMIKNYNGANYEYTI

>WP\_002868973.1 MULTISPECIES: SIMPL domain-containing protein [Campylobacter]

MKTNNIFMALAIVLASLILAFGFNKALSDFKTLERSVSVKGLSQKEVEADTLILPIKFTRSNNNLTNLYE

ELEQDKENIIKFLKEQGVKEDEISYNSPNIIDRLSDPYGNDTQATYRYIGTANLLIYTQNVKLGKSILEN

ISSLAKFGIVTKIDNYDIEYLYTKLNDIKPQMIEEATLNARNAAIKFAQDSNSHLGKIKKASQGQFSISN

RDKNTPYIKTIRVVSTIEYYLKD

>WP\_002858971.1 MULTISPECIES: NifU family protein [Campylobacter]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>WP\_002853404.1 MULTISPECIES: N-acetyltransferase [Campylobacter]

MSEFKIIDLRQEDLDILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>WP\_002829043.1 MULTISPECIES: N-acetyltransferase [Campylobacter]

MNSFEKAFYEGFKLSNCYDNFNLIREKILKQELILEKHENNNFFFFNRTDGLLYYFINDLQDYDLKACYI

KILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHEDSKELYSFFRKYFDPYLFYF

SQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVAFALLNHYFAANTQNKFFKL

FVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>WP\_002777060.1 MULTISPECIES: N-acetyltransferase [Campylobacter]

MKEIKLKEDLEKIYPLIKQLRNNLSLKDFLDKIQLATQTQHYKLFAYENEGSYKAACGVMPFNVLYHNHC

LYICDFVVDEALRGKGIGQAFLKKIQIWAKDQGYEELELSSSFFRTQAHEFYIQKMGFEKSGFVFKKNIK

L

>WP\_002851172.1 MULTISPECIES: nucleoid-associated protein, YbaB/EbfC family [Campylobacter]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMVAQNRSSMANDVLGGFGGMKL

>WP\_002869196.1 flagellar hook-associated protein FlgK [Campylobacter jejuni]

MGIFGTLYTGVTGLKASEVQIATTGNNISNANATFYTRQRVVQTTNGYITTGGVQVGTGTAIESIVRLHD

EYSYYKLKGASNQLEYTKYMASTLQEIAQRFPDLQNTGILKDLENYNKAWNDFASNPNENATKIALVKAS

QTLTESVNNTFATLDKIQKKVNDDIKNTVDEINRIGEEIATINKQIYGQEALPTEHANELRDRRDELELT

LSKLVSAVASKNEINQDNRLDTTITDPGHQYNLSIEGFSIVDGINFHPLKLDYDDKNKSYSIYYETPDEK

VRDLTAKISGGQLGAQLDLRGRNYSKSEGKYEDGIIQGYMDSLDTFAKTMINETNNLYASSAKSSVTSDY

LSGLKGDIPLVNYDRTIQPGSFDIVIYDDKGDKKLTKTITIDVNTTMNDIMRQINANTDDNNNKNSNDDV

DDHINTSFSYDAKTGDGLFQINAKSGFKVAIEDKGTNFAGAFSIGGFFSGTDASNMKVKDSILNDPSTVR

ASLSGVDSGNDMANKIIQLQYEKVNFYNEDGTIDNLTMEEYYRKLTGKIASDGENNNVVNSSNETLYNSV

YSEYQSKSGVNTNEELAALIQYQSSYGAAAKIVSTVDQMLDTLLGLKS

>WP\_002860571.1 MULTISPECIES: iron-sulfur cluster-binding protein [Campylobacter]

MSQKIPHEQIVQIKLNDKQMQENLMTAMHTLQKNRLNVIDARFKDWQGLRAKAKQAKNNALMSLEERLLE

FEKNATKNGIKVHWASSDEDACEIVYEIMKEKNITKLLKGKSMASEEIGLNHYLEKKGLKAIETDLGELI

LQLNEEPPLHIVVPAIHRNRHEIGEIFKEKLGANLENDEPESLNAVAREHLRKDFEGLKLGLSGVNFAMS

REGAFWLIENEGNGRMCTTAPDIHIALCGIEKVMESFEDAATMVSLLTPSATGQFIPTYNNIITGPRKNG

DLDGPKEVHVILFDHNRSKMLAHEDYYEALRCIRCGACMNFCPVYDQIGGHAYQTTYPGPIGEVISPNIF

GIDHTGDILNFCSLCGRCSEVCPVQIPLADLIRKLRCDKIGQGKNPPLGANNVHHNALEAFAFKQFKNIA

TNGDKWRFSLSKAHYFNWTVQNFASILPVIKKWYAFKELPQIKMDLYKEVQKLEGVSYE

>WP\_002851984.1 MULTISPECIES: cytochrome d ubiquinol oxidase subunit II [Campylobacter]

MFFGLELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFG

GAAFAAFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAV

SSFFSGSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKL

MINSILFLPFFLGFLAWIFLKDGFSVDTNGVVSMSANLYLYNFLNQMIFAVLLVIGVILVLLGMVQGTKG

CSKAIFTLGLGTVLTVFALLSSIGLGQSAFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYI

IYVWNAMDKVKITREEIANDDHAY

>WP\_002869327.1 tRNA (adenosine(37)-N6)-threonylcarbamoyltransferase complex transferase subunit TsaD [Campylobacter jejuni]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>WP\_010790601.1 tRNA 5-methoxyuridine(34)/uridine 5-oxyacetic acid(34) synthase CmoB [Campylobacter jejuni]

MSRIKMQENLLEKQFLNHPLYTKIQELKALNLTCNFSLDDSVNLSTNSQAKDEILAITKELKPWRKGPFK

IDDLFIDTEWQSFIKFNILKPFMNEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELIN

ALAKTPIKYELLGVEDLPSYSLKFDVIFCLGVIYHRSDPVKMLKDLKAGLNKNGVVFLDTMYIEDEREIA

LVPNKTYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLT

IEGYEAPKRVYIRIKI

>WP\_002858746.1 MULTISPECIES: anthranilate synthase component I [Campylobacter]

MFVKNVNFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKNKICDFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPMKKKQKNDF

EILNSLEDEKNDFLKMCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSAYMFYFPSKYG

VVLGSSPEFLLKIKKREIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQT

RVENLFSIIKNKFVMHIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEITSELEDCDRGIYGGA

VGFLNFNEDITLAILIRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>WP\_011271771.1 hypothetical protein [Campylobacter jejuni]

MILTRIKPSLKLYLLQQNIIFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIK

SFDENKYGFVMAVYGDKHIEVVLQNKENDTFFELRCNEEGCKEILKEDK

>WP\_011271767.1 hypothetical protein [Campylobacter jejuni]

MLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKFTWLGECVKEFDITEIGEQYSLKETIQDLCAKDFH

QKLKEFTEKTPKNQKLKDLER

>WP\_011812741.1 hypothetical protein [Campylobacter jejuni]

MEHKKALFCIFAIIHLFFWIIFSSLNHFKLDTFLSYEIASFSVLLIIFTSYLNYKKVIIKKSKNYEKDFN

FISSLFIKKKQNLSKIIHFKVLKDDLKPNIKEKIHFFTMFFTLFKLMAYVILVAGFLFLHRQDKLDIFAY

ICGISSLLVCVFIFILYIKKYESKKNY

>WP\_011271770.1 hypothetical protein [Campylobacter jejuni]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKDIAISME

>WP\_011187231.1 hypothetical protein [Campylobacter jejuni]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRXRIKLMSFVLIALAVWIVYLLK

>WP\_011117582.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>WP\_011271772.1 hypothetical protein [Campylobacter jejuni]

MEKKPFTIAEALNYETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>WP\_004306057.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>WP\_002869268.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRLYFSLFAFFIRNLLRLQFLKLNLLRIDNEI

>WP\_002869078.1 hypothetical protein [Campylobacter jejuni]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDDELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNAANADPEKLKARQER

LTKLQKEAEYYRTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIVTGLNLCATIMDFKIWHLSLKS

SGIKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>WP\_002868960.1 hypothetical protein [Campylobacter jejuni]

MKKIFLSVFLVLSLNAQNLEIDKIRTDLYSKSGTNVLKKVEISLEFDGNNLKENENKLIDAVNTVISGFF

YEDIFTEIGKNNFKKTLEKFLDKKYKIKLDDIYIISLSGVEKFDLEEFKRFLESTEAKEKGMGSEVKKAL

ENLEVPKTQVPSVEKITAPSVPNLEAKQVEQLFKDSDEENKNDNGEINIDNLNTPKMTPDIEEKIKRDLI

ANPPQIFKENNASKPYHLPQIGYDIKLDENSTQN

>WP\_002867958.1 MULTISPECIES: hypothetical protein [Campylobacter]

MELDQILLYAFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWTLNFIFLLALLSVFLGWKLKLD

>WP\_002867263.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>WP\_002866317.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDLKSLENNRLYILKRLGILKFLSIIEALLVGFLAFVFIRDALIAVILAVFVGVFFFRFTAKKLKLAQKE

LQINALNLFLRRFGAKFKKQSLSQKDFLKLGLTKDLKEFKSQNCFEFKDFKIYDIQFLDENKRFFCGILL

EILSANKNPSFENEEQIYIKLQDKNFTLNHVFSKENHYLIATLSNPFFIDIKKDLESNFKDLEENLNSIK

NKLFK

>WP\_002862076.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKRVRTKIRANFRRRVKRTLKGSLKEKLAGTILLCAIVPLAVLGYLFIVIIGTFFNTARARQGVRALDHF

VNASLFNGYAWESVSSHAWRERNRKKWARIVIKITDFFQKDHCKRANKREQPVVDFILSRNLDKQTIGK

>WP\_002860516.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQINNSLNSLSQYVKVNSNEENQNSKNQEQNALAQDPAVEVNISKEAKEKSNTSNQNNSQAPAQALNAQN

NTQQDSSSNSEDKLTELTQKLAEIQAKIVELTAKMSKANEDQIKSIESQIATLNAQASTIQAQIQELQSQ

QA

>WP\_002860365.1 hypothetical protein [Campylobacter jejuni]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGVYEQY

>WP\_002860363.1 hypothetical protein [Campylobacter jejuni]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYV

YLNILSDFLNYSQRIYNIKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLD

LKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEY

KNKKGK

>WP\_002859472.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQVNTFSNIASMAQTQVSNKKADDAKENTKDKNVQSANSSKDVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNAVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSGKNPLDMNTDELQQLVSEDGFFGVENTA

NRIADFVIKGGGDDVEKLKKGLEGMKKGFEQAEKMWGGELPQISQNTIDAALKKVSDRIDELGGKTLDLQ

A

>WP\_002859434.1 MULTISPECIES: hypothetical protein [Proteobacteria]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAIMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEVYLSDYFYCINCNN

>WP\_002859287.1 MULTISPECIES: hypothetical protein [Campylobacter]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEISEKEKEELATLLNSLINAKDKALLSN

>WP\_002858872.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKALEYLIVIGLVVAAAITAWSVLTVNHLHIG

>WP\_002858858.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKISLECKDLIIEKTLELFLKDHLVMKKNCDFIISDEKIYTAKPLFIISKNSPFLSIPFSKEALFESLNE

FDNALKAAALQLALEQKRLLEEKIDAIALEFKKDYENKIDLAIKDLKNKLVKALNDE

>WP\_002858755.1 hypothetical protein [Campylobacter jejuni]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKKPNKDFKIQDVKLVQFSQENKDCLELLIEAGQVRILNSYN

SCQKLSKDESFQKFLNEDFLKLYKNNGYLINENLQNLKNTMQDIMIYYKLRYSFSKDVKDMSKNKNLDIL

NIDEKDGGTLLYKINNQACVGIELTRHDSRMAMKIYGIENLDKECKLFIQSPSFKDLSYTKKDFKWYYLE

>WP\_002856886.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKYITISILSILLLILLAVVFTLLWQFKANVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PAAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>WP\_002856776.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELPPMEFVCEELDTPQDLEDKISMAKFEE

EQKIQNNIEISTQENKEFKKEEPFLQSEILNPSVMTEVQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKK

>WP\_002855905.1 MULTISPECIES: hypothetical protein [Campylobacter]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNETHEIKEEIKEKAEQ

EEKKKKHNQEAKTSDDEKNEEDESKDPNFKDAQSIHRLDISI

>WP\_002855595.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIILILALFLSASWAQNLEINPDTGLIIDPDSPLVEANCLACHGSNLITNMHASKKAWLAAIRWMQDS

EGLWEIEPEDEEKILNYLEKYYGEKYDTRRRIPLAIFLQNKTH

>WP\_002855438.1 MULTISPECIES: hypothetical protein [Campylobacter]

MCFSTLFAQDNFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRHIKITAIMLDKVKIYDRWYKKGDMIDD

AIIYEINTKEIKFQYDNLEIAIQINKNDKININ

>WP\_002854947.1 MULTISPECIES: hypothetical protein [Campylobacter]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>WP\_002854718.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>WP\_002854172.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKDGKKIENVSLISKTNVGYVSYKNSFDDKNNCDKRIEEMQNSKDLYFSQNGSINLNSDVDLGASVLNLI

KIQIGK

>WP\_002854125.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFQAIKNMIE

QAFI

>WP\_002853267.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFKKFYKLKIDGIILKDNIDNFPKN

>WP\_002853105.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALKFNITIEYTKENQKLTRENSKSAGSFRDTKTYINLVVEKNTDSQICEKLLDDVEKYFIGGG

>WP\_002853000.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDFLDSLKSIKKEMQANTNTSKLAKKSSKSGASVKNLEKLAKDIREKNQETNIDKEMQEIFLKQEKLQDE

FSEFIKNTDIKKI

>WP\_002852615.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVFLIPLLIIIGVIFGIDYVYFKNQDLKVQVKKEQKELNSSLEKEKKEYIEKLFKTK

>WP\_002852223.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKFKEFSLRFLFKVSEQPVLIRDLLEANALFNDGMLVDPSKLNFNFKILNSYIYFGVFCAVILLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDIFKVYTRKIISKKIIQKAWALHFPYFAYEKYSTMAGEFYKE

ALKEEIPKANLEQYVLDKIIHSK

>WP\_002852050.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLEDDFIKERQNIRQKMLKFSRAINQGKPLDDDLRDEISSDDILRRRFKKKTPNKFLEELDEEYESKHTK

KSNIYLKEDLINVKLEEKQSLAKKIFSKMKERRKEENKKTKKNFLFSRKKANEIKNIQTKTQIQTKSNQA

TTQTKQEKKELTNSIEKIQKTETKIQKPLIIEKKLDVKNQPNIKKSLENLQKKITPQENKQELPKPSNQA

QEKQQNDEDAQKAKNILLEGFSNATKEDRNLNFNHLLFAALLVSFALFLFAPQIYIRNQIYYLSREIATL

RTEESVLNEENKDLKRRLENMRFQNQILDYLE

>WP\_002851904.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKVVLISALLGAFAANVFAANTPSDVNQTHTKAHHSKAKADKKHEAKTHKKTKEQTPAQ

>WP\_002844160.1 MULTISPECIES: hypothetical protein [Campylobacter]

MCKIIKYLDYTKLNTLEKLYFDLTIMLIVTFLSFLFLVFEFFIYENIAVFFQDCFLMSVIFIIGITGLFH

TCKGLRKYKEILKKV

>WP\_002834241.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEEKNKYNQCLLLNGYEFLDFENTKNTTLKEWLKDENFLLFIKSIPKDYIFIIKKYGIANGIFLTHKKTF

EFAQKILEKVKDINFDFSYSEFEFNQNIFYALNFENKEISFTELVFSFKINSLDRESFDISNIYNKKHFI

IQKDNSLITFKYRKIQSKGFNLVFLLENNILKNYYFNYLEKINPYIAKDFKNIKENHSFEIYKLLRIDFN

VLINCHSVQEVIEKSLNTKINFNLNKFDIHLALSFAISLNFIAKNEQNKLYKFVLENNKLIYDYIDFINN

NFANEHFIKIKYKRKKYKIINIASFLLYHKLKPQKESYQNEFLEIYILINDYIKLSYETNNLINLNINSI

NRITNEHNVLTIELEKKQIPKNKKLKIKEDFINLKLPEEFKLIETHKELYLHGMEQKNCVYTRRREIEDG

LSAIYSLNYEGGVYTLEIFKRKNKFAIKEIKAKYNEFANKEVINFVEKSLKAV

>WP\_002826068.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEKDYKIKVTDVSELNEQYKEAIQEGTYEGEDVNKFFNTIKTFDVAESLLKKDFSNQYIKFDIITDKEKI

PLNIRLGDKNFQKGIEHLINIGSSKLIKENINPEIKKDLNNRLGIYKPKIYDEMLDGTFKAIKNLSEVAN

KDVGVMILEFANSYSETREKFEKKQINKSSFFKEKMNEFFKKKLNKILPDREISNEKTYSRSR

>WP\_002825403.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFFKKKISQKQKEKPKIPINDVILDDRLCKFKNKVQKISKDEASASLLARQLSRLIRANKF

>WP\_002824650.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKPLNEEIFIEFKSDLAERKNEVLLQVLELLETFRSDKNEKMARISSELTEILENEENLEKILNAKNLE

ELLNILIALNEDKMIKVYEDSYLKEKFPNVMVDKFLK

>WP\_002815835.1 hypothetical protein [Campylobacter jejuni]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>WP\_002815556.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLGVLAEFIKFLGLNNETNFTKTRTEEKEDELKELIEYENDMPKYYEESEIIDLGNQKIEVIKSIKINPL

GKGKAMKTSQIKEQRIIKF

>WP\_002809140.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFKESKLIEELKREYDEKLKKLRQKEKENKERIYKKFSSALFKDFEINEDFKNEFNLLVEKFDCKNTKNI

LDKINNLYDFNHRNDKIDTAKKQ

>WP\_002809110.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNEEINSNENNLFEIVNEDNSKNIAMQNYNELLEKFENLIKIIIAKINVGKQNAQNNTEDGIFKDLESNI

IELDNTYLALISYFKNPPNDEEKEIINKTISIKKTMEDFAKFANEIQKISLDDKLKQYNEQINKFCEIVE

YKLSHNAKNYNTFLDHFVEDGKQKLNTFSEIFTKMTKNTKWYLIFFSFTSIGLGIALGILILLTYIKYSE

YNNLKERVSTITQGLATISIDENSKGSFTLSFAKNKKTIFNENKNSIQITLQGGE

>WP\_002809107.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAFGKLVNDKIVIDTNNALNYKNKEGDIQQRKVDTALIDVIKEAGQVAAMEHGAVLFSAKINDEWKNYFV

NRDEKTHNIVLKPTNSQNRDDFIYINSNINEQGYFYYTINQKREAAKELIEGIGIIEHQNQDGTKSHYLE

TNVRLYNEELKQELKEKGNEFIAVISNAGIRIVNEAEMKAQKQEQQIQQTQEIKEPEKTQNQEFGR

>WP\_002809052.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAYPLLGTRIVLDEEKILKEGKYNLEDMYKMIDEYAKESGMIKINKETYHCKGDKYDLGCMTLFIYKYLI

DSEWFTKNAKEWIWISEKEGNSDLISASKAEGEGIWE

>WP\_002804272.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNNTINFNELFSQIRLSSYNNDIVKHYDNLKCVGKITPKLATLEIILRNKLDNKLSEKDNDWIKNSNDEK

IKKSKEEIEHREKNRILSHHQYLSRISLGTIIHLIKENKLQNSIMDLKNINFRNYNQYNRNFFFENGIKL

RFRNTHKVDIVLSLLQNLRNRSYHWENILKTTEKNGKHYPRLTTKIKNTHIGVDPQKIDFFLSDLIKTFN

EKILEYC

>WP\_002804244.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEKKPFTIAEALNSETSSQKTYSKADKKSAGRKTIDQKLRRDNLVVCRLNEQEMEILKKLMDLDLVSEYG

TYIRKLILKEARALNINS

>WP\_002801797.1 MULTISPECIES: hypothetical protein [Bacteria]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>WP\_002790713.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIYEKKITKKEIFSYAIFIAIIALICIFKNEIWEFVKFIFSNLDFICGNFANFVGEDNIVFFPITTLLIV

FTIAICAVWGLSNVLSLSLFIMPIFVAVFYIFNIDISLKNLYGSYFIFLIIINGLSWSVNQR

>WP\_002779777.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNKNNNCVIKVSKDDKIILEYIKSETNASYSKIISILLKKFNSCDTDEKNKINDEISKNKFYTSDENKII

KLKLTENEVNILKEISKNTGFSSITKQAKFLLLNSIKNEKLFTNIEIDEFIKTRTEINAIGKNIYQLLKI

LRSGNSVKINENNLNKTMDNIRDKIDILSDQLGAIIEKNNERI

>WP\_002776186.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKQWLSDFKLALIQEDVNKLENLLDELDMKAFIKNLAKESPSEDFLKENANDVFYQVQALLQEAVILIEQ

KKKTKAVEIQKFQKALTYFKS

>WP\_002856314.1 response regulator [Campylobacter jejuni]

MKVLIIENEIYLAQSISIKLSDAGYSCEIINSFNEYNGEKYYDIVLLSTNTNNFLKAVGQFKHSIIILLI

SYISTDTVSNPLKLGASDYIQKPFMIEELIRKIKHYQDFRKLSILNKAYQSYIKSRLETIKIPEYNYKKL

KLPLILKSNKQSSADAFVFNYANECDITLSFIDLTSTNSVEKVMKLPTENNLLFLSNFQALKAAEKEKLL

DFIQNKNVILHTNSNTDDLKINCINLNDNEKNIDSNEILTIDEYVKYVIINYQNIFPDTDLSKKLGISRK

SLWEKRKKYEISKKK

>WP\_002851199.1 MULTISPECIES: MFS transporter [Campylobacter]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRILFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENTGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIATLCLPKKSELN

>WP\_002779263.1 MULTISPECIES: flagellar protein FlgN [Campylobacter]

MLKQRLDEVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITAKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINDGTNNAYGDKKTNPESIF

KINV

>WP\_002869163.1 carbon starvation protein A [Campylobacter jejuni]

MTQLSTKILWLFVATLGAICFGYLALQNGESVSAIYLVVAAVCIYMIGYRFYGRFVAYKVLELDKNRATP

ALVENDGRDFVPTNKAVLFGHHFAAIAGAGPLVGPILAAQMGYLPSMLWILVGGVLAGAVHDFVVLFIST

RRKGRSLGEMIKDEMGKFTGGVAMVAIFGIMLIIIAILAMVVVKALAESPWGLFTIAMTIPIAIFMGIYM

RFIRPGRVGEASIIGFVLLILAIHYGSVIAADPYWAKIFTLEAPTLAIVMMAYGFIASVLPVWFLLAPRD

YLSTFLKIGVIVVMAVAIVLVAPDLQMPKANTQYFDGTGPVFAGGVFPFLFITIACGAISGFHALISSGT

TPKMLENETHALAVGYGSMLAESAVAIMALICACILHPGLYFAINSSSALIGTDVVNVAQTISSWGFSIT

PEEITTLTANIGEHTILSRTGGAPTFAIGVALILHELFGGVDLMAFWYHFAILFEALFILTAVDAGTRAC

RFMVQDILGNVYKPLGDIHNYPAGLLATALSVAGWGYFLYQGAIDPKGGIYTLWPLFGVSNQMLAGMALL

LATTILVKMGKARYTWVTLVPAVFVLVATLYGGIQKIMPYEEGNKVANAVSHVAAVSIQSQKIKDLEFKL

NNTKDEKEISTIKKEISIATQNKVGNLLNAILCVFFMIATLLVIISCIGICLGKIKIPLKETKYIKIDEF

QKI

>WP\_002859765.1 MULTISPECIES: cytochrome ubiquinol oxidase subunit I [Campylobacter]

MNELSSVDWSRAQFALTALYHFLFVPLTLGLSFMIAIMETIYVKTKNERWKKITKFWLSLFAINFAIGVA

TGIIMEFEFGTNWANYSWFVGDIFGAPLAVEGIMAFFLEATFFAVMFFGWDKVSKGFHLLSTWCVAIGSN

LSAFWILVANGWMQYPVGMSFNPDTARNEMQSFFEVALSPVAISKFLHTIGSGYVISALFVMGISAWFML

KGRHIIEAKKSLVVGASFGLVCSIFLFFSGDESAYRVTQTQPMKLAAMEGVYQGEHRAGLVPFGILNPKK

TIDNNESVFLFDITIPYALSILGNRDPNSFVPGIEDLIYGNESKGIEPMQNRIDRGKIAIQALKDYKLAK

ENNDTIAMANHKSILETHFKDFGYGYLEKPSDTIPPVALTFYSFHIMVALGSFFFLLFIVTLYLTMANDI

EKFRKVLWVCLLSIPLGYIAAEAGWIVAEVGRQPWAIQDLLPVHIAATQLGKVNVQISFWIFAVLFTALL

IAEVKIMLTQIKKGFDAHAGHTPLMGKGEK

>WP\_002858634.1 MULTISPECIES: tRNA (N6-isopentenyl adenosine(37)-C2)-methylthiotransferase MiaB [Campylobacter]

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGVDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIYKEAQKAIEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEGLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKEW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETVDVLEKVRFEQIFSFKYSKRPLTKAATMPNQIDE

EIASRRLSTLQNRHSEILDKIVKKQENKTFKVLFEELRAGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEIV

>WP\_002856411.1 ABC transporter substrate-binding protein [Campylobacter jejuni]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMLKAEDQIVGIATLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKAERLEDITKNITTLGQITKKEKEAELLKQEFTQ

NLKKLSDKPLNKSVIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GINAKNNLLDTNALLKNTKAVKTGSIYFNKDTHILLRLSPKIIDRIQEFKTKLENNNF

>WP\_002834281.1 MULTISPECIES: NADPH-dependent 7-cyano-7-deazaguanine reductase QueF [Campylobacter]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>WP\_002835056.1 MULTISPECIES: addiction module toxin, HicA family [Campylobacter]

MPELPRMTAKEAEKLLLQNNFLIDRQKGSHRIYKKGLYRMVIPHHIGEILHPKIIKQLFEIIEVAKD

>WP\_002882710.1 hypothetical protein [Campylobacter jejuni]

MEINPDKTLFSYCDIESAQELCLLKKTNFIEAIKKIMKNFLLINQNH

>WP\_002860359.1 hypothetical protein [Campylobacter jejuni]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGHGTGEKAFQEMLSRCNVKILEKNIWYDNGLD

RYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHVPAICLVRDPIKIMTSVYNYKILKNKDNLTF

SNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNINKHIRFTYIARTHLKNLKNISHVYYIDVSEI

SNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIFDIKKPIIYKHYFNNKFIEIYLYGSYNMINK

NFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLLYEIKLNINIFLDKINNMINMFKKESIKDND

ILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKEIKT

>WP\_002857540.1 hypothetical protein [Campylobacter jejuni]

MNDFFDFFHKFILKTENLNLEILTKNNKYFLIPNEVCRYKKSPFGLLG

>WP\_002855841.1 hypothetical protein [Campylobacter jejuni]

MKKYVLSLALLGSLLGASELKYQEFDGFKSPESIFVDKNYVYISNVGEKLEPLAKDNDGFISKLDKNGKV

LEHKFLTHLNAPKGMMEIGKTLYVVDIDVLRGFDLKTKKEIFNLPIKGAIFLNDIEKLDDNTLLVSDTGT

GLILKVDLKTKQYDELLKLDLAKFGGPNGLYLDRKKHKLFIAGYHPDGVSGGVVMAYDLNTKELSIIKNE

KESYDGIVPYKDGLLVSSWGNNLNGYIYNLDNVKSVKLELPLMKGPADIFIEGNILWIPKMAEGKIFKVE

LNK

>WP\_002853832.1 hypothetical protein [Campylobacter jejuni]

MYVIAFGMLFIFDSKISIIISAFIMGFPWGGVFGIALLFIAQKSSNAQIAARLSALAQGFGYLIAAQGQW

IIGFLHDKFENFSFAILMLVFVGILVNIFGYLSYKSQIIK

>WP\_002869121.1 hypothetical protein [Campylobacter jejuni]

MVDFFVFKKKTHKKINLFINLTTWKITLFMGFQSFLAYSLFFWYVQIVVEKGFDKEFSTSKVLFAQLVAA

PVSLFGPLLLGKLRQNFTYFLHSRFVQYVCDRFWYALYF

>WP\_002856015.1 hypothetical protein [Campylobacter jejuni]

MGLIIDIIKDKYYLNSTVAGILTSLPLIAFGSISFIVGYFSPIRAIVFGIFLIFLGEIIRSYFGIYGLFL

GMLAMGCGIAIANVLLPSFIKEKFPKKMASIMGIYSLVLSISSIMGIALAIPLLSVFDLAGAMFFWVIFS

FVALVVYYPQAKNGRFFRI

>WP\_002790442.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFFLEKNFQYIRIINEKEKRLINVYFCE

KPIIDFFQNAEYEKELQYYGINEKDFIKTDI

>WP\_002869233.1 tRNA guanosine(34) transglycosylase Tgt [Campylobacter jejuni]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>WP\_002869188.1 tRNA pseudouridine(13) synthase TruD [Campylobacter jejuni]

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>WP\_002868040.1 MULTISPECIES: tRNA (guanosine(37)-N1)-methyltransferase TrmD [Campylobacter]

MKFSFVSLFPNLMEFYFQDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLMQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLLEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>WP\_002854240.1 tRNA (adenosine(37)-N6)-dimethylallyltransferase MiaA [Campylobacter jejuni]

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>WP\_002854813.1 MULTISPECIES: 5-(carboxyamino)imidazole ribonucleotide mutase [Campylobacter]

MNFVSILMGSKSDYETMKEAVKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMSGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRLEKEKKLVSDSKEVEVLL

>WP\_011117588.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>WP\_011117585.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>WP\_011117573.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>WP\_011117572.1 MULTISPECIES: chromosome partitioning protein ParA [Campylobacter]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>WP\_002859852.1 MULTISPECIES: QacE family quaternary ammonium compound efflux SMR transporter [Campylobacter]

MEWFYLFLATACEIFGVVIMKELISTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIITCTAGLKFLS

>WP\_002857772.1 MULTISPECIES: lactate utilization protein C [Campylobacter]

MSKIDEISSKSKANILEHLKKAYKETTFTRIESIDPVEHIQTTQDMLTEMKQKMSDNKYIVENATKDTLE

EKINEIVAKYGFKSMIYGADLNLNLEQIKAEKKICFDKEIENLRSEVFHSDFSIIHARAGVSSHGVALIP

SSKTQPRMLSLAPKLCIVLLKKENVVKSLSEALNLVKKENEILPTNILFIAGPSRTADIELITVFGVHGP

QIAHIIIY

>WP\_002787430.1 MULTISPECIES: disulfide bond formation protein B [Campylobacter]

MNEINKTKNFYTLMCLAGFLIILLPVGIANLIFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGK

YLAALLIMTAVGLYQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFE

AELNGEKFRKYTKFSFAAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSKEGWNGLWQ

NISFLGKRDVKAPDYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVA

SSKWDVAFLDNNFSVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQY

ADFVKGNDKFKGQGESLGRGRLDTVRAKFNHVASMTTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSG

EFTPKANLKEGKTLGDLYVTSMTFKDGEIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDG

KINILSYQDGANKLYTLN

>WP\_002783219.1 MULTISPECIES: QacE family quaternary ammonium compound efflux SMR transporter [Campylobacter]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWQYILTAIGVCISFTCFLKACERLEVSITYSVFVGI

GTIGVVLNEMFIFNEAVSIIKLVLIAILLLSIIALKWVSKEA

>WP\_002777309.1 MULTISPECIES: QacE family quaternary ammonium compound efflux SMR transporter [Campylobacter]

MYIFIIVLSALLDIVANLLLKKSDGFKNKIWGLAAIVNAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIIIVIIAVFLLNY

>WP\_002856958.1 macrolide ABC transporter permease/ATP-binding protein MacB [Campylobacter jejuni]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>WP\_002860377.1 MULTISPECIES: gamma-glutamyl-gamma-aminobutyrate hydrolase [Campylobacter]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEICLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>WP\_010891930.1 MULTISPECIES: cytochrome c nitrite reductase small subunit [Campylobacter]

MIILRRKILKKTSNLFTIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGPHSQ

KVKGEPRATCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFA

QTAINATTNPHADKSLNCASCHKDVGHKHGI

>WP\_002834097.1 MULTISPECIES: P-type conjugative transfer protein VirB9 [Campylobacter]

MKKIILINLLLCSFIWALNIPKTSTFDKRIAYAIYNANDVFQINAKNGYVSVLEFGTDERIINTATGFAE

GWDLIEKDNLLFIKPKAYKTQLVQQENNNIGESQASQEFVLDPNPHDWKTNLIVITNLNTYVFDLKLVNQ

NNNATYKLSFSYPKKDLKAAKEFLEAQEQENIRRDLNKNTIPRNWDFYMKINKGSEDISPNFAYDDGVFT

YLGFDNTKTFPAVFMYDNGKESILNTHIKKDGNYEVLVIQKITKQILLRSGDKVVGIFNRGYAKNPLDKT

RETSNENIQREINKK

>WP\_011187243.1 P-type DNA transfer ATPase VirB11 [Campylobacter jejuni]

MLIVILIFQKFINLQGKRMSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFE

QAGHFATASASFKKDKIDVSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLF

EDLNPDDKNKIKPSDEELIKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIIT

IEDVEEIKFYEHKNFVQLFYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGG

SITSCHAGSPEETFTRLALMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>WP\_002868967.1 gamma-glutamyltransferase [Campylobacter jejuni]

MRYLAIFAISITLSFGAANPPIQDRTGTGLVLSSHELANKIGKEVLDKGGNAIDAAIAVGYALAVVHPAA

GNIGGGGFAVIHLANGENTTLDFREMAPLKASRDMYLDSKGEIIKDASTIGYLAAGVPGTVKGMSAMLDR

YGTMKLKDLMAPAIKLAEKGYLINDRQEQTMLEAKDMFKEFPSSSKYFLKKDGSTYKSGDLFVQKDLAKT

LKLIAKEGPDAFYKGKIADLIAADMAKNKGIITKEDLAQYQAIWRKPVEGTYRGYDIISMSPPSSGGAHI

IEILNIMENANIENLGFASSKTLHIMAEAMRQAYADRSEYMGDPDFVKIPLDKLTSKEYAKEIYAKIPKD

KALPSSKVKPGLGQIHEGHNTTHYSVLDSKGNAVSITYTINASYGSGATVEGAGFLLNDEMDDFSIKPGV

PNLYGLVGGEANAIEPKKRPLSSMSPTIILKDGKVFMVVGSPGGSRIITTVLQVISNVIDHKMDISTAVE

SPRFHMQWLPDEIRTEPFGIIKDVQNNLEKMGYKITKEPYMGDVNAIMVDPKTGKIIGSMDTRKEF

>WP\_002826431.1 MULTISPECIES: P-type DNA transfer ATPase VirB11 [Campylobacter]

MSITLDKYTQKFFGEFLKDDNINEICYNGDNKIWVQNSKGLWECIDTKLDFEQAGHFATASASFKKDKID

VSRPILSCILVGGERMQIVIPPATKSEHISITIRKPSKTRFKMEDHIKSGLFEDLNPDDKNKIKPSDEEL

IKLYEARDYQNFISKAVSYGKNIIIAGETGSGKTTFMKTLIDFISLDDRIITIEDVEEIKFYEHKNFVQL

FYPSEAKSTDFLNSATLLKSCLRMKPDRILLAELRGAETYDFINVLASGHGGSITSCHAGSPEETFTRLA

LMTLQNPQGQCVPFEIIQKTLKDLIDIVVHIHAHHGKRRISGIYFKEMER

>WP\_002872053.1 cytochrome c oxidase accessory protein CcoG [Campylobacter jejuni]

MQGHITNYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFLTQEFYLMPFVLIFLFL

FIFFITTLGGRIWCAWSCPQTIFRVIYRDIIQTKFLKIRKNINNKQKEYEGQYFKKFLGVIIFYFISLVA

VSNLLWYFIPPEDFFNYIQNPGEHLLLLGILFCASLLFTLDITYLQEKFCVYICPYARIQSVMFDHDTMQ

VIYDEKRGGLIYDGHTKLHKKPPEGECIGCEACVSICPTHIDIRKGMQLECINCLECADACSKVQSKFNR

PSLINWTSAKAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELV

ISNAYTFLFQNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIRATKNLANNDKKDVI

FPLHIKAYAKDNEKISVFRKSIFVYPKSTLIKDKNELK

>WP\_002855693.1 MULTISPECIES: lipopolysaccharide heptosyltransferase I [Campylobacter]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FMLNTDFNAKNLAFKQDVFSVDENLKQLLNNKLKLDKNEKNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQTKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFNLEELMAFTKMMDLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDTGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>WP\_002854529.1 MULTISPECIES: molybdate ABC transporter substrate-binding protein [Campylobacter]

MKKLVLIFIVLFLSLNLNAQNLSVFVASSASKAMEEVKNEFLKSHPNDNIDLVFGASGKYYQLLKQGREF

DLFFSADTKYAQAIYEDQNALDKPKVYVLGILALYSLDESLLEGGIEKLKDKANKIHHLSLANPKVAPYG

VAAKEVLENLKLDKLFEDKIVLGENISVPVLHVDSNNADLGIVAYSLVSSINHPKGKAILIDQKYFTPLK

QSYVITRYAKDKKLAFEFSDFISSQKAKEIFKKYGFDTP

>WP\_002851174.1 MULTISPECIES: formate dehydrogenase subunit gamma [Campylobacter]

MRKVFVTLLLSVVSLFAYGSERMGQDTQIWDFHRITNIPNYDTFGKLWTTLQGEYIATIALIAVIAVLSA

FALHYMVIGPKQFSHDGKKIYAFTLFERLFHFIAAISWVILVPTGFVMMFGEVFGGGVFVRVCKNLHAFA

TILFIISIIPMFLCWIKRMLPASYDIRWMMIVGGYLSKIKRPVPAGKFNFGQKSWYYIAVFGGFLMIITG

GFMYFLDFNSTAIQGLFGLTQIELLRISAIVHNFLGIVCAVFFGVHIYMAVFAIKGSIHSMISGYKEEEE

VYILHSYWYKELSNKKQIEPSFSYDPNVKI

>WP\_002785900.1 MULTISPECIES: hydrogenase accessory protein HypB [Campylobacter]

MCKDCGCSINSSHTHDHHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEANTLCINLMSSPG

SGKTTLLESTIKALKNELKIAVIEGDLETNNDAIRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDD

VDLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADIVLITKADLAHHFDFDVKEAT

RLIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>WP\_002868878.1 MULTISPECIES: type I methionyl aminopeptidase [Campylobacter]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGAICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIRDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGASAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDAGSIDGLNAAHYEHCVAVINGRAEILSMI

>WP\_002853487.1 MULTISPECIES: endopeptidase La [Campylobacter]

MQIEEIQNYPANLPVLVEDELFLYPFMITPIFINDSSNMKALDLAIKNDSMLFVAPSKLENGRNFDEIYN

CGVIGTIMRKVPLPDGRVKILFQGYAKGKIIEQISNKPLEAKIELIKEDFLEGTKKEALLEVLKEKVKNL

ANISHYFSPDLLRTIEEGFDASRICDLILNTVRIKKQVAYEFFVLTDLEQKLVKLIDLIAQEIEANKIQK

EIKNKVHSRIDKVNKEYFLKEQLRQIQKELGSDTQKEDEVREYQKRLELKKKFMHEDAYKEIKKQIEKFE

RIHQDNSEASMIQTYIETALDVPFEKISKKKLDIKEVSKQLNHDHYALNKPKERIEEYFAVRELLEKRKI

AEKDGAKVILCLYGPPGVGKTSLANSVSKALKRELIRIALGGLEDVNELRGHRRTYIGAMPGRITQGLIE

AKQINPVIVLDEIDKLNRSFRGDPSAVLLEILDPEQNSKFRDYYLNFNIDLSKVIFIATANDISNIPAPL

RDRMEFIELSSYTPSEKFHIMKKYLIPDELKKHGLKSNELFIDDETIELIISDYTRESGVRNLRRKVAEL

CRKSAKKLLLENIKKVIINTKNLNEFLDKKVFEIEKNNGENQVGQVNGLAWTSVGGDVLKVEAVKIKGKG

ELTLTGSLGDVMKESARIAFSMIKVLIDEGKIKIPKKIIIDPKVNVYDSYNIHIHVPDGATPKDGPSAGI

TISTAIASIFSDKKVKADVAMTGEIDLKGKVLPIGGLKEKLIAAYKADIKTALIPRKNYERDLKDIPSEV

RDNMEIIAVDTFSDVLEYTLV

>WP\_002780453.1 MULTISPECIES: type I glyceraldehyde-3-phosphate dehydrogenase [Campylobacter]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKHGAQIVLECTGAHLTMAKCQEFIDMGVQKVIMSAPAKDDTPTYVLGVNSELYK

GESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGA

AKAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVSKDEINEAFRKAAATNLKGILMVDDDERVS

SDFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYIANKA

>WP\_002776292.1 MULTISPECIES: phosphate ABC transporter permease subunit PstC [Campylobacter]

MLKEKIIKFALFLCAFVSVIVSFAIMLTILIEALKFFQKESVVTFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGIQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACLLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FVITLIINMFSVYLINRFHKRKNL

>WP\_002869292.1 MULTISPECIES: 50S ribosomal protein L2 [Campylobacter]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>WP\_002857293.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDKAKIVQNLNALFKQRAEFYSYFDENIAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>WP\_002857162.1 hypothetical protein [Campylobacter jejuni]

MNQNNNKTLKNELEDLQYELSIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>WP\_002852327.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>WP\_002825273.1 MULTISPECIES: co-chaperone GroES [Campylobacter]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>WP\_011812727.1 primosomal protein N' [Campylobacter jejuni]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLKSKKNLKAIVLKECQKPDFKTIEIKEITKYF

LTPLQLELANFIVYYYASKLGFVLGFFETSPKYECQKMFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLEQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLECFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELSITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNILKCHYCNYTSLIEQNCPSCKGEMLEARKIGTAELLELLQNALPLAKIAKFDSDEITSV

KKLNTILKNFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIENYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQKSAQKLCEKFASQFRNI

KQVELVGYGICGVEMLYGKYRFYLLLRSENHKALVAIENYILQFKNASVDIDPIDFV

>WP\_002869100.1 flagellar hook-associated protein FlgL [Campylobacter jejuni]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGAGTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLTQNPDKTK

YLTGDSKWQQLIGQGYVKDNSLDADKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPEDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQADDKTELNNIIQAAQNEGITME

DVTNRVMTAALGNPNNGDITNLNNPVTIQINGQNFEIDLKQTDFIKSKMTDTDGNAANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSYPDPNNP

GQTISFPIMHTNPATGNSGVVTGSNDITYGQINDIIGMFAADKIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIEISLSDSQSGQFPAPPFTTTSTVQNGPNFSFSANNSLTIDEPN

VDIIKDLDSMIDAVLKGNMRADSESENPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIEGVNTRTSF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>WP\_002857249.1 YajQ family cyclic di-GMP-binding protein [Campylobacter jejuni]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>WP\_002851967.1 MULTISPECIES: cytolethal distending toxin subunit A [Campylobacter]

MKKIITLFFMFITLAFATPTGDLKDFTEMVSIRSLETGIFLSAFRDTSKDPIDQNWNIKEIVLSDELKQK

DKLADELPFGYVQFTNPKESDLCLAILEDGTFGAKSCQDDLKDGKLETVFSIMPTTTSAVQIRSLVLESD

ECIVTFFNPNIPIQKRFGIAPCTLDPIFFAEVNELMIITPPLTAATPLE

>WP\_002855278.1 MULTISPECIES: succinate--CoA ligase subunit alpha [Campylobacter]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGVTPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIKENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESAAAKKEALKSYGIHVVDSPALI

GEEIQKILG

>WP\_009882807.1 cytochrome c [Campylobacter jejuni]

MREIKIFLVVVVFTTLVYWGVEPYAHSVMKPHVTPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFVKGDAKKGKEFFENNCFACHGIKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPALALKVDHKFGDAFIMTAYNKDTSGESEEATNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQRVALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>WP\_009881995.1 5'-nucleotidase SurE [Campylobacter jejuni]

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKIIQNIFDKGFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAA

ANLDFEDEKNSDIALLKKGYATITPIMLDLTAYERMKKVKKWLKANDE

>WP\_002857587.1 MULTISPECIES: cytochrome c biogenesis protein CcsA [Campylobacter]

MKVKSLLIASLVAFSSLNAASLIDEAKNSGLVALPKDQKGVDEILKQNGVKASEFTLEKAELGKKLYFEP

RLSKSGIISCNTCHNVGLGGTDGISTAIGHKWTANPHHLNSPTVYNAVLNNTQFWDGRAGTLADQAKGPI

QADPEMATPAKLAVEKISSLPEYVSEFKKIYGKSGVNFDNIADAIANFERTLITPSRFDKFLEGDEKALT

KEEQKGLKLFIDKGCVACHNGVNLGGNMQAFEVAGKYKFANLGDFKGDANGMVKTPTLRNVAETAPYFHN

GAIWNLKDAIKEMGSVQLGIKISDKEAKSIETFLKSLTGTKPAIVYPQLPISTEKTPKPEL

>WP\_002856023.1 cytochrome c biogenesis protein [Campylobacter jejuni]

MKNIIKSIGDLRVSVVLFLLFALFCALATFIESAYGTPTAWAMVYDTFWFEYIQLLLGINLLCGMFRYKM

FGLKKLPLMIFHISFLFILVGSAMTRYAGFEGILPIREHTQNSLIESSKTSLRISAIKDGERYSAVNDRY

IGNLPFANSFKLKLNLGDDQAVLKYKDLILNAHYTYKENNNSDPLLVLMLSQKGSQGVDVKFEKGEVKNI

EGVNFAFMNDNVKAPFVKIDENLTLSSSENLHFLSMLDGQNLDLKIGEKANAKERRLYEIKDISFVVKAA

SLHAQEALEGSNRPQDESFWLWFKSAWLEVGRTMLISTFGEPQNWKNSLLLHFKDFALSNENKNLELTGS

NALKLELSYKNESKEFYIFEYNKPIMIELAGQKFFISWALSYEQLPFDIYLRDFVLDRYPGSMSPASYAS

EITVKNNNENFDYRIFMNNVLDYDGYRFYQSSYDQDEKGTVLSVNKDPGKIPTYIGYFLLCLGMFMNFLN

PHSRFRTLARLINKDTLKHTSVIISILLLSFGSEKTFAQDLNSTLPVVNTNHAKALATLIVQKSADGRMV

PFDTLSREILEKIHQSDSYKGQNSNAVMLSMLVDVDKWQMEPFILMPQNQAVRDAIANILEIPSAKYISY

KDFFDENNRYKLQKYVENANRKNPNARGVFDKEIIKLDERANVVNLVFSGELFKFIPVQNNPNNVWLAPF

SAVTTLKGDEGHIVLALIQNYFSAVENAFKDGNWTRADEGLKFIKEYQEKIGYKVMPSKTKVEMEIFSNK

AEIFVKLAPVYLIAGFLLLILVFSKMVVPNLKISFIFKVVYVLNVLAFVIHTVGLGLRAYLSGHAPWSNG

YESMVYIAWALSLSGIFFSRKSPIALSLTSILSGVVLMVAHLSEMNPQITNLVPVLNSYWLSIHVSVITA

SYGFLGLCALLGIFTLFLMCFLKKDGKYNLNILRNITEATRINEMAMIFGLCLLTVGNFLGAIWANESWG

RYWSWDSKETWALVSILVYAAILHLRMIPKYCNQFVFALWSMFAYWVIIMTYFGVNYFLTGLHSYAAGEA

AQIPNYVYWGFALMVVLALFARRKRNFVGKL

>WP\_002852762.1 MULTISPECIES: cytochrome c [Campylobacter]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGLTEEDFKAIEAHIETLK

>WP\_011187228.1 tetracycline resistance ribosomal protection protein Tet(O) [Campylobacter jejuni]

MKIINLGILAHVDAGKTTLTESLLYTSGAIAELGSVDEGTTRTDTMNLERQRGITIQTAVTSFQWEDVKV

NIIDTPGHMDFLAEVYRSLSVLDGAVLLVSAKDGIQAQTRILFHALQIMKIPTIFFINKIDQEGIDLPMV

YREMKAKLSSEIIVKQKVGQHPHINVTDNDDMEQWDAVIMGNDELLEKYMSGKPFKMSELEQEENRRFQN

GTLFPVYHGSAKNNLGIRQLIEVIASKFYSSTPEGQSELCGQVFKIEYSEKRRRFVYVRIYSGTLHLRDV

IRISEKEKIKITEMYVPTNGELYSSDTACSGDIVILPNDVLQLNSILGNEILLPQRKFIENPLPMIQTTI

AVKKSEQREILLGALTEISDCDPLLKYYVDTTTHEIILSFLGNVQMEVICAILEEKYHVEAEIKEPTVIY

MERPLRKAEYTIHIEVPPNPFWASVGLSIEPLPIGSGVQYESRVSLGYLNQSFQNAVMEGVLYGCEQGLY

GWKVTDCKICFEYGLYYSPVSTPADFRLLSPIVLEQALKKAGTELLEPYLHFEIYAPQEYLSRAYHDAPR

YCADIVSTQIKNDEVILKGEIPARCIQEYRNDLTYFTNGQGVCLTELKGYQPAIGKFICQPRRPNSRIDK

VRHMFHKLA

>WP\_002869199.1 pyruvate:ferredoxin (flavodoxin) oxidoreductase [Campylobacter jejuni]

MGKIMKTMDGNEAAAYAAYAFTEVAGIYPITPSSPMADYTDMWAAAGKKNLFGVPVKIVEMQSEAGAAGS

VHGSLQAGALTTTYTASQGLLLKIPNMYKIAGQLLPCVIHVAARSLAVQALSIFGDHQDIYAARQIGFAM

LCSHSVQETMDLAGVAHLAAIKGRVPFLHFFDGFRTSHEIQKVEVMDYAHFDRLLNREALLEFRNNALNP

ENPKTRGTAQNDDIYFQTREVSNRFYDALPDVVNEYMQEISKITGREYKPFTYYGHKEPERVIVAMGSVT

QALEEVVDYLNAKGEKVGILKVYLYRPFSLKYFFDVMPKSVKKIAVLDRTKEPGSLGEPLYLDVKSAFYG

RENAPVIVGGRYGLSSKDVDPAQMIAVFENLKLDNPKDGFTVGIVDDVTHTSLSTGEKISLGDESTIECL

FYGLGADGTVGANKNSIKIIGDKTDFYAQAYFAYDSKKSGGYTRSHLRFSKKPIRSTYLVSTPHFIACSV

AAYLEIYDVLAGIRKGGTFLLNSIWNAEETIRQLPDAVKKTLAEKEVNFYIINATKLARDIGLGNRTNTI

MQSAFFKLAKIIPYEDAQKYMKELAYKSYSKKGDAIVEMNYKAIDVGADGLVKVEVDPNWKNLELKEKEQ

TNAYKGTEFVEKIVKPMNAAKGDDLPVSAFLGYEDGSFEHGTTEYEKRGVGVMVPRWIEANCIQCNQCAS

VCPHAVIRPFLINDEEMANAPRGVKDHALEAKGTKGEKLSFKIQVSPLDCTGCELCVHECPTKEKSLVMV

PLQEEMDFGEQENADYLFKEITYKDDILNKETTKGAQFAQPLFEFHGACPGCGETPYITLITRLFGERMI

VANATGCSSIYGGSAPSTPYRKSVKNGHGPAWGNSLFEDNAEFGLGMKIATENTRHRIEHIMNESMQEVP

NALSALFKDWIANKDNGAMSVEIKDKMIPILEQNKNIKAVQDILELKQYLSKKSHWIFGGDGWAYDIGYG

GLDHVLASGENVNILVLDTEVYSNTGGQSSKSSRTGAVAQFAAAGKPIQKKDLGQIAMTYGYIFVAQVNS

TANYAHLIKAITAAEAYDGPSLVICYSPCIAHGIKGGLGYSGEQGELATKCGYWPLYTFDPRLEEQGKNP

LTLTGKEPDWDLYEQFLMNEVRYNSLKKANPEHAAELFERNKKDAQRRYRQLKRIAMADYSNEVES

>WP\_002869041.1 MULTISPECIES: 4-diphosphocytidyl-2C-methyl-D-erythritol kinase [Campylobacter]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>WP\_002868892.1 DNA ligase (NAD(+)) LigA [Campylobacter jejuni]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>WP\_002853034.1 MULTISPECIES: exodeoxyribonuclease VII small subunit [Campylobacter]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>WP\_002852880.1 MULTISPECIES: ubiquinol-cytochrome c reductase iron-sulfur subunit [Campylobacter]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNAAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEEGPEYKKMIAEA

>WP\_002852750.1 MULTISPECIES: ATP synthase subunit A [Campylobacter]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>WP\_002854049.1 MULTISPECIES: UMP kinase [Campylobacter]

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALESSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>WP\_002852968.1 MULTISPECIES: IMP dehydrogenase [Campylobacter]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVVVLDSAHGHSKGIIDTVKAIKAKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGVGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>WP\_002869354.1 aspartate--tRNA ligase [Campylobacter jejuni]

MRSHYNTDLGISHVGQSVKLCGWVNSYRDHGGVIFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVL

IAEGAIRPRGEGLVNPKLKTGEIEVVVSKLTIENESAVPPFTIADESVNEELRLKYRFLDLRNPKLYENF

ALRSKACIAARNSLANMGFLEVETPILTKATPEGARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDR

YFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEQKDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMEN

YGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIAKDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGA

QGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRCELEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLID

PNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMPKNIDETDLEEISSIAYDVVLNGVELGGGSIRIHKNDI

QQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPHGGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMT

DAPSPASNEAMRELGIKLRENIK

>WP\_002852069.1 MULTISPECIES: glycine--tRNA ligase subunit alpha [Campylobacter]

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>WP\_002855427.1 MULTISPECIES: phosphoribosylformylglycinamidine cyclo-ligase [Campylobacter]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEESEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIIGEICINEGIVLE

>WP\_011799398.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKSIFQKILTLILISPIFLFGADGGNIASKLANSVNQQITEAGSSVASIINTISIVMGVIWITVMLLMTF

INMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>WP\_011799393.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRKISLAVIAFSLINVSASAIDLSEFTGDTKLSCEAVLCLASPYKPSECAPALARYFGFSARYWSDVVRM

RTNFLNLCPLGANNTIKSDDKDLEAWRNSLVNLTGTCYIPDLNKKYQRTVLWIETIQKCSHGEGCTTESI

KHYGYRIDPTLDNNCKILSSNKYSDYNLKYTCPTKFYPEEDWNNGYEKKEVNQSEFNSLKEEDRFTADKL

TEVSYSEYKNLPNNKRKISTSGFKTTYYRIDLGYYKKEWINKNCWVNQGK

>WP\_011799391.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEEVEG

>WP\_011187230.1 MULTISPECIES: helicase [Campylobacter]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILDLNDPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPQNILGKMNIKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>WP\_011117560.1 MULTISPECIES: single-stranded DNA-binding protein [Campylobacter]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>WP\_002856822.1 MULTISPECIES: flagellar basal body rod protein FlgC [Campylobacter]

MAYLSDFDISGYGLSAQRFRMNVISSNIANANTTRTAEGGPYRRREVIFKATDFDKLLNEQINKDNNFLK

YENPLNDPSSPEEAKPPIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>WP\_009882771.1 L-lactate dehydrogenase [Campylobacter jejuni]

MAKIGIVGLGYVGAASAYSIVTQGICSELYLYDIKQDLALAHARDLEDMSAIHFSYTKIFHVSNLENLAS

CDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIVATNPNDTITYYTQVLSQLPKNH

VFGSGTNLDSSRLKKFLAKDLNINSKDIFACMIGEHGDSQFAALSNASVLGQNLLDFYKQKLGKDLDIQE

LEKAVISEGYFIYERKGRTEFGIGTSCANLAKAILEDRKSLHPVSVVFDDIAFSMPAIIGKDGIEKVFEL

KFNEKEKIKLENSKQQIKNAIQSVKDKI

>WP\_002857575.1 gamma carbonic anhydrase family protein [Campylobacter jejuni]

MLIKFKNHSPKLGQNVFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRELNDEEISFLKQSALNYMDFKNEFLKDLQ

>WP\_002852211.1 MULTISPECIES: acetolactate synthase small subunit [Campylobacter]

MRRVLSVIVLNEHGVLSRIVGLFSGRGYNIDSLTVAPLENKEFSRINIVTSGNERTFEQIVKQLHKLIPT

YKVIESEEFIDKEMALVKIPLNENLGGLDAVLKAYNGTIANSNENFLFLMVADDANRIDNFLKTIKKYNP

SDIVRSGSVLMEIK

>WP\_002857495.1 MULTISPECIES: rod shape-determining protein [Campylobacter]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGFDKYLSEIVRLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>WP\_002854244.1 MULTISPECIES: transcriptional repressor [Campylobacter]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYTEIKKEYPSISLATVYKNLNTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCAKCGGIEDLSFKDAKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>WP\_002854230.1 MULTISPECIES: transcriptional repressor [Campylobacter]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>WP\_002853007.1 MULTISPECIES: thiamine biosynthesis protein ThiS [Campylobacter]

MIINGQKLELKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>WP\_011799395.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFFVFRKIKNSKEFKEYILKLEDKKSPKLFSDESLKVR

LIY

>WP\_011117587.1 MULTISPECIES: hypothetical protein [Campylobacter]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFLSELEKGVDFRSYEFSNDEDEYIVNAFELFSCVFWGM

DFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKVLKELKKCSKK

>WP\_011117580.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>WP\_009883030.1 MULTISPECIES: hypothetical protein [Campylobacter]

MINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKSVDLAI

NDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYPRRLID

YVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRNSYRRI

EFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESRIKHYD

KLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVLDDERE

IDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTHSPFIY

DNIFEDYIVDLEKYRVNNG

>WP\_009881539.1 MULTISPECIES: Bcr/CflA family drug resistance efflux transporter [Campylobacter]

MQKHTKIHGFAKFKLIVILALMSSIAPLSTDMYLPALSHVEQSFQTNSFLTQLSIASFFIAFALGQLIYG

PLSDIFGRKIPALVGIFFFIVSSLFCVIIDDIYAFIALRFFEALGGCAGVVIARAIVNDLFEIKEAAGIF

ALMMVFSSLAPMLSPTFGGFLLEYFSWHSIFATLFALGILLFLMILFGLKESAPHLKNKKFSHHEAMKSY

KFVLSDKRFLVYILCASFALAAMFAYITGSSFVFTQFFGLSEQKFALLFGANALGFVICANINARLVLKY

ESEKILAKALMIMFISTVILLVNAFFHPNFLLFELSIFTSIAMLGFIAPNTTTLAMARFKEHSGTASAVL

GTVQFGFAGLISFVVGAINANTPIILAFVMCACVLVANMIYFLIKIKEKNENK

>WP\_009881536.1 MULTISPECIES: membrane protein [Campylobacter]

MTNTQINDKILELANYLKIDNKCVAHNARLQSIQINGAVIKNFSFKLFNEYKLSFFNCKFLCEINEAPGF

FEIENPVYIYGCTFEENVISYNIKFKSNVVIAYCRFNKNFYFEANTFCNSSNFERNFYNYASFKKSHFEK

NVTFYNSTFKGLDFSQAIFNENLNIVNTKLNFTFSNLEEKIEQEYEEFNKNKKEEDQKSLDKFANDFRDS

FRTFKSALIKDNNALDASNFHKYELYCKEIELKQNWDKKGENVKNTTDLEKNVSRIRDFMDFLLLGFYRK

LCDHHTDFLKVFNNLILLIALYALFVFGFTWLHDDKLEDTRAILTLFGFFDKFRLYFDIISTIFVVFGCG

FFVCKLDSYEKKNNVSKKQNINFIYIIGDFLNLIKSLLFASFIPCVFYGLFSLFGFFLNLGKDFGYSLLI

NTLFVSLYICLVYTKSLFFGRYVVLIFSYIVFIIMLIKQPNVIHPLIGKIANESDKFFNYPSLIVLNILY

TILLALVLFSLQKTARKNSIVPS

>WP\_002886243.1 MULTISPECIES: accessory colonization factor AcfC [Campylobacter]

MKKIITLFGACALAFSMANADVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATWFEKAKKDADIL

FGASDQSALAIASDFGKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSG

TGVWEDMIGRTQDIKTIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLV

VYRTFNVVAKEGASKETQDFIAYLSSKEAKEIFKKYGWRE

>WP\_009882848.1 major outer membrane protein [Campylobacter jejuni]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGVLRYRYDTGNFDKNFVNNSNLNNSKQDHKYRAQV

NFSAAIADNFKAFVQFDYNAADGGYGANGIKNDQKGLFVRQLYLTYTNEDVATSVIAGKQQLNTIWTDNG

VDGLVGTGIKVVNNSIDGLTLAAFAVDSFMAEEQGADLLGKSTISTTQNAVPFQADSLGNLYGAAAVGSY

DLAGGQFNPQLWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKRHANGNLFALKGS

IEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNET

VRVGADFVYGGTKTEATNHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA

LYKF

>WP\_002859435.1 MULTISPECIES: nucleoside-diphosphate kinase [Campylobacter]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>WP\_002790076.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVKNGLLLTIFLSVIGVLGVIFIHIFVGAIIFVLIAVLMIYLLRQHKDEQIMIDKLLVLCRELKEGNFDN

RIIYVKTKSKKLAEIADNLNNTIDGLEAYLREINTSISCSQKGEFYRKALPEGLKGIFAHNIEFINKALA

NIEVTARSTFKNALSRTLMDLSLGNQNKDMSQISSSLNQDISMMKNVYDTVDAISHTATENGSEVDSLQS

AMGSLMDVVNSSKETVQTFVANSQNITSVVEVIRDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVRK

LAERTQRSTSEISIAIQTMQQDFVNIQSGSEQVFNIVSESEERINKFSQAFKRLEENSSALGVNFGSFAK

RLILSVVKIDHILYKSNIYLNLNGAQNFNLESVDPISNLCQDERAQGVINELSSETELNLAKEFIKDNAK

KAIEESSQDYIDQKAYDAIVNDIKSLEQRSAEILAKLKI

>WP\_002859429.1 MULTISPECIES: exodeoxyribonuclease VII large subunit [Campylobacter]

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>WP\_002857192.1 MULTISPECIES: histidine triad nucleotide-binding protein [Campylobacter]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKTKKENPQALF

>WP\_002854922.1 MULTISPECIES: phosphoribosylaminoimidazolesuccinocarboxamide synthase [Campylobacter]

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>WP\_002787379.1 MULTISPECIES: hydrogenase expression/formation protein HypE [Campylobacter]

MKNISLAHGGGGEEMNELLTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELEKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEIISKKESKNIKAGLSILLSGDIGRHGASVLIKRNELEADVKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>WP\_002786691.1 MULTISPECIES: imidazole glycerol phosphate synthase cyclase subunit [Campylobacter]

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>WP\_002857452.1 MULTISPECIES: beta-hydroxyacyl-ACP dehydratase [Campylobacter]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>WP\_002840050.1 MULTISPECIES: iron-sulfur cluster assembly scaffold protein NifU [Campylobacter]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKARNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>WP\_002927405.1 nicotinate-nicotinamide nucleotide adenylyltransferase [Campylobacter jejuni]

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKN

>WP\_002868817.1 molybdopterin molybdenumtransferase MoeA [Campylobacter jejuni]

MKNIFETLKDLENQISCLDESELISLEKAKDRILAKDLYARKNLPSFDNAALDGYAFNYTDINEALEIKG

TIFAGDKNFYTVAKNECYKIMTGAKMPKNADTILMLEDECIEENKLIIKKVPKQYNAYRYKGEELKKGEI

LLQKGTKLNDKHIALLASQGLYKIEVIRKIRIGIFSSGNELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDEFKSTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYRKGENF

VLILPGNPMAAYLSCFIFAKKIINLLSGNLDNPLTFYGKMGMDLKLKSGRNNLILGNLEKGIFTPFNENK

FGSGMILPLIKSEFLLISEENTGELKKGDEITLLKI

>WP\_002820769.1 MULTISPECIES: hydroxymethylbilane synthase [Campylobacter]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>WP\_011812786.1 imidazole glycerol phosphate synthase subunit HisH [Campylobacter jejuni]

MIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALKEQVL

VQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQGINNK

SDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>WP\_002852567.1 MULTISPECIES: phenylalanine--tRNA ligase subunit alpha [Campylobacter]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>WP\_002869325.1 1-deoxy-D-xylulose-5-phosphate reductoisomerase [Campylobacter jejuni]

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>WP\_011812717.1 proline--tRNA ligase [Campylobacter jejuni]

MMRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEV

NLSFITPASLWQESGRYNVFGKELLRFKDRKKNEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKF

RDEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKE

FMVLAKNGEDDILICENCDYAANVEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKINAFYTI

KAVVKKAIYENESKLVVFFIRGSDDLQEIKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYI

DFELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQK

YSKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEANHDEKGCIWNKTLAPFVLEIIVSNLKDEKALE

FANKLYEDLTNLGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIELIQREDLVKELIKTDEL

MEILKKKVL

>WP\_002857553.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTIKHKS

PRTSVMIMSSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIEDLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>WP\_002853196.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIVSSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>WP\_002853168.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MINVLMIEDDPDFAQLLSEYLAQFNIKITNFENPKSALNVGIQGYDCLILDLTLPGIDGLEVCREIRQKS

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHTNNENINSAFKIDERRH

EITYEDKVLTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>WP\_002869137.1 adenylyl-sulfate kinase [Campylobacter jejuni]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>WP\_002866134.1 MULTISPECIES: two-component system response regulator [Campylobacter]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>WP\_002851288.1 MULTISPECIES: acetyl-coenzyme A synthetase [Campylobacter]

MLNQNNQELFKPSKEFSRNARIKNLCEYYDLCDEAKEDFEGFWKRQAFEKIEWFSPFSRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKAANLLKKFGVKKGDRVVIYM

PMIPETAIVMLACARIGAIHSVVFGGFSPEALRDRIIDAGAKLVVTADGAFRRGKPYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYIKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

ISKFYTSPTAIRMLHADAPNEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGGTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKDEGEDGLLCITKPWPSMIRGIWGNDERYIESYFS

QAKKDGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIGTAEIESAIAKHPSVAESAVVSILDTIKG

ESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGPIAKIEKILYTPGLPKTRSGKIMRRILRTIARGE

EIKQDISTLEDSKVVETIVKLAKAEFE

>WP\_002776307.1 MULTISPECIES: phosphate ABC transporter ATP-binding protein [Campylobacter]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDEEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>WP\_002869430.1 ABC transporter ATP-binding protein [Campylobacter jejuni]

MILELKHISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYAILEELGI

AEFAYEKAASLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>WP\_002869429.1 ABC transporter ATP-binding protein [Campylobacter jejuni]

MLIVKDLHVYYGLIEAVKGIDFKVETGHIVSLIGSNGAGKTSTLNALLNSVKRTGEVNFLGYDTKRHLTH

TLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLTSKKHALAGTLSGGEAQML

AISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRIV

MENEAKNLIGDDEIRKKYLGL

>WP\_002855601.1 MULTISPECIES: CTP synthetase [Campylobacter]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>WP\_002853544.1 MULTISPECIES: acyl-CoA thioesterase [Campylobacter]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKVVNVGNTSISVEVEVTAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>WP\_002853334.1 MULTISPECIES: molecular chaperone DjlA [Campylobacter]

MTLVLIILVVLVFYWYYKTWGKQDFLNSATRGAKGFAKGFARGVMEERMDEFKRRMNYYVIALLAKIAKS

DGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAFYVAKDFLKEVPLPKNERFNVLRVLVF

MALIDADFNAKKREILEQIAKAFDIAKSELDAFIASLSNLKSTKKELSLDEAFAILELPNNADLNAVKKQ

YRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHLER

>WP\_002851546.1 MULTISPECIES: DNA starvation/stationary phase protection protein [Campylobacter]

MSVTKQLLQMQADAHHLWVKFHNYHWNVKGLQFFSIHEYTEKAYEEMAELFDSCAERVLQLGEKAITCQK

VLMENAKSPKVAKDCFTPLEVIELIKQDYEYLLAEFKKLNEAAEKESDTTTAAFAQENIAKYEKSLWMIG

ATLQGACKM

>WP\_002851424.1 MULTISPECIES: DNA recombination/repair protein RecA [Campylobacter]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>WP\_002869282.1 3'(2'),5'-bisphosphate nucleotidase CysQ [Campylobacter jejuni]

MLNLDKFLEIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCIMISLVHDNRPVLSLIQNPLKGDIFYAHAKTKVYKNDKPL

QIDQQEYEKNKYKALLSVNHLSKEDEDFAKEHQLEAINIGSGLKFCAILEARAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYNPLNYKSSPFICVSSRNFLQDFL

>WP\_002868927.1 4-hydroxybenzoate octaprenyltransferase [Campylobacter jejuni]

MNTFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVGARNFAMATNRLM

DEDIDKDNPRCANRPNVSGKIGRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGKIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHRIVHKNFAHINRAFFTLNGYLS

IIFFIFIWIDLLWN

>WP\_002868813.1 methionine--tRNA ligase [Campylobacter jejuni]

MRYITTPIYYVNDVPHLGHAYTTIIADTLARFYRLQGHETRFLTGTDEHGQKIEEAAKLRNSTPQEYADK

ISFEFKKLWDDFEITYDIYARTTDTRHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINDC

SCPDCGKQTRILKEESYFFKLSKYQDKILQWYEEKDPILPKNKKNELINFVQSGLKDLSITRTSFDWGIK

LPQEINDDKHIIYVWLDALFIYISSLDFQSKGENAKFWPAHVHLVGKDILRFHAIYWPAFLMSVDLPLPE

FIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGNDGDFSENMLINRINAELSNEF

GNLLNRIIGMSTKYSQGNISKEGVLKFYNVELNQAKEHLNLAVEFLENLQCNRYLEELFKALSVANLAIS

KYEPWNLIKENKHEQANALVALCANILAKTSLLLSPTLPKSCQKVALALNFEISSTNYAKIILDNELLDF

KANPCEALFPKVEKALLKQEIKEEPKKEKSPKIKIDDFAKIEIKVAKVLDCQNIKGSEKLLKFQLELDDK

EIRQVLSGIAKHYKASDLIGKQVCIISNLKKAKIFGHESDGMILSAKSGDKLVLITPEQLVQNGSLVG

>WP\_024088118.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKNTMYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>WP\_011117593.1 MULTISPECIES: hypothetical protein [Campylobacter]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>WP\_011117586.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>WP\_011117567.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>WP\_011117559.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>WP\_011117551.1 MULTISPECIES: hypothetical protein [Campylobacter]

MQEISNYEKIKKDIEEGIQKRKEEDKKNKKIINQIKIISSLENKVQKEKEKLDKLVKNETKELENE

>WP\_011117550.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>WP\_011117549.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>WP\_011117548.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>WP\_002869238.1 MULTISPECIES: hypothetical protein [Campylobacter]

MITLSSFNRYFGNNPLQTLTKIRDESIENAKI

>WP\_002869114.1 MULTISPECIES: membrane protein [Campylobacter]

MLENPIPNSIIITTIAVVLAFSALAVFLIKKTKENK

>WP\_002869099.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MTKTEFLEELKEAMHRDEELNEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSNLINLA

KLD

>WP\_002868917.1 MULTISPECIES: N-(5'-phosphoribosyl)anthranilate isomerase [Campylobacter]

MLKLKICGIKDEKNAKDLAFLNIDFFGLIFAKSPRRVSLEQARNLSAIFHEKDKKVVGVFVDENLEQILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVENSLDLKSEIFANLVLFDAKGILKGGNGISFDW

TLLGSYTKDFALAGGIGLDNIHKAVQTGAKILDLNSKLEDEKGLKDINKIKQILKELKK

>WP\_002868437.1 MULTISPECIES: cyclic pyranopterin monophosphate synthase [Campylobacter]

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>WP\_002868367.1 MULTISPECIES: metal ABC transporter ATP-binding protein [Campylobacter]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSKNISYFGNFKPNNKQ

KREIYLLFPEPILLNRSVRANFLFTLKTYGIKEDIEERIKESLMFLNLDESLLSKHPNELSSGQSQKIAF

AIALSVRAKYYLLDEPSAFLDKNTTLLFKKTILKMHENFNTGFLIASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFCNFIDFSNCKKYKDFKKPPSKIAIDPYKISFFNSKNIPKNNYDFILEKCYIIAL

RSRKSDVFIRVSCMDKILEFALEKQEFLRFDLKLYEELSLYFYEDAICFLN

>WP\_002868214.1 MULTISPECIES: ATPase AAA [Campylobacter]

MSLALTFRPENFDDILGQYELIEIFKKFTALQKLPHSIFFGTAGSGKTTFARVVAKEFGLDFYEFDGGNF

KLEELRKILDNYKNSLYKPLIFIDEIHRLSKTQQEMLLIPMENYRLILIGASTENPYFVLSSGIRSRSML

FEFKSLGAKELETLLLRVQEKMKFSIDKEAKDFLLKSADARAMLNLLEFVLVLDEKHISLENLKKLRNTI

NSEGVSSKDTHYILASAMIKSLRGSDVDAAIYYLARLIDAGESADFIARRLVIFSSEDVGNADPNALNLA

VSTLDAVKNIGYPEARIILAQCVVYLASTIKSNASYKAINEALNYVKNNEALEIPNYLNNNHQEKQNYLY

PHDFGGWVEQKYLSKNLKFYHSKGLGEEAKLLDNLYKLKNHKA

>WP\_002867373.1 MULTISPECIES: ribonuclease Y [Campylobacter]

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKFDDLSKKEQKLQQEEEKLKEDKEYLCKSQKHIQNLQSDVDKLKNKYQEKLDDVLKI

LEHSTGLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGETIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCKRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRVIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAVEYAK

>WP\_002867371.1 MULTISPECIES: competence protein [Campylobacter]

MSLWNSFSYSFKEFHYLFFSVVVIFIFNILLEYNNFLNFKNQKHYLIDNALLTHQYIKYNKKNKKYWVLK

LQTENFTFYTTSFKDLNLSKNQFLSLRIITHNINFKDYLSKSFYAPSYDFEKLKEKEYNPIISYFLNQHT

NEKIKEFYGALFFALPISLELRNDVNYYGIAHLIAISGYHIGLLFSLIFFILAPIYSFFQKRYFPYRNLR

LDLSILIFALLLAYACLIGFVPSFVRSLIMAFWIFYLLCKNIKIINFVTLFCSILLCISLYPRLLFSIGF

LFSILGVFYIFLYMHHFANKFNNLINIILLNIWTFFAMVLPVLYFFPLISYQQILGIILSGIFVIFYPLV

LFLHLINYGDLLNFILDEFFKFKIYGTNIHIPFWIFISYLIASLISVRFKYLAFLCIFANFIPFIMIVI

>WP\_002866730.1 MULTISPECIES: biopolymer transporter ExbD [Campylobacter]

MPFDDEKPELNITPLVDIMLVLLAILMVTAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>WP\_002864418.1 MULTISPECIES: NADH-quinone oxidoreductase subunit J [Campylobacter]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALAGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSTILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAIVLTHKELTKEKQ

>WP\_002860439.1 MULTISPECIES: 5-formyltetrahydrofolate cyclo-ligase [Campylobacter]

MEKTDFRALQKIRLFKHSKLNFKQDYKIFKECLKIIKLFKAKNILIFIPLHYEPNLIKFRHILNKNYKLF

VPFMQDKSLKIVKLRLPFIKKRFGVLEPIDSFFKAKIDLAIVPVIGVDKNLKRIGHGQGFYDRFFENLNY

KPHIIFVQSIDALSQNNLTQKHDISGKLYINPYKKYYKKERKNDRITYRTYSRYSRTRYRIFSCKKNQ

>WP\_002860421.1 MULTISPECIES: polyphosphate kinase [Campylobacter]

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLERYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKICDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKTFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKVLEMIRIETSKKNEGVIVAKMNSLVDSDIIQALYEASMEGVQIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKIIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>WP\_002859850.1 MULTISPECIES: 8-amino-7-oxononanoate synthase [Campylobacter]

MSLENILEALEKNHNLRKLTSLKHEGNFVFKEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSS

SSSRSLSGNFTIYEELESFLKSKFKEKEILHFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKL

GGAKFFRFHHNDMNHLENLIQKHYDHYENIIILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSV

GCFDEEGLGLVKALNLEEKVDFIVFTFGKALASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTK

FIFEKMSELKEKREKLQIIGNFFKNQLIEKNHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKE

PTVPKNTARIRFSLHAGLSKEDLKKVIELL

>WP\_002859562.1 MULTISPECIES: DNA-binding protein HU [Campylobacter]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>WP\_002859520.1 MULTISPECIES: lipoprotein [Campylobacter]

MKIYSVILGAFLLGACSLKDQAIVDTNLKSQTLMFTQKYKITQDKINAIITMSYLNPILDKTSKDDVLAL

SFTPNTLKIQNLEVFINNKKANIEKLDDEYLKYIIQNNYTDYFKASLPSVKEETRLVAKICLDHLPCFEL

NFQKYPKSLYYRSEDVDTQYN

>WP\_002859439.1 MULTISPECIES: DNA polymerase I [Campylobacter]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMISGFANFIYSLKNEYKSDYIVFALDSKGKTFRSEIDP

NYKQNRTPPPPELLEQIPICIKMIEKMGFISVSQEGYEADDIIASFVKTCENRDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEAACLEKYGVKPNQIRDFLALCGDSSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLVRNERSRNLLLEGKENAFLSKKLASLYDNLEVQNLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLVQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMNENEAFYV

PLTHNYLGVGEQISLQSAKKAIEAIFNHFVIGHNLKYDFKIIQNNFDLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLETPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEILMKKFENEIKNLSEEIYTLCEDRFNLNSPKQMGDILFEKLKLPSGKK

GKTGYSTDEKVLNILLDKHPVIAKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFISLDYSQIELRILAHFSEDEKLLNAFANDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEANLAKSYIEKYFENFTSIKKYFEKVKNEAKQNGFI

VTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADVIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>WP\_002859438.1 MULTISPECIES: flagellar motor protein MotA [Campylobacter]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGKKLKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPRISQFDKG

>WP\_002859428.1 MULTISPECIES: ubiquinone/menaquinone biosynthesis C-methyltransferase UbiE [Campylobacter]

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>WP\_002859427.1 MULTISPECIES: 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKEFNPCEIKLGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>WP\_002859390.1 MULTISPECIES: citrate transporter [Campylobacter]

MEIFLALLGFFSLGLIVWLLLKDYTTPALAFISVSISVACILLILERLGFGVGVALGVKGGVFDIKTLVV

FIKDGVKSVTDTAALFVFSILFFSVLNASGFFTKILNAFLSKMKANVYQVCILTVFIAAAVHLDGSGAST

FLIVIPALLPIYERLGIRKTSMLLIITSAMGVMNVIPWGGPTLRAATNIGMDANLLWHHIIPIQIVGLVL

SLLLAIWIAKIEIKRGAGAGNLSGINLNIEKSEHHNEKWFWLNLLVAIGVIGLLISGIIPSYICFMIGLA

IILPLNYPNLKTAKKVLDRASGGAMLMYITLIGAGILIGVFDKSGIMEKMGVLILNFVPDYLGAYIPLMV

GILAVPMAIIFCTDSYFYGVMPIVLSVTKAFGAEPLTIAIIMVIARNCATFISPVVPATLLGCGLAEVNI

KDHIKRSFFYIWGISIICLIFAEVAGII

>WP\_002859297.1 MULTISPECIES: potassium transporter [Campylobacter]

MDNFLEIFLITVAIAIVLNVIFKKFEIPTIIGYIAAGEIISEIYHLSGKGEITHIAEFGIVFLMFTIGLE

FSFKHLMAMKQEVFLNGSLQMLTCGFVFMLLAIGILGLGDKSATIVGFALALSSTAVVLKILNDNGDINE

QYGRKALGILLFQDIAVIPLLLLVDIFSSNNQNIEKLLFTTLISALILITLLFFIGKYLVDRIFRLIIHT

SSQEIFISTVLFMVIGASFLANYFGFSYSLGAFIAGALIAETKYKHKIEADLIPFRDLLLGLFFITVGMQ

IQLDVVAQNWFLIIVLTLLVMALKFGIVFGFLFLYTKKRVALKTAFAIAQIGEFALAIFSLLQAKNMLDI

KTSQILIVVSILTMIITPFILNNIRKITNVVEDIALNTNAVQNIDSNIKLKNHLVVFGYGRLGQEVVQKI

KNTGVPYLVLESDLNLVELGVSRGENVVFANAAQEETLKIANIEECAVAIITVTNEAKLEILCQVLANYP

KPIDTIIHVNGTLKKMLFSSIDENIRIIRSEKVIARNLVQEALECRIHKNT

>WP\_002859054.1 MULTISPECIES: hypothetical protein [Campylobacter]

MCQEKHTHTHSQKHLKAVCNRLSRTIGHLSAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAIEENDIQSIEELNKAIDMFMK

>WP\_002858952.1 MULTISPECIES: peptide chain release factor 1 [Campylobacter]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>WP\_002858739.1 MULTISPECIES: ABC transporter substrate-binding protein [Campylobacter]

MKKILLFILSLGIFYTFTQAKNLEQEQNTSSNLVSVSIAPQAFFVKKIAANTLDVNVILPPNSNEHNFEF

KPSTMKKLEKSDIYFTIGLEFEKVFTDKFKQNFSKLQVVNMQKNIALIQTHDTHEHSHEHEHHEHEHFDP

HTWLDPILVQTMALNIYDTLIQKYPQNENLYKENLDKFLAELDSLNLQIASKLEKLKNREFVVYHPSWTY

FAKRYNLTQIPVEILGKEPKSKDLQKLITLMKDKNLKVIFVQNGFPENAAKTLAKECDAKIYKIDHLSYD

WENELLKTADAFSHNL

>WP\_002858694.1 MULTISPECIES: lysine--tRNA ligase [Campylobacter]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>WP\_002858674.1 MULTISPECIES: 50S ribosomal protein L32 [Campylobacter]

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>WP\_002858639.1 MULTISPECIES: 3-oxoacyl-ACP synthase III [Campylobacter]

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>WP\_002858620.1 MULTISPECIES: 1-acyl-sn-glycerol-3-phosphate acyltransferase [Campylobacter]

MIYKKIKALYFWIFFVLSVALVIFCFCFTKSQNTLWKIRKIWAKFQRYTISYKQEIIGTFNPQAQMILMN

HQSALDIIALEELYPKNLCWIAKKELGEIPIFKVAMKKPKLLCIDRKNPRDLVRVLKEAKERISEDRVLA

IFPEGTRSKNEKMLKFQSGAKILSEKLNLKVQPILIVDSAKILDTKSFSASSGVLKIICMDLVDTNDEKW

LENTRKKMQELLDQERAKLC

>WP\_002858610.1 MULTISPECIES: 50S ribosomal protein L10 [Campylobacter]

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKVKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>WP\_002858047.1 MULTISPECIES: molecular chaperone GroEL [Campylobacter]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>WP\_002858009.1 MULTISPECIES: L-seryl-tRNA(Sec) selenium transferase [Campylobacter]

MNKFRTFPQINTLIEDESLKSYPFYIKAFFCKKVVAKLKENFFQDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELAKEKELLSYYDLGSGWCENLNEKLIKNEPKIRKLVQECDILSFSG

DKLFGSVQAGIILGKKELIEKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

KKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILTINQMENL

>WP\_002857555.1 MULTISPECIES: oxidoreductase [Campylobacter]

MQDNIIDRRSFFKLGLLGGSVVAASTIGGGAVLKAAELTHSHQASQGKSNKIRGRMFFQTQTEFDTLSAA

CERIYPKDEQGEGAIGLGVPYFIDNQLASAYGYNDREYMQGPFMEGKAEQGYQTPMQRKDIFLEGVHALE

ENAQKRYKKSFSLLKGGDQDKILSDFEKGKIQTTGFKSSYFFTLLRDMTVAGVLADPIYGGNDNKNGWRM

MQYPGAQMSYVDKIASDEFFNIEPMGLADMES

>WP\_002857525.1 MULTISPECIES: peptidyl-tRNA hydrolase [Campylobacter]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>WP\_002857297.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDNSLSAYTQKYDKEGYGLQYPDGHVIRFYERILKYKLSKTSGKLLDFGCGNGVHSKYFKNITGGGYRAL

WH

>WP\_002857102.1 MULTISPECIES: UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter]

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>WP\_002856943.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKILILSLAAASFLNAEILVYGPGGPAPVLKELALKFEEKTKEKVIVTAGPTPAWIDKAKENADLIFSG

NTSMMDDFAKKIPSLSLENLSVLNVRPSGIIVRPNNPKNIKNFEDILKDGINVMVVDGAGQVGLYEDMAL

KSAKRENLVKLRKNIKIYAKNSKAAVDEWNNNPNIDALIIWSHWAKALGDDKALFIKDKNAVIYRAAEIA

PTKKGLENKKALEFVDFIKSKEAQKVWKKYTWKEVK

>WP\_002856929.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINRTLKDAELKIGKINTDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILENKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>WP\_002856884.1 MULTISPECIES: flagellar hook-basal body complex protein FliE [Campylobacter]

MNNINDLRLNNNISNTNKSQNSTGIGDEFAKMLKNEIDDLNKAQESGEAAMTDIATGQVKDLHQAAIAIT

KAESSMKFMLEVRNKAISAYKEITRTQI

>WP\_002856751.1 MULTISPECIES: membrane protein [Campylobacter]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGVVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>WP\_002856550.1 MULTISPECIES: potassium transporter TrkA [Campylobacter]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRGKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGVMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGEASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNTTDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGRNLSTNLNRHYYKMRQNYQLFIPVE

>WP\_002856547.1 MULTISPECIES: 30S ribosomal protein S20 [Campylobacter]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>WP\_002856489.1 MULTISPECIES: enolase [Campylobacter]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>WP\_002856353.1 MULTISPECIES: arsenic transporter [Campylobacter]

MLAFFIFLSTLVLLFWRPWNLPIWVFSSLGAFFVFIFQLVDFKDACFVFSLVWDSSLTLVGLIILSFSLE

ALGFFDFIASKILYFSREKNQEKIYISTKKMMLFLLIFVFFLSAFFANDGAILIITPIIIALFSTLKDCK

NHAFILSSFLLSLSFLCDASSNALVISNLTNIITANYFKIEFLEFAKNMFLPNFFVLLSTIVTVFVLYVR

VLPKRLEFKLIKKEQISLKLFFLCIVFLFLFVISFFIGEIFNIKISFFALLWAGIFWLIILKIQGKKSIK

ILFEAPYGVLLFSFGLYMVVFALHKIGVSEILVKSYAFLMQDKSGIFGVALISAFGSSVFNNLPMVLIGD

LALKEYFENFSFDSLMIYAHLLGVNIGPKLTPIGSLATLLWLGVLARKGINISFWQYCKFGFLITLPVLV

FSLFALIV

>WP\_002856259.1 MULTISPECIES: serine/threonine transporter SstT [Campylobacter]

MFSKIIQSYAKGNLIVQICIGIVLGILIGISSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGAKIKNIIILYIVGTFLASACAVLANFFFPVKLVLDGVQTATNSSPTHMSEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGIALKHCSNEAKQVFIDINEGVLKIVKFIVKLAPFGIFGLVANSVAQTGAQGL

LSYVKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAACGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>WP\_002856117.1 MULTISPECIES: catalase [Campylobacter]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIKITADLSA

YTKAKIFQKGEVTPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSFVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKEDKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRALKHFEKISPDYAKGIKKALEK

>WP\_002856024.1 MULTISPECIES: ribose 5-phosphate isomerase B [Campylobacter]

MLREKIYIASDHAGFELKEKICVFLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGVELAIDIIEKFIQTPFEEGRHMQRIQK

IEVKI

>WP\_002855974.1 MULTISPECIES: ribosomal RNA small subunit methyltransferase G [Campylobacter]

MIFKDYDFLQNYDLKNFEEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKAAFLRTLKIECELPNLHIYKEKVQEYKNTFKADIITSRALMDVK

PLLEICKNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRRYCILK

>WP\_002855920.1 MULTISPECIES: GTP cyclohydrolase II [Campylobacter]

MKIKISEIANLPSKWGNFQIQSFKENDKEHLCIFKNTPKDTLNLRIHSECLTGDALGSLKCDCGEQLEFS

LKYIEKNGGMVIYLRQEGRGIGLFNKVNAYALQDKGFDTIKANHQLGFKADERTYEIVEFILKHYEISKV

NLLTNNPEKLDSIKEKIITRIPILIEPNRFNVEYLNIKQTQMGHLK

>WP\_002855904.1 MULTISPECIES: membrane protein [Campylobacter]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>WP\_002855820.1 MULTISPECIES: LysR family transcriptional regulator [Campylobacter]

MKIKDMEIFLDLLNTQSPTHTANNFSITQPNVSIVIKNLENKFDGILFERLGKKLLPTPKALELGKNWLK

IIQAYYQSLEKLNDESMLLGEIKIASTQSISEHFLAPILFDFKAEFKNIEIRSQTQNSKECLNLLKNGNI

EFAIIEAELDPALVEYENLEINFWQDDELIVATSDKKLNEKEFYIDELLEQKWILREVGSGLRDKFLNEI

GASSKKLNIFLELDRMAAIKELVLQKKAISIFSKKSIEKELKNSTLYEIKLKNIDLKRKFYTLKRKNYNF

NRALEKFEKIFKS

>WP\_002855748.1 MULTISPECIES: DNA-directed RNA polymerase subunit alpha [Campylobacter]

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>WP\_002855723.1 MULTISPECIES: 50S ribosomal protein L22 [Campylobacter]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKRFRPRARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKK

ATAKKES

>WP\_002855654.1 MULTISPECIES: DNA-binding protein [Campylobacter]

MDEGQKQQFIKLTYFLGEVLGEQYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELMQNKKYLE

KDFLCDYKALVGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGDILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSIAQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>WP\_002855462.1 MULTISPECIES: glucose-6-phosphate isomerase [Campylobacter]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLQFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVVSLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDVIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>WP\_002855458.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIKKFILLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEA

EVNATLAKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLE

SRKISGVLSKMDPKKASELTLLLKNLDNNASN

>WP\_002855302.1 MULTISPECIES: adenylosuccinate synthetase [Campylobacter]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>WP\_002855295.1 MULTISPECIES: transcriptional regulator [Campylobacter]

MTKENSPCNFEECGFNYTLALINGKYKMSILYCLFRYEIVRYNELKRFLSSISFKTLTNTLRELENDGLI

IRKEYAQIPPKVEYSLSKRGQSLIPILQAMSKWGKKDKKGKKCLN

>WP\_002855271.1 MULTISPECIES: elongation factor Tu [Campylobacter]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>WP\_002855217.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFKISPYLICIFFIFSNVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVH

SKFRKYPRQFVMSLRRNLDWVTQTLIPDYTNPHIDRARLILEFSGYNKGLATFTVYIEDKESRLMVEFLD

PRKKALQNPPQNNQVVPMINFNEPQVKPLTSKENNNSN

>WP\_002855131.1 MULTISPECIES: NUDIX hydrolase [Campylobacter]

MAFKNLKELSFEKSNYIKPKRFAYESNGRLCTWDFIESKDSVSVLLYHKELESFIFVRQFRIPLWYHQMH

DKDYVKDDDMGYTIELCSGLVDKKLSLEEIAKEECIEELGYAPKNLEKIGDFYTGFGSGVSKQSFYFVEV

DEKDKISSGGGVDDEEIEAVYVKVQDFEKKCKNMIRTPLLDFAYMWFLKEKWGKLKII

>WP\_002855005.1 MULTISPECIES: septum formation inhibitor Maf [Campylobacter]

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>WP\_002854991.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNYKLSLSPLFVLEIIASILFIVFFGFGNFLFFILLSMIFGAVLLGIFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLVFPGIITSVFGIFVFFFGIALKLITKSKYQYTKQEYQNSNEEIIDVEIIEDRK

>WP\_002854985.1 MULTISPECIES: preprotein translocase subunit SecE [Campylobacter]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>WP\_002854974.1 MULTISPECIES: 50S ribosomal protein L28 [Campylobacter]

MARVCQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTRKMRIAASTLRTLKKQNSK

>WP\_002854966.1 MULTISPECIES: ArsC family transcriptional regulator [Campylobacter]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

NLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>WP\_002854928.1 MULTISPECIES: 50S ribosomal protein L1 [Campylobacter]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>WP\_002854831.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MATFDDVKAVVVEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>WP\_002854826.1 MULTISPECIES: 3-deoxy-D-manno-octulosonic acid transferase [Campylobacter]

MIFFYYFLTWAAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFEYAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKTKIILLNAR

ISDKSYHSYQRFSFFYKKIFSYIDEVFAQSELDKVRLESLGAKNVKIFKNIKANLEIKNNKIYTKPKEKL

IIFASTHKDEEELLLDHFKLEENEKLIIAPRHPERFKEVENLLLNKGLEFEKFSSLKDENKKFAKKILLL

DALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDNVLISGKFIHNQKALFEEVENVYFCENLKDLN

DKIHYLNLKVKISKKENLDLIIQTIQKGIDARKSL

>WP\_002854820.1 MULTISPECIES: 50S ribosomal protein L7/L12 [Campylobacter]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAAPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>WP\_002854814.1 MULTISPECIES: Nif3-like dinuclear metal center hexameric protein [Campylobacter]

MKLSEIYNFLDQLSPFDIQESWDNSGILLGDRDSEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKTYPRAFIKEMICKNISLISMHTNYDLSHLNIYFTEEILGFKISFKDEFLIYVENSISFEALCDW

VKKKLNLQILRVSNCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>WP\_002854647.1 MULTISPECIES: ferredoxin [Campylobacter]

MSLLITKDCVCCDACREECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>WP\_002854524.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKILEYSITHFCEHILRLRIEAAQDISGELYGASIPIMGKSEGECNFYLFFPKEFLKKIAEILINDEKF

KEDDWCDLTKECANQIIGYAKNLLNDAKGDDEYKLGIPEYLGKVDFSEIVLDEALTYKFENCYFRIGYCK

>WP\_002854351.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>WP\_002854333.1 MULTISPECIES: flagellar motor protein MotB [Campylobacter]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QEKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQVALNLPSKVEFERGSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKAP

>WP\_002854302.1 MULTISPECIES: fumarate reductase iron-sulfur subunit [Campylobacter]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>WP\_002854278.1 MULTISPECIES: 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>WP\_002854245.1 MULTISPECIES: aspartate 1-decarboxylase [Campylobacter]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>WP\_002854234.1 MULTISPECIES: type III pantothenate kinase [Campylobacter]

MLLCDIGNSNANFLDDNKYFTLSIDQFLEFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYGVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>WP\_002854204.1 MULTISPECIES: tryptophan synthase subunit beta [Campylobacter]

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVVNLSGRGDKDMQMIRDYKKGVIYG

>WP\_002854193.1 MULTISPECIES: fumarate reductase flavoprotein subunit [Campylobacter]

MNIQYSDALVIGGGLAGLRAAIEVAKSGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRMEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGPKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>WP\_002854112.1 MULTISPECIES: acetyl-CoA carboxylase biotin carboxylase subunit [Campylobacter]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPSQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAEDRNKAIAKMKVALDELLISGIKTTKDF

HLSMMENPDFINNNYDTNYLARH

>WP\_002853757.1 MULTISPECIES: membrane protein [Campylobacter]

MIEFILRDMFFAAVAGFGFAYACNPPLKTLILSALLAAIAHGLRFTLVEYFHFQTLAIATFVASFCIGCL

GIALAKIIKTPAEIIAFPALIPMIPGIYAYKAILYLISFIRSDDLKAKSEFLVQFFDYFFTTVSVTLALA

IGVSVTLLIFFEQSFMMTRHAKKH

>WP\_002853697.1 MULTISPECIES: cation transporter [Campylobacter]

MSLQKKATLVASLCAIVLALVKFIVGLTSGSVAVLSSAIDSLMDFAISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGIFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALVLIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICTLISNNPEIISYHELKTRKTPSCNYLSVHLVFCPIISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>WP\_002853680.1 MULTISPECIES: non-canonical purine NTP pyrophosphatase [Campylobacter]

MKIILATSNKHKVLELKEILKDFEIYAFDEVLMPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFKQSKAYYVAAIAMVGLMGEFSTHGTM

HGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILNKG

>WP\_002853654.1 MULTISPECIES: rod shape-determining protein RodA [Campylobacter]

MFRLDRRILTHFDYMQPILFLPIILISFFLIFEANPFLAEKQFVYACVGLFAFMVFFFFPIRKFIWIIPV

AYWINIFLLLSVDIFGVEKLGAKRWLEIPFTHFTIQPSEIFKPSFILMLAYLIYQNPPPKNGYKLKQFIK

LSFYIILPFLLIAKEPDLGSAMVLLLVGFGVLFIMGVHYKIWLSIVIAISVSSPIIYTHLLKPYQKQRIH

DFISEKPSYQVAQSMIAIGNGGLTGKSQDEATQTHFKFLPISTSDFIFAYMIERFGFIGGLTLIIFYILL

IFHLLSLNYKLKDDYFARVAINCVALFIFIYAAVNISMTIGFAPVVGIPLPFFSYGGSSFTIFMIFFGIL

QHLITFRYFWTDIKAK

>WP\_002853613.1 MULTISPECIES: peptide-methionine (R)-S-oxide reductase [Campylobacter]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIVCANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>WP\_002853464.1 MULTISPECIES: DNA-directed RNA polymerase subunit omega [Campylobacter]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>WP\_002853455.1 MULTISPECIES: 30S ribosomal protein S2 [Campylobacter]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>WP\_002853446.1 MULTISPECIES: recombination protein RecR [Campylobacter]

MVKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERNKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQIILKLNISELIFALTHSIN

SDATIFFIEDKFKGLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>WP\_002853389.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIEAIDLQSALTEASRSLECSVMDLEYEIIQHPRKGFFGFGRKKAIIEAKAKKRILKKNPKKEFTSSKN

HKPETHEPKQENKIEIKNEKNKSQKEKYTVKSDEIFDSFHRESKGVRNTQDILDEIRIQLVKLLESSQFK

IELSELRMYDEDCVLIRLDGEDAALMIGKEAHRYKAISYLLHNWINLKYNLLVRLEIAQFLENQIQGMQL

YLQSVIEKIKIHGRGQTKPLDGVLIKIALEQLRAEFPDKYVGIKQNNDQRFVVINDFFKKDE

>WP\_002853356.1 MULTISPECIES: membrane protein [Campylobacter]

MEFLAFIFLIIIFLFVVFIIVTRYEKKIKLLNQNIQNMKEDIADLKETTQKNRSLIEKNRSNIENIIK

>WP\_002853351.1 MULTISPECIES: phosphoribosylformylglycinamidine synthase subunit PurL [Campylobacter]

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>WP\_002853332.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MNESVGFVEHLRQILTSWGLYDENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALLIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYAPAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTR

>WP\_002853290.1 MULTISPECIES: amino acid ABC transporter permease [Campylobacter]

MENVFNAQNIEFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>WP\_002853247.1 MULTISPECIES: membrane protein [Campylobacter]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>WP\_002853153.1 MULTISPECIES: ribonuclease HII [Campylobacter]

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKQLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDALGLSTCLKKGLKLIKKHFKTENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDRVMNFLAKDFPCYEFEKNKAYGTKAHKEFIAKFGICKLHRKSFKLL

>WP\_002853032.1 MULTISPECIES: 30S ribosomal protein S18 [Campylobacter]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>WP\_002853004.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKTHRYQNKTQTEITIK

>WP\_002852982.1 MULTISPECIES: flagellar assembly factor FliW [Campylobacter]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>WP\_002852972.1 MULTISPECIES: lipoprotein [Campylobacter]

MKKIYFMLAIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>WP\_002852961.1 MULTISPECIES: lipoprotein [Campylobacter]

MKKGIFLLVFLSVFFSACSTKNDEGLYNLSASEWYKQIIKDLQDKDLEKADDHYNGMASEHVADPLLETT

LIILAQAHMDEEEYKLAEFYLDEYNKKFGNSRNADYIRYLKIKAKFDAFAVPNRNQALMLESQKEIDTFL

KDYPYTEYEPLVQTMLTKFNLAVFYLNSTIENLYQRIGHDESAQIYKQRLQESEFYQQSIIKPELPWYRS

IFERF

>WP\_002852919.1 MULTISPECIES: membrane protein [Campylobacter]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>WP\_002852861.1 MULTISPECIES: SsrA-binding protein [Campylobacter]

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKNEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>WP\_002852854.1 MULTISPECIES: carbon storage regulator [Campylobacter]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>WP\_002852807.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MELLRAENLSHSFDYPLFEGLNLTLNTKDCIAIQGSSGCGKSTLLHILSSLLIPKKGEVFFKGSSLYQID

ENERLKIRRYDFGIIFQTHYLFKGFSALENIELASVLSGQDLDEKILKRLGIDTLLHQKIGKLSGGQQQR

VSIARVLCKKPKIIFADEATGNLDFDNAKNVIELLISYVKENDAALFFVTHDSKLASFCDKTYTINANGI

C

>WP\_002852685.1 MULTISPECIES: lipoprotein [Campylobacter]

MKKILIFCIGLFLGACGYIPTSKIANNIFDEKVYVNVELSQQDPKNSIYVADTLKEMVISKLGRKLALKH

EADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYNFEISPNSIISDSAR

YEAIRAASSEAFDEFISVIAIKGQKRDSKY

>WP\_002852641.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMANKTPKN

>WP\_002852609.1 MULTISPECIES: transcriptional regulator [Campylobacter]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>WP\_002852579.1 MULTISPECIES: 30S ribosomal protein S15 [Campylobacter]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>WP\_002852565.1 MULTISPECIES: isoprenyl transferase [Campylobacter]

MNELKHLAVVMDGNRRWARAKGFLAKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDRCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCVNLAISYGARDEIIRA

AKRVIEKKLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRII

KEFRNRERTFGK

>WP\_002852485.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIVLMFFLFSISLFGADFITLKEYSKMLYENPRGISCKECHGADGSEQILGYYMKNGIKTAYKVPSIQN

LSFENFKNSLNQSKDAKSIMPNYSLTNDEIVTLYNYIKQFSKEEK

>WP\_002852476.1 MULTISPECIES: 7-alpha-hydroxysteroid dehydrogenase [Campylobacter]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNAQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDVDFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRVNVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>WP\_002852451.1 MULTISPECIES: threonine synthase [Campylobacter]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKDEILALFDLKNSDEKVFEARNIKKEILDWMQK

>WP\_002852435.1 MULTISPECIES: oxidoreductase [Campylobacter]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSYKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGAIETIEKNENAENVRYYGSVFNQFS

>WP\_002852414.1 MULTISPECIES: membrane protein [Campylobacter]

MSNILKEEKNHLENSNSKRQKIIRKTLEAADGLSLGISMVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWG

ISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKNK

>WP\_002852274.1 MULTISPECIES: 30S ribosomal protein S16 [Campylobacter]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>WP\_002852256.1 MULTISPECIES: non-heme ferritin [Campylobacter]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHAKKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALSRKK

>WP\_002852227.1 MULTISPECIES: RlpA-like lipoprotein [Campylobacter]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>WP\_002852071.1 MULTISPECIES: cell division protein FtsZ [Campylobacter]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKVSGG

YDEEIMAQIETPTFLRRQMD

>WP\_002852021.1 MULTISPECIES: cytolethal distending toxin subunit A [Campylobacter]

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKDNFDQQWFLTTPPFTAKPLYRQGEVR

>WP\_002852005.1 MULTISPECIES: ATP synthase subunit beta [Campylobacter]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>WP\_002851996.1 MULTISPECIES: membrane protein [Campylobacter]

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>WP\_002851909.1 MULTISPECIES: homoserine kinase [Campylobacter]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>WP\_002851907.1 MULTISPECIES: L-lactate permease [Campylobacter]

MEQILTWQQIYDPFSNIWLSALVAFLPILCFLVCLVVLKLKGYQAGFLTVILATLVALFAYKMPWNLVGA

SFIQGFTNGMWPIAWIIIAAIFLYKLSIKSGSFEIIKKSVMSITPDHRIQVILIGFCFGSFLEGAIGFGG

PVAITAALLVGLGLRPLQAAGLCLIANTAPVAFGAVGIPIIAMANLVGIEQHSVSAMVGRMLVPLSLTIP

FFIVFLMDGFKGIKETFPAILVAALSFTTTQFLSSNHLGAELPDIISAVVSLAVTTVFLKFWKPKNIFRF

DNESNFTQDNTLSFNQILKAWSPFILLIVCIIIWTQPWFKALFDKDGILSYTSITLQFSNITTGILSPSI

TGIGEAKPLSLALGVDLINGKTVAQAGTAILLAAFLTIAILKIKAEDAAECFWVTLKEMAIPCITIGLVV

AFAFISKNSGMSTTLGLAFAHTGDAFSFFSPIIGWIGVFLTGSDTSANLLFGTLQQVSAQKLGISEALFL

AANSVGGVVGKMISPQSIAIACAAVGLVGKESDLFKFTLKYSVAFIILIGIWTCIIAFFLQGIIPEVIVK

>WP\_002851896.1 MULTISPECIES: amidophosphoribosyltransferase [Campylobacter]

MCAVVGVINSKNASTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENVVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNPMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>WP\_002851861.1 MULTISPECIES: ATP synthase subunit delta [Campylobacter]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>WP\_002851769.1 MULTISPECIES: glutamate 5-kinase [Campylobacter]

MKRIVVKVGSHVISEENTLSFERLKNLVAFLAKLMEKYEVILVTSAAISAGHTKLDIDRKNLINKQVLAA

IGQPFLISVYNELLAKFNKLGGQILLTGKDFDSRKATKHAKNAIDMMINLGILPIINENDATAIEEIVFG

DNDSLSAYATHFFDADLLVILSDIDGFYDKNPSEFSDAKRLEKITHIKEEWLQATIKTGSEHGTGGIVTK

LKAAKFLLEHNKKMFLASGFDLSVAKTFLLEDKQIGGTLFE

>WP\_002851754.1 MULTISPECIES: 4-hydroxy-tetrahydrodipicolinate reductase [Campylobacter]

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>WP\_002851752.1 MULTISPECIES: ATP synthase epsilon chain [Campylobacter]

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>WP\_002851738.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDNLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQVKKVLAELSSLVDA

INANYVSKNELNDANLSVKTITPSVVVSTTDSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYKQKNYNNAIVYYKKSSSLSTKGDYFPKLLYHTAI

SLDKTGDTKTANGFYKALKTNYPNSPEAKASPNRK

>WP\_002851731.1 MULTISPECIES: 50S ribosomal protein L20 [Campylobacter]

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>WP\_002851726.1 MULTISPECIES: translation initiation factor IF-3 [Campylobacter]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>WP\_002851715.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSDDVLYLVFIIVLLIAMLAYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGVKDDSEEDEDYKTSL

LKEEIMIELDKQISSKITPVLRTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLRIGTGNVELVLKFKKLIK

>WP\_002851710.1 MULTISPECIES: flagellar motor switch protein FliM [Campylobacter]

MAEILSQEEIDALLEVVDDNTDTPIASNSKDEKDERNIVVYDFKRPNRVSKEQLRTIKGIHDKLARNLAS

QISSMMRSIVETKLHSVDQMTYGEFLMSLPSPTSFNVFSIKPLDGNCVLEINPSIAFPMIDRLLGGQGDS

YEASRELTDIELNLLDSILRIIMQRLKESWATVTEIYPSIEAKESSPNVVQIVSQNEIVIMVVMEIIIGN

SSGMVNICYPVVHLESILSRLANRDIMMGETSAKKSRNKELKTLIGRAEVVYEAILGKTLINVHEFLELK

QGDILRLDREADDKAIVSIDKKDVFLAQIGLHRFRKSIKILELIRTDKDEIKEILEKYEEERKAKASVYD

EPEEEDEEI

>WP\_002851686.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIYLAQTDTTVGFLSKNLEEINALKGRDKNQPCLITSAKFCELKSLARIPKSFKNLVRRSKKTTFIYPNN

QAIRIVKECKHANFLSKNGYFYSSSANKHGKEFDEEWARSVADIILDEKFFENIPSKILKLSKNKMIKIR

>WP\_002851681.1 MULTISPECIES: F0F1 ATP synthase subunit B [Campylobacter]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKASAAAALITAKKEAEILVQNIKKETQDELDLLQKHFEEQKDYEFRKMEKEL

VSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>WP\_002851662.1 MULTISPECIES: superoxide dismutase [Fe] [Campylobacter]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>WP\_002851635.1 MULTISPECIES: membrane protein [Campylobacter]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNVNIWVMIFSWILIFALAIFHFVCFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>WP\_002851603.1 MULTISPECIES: 50S ribosomal protein L31 [Campylobacter]

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>WP\_002851549.1 MULTISPECIES: 30S ribosomal protein S17 [Campylobacter]

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>WP\_002851461.1 MULTISPECIES: biotin transporter BioY [Campylobacter]

MLELIGELSLQNYMGEWLEIARKPAFFQKSCLNSKAKYELKYKNGIPYVEIENFCSKKNEISSIKGKAKI

VSNRQLAVRFNIFMNLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILARNIIDEKNIKELLNIAKQRGFD

ISDVVFDKY

>WP\_002851457.1 MULTISPECIES: LamB/YcsF family protein [Campylobacter]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>WP\_002851456.1 MULTISPECIES: NADH-quinone oxidoreductase subunit I [Campylobacter]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>WP\_002851428.1 MULTISPECIES: ATP-binding protein [Campylobacter]

MNKYKFVKFQVKNFRSLLDITLNIDNNNINTICGENNIGKTNFLRALNLFFNHNNGVEYNQNEDRPYHIQ

KGSTGGRKTELIGYFTKNNVTHILKVEFHKDKIVYILNGKMVEWKVARDIVESFKLLFIEASNVNMPSVI

SAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDIEKDINIYLKQMLDFDNTLKDKEIKIRFAEF

EKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQYITDKITTDIIWAIDEPEAFLQPKLQKKIM

EIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKEEKIYARKKGRVFQEINTKPIYIGTAFEKLS

VIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILNLSMPNIIHSGGATKIAGFLEYFNNQCSYTS

FKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKRYGESIQENNRDIWEIEDFMPIKIIVDAVNI

ILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRNEEKERFILNTESRKKEICQNAFRAREKYTK

NDLEDYHVDFMNELIDSFNKVDLIKKDN

>WP\_002851421.1 MULTISPECIES: UTP--glucose-1-phosphate uridylyltransferase [Campylobacter]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQISGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRPLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEENLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTKAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFYEKSKC

>WP\_002851392.1 MULTISPECIES: transcriptional regulator [Campylobacter]

MKKYHSLCPIETTLNLIGNKWKILIIRDLLQGTKRFGELRKSISFTKNQNISQNVLTQNLRELEEAKLIK

RKVYAEVPPKVEYSLTSLGNSLESILKSLENWGNSYKNIV

>WP\_002851370.1 MULTISPECIES: membrane protein [Campylobacter]

MQERIKELELRYKYFLLKKYLKYLLLIILISVIAFCFFVLMQKYNKQKNIYLQAIEHKKHLEQKILQAQI

LQEKNKISREKLYKELEEVKAVQENTHISKIEIDSKILNISDLKKSFYQNPSYEKALNLAKKYFDIKAYQ

KTIFWALKANELDKQKQDSWLIFAQAKRALGEEKEAQSALDAYINYYGLMELDGK

>WP\_002851335.1 MULTISPECIES: tungsten ABC transporter substrate-binding protein [Campylobacter]

MKKIISLALALALSASAAELKMATTTSTDNTGLLDALKPLYEKESGNTLKWVAVGTGAALKMGEDCNADV

LFVHSPKAEKEFMKKGFGVDRTPVMYNDFIIIADKSLASKFKGKNLKESLELIKNEKLTFISRGDKSGTD

NKEKSLWKNLGGVPEKQSWYQQSGQGMLASIKIAEEKKGVILTDRGTYIKYEANEKGKPNLVIVNEGDDS

LKNFYSVIATNPKHCKNVNYTEASKFIKWVTSDKTLNFIADFKLLNKPLFVIDAKTRKD

>WP\_002851306.1 MULTISPECIES: cytochrome CBB3 [Campylobacter]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWAIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTANENLV

AKGKEAYATCAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>WP\_002851302.1 MULTISPECIES: 50S ribosomal protein L6 [Campylobacter]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>WP\_002851292.1 MULTISPECIES: 50S ribosomal protein L15 [Campylobacter]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>WP\_002851277.1 MULTISPECIES: ribonuclease HI [Campylobacter]

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>WP\_002851264.1 MULTISPECIES: formate dehydrogenase iron-sulfur subunit [Campylobacter]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSEKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>WP\_002851150.1 MULTISPECIES: lipoprotein [Campylobacter]

MLETKKSFWPYGILLSLLAIIIACIVTIFIASHHPVYEDDFYFDSYQNVENNYNQIQKQQVNFDKFFKVN

FQNDKITFIGKRKIPSYEVDQNSYVANFKISALQNINSNDLKVQVLLTRPFTKNFDQKLEGQVKNGILSI

ALPKLDKGRWELKLKFYANQETVGFFSYELNAQ

>WP\_002851148.1 MULTISPECIES: allophanate hydrolase [Campylobacter]

MFSVHFSGSKALLLRFEQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLAEQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFDIQEQVAKKVYQKEIYEYKNH

>WP\_002851098.1 MULTISPECIES: transcription termination/antitermination protein NusG [Campylobacter]

MSTHKWYAIQTYAGSEMAVKRAIENLVKDNGIEEQLKEIVVPTEDVIEFKNGKEKISERSLYSGYVFALL

DLNTELWHRIQSLPKVGRFIGESKKPTPLTEKDINLILEKVHNRAAPKPKISFEEGENVRITEGPFANFT

AIVEEYDMVRGLLKLNVSIFGRSTPVEILYSQVEKII

>WP\_002868834.1 HugZ family heme oxygenase [Campylobacter jejuni]

MNFESIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNTNGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KVNPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVTHVGASGNPHKFPHKH

>WP\_002858852.1 MULTISPECIES: tRNA(Ile)-lysidine synthetase [Campylobacter]

MQIKDEILALLKRGKNLLAFSYGSDSSVLFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKHAPKFQSNFEKKARDFRYDFFEKICLEQGYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQECE

KRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLD

EDRKKLYDFENIKEIQGLLICPKNESLIARAVKMKGLLLSTAQRKELLKGDCVLGGKIALAYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPRLLRAYLYNHKIDISSLSF

>WP\_009882284.1 MATE family efflux transporter [Campylobacter jejuni]

MSSIFSTLSPFRLFVKCAVPNVISMAFISFYYIVDGIFVGKYLGSDALAALALIIPFIMMSFALADMIAI

GSAVQISMHLGLGKKNLTRKIFSSSMLIIFIISCFIGILEYFLGPVLIDCLNVSDEIKTMTKECMFVFAL

FAPFTMLSFALDNYLRICGKTAYSMVMNVIIALSNIVLDYIFIVELGWGLFSAALATCLGLVLGGIFGIF

PFLFQNLELKISSLYMNLKIFKNILYNGSSEFFGNISGSLYSIFANFVLLKISDTQAVAAFSIVLYIDSF

IIMLIIAIGDAMQPALSYNYAKKDFSRIKAIIKVVFFAGGFLSLFSIVLILIFGENLITLFTKENNQEFK

TFAYTALMLFAFNYFFAWFNVLSGSFLTAFNKASFSLVLSLAQNLFIPLFFLLFLSCFMGLNGVWLSPFF

AEFCVLILAWIFLKRIFKDLSL

>WP\_024088096.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKEVKGGYITYLKRLSDNEVIAFAKPDWNLELTLFQDSNGDQYYWNREGLVRFGGMCGIETTNCLVNGKH

SYINQKRLWETMSIVGDDPYRNFLGYTVKRNIGISNLGKRFVYFSYGVAVINEQSGSWYRVKSSPVLNNY

RVVKEISSNYKDFLERYLGGYSIK

>WP\_011815226.1 MULTISPECIES: hypothetical protein [Campylobacter]

MENKNFKKTIDLNVIIPKFLNSLNSIILNKVNQKLKFLNFYFKKLQTESVANRNRNYDIMF

>WP\_011187239.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSIKNLSVEELAQELETSNHEKLIKALFLFEKNSSMEDLNSDQIEIILDEVYEFYINHKSISSFLQEDIN

QALDKAIDKELCKKQEKSFER

>WP\_011187236.1 MULTISPECIES: conjugal transfer protein TraC [Campylobacter]

MKKRLLSLILISPIFAFGAGGIDKVNTFMQNLSIALYALGGVLLTIALMWGASKIMYQGQTLREVAPVFI

GGVIFGSASAIAGYIIT

>WP\_011187235.1 MULTISPECIES: hypothetical protein [Campylobacter]

MPKRNTIDTITLGLFSDEDVSIICEDTIKLERGSVAVLSGNSEVGKSFLALKVCANAINDGLKPFFWSVE

DKNKAILGRIKNIESFYSFNTAELEFSNELPKINKEPINCLKEELNELADCDLIVLDTFSAFFSTLGFKD

QNNQNDVQNFFNILTDIAKSNNQAILLLHHLDKKGESLMGSSVIINAPRLVYKLSFEKGEDKNSTTYRLL

EVLKDNNNINAGEFQKTIKVLQNSSIDEPSIVNLRANSIDSNTLEIINKKDISAVSVNELAKGYVTMNEN

RGVFYLSSRKLTDTNFYKVFKENDNKIDFKMTGANDSSYVISLKNSLLTQTHRNILDALFLYIKKNVDTS

VIKKYQENFWDMEVRLEPYKFLKQYLNKNSNNYSWLKQKFTEISRFAYDLAFTQNVEDKDKKTITQRDKG

ILMFDSVERITKENGTIVSVFVLTVRREYIKKLETESTLSYDDDLSKILINLNSLVAQDLIRFLTSFPDK

KILSYSEFCEIKAYRFYKESSIISKQKKEIVKLKDKLIEFGINVYGKGVEFANYDDEFFHNKYKNENDLF

FIYESNNRVKRYIKRSDPMNQLNTKSNKFLLQKSLFD

>WP\_011187234.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKNTIKLALLGAVITGVFSACSSEPKTVQYYEDPKNATELEAKIKECDKNANSAKTDTECANAYKANYSK

SFQKPRESAMEFFKNNK

>WP\_011187233.1 MULTISPECIES: hypothetical protein [Campylobacter]

MPQKRIYLYVPFKDKEKAKSLGAMWDDKEKKWFAPKTLDKNIFSQWLYPHQNKEFSFDENEVLTAFKSAL

ENQGLIIEGLPIMDGKIHRVKTTNDKGRELSGAYNGFLDDYPAGFMQNFKTGIKENWKMPIEKNQSNNIK

NSQKLHEQIKKDQELREKEILTLQEKTALKLENEYNNARWANSNHAYLKKKGFDENFYLKQDNKGSLLIP

LKDENGKLWSVQRIFPNGDKIIGVIKTQEEKDQGVEYLAKKQGCFHIIGAKSLEHCKEFIITEGFATAAT

IYKALNKPVIMGVDAGNLSKIVETLKNKFQNTPITLIADNDKKRELKGLSNVGVETAKEIQQKFSDIKVI

IPKISNQEAEQGISDFNDIFLNKGIDEVKKQLNFIDFHNKLKSFKSMEKTQPEKEITR

>WP\_011117569.1 MULTISPECIES: hypothetical protein [Campylobacter]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>WP\_002869194.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKVDNFLNTYSMNSALLDRAAKARSLESSIKINDNDIVTKTKEDEALKEQTDAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFLKERG

>WP\_002868969.1 MULTISPECIES: hypothetical protein [Campylobacter]

MERKIYNIKRGWLFKTKRDFAKRWNIEIEDRFYERCITLIGDIINPKQLSELEQKIFLIVGEIYKGEKKF

SGVISIFNHFNGLHDSYFAFHETALYSLLMQLKDVKFLEALENIINFCKKDKDDEFLLTFNDIVLMSNKP

FRLYYNDKYEFHPSNIEIFDQVLINDVLEFLKDYPKAKKQLSEALKIFITKENYRDVVDKTRLSLELFLT

QLLNNEKSLENQKDEILRYFGNLLDENFKKMFLEILNYYQRLNNNRAKHCKSNGQEFKDYEVEFLIYLVG

NFLQLFMTFNKFKK

>WP\_002859730.1 MULTISPECIES: 7-cyano-7-deazaguanine synthase [Campylobacter]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>WP\_002856616.1 MULTISPECIES: NAD-dependent deacetylase [Campylobacter]

MKNIMILSGAGLSAPSGLKTFRDNDGLWEEYDVMEVCSATGFRKNPKKVLDFYDARRAQLQNVKPNHAHE

KIAQLKEKWGKNLFVITQNVDDLLERAGCKDVVHLHGFLPELRCLKCEGIFNIGYEKIIDKQCPKCKSKD

LRHNIVMFEEQAPAYATLYSLLNQTSLFISVGTSGAVLPVGRYASMCEKSILNIYEKDANLERYFDKIYT

EDIISAIDKIALDIENFMKDGNV

>WP\_002855371.1 MULTISPECIES: molybdenum cofactor biosynthesis protein MoaE [Campylobacter]

MEHFTLYQGSLDIPKIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGISLLFAHSIGDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYAKERSTKL

CGAGLLKG

>WP\_002854708.1 MULTISPECIES: undecaprenyl-diphosphatase [Campylobacter]

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>WP\_002854522.1 MULTISPECIES: membrane protein [Campylobacter]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIILFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSSGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIAAQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSAANMN

>WP\_002854349.1 MULTISPECIES: malonyl-[acyl-carrier protein] O-methyltransferase BioC [Campylobacter]

MNFLKAKDYQKHAKVQDLMGLKLCEILKNLEISHFKKVFEFGCGRGEFSDKLSKIITFDEYLKNDILDYP

DNLNVEIFDMNTLATQILSKQKFDLITSNASLQWLDLKQVLPTLANMLNEKGILLLSTFGKMNLKEIKQS

TGLGLKYFSTKELEQIFKPYFSDIKITEEIVNLEFQNALEVFKHLKLSGVNSLGFYRLNKQFLKEFEEKF

QNKLTYHPIFILCKKDTK

>WP\_002852633.1 MULTISPECIES: phosphopantetheine adenylyltransferase [Campylobacter]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>WP\_002851856.1 MULTISPECIES: 2-oxoglutarate translocator [Campylobacter]

MALLGLSLVLISGVLTFGEVLAEKAAWNTLVWFSALVMMATLLGKLGVTQFLAEA

>WP\_002851459.1 MULTISPECIES: 30S ribosomal protein S9 [Campylobacter]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>WP\_002851156.1 MULTISPECIES: carbamoyl-phosphate synthase small chain [Campylobacter]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNASFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>WP\_002869256.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>WP\_002868851.1 RNA polymerase sigma-54 factor [Campylobacter jejuni]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQDSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKIIECLNEEGYFEYDEEFLKEYSLEEIERVRA

RFKFLDPVGVGAKDYKEAFLFALENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALTVLKRFSTPPF

LEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDALAMRKATLYK

IGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAFALDEEGETS

NVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKLYELEG

>WP\_002781802.1 MULTISPECIES: UDP-4-amino-4,6-dideoxy-N-acetyl-beta-L-altrosamine N-acetyltransferase [Campylobacter]

MIKLKNFTELNSQEIELIFKWRNHPDINQFMKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAKPNLKGVGQILMNEIIKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDK

DFYHICLKQSDCKALPS

>WP\_011187223.1 MULTISPECIES: hypothetical protein [Campylobacter]

MYSYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQPNEKFIFKCPNCSRKNRKVFYAF

>WP\_002851566.1 MULTISPECIES: 50S ribosomal protein L29 [Proteobacteria]

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>WP\_011187222.1 MULTISPECIES: hypothetical protein [Campylobacter]

MAKYTKRRDKRGYEWKSAYREKEALMLERGYPEVSPHDFYRELFPAGSLQQEPEDGKGNIIATQIRPSGK

GRTRQWVIDDSLKMLDKVIGDRFGLIPPISFYGKSHTKENAHELFAVVVDVDYVGKQQLKNLLKQFGNGV

QLRPTYLVSSGKGVHLYYFLQEPVQLYRNREEVLAELKEAFIRRLWNDTSSIRPDSPDITGIYQGFRCVG

SQSKLGVDFPVKAYKLSENRYTLEDIKASIPSCKVDLAPLYEKPRRKSTVTLEEAKELYPEWYEKRIVQG

EPKQKSKKQGGTWVCNEALYEWWKRKITEEVKAGGRYFSIMALCSYGLKCGISEQKIRRDAYAFLDHLES

LTEDEDNHFSRADVKDGIKKPKMIYFYGILKY

>WP\_002868766.1 ATP synthase subunit gamma [Campylobacter jejuni]

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>WP\_002777340.1 MULTISPECIES: signal transduction histidine kinase [Campylobacter]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYTMGEVLNKPHNIVRHEEMPKTVFKYLWDYMKEGK

EIFAYVKNKTKDNNYYWVFANVTPSIDVNNNIIGYYSVRRMPNKSAISTIESLYSDLLRAEQQQGLNKGV

EMLKNFCKDADKTYNELIFSLQEAK

>WP\_002869349.1 MFS transporter [Campylobacter jejuni]

MTKQEIQKLDTNFLGHPKPLFSLSMVELWERFAFYGIRSLLVLFMATTISKGGLGISTEYASAIYGIFAG

CLYLAALPGGWITDNYLGQKKALFLGSFIIALGHISIALSILSTPIFFLGLTFIVIGTGFFKTSASVTVG

MLYKQNDTRCDTGYTIFYIGINIGAFIAPLICGFIQAKWNYHLGFGIGGLGMLISLLILYFKAIPELEEF

HKNCTLRQNWEQPFKKSKNLTLILSISLLSIIGFFLIFINLADINPIILSKKLLIVILLCLVIYFIYLFV

FKTLNKREKQQLTILIVLFFVATFFGALLNKNLPLIIFLRKILQIEIFLIGKFQQTGFNLLIQFLSSYLL

L

>WP\_002869338.1 MFS transporter [Campylobacter jejuni]

MLNNVLPLSFIVGTRFFGLFIVLPVLSLYALKLEGANEFLVGLLVGVYALTQMILQMPFGILSDKIGRKK

TMLIGLIIFIIGSLICSFAENIYTMLLGRMLQGAGAIGAVATAMISDFITEENRGKAMAVMGSFIGLSFA

ASMVISPLMSAKWGLSSLFDLSAALSLLCIILLYTVVPKENKITHENEKTPFFHLIKQKNLALMNLTNFM

QKMLMSIAFLSIPIILVKHLGFASDKLWIVYSASMVAGFIAMGFAGSLGEKRGLAKQILLLGIVFFILSY

LFFAFSNSMDFFITAVVIFFIGFNLHEPIMQSCASKFCKVHEKGAALGLFNAFGYGGSFTGGIIGGIFLH

LDALNLLAIILVILALIWLVALFFLKNPADFKNLYLPLETPLNFSTFGENLGVVDIYKNSKNLVVKFDSK

LTNKEELEGKIKI

>WP\_002869297.1 23S rRNA (adenine(2503)-C(2))-methyltransferase RlmN [Campylobacter jejuni]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>WP\_002825806.1 MULTISPECIES: holo-ACP synthase [Campylobacter]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDEKNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>WP\_002872030.1 lipid-A-disaccharide synthase [Campylobacter jejuni]

MKTFLVCALEPSANLHLKEVLKAYKKDFGEFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELINLSFAQKINGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDEIKEFKNQEDINHTFSKKDDEKTIAFLPGSRRSEIRRLMPIFKE

LSQKFKGEKILCVPSFNLEKLEIYGDISEFKIESNTPKVLKKADFAFICSGTATLEAALVGTPFVLTYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>WP\_009881385.1 dihydroxy-acid dehydratase [Campylobacter jejuni]

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGVDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMVVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGEAVCFNSQDEAIKGI

IKGKVKKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSVGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEEEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>WP\_002869287.1 biotin synthase [Campylobacter jejuni]

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>WP\_002869186.1 peptide chain release factor 2 [Campylobacter jejuni]

MDNYEFSELLKTLKNKVGNIASIIKPENIQTRLKEIEELENSPSFWSDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDANELFDLANSENDTETLEALFNDASKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANTGEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>WP\_002869063.1 trigger factor [Campylobacter jejuni]

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>WP\_002868936.1 translation initiation factor IF-2 [Campylobacter jejuni]

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPEIAAAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENIKEQEKLNESEKKEPKKEEKLKQEVKKEELKIEKENAKEEEKQEIIDAHKPQSLASATLAKRRGL

VIVKKKKDEEEIQVKKEEVKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFL

DEHDFGDISLDDEDEVVLPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPSKKIEK

KEVEEVGSVAISKEIRVYEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEA

DEFDYVKDYEEETDEKDLVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRK

ITFIDTPGHEAFTAMRARGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDM

VKTQLAEMEIMPVEWGGSYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRG

AAATIIVQNGTLTVGSTVVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKE

AREYANKRHEYNRQKELSKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVN

IIHSGVGGITQSDIELASASENSIVLGFNIRPTGEVKERSKDKGVEIKTYNVIYNLLDDVKALLGGMMSP

IISEEQLGQAEIRQVINVPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKG

YECGVGIEGCDDMRVGDYIESYKEVEEQASL

>WP\_002860145.1 chromosomal replication initiator protein DnaA [Campylobacter jejuni]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

ASLKAKIEELKNKILVKSQS

>WP\_002856795.1 alanine racemase [Campylobacter jejuni]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>WP\_002837927.1 MULTISPECIES: elongation factor 4 [Campylobacter]

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>WP\_002831283.1 MULTISPECIES: uracil phosphoribosyltransferase [Campylobacter]

MKNIHCINHPLIEHKLGILRAKETKPFQFRMLIDEISSFLLFEASKDFSLKEIEISTPIQKTTVKKLDEK

IMICPILRAALGMLESVFKMIPDASVGFLGFVRNEETLKADFYFQKLPKDAKKRTAIVIDPMFATGGTAI

EACNFLKSQGVKKIKFISILAAPQGLKKFSQMHDDVEVFVACIDEGLNEKGYIIPGLGDAGDRVFNTL

>WP\_002781436.1 MULTISPECIES: translation initiation factor IF-1 [Campylobacter]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>WP\_011812789.1 flagellin A [Campylobacter jejuni]

MGFRINTNVAALNAKANSDLNAKSLDASLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAISNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQEFAINGVTIGKIEYKDGDGNGSLISAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSIQNQVTSTINNITVTQVNVKAAESQIRDVDFASESANYSKANILAQSGSYA

MAQANSSQQNVLRLLQ

>WP\_011812788.1 flagellin B [Campylobacter jejuni]

MGFRINTNIGALNAHANSVVNSNELDKSLSRLSSGLRINSAADDASGMAIADSLRSQAATLGQAINNGND

AIGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQDFAINGVVIGQINYKDGDNNGQLVSAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSVQNQLQVTINNITVTQVNVKAAESTIRDVDFASESANFSKYNILAQSGSYA

MSQANAVQQNVLKLLQ

>WP\_002822570.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDKNQEKEIISYMRELLNSNEKLDCGTAFKIAKKFNINIEKIGQLADENHMRIDNCELGQFGHLDFEKAK

IEVLKKIEPSLDEKRRIFCKDARDIAKEGCGLKSMRSALKTYKVDVKYCQLGCFKEKKGKQFIVRTKTWI

ENADGDLLFGRGKTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKL

TPRAMELMENYSILQKDIEEYANKRFKELFLKGKK

>WP\_009883057.1 NADH-quinone oxidoreductase subunit D [Campylobacter jejuni]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>WP\_009881794.1 UDP-3-O-[3-hydroxymyristoyl] N-acetylglucosamine deacetylase [Campylobacter jejuni]

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>WP\_002869384.1 MULTISPECIES: pseudaminic acid cytidylyltransferase [Campylobacter]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>WP\_002869075.1 UvrABC system protein C [Campylobacter jejuni]

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>WP\_002868865.1 S-ribosylhomocysteine lyase [Campylobacter jejuni]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>WP\_002855940.1 pseudaminic acid synthase [Campylobacter jejuni]

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>WP\_002854766.1 MULTISPECIES: 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase (flavodoxin) [Campylobacter]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>WP\_002851478.1 MULTISPECIES: 30S ribosomal protein S14 type Z [Campylobacter]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>WP\_002790573.1 MULTISPECIES: UDP-2,4-diacetamido-2,4,6-trideoxy-beta-L-altropyranose hydrolase [Campylobacter]

MKVLFRSDSSSQIGFGHIKRDLVLAKQYSDVSFACLPLEGSLIDEIPYPVYELDSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNPNLKKLQKFAKLHNNI

RLFIDHENIAKLMNESNKLIISASSLVNEALLLKANFKAICYVKNQESTATWLAKKGYEVEYKY

>WP\_002855429.1 MULTISPECIES: flagellar basal body protein FliL [Campylobacter]

MDEELENEETKKKKGGSLVIIIVILLFVLLLSIMGVIAWLISSSSSDESEVKEAPKEEAKADKPKVSAPT

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNSELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>WP\_002855210.1 MULTISPECIES: elongation factor P [Campylobacter]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>WP\_011271766.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKQEIYTSKFYISKRNGKEVCFKLDFEIKAFEENQKFYYVEIYAIIDYQYLKNEIAVIPNTNKNRNHWIL

RYDFNSWNFHSSIMLHSDYRSLGIGTFVINKMLEIALNYIPTARLSGKLSAVDEVKLENHIRRDKLYKNL

GFVFNENNIGFSINSISNLKIRKDFDYIQEVRIFDMCNQLAELQYLKAGNDKLLKIYKEDFYKEKSKNDT

LRARIKLMSFVLIALAVWIVYLLK

>WP\_011187232.1 MULTISPECIES: spore coat protein CotH [Campylobacter]

MSRSIRIFDDEIIAKKVFTKIENASKLPLNYINKNKDKYTKDIKTGKLVSKNMFRKNTEVVVKITSGSKN

SQALSKHLDYISRDGNVELITNDFDIYAGEDEILEVKRIFKNEGSPIPLYKEGAKEKRHTINMVFSMKEH

STTPKEKLQQAVITTLKRMYPNNFFVVAFHNDTDNPHCHVCLKVADKNGKRINPKKADLANLRAEFANAL

NELGIEAKATNKKQREVEINQEFSVKLNTNNEINQAPKIKMHYYQVMDFGEANYQFSTDKNAKKSYYVSY

KTKKGITTIWGQDLERVVRENKVLRGEYARFKIVGQEEYEIKRKAKINNKWQEVIKTLKKPIWEVSVIGR

EKDLKQINKAKTTKKYKIIQDKGVNNERDYTKQYRQRVLQELGNKSTIRRETAQERNSMRILSKQPMVHN

TKRTQMLLHINALNQLQQGKRGRTDNSLRWTSARNNEITRNG

>WP\_002864358.1 MULTISPECIES: C4-dicarboxylate ABC transporter [Campylobacter]

MFLPGIAAMLLMPLMLYFLSPLEIKSTPNASTFAKDKLKELVKMKNSEKIMLSVFVSLLLLWAGALGLFF

WNFS

>WP\_002852998.1 MULTISPECIES: adenylosuccinate lyase [Campylobacter]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLIFEQNNMLKPMLFIKIDFVAGRILMKLSSNEKLFITYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>WP\_002852001.1 MULTISPECIES: 3-dehydroquinate dehydratase [Campylobacter]

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKSLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>WP\_002851915.1 MULTISPECIES: preprotein translocase subunit SecG [Campylobacter]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLGY

LYNKASKDSLAEKIKVENNNTTIPSAPIVPTTPNTNSIAPSAPQLPSDVNSSK

>WP\_002851887.1 MULTISPECIES: carbonic anhydrase [Campylobacter]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>WP\_002851803.1 MULTISPECIES: 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase [Campylobacter]

MLKIQGVKHFEKSRFFPFFSQNIRSFKYLALIGLGSNIEPEKKRFDMLFRVMMDDKRFKILSTSPMLINE

AFGFKEQKDFTNAVMLIQTNLHARALLKVLLYYEVKFKRKRTFKNAPRTLDLDLLYFSQKVKRDKWCEVP

HKGAKERVSVILPLGMI

>WP\_002851758.1 MULTISPECIES: ribonucleotide-diphosphate reductase subunit beta [Campylobacter]

MQRKRIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVRKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>WP\_002793551.1 MULTISPECIES: 50S ribosomal protein L33 [Proteobacteria]

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTLHKEVKLKS

>WP\_011117579.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>WP\_011117570.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>WP\_002856866.1 MULTISPECIES: 2-oxoglutarate:acceptor oxidoreductase [Campylobacter]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKDTMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>WP\_002851453.1 MULTISPECIES: 50S ribosomal protein L5 [Campylobacter]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>WP\_002851353.1 MULTISPECIES: 30S ribosomal protein S8 [Campylobacter]

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>WP\_002856384.1 MULTISPECIES: 50S ribosomal protein L23 [Campylobacter]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>WP\_002851509.1 MULTISPECIES: 30S ribosomal protein S19 [Campylobacter]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>WP\_002851138.1 MULTISPECIES: 30S ribosomal protein S3 [Campylobacter]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>WP\_002815096.1 hypothetical protein [Campylobacter jejuni]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>WP\_002809290.1 hypothetical protein [Campylobacter jejuni]

MQAKLIFILLLGVLFFSACSTKNQGKYDEFFNNQTGWIPVNTQNKDLNKGTMDEK

>WP\_002804229.1 hypothetical protein [Campylobacter jejuni]

MHVPEKGKTFAGEVREETVAWSKDTYQLLKQAEQGKVKSYVQDIALAVLDCKETATSRETFIRLMNERGY

GVDWQDSHKYITYTDLAREQAGEKACKIRDNKLEKYYNMDFGKESMEHEFERNARTAEAEQSKRAASRVK

PTEPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQAERRRAEQEAHQRAEAERRAAEEQQRIAS

RRYIGRDWEPER

>WP\_032592775.1 hypothetical protein [Campylobacter jejuni]

MKGLEMQAKLIFILLLGVLFFSACSTKNQGKYDEFFNNQTGWIPVNTQNKDLNKGTMDEK

>WP\_010398003.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>WP\_024088192.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni]

MQINKYNNEDLIKLNKAITGGGHKGYFNYDEKSKDPKSPLNPWAFIRVKNEVITLKASLESILPAIQRGV

IGYNDCTDGSEEIILEFCKQYPSFIPIKYPYEIQIQNPKSEENKLYSYYNYVASFIPKDEWLIKIDVDHI

YDAKKLYKSFYIPKNKYDVVSYSRVDIHYFNDNFFLCKDNNGNILKEPGDCLLINNYNLKWKEVLIDRIN

NNWKKATKQSFSSNIHSLEQLKYKHRILFHTELNNYHFPFLKKHRAQDIYKYNWISIEEFKKFYLQNINH

KIEPSMISKETLKKIFLTLF

>WP\_024088151.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni]

MPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDDQKD

YFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSEKIY

KEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFYTTN

FSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYKNLA

NLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFLKQN

NINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSKSQI

LECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLDIIN

DMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKPCIN

CANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNKVYK

IDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYRILK

KFLFHRKEFFRDRKNKNKEKPYV

>WP\_024088119.1 hypothetical protein [Campylobacter jejuni]

MRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIERQEIERQEIERHKERNQFIYNDNIR

AKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKNDEQHFLFAEVDTGRDYYIKEGAEIIH

EEYNIMKNIKFKGKEK

>WP\_002856574.1 MULTISPECIES: 30S ribosomal protein S4 [Campylobacter]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>WP\_002854670.1 MULTISPECIES: flagellar motor switch protein FliG [Campylobacter]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQKLAEQGLVQTGDADEMIE

>WP\_002909884.1 MULTISPECIES: hypothetical protein [Bacteria]

MPEKGKTFAGEVREETVAWSKDTYQLLKQAEQGKVKSYVQDIALAVLDCKETATSRETFIRLMNERGYGV

DWQDSHKYITYTDLAREQAGEKACKIRDNKLEKYYNMDFGKESMEHEFERNARTAEAEQSKRAASRVKPT

EPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQAERRRAEQEAHQRAEAERRAAEEQQRIASRR

YIGRDWEPER

>WP\_002842899.1 MULTISPECIES: conjugal transfer protein TrbL [Campylobacter]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGSVLNPV

GRLAGWAGGKVAGKTVNTAKAGGKLAAKGTLASAKGGYSFAKKMYERARNAG

>WP\_002842869.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSDKELQKEILALENDVKQLEATIDVIKQRITHLKDIAWDRQSKKESSQMYKVLKEDKTHTRVKSNVGDI

KVDKDFMDKEIKKHLDNPNLRGMVTTQEMLSFPKVAKGVEANNEARGYTWQVKANDGNTLVYGSRKYETN

NEKIHRLATSHSKTEKNERQAEVGGRSHPHHPIFNDFNFRKSAENIISQQNKSTNDFKAKLEEFSTKKTN

AIESINKEFKR

>WP\_002842868.1 MULTISPECIES: single-stranded DNA-binding protein [Campylobacter]

MNNVNLIGYLGKDFEVGTTNSGRVYAKNSLAITKRWKNERGNEESSTTWIPIVLFGKSAESASTHIKKGS

QFACSGELSSNQYQDEDGNTRTMLTVIVSKFYWLGKKDKDDNGTQNPQVPPKEPNIDYENTNIESEETQV

F

>WP\_002842823.1 MULTISPECIES: molybdopterin adenylyltransferase [Campylobacter]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKCDLI

VTSGGTGPALRDVTPEATEAVCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIK

ECLEPVFPAIPYCIDLIEGAYIEANDEVIKVFRPKKKCQN

>WP\_002831611.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQAPRQESRYNDSAYHQHND

YYKKKKKESWLGELFDF

>WP\_002831077.1 MULTISPECIES: glutathionylspermidine synthase [Campylobacter]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANAYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLIPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANISIIKDGKTLHENVGPYGNNKAIYQEYVEFNSCE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>WP\_002826100.1 MULTISPECIES: leucyl/phenylalanyl-tRNA--protein transferase [Campylobacter]

MESSNLYSKLLNAPKNAPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCILIPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDTRSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVSIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>WP\_002824979.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRRVDLRKSKELFEDLAQIIKEAKQGEVLVVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVI

KKERV

>WP\_002824739.1 MULTISPECIES: flagellar motor switch protein FliN [Campylobacter]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>WP\_002822505.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRKILFASLLPIIALADCASLMAKYEAPEPESKTMKQVERWINKKVSDPADAAVLKECMIARAADNPNQV

SVAGK

>WP\_002819467.1 MULTISPECIES: membrane protein [Campylobacter]

MDILKLAIKDFLSLKFLKFALIPLIFSLILMLFLGVLGFSALLDYFNSLFSVGEDSFWAWFYALHFVQIL

ITIISFLFSGFIVVFASVFLALFITSFLTPFIAKEINQKYYHYDNTNEVSTLKTIFEIFKIFIKFIGILL

LCTLALFLPFINIFVYYLAFYYLFHKLLMIDVTSTILDKESFKNFHSDFSPLEFKFSTLCFYLLSSVPLL

GLFLQVFFVIFLTHLSYQRILKLKAKA

>WP\_002818959.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>WP\_002818956.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>WP\_002816248.1 MULTISPECIES: ATP-dependent dethiobiotin synthetase BioD [Campylobacter]

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>WP\_002815407.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>WP\_002812871.1 MULTISPECIES: CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase [Campylobacter]

MNLPNILAIFRMVLAPLLFFLLIHKFENIHQSWINYFAALTFSLAALSDFFDGYIARTWKQTTKLGGILD

PLADKMLVLAAFLGLLLTGKANEWVIYIILVREFFITGFRVVMISENLNVNASFAGKLKTAFQMTAIGFL

IMEWIGGEILLYIALILTLYSGFEYIYTYIKAQKKGEK

>WP\_002812868.1 MULTISPECIES: 30S ribosomal protein S6 [Campylobacter]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>WP\_002809287.1 MULTISPECIES: conjugal transfer protein TraJ [Campylobacter]

MKNEFNTAIDYEASFRYLIEKSNKRAWLIAFISIFIAIISIIAVVLLTPLKTIEPYVIRVDNTTGMVDIL

TMLDEKEIKANEALDKYFISTYVKAREGYYYDLLNQDYLLTQLMSSEKVANEYRALYEGDNARDQILKNS

NEVSVQILSIVLGESNGVKTATVRAIITTKNLTSKGTTQATKVITLSYDYILAKASEENRFLNPLGFKVL

TYRIDDEVAQ

>WP\_002809120.1 MULTISPECIES: type IV secretion system protein VirB10 [Campylobacter]

MQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEEVQKEDNK

DLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGFGNNGTGN

REEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGCALKTRLV

SSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIPVYSGATD

ELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIANTALEKM

IDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>WP\_002809115.1 MULTISPECIES: sodium:calcium antiporter [Campylobacter]

MQNNKSIQMIFLAIASFILTYLITPIVFFFLNKVKIMKAIEIYNINFTLQAISNGYPKIWLSLGITFGIC

FVVFSVLVLSLKAKKSQFGEARFANFNEIKKMNLFSDNGIIIGKYKGKILRFSGQQFVALGAPTRSGKGV

GIVIPNLLEWRESAVVQDIKQECFDYTSKYRKEILGQEVYLFNPFSRQTHRYNPLTYIDMSDKEHCDSQL

MDLGNILYPQDGDSTSKFFNGLAQNLFIGLCYLWRDLQLTDYGKEFQSAFDINVGEFNFYNILQLSKGFS

LKNEGKTLKGFDDTYNFLSYCEVLDEATIRRLETYFNINSDATKSGVMSSFNAPLVPFESETLRLSTETS

DFDLRDLRKKKMTIYIGITPDQLANAQFILNIFWSQLILLNTKELPQSNKDLKYTCLMVMDEFTAPGRIP

IYQSAISFMAGYWLRSLMIYQSNSQLETQPPLGYGKEGAKTLLTNHACQIFYAPREQEDAEAISRILGNT

TFKTKSRSINTGNNGGGSHSISEASRALMLPQELREMPFENELITIDSGKPILCNKAFYYSDSYFMDKFK

AVSKSLSTIRKIPSRKQLEDAILKGECKVKIQIIGENNDKKIA

>WP\_002809113.1 MULTISPECIES: cag pathogenicity island protein [Campylobacter]

MIKKSLDNLVIMALVFIMVGCSTAPKPKELDDNSALSINNSILEKKYSFVPKDPYLSGFNWTYHIVVEKK

TIDDDFIKNDLITKTFLLAHNSTKIILVGRKDLIEQYKQYFEKNQVLAPIELQPVNPIERDFNKVNILFF

NKTNF

>WP\_002809111.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKT

YGFRINPELTNSCKLLASSKYTDYHLKYTCDKKFYEQKDWERGYELKEVSQEIYNALPVSQREQGEKLTP

ISYGEFIKLPANKRKQEGFGKYYRIDIAYYQKIIIKKDCWINEK

>WP\_002809051.1 MULTISPECIES: hypothetical protein [Campylobacter]

MGINRKAINFDLSTKSLEKYFKDTREPYSLIKKFMLENGFEHRQYSGYTSKEPINERRVIRIVNKLTKKF

TWLGECVKEFDITEIGEQYSLKETIQDLCAKDFHQKLKEFTEKTPKNQKLKDLER

>WP\_002807223.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>WP\_002805290.1 MULTISPECIES: flagellar basal body rod modification protein FlgD [Campylobacter]

MISSSDWNLNTTATTSGTTSSGSTSGTTRTDSSSSSGIVSNPNATLDKDAFLKLLLIELQHQDPTDPMDS

DKMLTQTSQLSALEMQQNTNTTMQKMVETMQKLSDSFSTSMSTSALGAIGKMATVSDNKIKLTGADELIA

LKMYLPEDSDENGVTLEIYDSNNKLVFSEKSDAKSISQGLFTMEWPGRNNDGVYAGDGEYTVKMVYNNKN

GEKITANYGTYPIEGVVFKDGVAYAKMAGQEVPFDAIQEITDYKLGSSSSTGGSGSSGDSSGGSSDGDSS

GSGSTEDGDKEEKA

>WP\_002801799.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSLREMHEQQKQSSPREQLQELNRQSRTELENSLLKEALAMSSENCEELMKQSNQEQVRAEQNRQRDAEQ

NRKLISELKQSVELLKNSNELLQDAISGEIGSLKDEVKENTVQEVRKALQANIEAIQRATKLLEKQSDTL

TSVMKQKIRELEESKNSFFRYEGLKLYLFWGGMVCNILVFLMLLYGMISK

>WP\_002800974.1 MULTISPECIES: 50S ribosomal protein L27 [Campylobacter]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>WP\_002797496.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKSKYNSVVKVRKQQLDKAESNLNQAKQRQLEHEKAYELSRQECESLGVLPKSGSIAELRSNLSMAQVGR

EALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKVLEAEEIKQKQKELAKAEEKFLDEIAISRFFKGEK

DD

>WP\_002791636.1 MULTISPECIES: 50S ribosomal protein L4 [Campylobacter]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>WP\_002790730.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIISVVNKKGGVGKTPFAFSIAKDLEYFLQSNDNSIIEKIYPEKAKILPTPKKIDNCVYDFGGFVEKGVL

DIIKESNKIIIPCTSNYNSLLRTLETLNEIGNDDRVCILVTDYRDEKEKRQICETLESNFTDLNLFFFKF

SKIIENSMSSGASFTELYNENNLSRLSYTNFFNEYQRLLDFIRKDK

>WP\_002790440.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKNTMYSYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQPNEKFIFKCPNCSRKNRKVFYAF

>WP\_002790346.1 MULTISPECIES: resolvase [Campylobacter]

MNIAYIRVSTNKQELDSQKLEIMEYCHKNNIHLDEILEVKISSTKSQEKRKIKDLKQKLKAGDLLIATEL

SRLGRSMLEIINLVLEFNSNNIKFLFLRQMELSNFNNPASKLILSVYAYLAENERDLISQRTKAGLENAR

ASGKKLGRPKGSLNSIYDKDIDKIQTLLDKDLSIKSIWKLLYKDNGKSYDGLLWFIKKRKLKGS

>WP\_002787993.1 MULTISPECIES: molybdenum-pterin-binding protein [Campylobacter]

MNILNGKIIELLNEGEIVIVKISIKEHIFKVLMLDLHSLQDLKIGTKIQVLFKEHELGFALPHSILSVEN

SFLARIKSIKKGKILYHIFFDFEGDEISSIIAKEKALELKLEEGQEWLCFVKENDIILKAIYG

>WP\_002786346.1 MULTISPECIES: preprotein translocase subunit YajC [Campylobacter]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNVTAKISREFIAKKIDA

>WP\_002785535.1 MULTISPECIES: 50S ribosomal protein L18 [Campylobacter]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>WP\_002783526.1 MULTISPECIES: homoserine O-succinyltransferase [Campylobacter]

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>WP\_002782934.1 MULTISPECIES: 30S ribosomal protein S12 [Campylobacter]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>WP\_002781812.1 MULTISPECIES: ABC transporter permease [Campylobacter]

MNENLSLKAKIYHYAVLFLVFLFLALPLMATFLYSISTSWGVSVLPDDLTLKWYQELFHDERFLLALWHS

LLVCVGSILLSVILVFPLVFVLNYYFLKLKAFVNILIIMPFAVPPIVSCVGLLQLYADNIGGTAWILIFT

YFTIALPFIYRALDNAMSNVNLNELIASNAMLGGSLMGAIFKLVLPNLRNGILVAVFLSFSFLIGEFLYA

NILVGSAYETLQVYLYNIKNQSGHYSSALVIVYFVLIFITTFIASLIKE

>WP\_002781429.1 MULTISPECIES: 50S ribosomal protein L36 [Campylobacter]

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>WP\_002780697.1 MULTISPECIES: 30S ribosomal protein S21 [Campylobacter]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>WP\_002779987.1 MULTISPECIES: 50S ribosomal protein L3 [Campylobacter]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>WP\_002779755.1 MULTISPECIES: conjugal transfer protein [Bacteria]

MMKCEWILCPVCGSKTRNKIRKDTVLENYPLYCPKCRQERLIKVDNLKITVIKEPDA

>WP\_002779751.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNTNKITDLHIQISKEDLKILDLLLKANEYSNIVFYCENDEEHFIFTEVKLGNYFCINR

>WP\_002779704.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLEMDNNKEFKILRLNKQEILKIGGYGICDSCNRRLSNDGYMICVLYSCYCEKCYKEWYKVAINHKEDRE

IEKDVYENIKSKITNIYF

>WP\_002779703.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRVVNLSKKIVDKILFLRINRVVNILMLIFALFSTIAIALFLSYFIEEENYYAYFVSSFFLVNGFLLTIH

LIGEKKCAKEVDYDDNFISKLNNSLRKELEDDLLKLQEYYDGINVLEYKTFALLKCNSYYEKGRINEELI

DKIKKYYINLFKKKIAKELEEMQKEKERRNILKTNQELILKKIGE

>WP\_002779702.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKITIVAYAICFLSGLWFLFSSVKDDFGILSFILGIALIYFGVINIKRILNDSNENKTELETLFATANI

IFVSISSIFLLMLIAFFTFQNEINIKFFSDQGLVLKNDKKISIYLKGKEIKSFDENKYGFVMAVYGDKHI

EVVLQNKENDTFFELRCNEEGCKEILKEDK

>WP\_002779544.1 MULTISPECIES: 30S ribosomal protein S11 [Campylobacter]

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>WP\_002779471.1 MULTISPECIES: 30S ribosomal protein S7 [Campylobacter]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>WP\_002779452.1 MULTISPECIES: 50S ribosomal protein L11 [Campylobacter]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>WP\_002779441.1 MULTISPECIES: 50S ribosomal protein L16 [Campylobacter]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>WP\_002779438.1 MULTISPECIES: 50S ribosomal protein L14 [Campylobacter]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>WP\_002779437.1 MULTISPECIES: 50S ribosomal protein L24 [Campylobacter]

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>WP\_002779428.1 MULTISPECIES: 30S ribosomal protein S5 [Campylobacter]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>WP\_002779353.1 MULTISPECIES: 30S ribosomal protein S10 [Campylobacter]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>WP\_002779321.1 MULTISPECIES: 50S ribosomal protein L13 [Campylobacter]

MTKITKPNEVKREWIVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFTGANKAE

DKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTAQIAKEG

K

>WP\_002779270.1 MULTISPECIES: dihydroneopterin aldolase [Campylobacter]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>WP\_002778908.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLKIILVLSILSSFAFANSCANYEQELKKCNSLKNSHERKMCRLGLFAKCKKG

>WP\_002778842.1 MULTISPECIES: iron transporter [Campylobacter]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>WP\_002778820.1 MULTISPECIES: 50S ribosomal protein L21 [Campylobacter]

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>WP\_002777995.1 MULTISPECIES: 50S ribosomal protein L35 [Campylobacter]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>WP\_002776864.1 MULTISPECIES: 50S ribosomal protein L34 [Campylobacter]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>WP\_002776146.1 MULTISPECIES: flagellar protein FlaG [Campylobacter]

MEISKANGQMDTALANISQRTSETQASLNIQTDRSQGQEGDDGQQRGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>WP\_009881324.1 DNA polymerase III subunit beta [Campylobacter jejuni]

MKLSINKNTLESAVILCNAYVEKKDSSTITSHLFFHADEDKLLIKASDYEIGINYKIKKIRVESSGFATA

NAKSIADVIKSLNNEEVVLETIDNFLFVRQKNTKYKLPMFNHEDFPNFPNTEGKNQFDIDSSDLSRSLKK

ILPSIDTNNPKYSLNGAFLDIKTDKINFVGTDTKRLAIYTLEKANNQEFSFSIPKKAIMEMQKLFYEKIE

IFYDQNMLIAKNENFEFFTKLINDKFPDYEKVIPKTFKQELSFSTEDFIDSLKKISVVTEKMRLHFNKDK

IIFEGISLDNMEAKTELEIQTGVSEEFNLTIKIKHLLDFLTSIEEEKFTLSVNEPNSAFIVKSQGLSMII

MPMIL

>WP\_002911284.1 2-hydroxyacid dehydrogenase [Campylobacter jejuni]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKNLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFMFAFLNQVLYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVVKISKAFGAEIYYYSTSGANKNADFVHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEALNALMDIVYNNLKEWIENGK

>WP\_002868996.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKNEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHITFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALAQGKMTKDLNAKSYLNTDEMGDCILE

ILKENDNG

>WP\_002868926.1 homoserine dehydrogenase [Campylobacter jejuni]

MKVAILGYGTVGSAVVKFLLENDKLIRARCGQSITPVIALARSPKKNALIPITHSVEEILNADVDVFVEL

MGGVDEAFKIVSEILKKKKAVVTANKAMLAYHRYELENLAKNLAFGYEASVAGGIPIIKVLKEGLSANNI

LAIKGILNGTSNYILSSMSQKNMSFEQALQIAQNLGYAEADPTFDIEGQDAAHKLLVLSSIAYNLKAKPE

DILIEGISEIGPEDMYFANEFEFTIKLLGIAKVRENKVELRVHPTMIDKEKMLAKVDGVMNAISINGDLL

GESLYYGVGAGGEATASAVISDLMDIARDQVKAPMLGFVNTLEYELLSKDEIYTKYYLRVKVEDKIGVLS

KITQLMSENNISIDSFLQKPKKNDENYSTLFFTTHLTYEKSIQNLLEILRKQDFIKTKPFMMRIE

>WP\_002868863.1 5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase [Campylobacter jejuni]

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>WP\_002856173.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDAFNLKRVDVSTYQAASGAGKEGMQELVEAMQSFFAFKLDEFKSQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEIDVKKAKEILEKAPSVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>WP\_002855972.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni]

MNNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLCPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>WP\_002855849.1 3-dehydroquinate synthase [Campylobacter jejuni]

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDSILDFIEKIDEKSFLNATCENEIFTQI

IARSIELKSRVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQKIKDILLKFGLPISYKINNVDEFYEAFFMDKKSSNKKINFVLASPLGKGFIKGDISKEDIIATLREF

Q

>WP\_002868951.1 membrane protein [Campylobacter jejuni]

MYIKDIHRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQDEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMVYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>WP\_011812801.1 ATP-binding protein [Campylobacter jejuni]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDQSFLKEKIEFLI

SQGQSLIILDEVGMYDYAMLESIRIYSDSISFVLSSHKKLNMLKKEHFKSRLSACFKLKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>WP\_011812790.1 enterochelin ABC transporter substrate-binding protein [Campylobacter jejuni]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILNLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>WP\_011812750.1 conjugal transfer protein TraG [Campylobacter jejuni]

MLFLSTLFFTPSFLFGATEIANGNLIYTWGYGDVMNEIMQAVKGITTETSYIVNAALAISLLLFSIKKAM

DGQTNPVFEFGKMFVLFAVVWVMFLKTPNDNNHRFMIHDEVTSKDYVISQISIGIGKSFALITQFEKVIL

EAMEKHFSTPQSTNFSNAGLGFSLQVMSTLPSVKLSAIDATLQKNIDFYFRNCVSVGILLNQQGRNLFQN

SDNLMQDLFTNIGNGFQLTPLFKNNNNIEEQSVVPCSDASPQIVEMIQKDTDEAIKIHAALLGMANDMAN

YEQKFLGAAQIYNKQAVSARSYLQQSMIMLASQDAIINTAKSVGLNPASVAANTAYADQQFYASMQAQGH

LAQTYLPLAKAYLTAIIIGLS

>WP\_011812730.1 restriction endonuclease [Campylobacter jejuni]

MNYYQELKKYLNNNLFTSYSLEIDFPKIYNFNANQKAFRDILTKITKIYNKNKFIKQNEHQFEDEFISKV

LEILGWCFVRQDEKIIQGKLEKPDFLLFSNDKLKSKYENLDKETKKSSNDFTIILESKAYNIEIDNKKVK

DNPHFQILRYLGNLKKNYGFLTNGRFWRFYDNSILNSNKVFYEINLEKIIEDQNIEAFAYFYSVFSAFNF

TEKEDHLEITLQNNKLSKIKIEDDLKSIIYGTNGNESLFEFIGSRIYNKTKADLKLIYENSLYFIFRLLF

IAYFEDKFEIILEKHKYFKSKISLRTLLENLQEDENSSGGFGELENIFNIYNKGKGNFDMPVFNGGLFDE

SKTALLSTPKIFNDKDLKFILNQLLNFKDKNLSFKRDYKTLSVEHLGTIYEGLLSYFFEIANEDIYYVSY

KEKSKEIECYFDNYDFKILEKSKKVEKYTFYKKGQIYLKNTSNSRKASASFYTPQSIANFLIQSALKDKL

NNENILKFKILDNACGSGHFLVGVLNAITHIVLSDFDHFTNLKELYEEEKENILNHIKDFVQDYEVDESD

ILKRLLLKRIIYGVDLNPFSIELTKLSLWIDSFIFTTPLSFIEHHIKCGNALINSNLSDFKDLIKQNSSN

LFTNSITQEFEILQEVFEKLDNLKDTNEEQIKQSKQIYQNEITPKLNKLNLYLNYINTLHFVNKEELQIL

KALSQDDIQNLSQNEQAKAIISKYQKEFNFFNYELEFPEIVENQVFKGFDIIIGNPPWDKTKFSDDDFFP

QYKSDYRSLIASKKKEIQDNLLAKDYIKQNYEKQKAYINDLSEYYKKAYPLNKGSGDGNLFRLFVEKNLS

LLKKDGNLAYVLPSALMFEDGSLTLRKEILENKTLEYFYSFENNKAIFIDVHRSYKFALIQVKNTQANHA

HKIKTMFYKTDMNSLKNKDEILTLSLKDIKKLSPTHLALMELKDKQALEILRKCYNAFQNLSFDYIDFRR

ELDMTNDKDLFIEEFREGLLPLFEGKMIHQFDANFSQATYFLEKAKFDERLKSKELSRAKKTTGKELNPK

LIKYDREFFRLGYRAVARDTDERTLIASLLPKNCGFGHSMFANAPKQYIVKDDEICMDIVPYERILFVLA

LFNSLVVDFIIRNMVQINVSKTYLERIPLPQPSDEEIQNNEIYKTLAKNALLLQLYNDKNHHFDELKQKF

DIKNEEIPKTKKAYDILKTKNDLLVKKLYGLSDDEFSYMISTFKVLNEKQSEYITLIKTI

>WP\_011812706.1 hypothetical protein [Campylobacter jejuni]

MKHCLALCFIFFLCACSAKNQNFSSQSLMVLIASPMIKINDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKQVFNQKFFKNVYYDDILNDILKANPLWQGRNLEKTDCGFEQNLKAKNYEIFYYVCDNKV

SFFDKISHTKIILTHIQN

>WP\_011799396.1 relaxase [Campylobacter jejuni]

MKKSFSDYWEEIQKIKKASSVIKDNYKRNKVFNSFVNSYSIKHNINNINQTTYSKQAVVKLCSNLSKDGA

KRAMDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVK

ETMDNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHY

HNQVSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLD

FINLFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTK

NLKNFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKIN

NINNYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCE

YLNINDDLKLVSVKSNKINYGGFNKSKDNQKIL

>WP\_011187240.1 type IV secretion system protein [Campylobacter jejuni]

MKKNIFGVNKAIGKSHPHENGARLISLDYNYTKEYNYNYEICVTQFNHLFSEVKFSHRVAALWLTPQNYI

QKFKKSILILTSLLVLPNLAFSAGIPVVDVTANQQMATQNAKQVAEWAKDASRWTETVAHYQKQIQAYKD

ELLSKTGIRDSVTFLKDIKQIYSDFAEVGQNIQSFYNDVLRDPQKFLSDKGNEIFGKYTSFDRCNFDFLS

QSEKNICKMNLITYAAQVETYNQASKQIDTISQTLQKLQDKLVNSKDIKESTDVGNAIQLEVAKIQMVKN

QVDLANASYENQRKIKEDMAMQEYSKSLQKPRESAMEFFKNNK

>WP\_011187229.1 hypothetical protein [Campylobacter jejuni]

MLSFSRMKNLFSNVLIAREKIERFFMRSSLEKVIKNYNENFSNKRDNDFAQGLIKYLYENAIIGENDKFF

LEKNFQYIRIINEKEKRLINVYFCEKPIIDFFQNAEYEKELQYYGINEKDFIKTDI

>WP\_011117552.1 conjugal transfer protein [Campylobacter jejuni]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>WP\_009883169.1 flagellar hook protein FlgE [Campylobacter jejuni]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>WP\_009883121.1 hypothetical protein [Campylobacter jejuni]

MKSDLDIFKKHLGEIQGVNEFKANQICSQINDANDFIGALQVLDMSLKKIEKSILERIDENSDDMQKRTL

DATASQLIQNCSFMGTALFGNIFNVYVGKKLFEFEIANPLLILQTSNYEGVLAYIQDKRDEIKIILSELA

TAITLGETMDNAGIYNSTMDFKNLFK

>WP\_009883110.1 hypothetical protein [Campylobacter jejuni]

MKIDTSTSLTHSLTNDVDKKELSVLKKEDQDKIPVQDLSSLNSDSVKVVFENKQGELIALNLSNENYSSL

QKNFSSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGSLNSNLNNKQQSVKLNFNTSTLQQSMQNLG

FKTSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPTMREILSDIKEASGGGANAMKTIDPQKINK

KDDRENNIKEKEDEDLLQKAQEKGLSALSADEQAKLEASNPEEFEKLKQKSLQELSQNLSKDFKDKIENQ

EAQIVDKRV

>WP\_009882865.1 hypothetical protein [Campylobacter jejuni]

MKKILLSFAFFASLASANTINAIAVVVDKEPITTYDIDQTMKALKIDRNKALGVLINEKMEISQMKQLGI

VVNDLELDDAINKMLAQNKTTLNAFKANLKSKNRSYEQFRTNFKKDLEKRKLYEKIASMAKTDFSDDGAK

KFFEQNKDKFTFYTQINANIYLSNNPQTLENIKNTKKTILKPQNASLNTSNADPRLLGLLSQIPVGGFSP

VLNGKNGYELYEVKSKDGTQTPEYEQVKNEVLNAYVSEQRQNFIQDYFDKLRSKINIEYLR

>WP\_009882704.1 ATP-dependent Clp protease ClpA [Campylobacter jejuni]

MKYQENLQKYLDNAKNLSLINHHEFVTCEHVLFALLKLSTDFKDIFEEFSDGDLELLETELKNYISQNNQ

VIKQEIEPTISVVLDEILLSSKNKNNEIKIIDFLEKLIQDSRSYSSYLLKKHNINLNKIQELQNHENIQN

LSNHTSDLTLLAQNGKIDPLIGRKFELERMMQILSRRKKNNPILIGEAGVGKTAIVEGLALAIAKKKVPK

NLQNAKIFSLDMASILAGTKYRGDFEKRIKEILNELEKIPNAILFIDEIHTIVGAGSTGESHTDFSNLLK

PALSNGTLKCIGATTFMEYKNTFDKNKPLSRRFAKINVDEPSQEESLQILKGLKNKYEEFHHIKLNDEIL

QYAVIWGKKFFNDKFLPDCAIDLIDELGASFALNPKAKKNVNLKDLENVLAKMTHHHKMFEFDQNKALMN

LKTNLKAKIFGQDEVIDSLVSSLKQSFAGFKNSNTPRGVFLFTGSSGVGKTELCKSLAEFLGLNLERFDM

SEYAEKHAISKLIGSPAGYIGFEEGGLLSNAIRKNPFSLVLFDEIEKAHPDLSNTFLQIFDNAELTDNSG

LKVDFKNTIIIMTSNLGLKESNELGFLSKNEEKSNRAIKDFFAPEFINRIDKILHFNDLNDTILVKIIEK

ELDEISKNLNNIKLSVDDKAKIYLAKKAYNKEFGVRLLKRIISEEIGEKISDEILFGKLKKGGIAKIKLG

KNGKLEFIF

>WP\_009882664.1 lysine transporter LysE [Campylobacter jejuni]

MFDSFLSGVFLGFGVSVPFGPVNILILTYALKAFKNSIAVGLGAFSIDMLYLFLLQFGLLNFLGNVIFMR

SLAIFGFCFLTYMAYLMLRKKKESLNLEHKEFKESLLKSYIKGAFLNGSNPFVIGFWLSAASVVLSSDYA

YLMTLGLVVAILFWVSALAFVVARYSHVFSAKVVFIINIISAIIIEYFALNLLYKTFLG

>WP\_009882648.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDVIKLITIDTKG

DKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLKSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYSNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQDQKQNYKTIINP

>WP\_009882621.1 hypothetical protein [Campylobacter jejuni]

MKKILVSVLSSCLLASALSAVSFKEDSLKVSFEGYKTKDMIGTKGEFKNVEYNFSKNIKDLASYLKGAKA

TIKPSNAFMGEGNDIITNNITKVFFPALLGDTDIKVVFQDVIAGENKGVISAKITMDKKSTIVPLTYTIK

DNKFEAKGQLDLHTFKNGSKALKALSDVAAGHGGISWPLVDISFNANLAE

>WP\_009882583.1 hypothetical protein [Campylobacter jejuni]

MKSCLYFTFIVLFLTACSTKNLTSLHHENLEQKNENQHYAKLEYEQNVSILPQFTYNINFDVKRYKKHFF

NPWHDSFKNYKGQNIFWSFPLYLNSKNTYYFFNKQIIPLSWFKNAINNANIQEFGKLNQKALIIQNTIIK

NLPTQRAILKNPFFENEGIPFDYASDGILNTGSPVLISHFSKDKRYAFVLGEAGFGFVESKNLEFFSNDR

AKIYENLNFITPLKEKFAIYSEDGKFLFESRIGAIYPYYKEDKNYFYGKIGSKKYKISKKDVSKFPLQFN

DKNLKNQLSQVLNLPYGWGGYNFERDCSLLTRDIFSAFGLYLPRNSAAQKNSFNHFDISTLSNSQKKDFL

NRFGKAYLSLLYLPGHIMLYAGQITDNNIAIHNIWGLRKDATQRLLISSSVITSLEIGKNEILEDNLLLS

RLKEISFINLNEQEKEQIKSYLENIQNK

>WP\_009882473.1 hypothetical protein [Campylobacter jejuni]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQADISNTSTNTAYGYSVDKDGYMGSDFNKAAGLPEDF

KIHKSTLDEIERKAENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTEADI

NSMPKGYAINGIKSMDFNDPSNRMNITHLRDFSNSLISNVYKTPEQAKEADEIWLDSGCMIKGLSSETLG

LSLEEIKNVSKGEDWQFNPDMSVYPQNEDGSYSKETLFMSFLKSQGGQPVESPKTTLNPKVEAYNRAMAK

ESFSGPAINIDSIMTGKSDFKSFFRYWAERGIAEGDLYMYENNIPKESAMGNWALDAEIKQALANGWKAK

PSTINSYADSIMDRLNNLLGQTRV

>WP\_009882443.1 hypothetical protein [Campylobacter jejuni]

MITQIIILYFHKVKLIKNSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFSISS

KTSSPNYDISSEFKNSIYTLKYKQADISNNTAYGYSVDKDGYMGSDFNKAAGLPEDFKIHKSTLDEIERK

AENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTETDINSMPKGISELSSD

KTIGIMPKNYDKLTITNYYNTQEQYNEAEQLGMFGHINIGLQPLNFTPQSMQTQNLDKDTAIDTFNPDMS

VYPQNEDGSYSKEALFMSFLKSTGVSPREGSATLNPIAKSYAEAMAKESFDGSLTSLDDIMTGKVDFASL

LKGYAQDGWLDADIYAMEKGVAWQNTSIGYGGAWFDREFNQAKANGWKASNESINSFVNNIMDRLNNLIG

QTRV

>WP\_009882434.1 hypothetical protein [Campylobacter jejuni]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKNYTLNTNTYTEQKSYTNNYDNSYSPSIQTNNSSSDI

NINNNTIQKQETNPLDENQSLNNDTFNTSISENNQSLNNDTNTSNNINTNENKQILDTDKEKLKQENKQA

KIEALKKEISKQQKILERERAVKKELQSNKSNKNKYLNTAREYLSIGKNSRLEPELSTENMKVYVLDGKF

LSQYRINLLKDMLSVIQDNAKDYYLSVFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISLDRLSPYLNNP

KELNEHVAREEILERLKLQIKKDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>WP\_009882413.1 hypothetical protein [Campylobacter jejuni]

MVGFLENQGGVVSKDYNNGYVSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDT

KTWTYTDSKGVVGKDEASEITQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMDK

IKTGEGYFASFKEELQKYQEALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFADLSGN

EGFRYKLENEILNSQGFSIEGKDVDGKVYTGNFNFKGKLASLPEKPNISIYEPDKQGGEDPDKPSVLPPE

IPEKVVEAPIKIQTEVDAKKKKKMMIKWK

>WP\_009882368.1 acetate kinase [Campylobacter jejuni]

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>WP\_009882343.1 lytic transglycosylase [Campylobacter jejuni]

MKKILLCFLICFNFLFAQINTPEFYERQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSMQNFS

KVTPMIRKILAQQEVPDEILYLAMVESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQVIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSASLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIREFNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>WP\_009882162.1 hypothetical protein [Campylobacter jejuni]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>WP\_009882150.1 hypothetical protein [Campylobacter jejuni]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVEPIDSGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEEQIKTIARLKGYKIVTANPDYTLKNSISIYTEEKNAQKTSNFMSGDYIKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSGFNSFDGDATFEESLPQTNSNQNNTIESTPTQNIPTNP

SSINQNNKSKNQDGVEIFE

>WP\_009882097.1 hypothetical protein [Campylobacter jejuni]

MKFFLLVFCFVNLALAQVYKGELYFYHLQDKEIFAIVYDNTPMTPLFDRDKNQTSSSFLIVDDINGNLEI

PLFKTNDFWQDEHKKYKINSSKMLTYDNKNFQGENLGTTTLELVETQDGIRIKRSLDFIGFKDDFKEFHP

VHKGVFSFEQIRQKPIFLQDGKISFEEWYYFYEDGMSRAILELNNFVYDINAHAFVKLNDLYNTKNQKFQ

NLLHEKLKNTCDECFEDLQNLQFNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>WP\_009881781.1 hypothetical protein [Campylobacter jejuni]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFK

IHKSTLDEIERFNQHNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLND

GCNQNKEYIVTHIFNAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGS

YSKEALFMSFLKSYSPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQD

GWLDAGIYAMEKGVAWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>WP\_009881534.1 transglycosylase [Campylobacter jejuni]

MKNYNKVLKTKKTENFSNSKNYEEQVVNWQQYFPTYHFDYKKNRDIALEEYKFCCKILESEERIFDNLIK

YMLTFGTIIISLLSGASEKIKAIFKDVTENPNYIIWFIIALVLLFFIFMTKNFAEKQKSIIFAKRKIIIL

RRMLGMDYGTQEFLFKKGMLEGANMPFSIKLRFNYLYHIIPILCVTALLIIIHMFLGYSLMYAIVFNSII

IIALYLFYIYCILDINETILLVIIRILFSRLGINFVDNFEHVLYRAKLSAYECKRQKIDLDNLKKILVAI

EDQKFYQHKGVDFKALCRALLSRGRKIPFFNKISFIKNIPFTGGSTITQQLFRTLFIENMNKKRYRRKIA

EILLSYLWFNKILSKEEQLEIYLSAVRFDKKIFGIMQAIRHFYGGDKYIKNLSKAQSFFLIERVSVTSGT

MLPKVIDTIVRLEKEKILNKEDIEDIIKIYTKAQQDNKITVFFKNRNILEELSKKYKHQN

>WP\_004315270.1 hypothetical protein [Campylobacter jejuni]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKKYPNHKLYDYTSVRTISDINNPE

GKIKEMKRDLEIDKTPYSNYVFLLNPNDKKTIKL

>WP\_002869432.1 branched-chain amino acid ABC transporter permease [Campylobacter jejuni]

MDSTLFLQQLVNGLSLGSMYALIAVGYTMVYGVLRLINFAHGDIMMVGAYAALFCMTNLNVPFLGALSLA

MIFAACVGIATDRIAYKPLRQAPRISLLITAIGISFFLQNLFNILFTSTPRTFTPPSYFEESVNFGGVIT

TYGSLMVPALTFVILIAVLWILYKSKYGIAIRALAFDIQTVNLMGIDANRIIAIVFALGSALAAVGGVFW

AANYYSVEPTMGTLIGLKAFAAAVLGGIGSVVGAVLGGLIIGFTEVVVVAFFPDLSGFKDAFAFIFLVFI

LLFRPTGILGINFEKSRF

>WP\_002869431.1 branched-chain amino acid ABC transporter permease [Campylobacter jejuni]

MMVRIKVSHLIFLIASIVFIFVSPYIFGDYGLNIVNQIAIFIILAVSYNLINGVTGQFSLEPNGFVAIGA

YAAALVLLSADAKNDQFFLDGPSSFILAIHSNSFILALIVAGICSSLLALILAFAVFRVRGDYLAIVTLG

FGIIIKIAAINFPSITNGSRGLVDIPQFSTIYWTGGIAIVAVILILNIVYSKYGRAMKAIRDDEDAASAM

GINTFWIKTLAFSTSAFLEGVGGGLLACLLTTVSPTQFDFLLTFQLLIIIVLGGLGSTTGAIIGAILVIG

GSEWLRFLDELNIKIDSLNLDIQSMPGLRMVVFSIVLILVMLFARKGIMGYYELSDVIRGIKKRFKRSEK

>WP\_002869407.1 SDR family NAD-dependent epimerase/dehydratase [Campylobacter jejuni]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>WP\_002869406.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>WP\_002869373.1 DNA methylase [Campylobacter jejuni]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>WP\_002869321.1 iron ABC transporter permease [Campylobacter jejuni]

MRKKMLILSFLTLGMIGIFILAGLNGFDEYALKSRFLQIAAIIIVAICIAVSTVIFQTLCNNKILTPAII

GLDSLYMLLQSALIFSFGAANLSVYKNDINFLITLVCMVVFSLGLYKILFSSDRSIYLIMLLGLVFGTLF

STLSSFFEVLIDPDEFMVIQGRMFASFDNIAFDVLILAYIISFLSFIWIFRYMKFLDPLNLGKDLAINLG

INYQKISKQLMIIIAILTSISTALVGPITFLGLLVVNITYELFKTAKHSILLSACILISILALLGGVFFV

SRVFDYNATISVVINFLGGIYFIYLVLKGNKL

>WP\_002869305.1 flagellar cap protein FliD [Campylobacter jejuni]

MAFGSLSSLGFGSGVLTQDTIDKLKEAEQKARIDPYTKKIEENTTKQKDLTEIKTKLLSFQTAVSSLADA

TVFAKRKVVGSISDNPPASLTVNSGVALQSMNINVTQLAQKDVYQSKGLANDSGFINANLTGTTDLTFFS

NGKEYTVTVDKNTTYRELADKINEASGGEIVAKIVNTGEKGTPYRLTLTSKETGEDSAISFYAGKKDSNG

KYTSDSEAETIFKNLGWELDTTSSIDPAKDKKGYGIKDASLHIQTAQNAEFTLDGIKMFRSSNTVTDLGV

GMTLTLNKTGEINFDVQQDFEGVTKAMQDLVDAYNDLVTNLNAATDYNSETGTKGTLQGISEVNSIRSSI

LADLFDSQVVDGTTEDANGNKVNTKVMLSMQDFGLSLNDAGTLSFDSSKFEQKVKEDPDSTESFFSNITK

YEDINHTGEVIKQGSLNQYLDSSGTGNKGLDFKPGDFTIVFNNQTYDLSKNSDGTNFKLTGKTEEELLQN

LANHINSKGIEGLKVKVESYDQNGVKGFKLNFSGDGSSDFSIKGNATILKELGLSDVNITSKPIEGKGIF

SKLKATLQEMTGKDGSITKYDESLTNNIKSLNTSKDSTQAMIDTRYDTMANQWLQYESILNKLNQQLNTV

TNMINAANNSNN

>WP\_002869222.1 peptide ABC transporter substrate-binding protein [Campylobacter jejuni]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>WP\_002869203.1 recombinase RecB [Campylobacter jejuni]

MSQFEPFLALEASAGSGKTFALSVRFVALILKGARINEILALTFTKKAANEMQKRIIETFLNLEKENKTS

ECNELCKLLGKDKEELISLRDAKKEEFLRTELKISTFDAFFGKILRVFALNLGLSSDFTMSEERLDVREI

FLKLLKKDELKDLAYYINLVDEKENFFNELEKFYENAYFQNRPKILNPTKAYINKAYSELRSYCLGLTHV

KNYKNLCDNFKSEVLDLSVFMQSSFMTKFESTKYLQDLESTNLHFSAKRMELINALNTYAIELENYKIAN

LMNLLNHYSEAKNIFHKDKNTLNFQDVSKKVYELITSEFKDMIYFRLDGFISHLLIDEFQDTSVIQYQIL

RPLIAELVSGEGAKKNRTFFYVGDKKQSIYRFRKGKKELFDLLKQEFSQIKSDSLNTNYRSKELLVDFVN

ETFKEKIKDYKEQFALESKKGGFVRIVESKEQKVKNQAQEIKEKTLETLFEQINFLRSKNISYDDICILC

WKNSDADMVLDFLREQKIPAFTQSNVLLENKASVRLVLEYAKYCIFGDEFYLVFLKELLGFEPRKIALDF

SKNAMENVLFLIKELKLDLNDIALIQFIEYAKTKENFLKLLFEPCALKIVSEQNMGISIMSVHKSKGLEF

DHVILLDSLSKNNSNNEDIMLEYDINQGWQLHIKDKIRELTKEPIYTLFKENITRANYEDDINKLYVAFT

RAKESLIIIKRNEESVNGNYPSYFKGGFLNIHSQERGFLESKEQILSVKKESIQTLQKFEKISPQEVQSE

EKLDSKELYFGNTFHFFMQNLKLPKGENFQILTQRCKSKFRHFLDESDFEKLFKRIEILLKNTQFQNLIG

DGKLLKEQALSFNGEIKQLDLLALKDEEAFIIDYKTGLAMQDKHKEQVRTYKIAISEILKKDKVHAFIVY

CLENEIQILEI

>WP\_002869184.1 dUTPase [Campylobacter jejuni]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>WP\_002869183.1 sugar ABC transporter substrate-binding protein [Campylobacter jejuni]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>WP\_002869138.1 sugar nucleotidyltransferase [Campylobacter jejuni]

MNAIILAAGFGSRLMPLTKDQPKCMVEYKNKKIIDYEIEALKSAGINEIAVVGGYLNDVLKNYLNKYDIE

HFFINSKYDKTNMVYTFFCAKDFMLKCIEEKQDLIISYADIIYFQDCVQKLINAKEELAIVVDKSWRKLW

SKRFANPLEDAETLKMTNGYIIELGKKANAHDEIEAQYIGLFKFSYQFLSEVIAFYEMLDRDILYDNKNF

ENMYMTSFLQALIEKYNNAKAVEIDGNWCEIDFMSDLEVQIEK

>WP\_002869129.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni]

MLGIVFSLFSVFLLVFMLYKKINAHMALLLSGLLLLSLAAIFGLSPHIVAKGSLNLGFFDIFQVFNQTMS

STLAGLGLTLMTIAGFSAYMDHVGASYALFKVFEKPLKAVKSPYVLLIVAYFIVQLLVLFIPSHAGLALL

LMVTMYPILVRSGVSKLSALSVIAICQYIDHGPGSGNVIMASKVAEVDPAIYFFHYQLPTTLPIIIAVGI

AIYLCNKFFDKKDNFVFNAQEIEKELNENEGKEKELKKPPRIYAILPIIPLVLILGFSSVLDSILVLMGI

SSAEEVKAAASTAIKMNVPVAMVISTFVAIIFEMIRYKSIVETLNSIMIFFKGMGHLFVITVSLIVCGQV

FASGLLSVGFVDTLIEFCKNAGFGVLAIIIAVSILLAVCAFLMGSGNAAFFSFAPLIPNIAKHFGVETIT

MIAPIQIMTGFGRCVSPIAPAILAISAIAKVSPFAVVKRTAIPMLVAAIVNVIMTYIYL

>WP\_002869042.1 ATP-dependent DNA helicase [Campylobacter jejuni]

MNLFEDLNDSQKQAVSHIDGAMLILAGAGSGKTKTITTRLAYLIGEVGIPSHNTLTLTFTNKAANVMRHR

ALNFLQGNHNPLLCTFHKFGLLFLKLHFERLERKNSFIVIDTDDTKKIIKDLIHDKNKDNVYDIIQYISY

CKNEGKRVSNVFEDLNLLKEHNFEKYQNEYKFANYYRAYEEYLLKQNFVDFDDLLLLSNLILENDINFAK

EQSLLYNYITVDEYQDTNTLQYKILKNLCCMHENITVVGDDDQSIYSWRGAKIENILNFQNDFKNVKLVK

LEQNYRSVGTILQAANNLISHNEQRLGKTLICTKDTGENIKILKNENEKDEGLYIAQEVKKLLNSGVEAK

EIAILFRVNALSRAIEEAFMKKQISYKLLSGMRFYERLEIKDLISYLRLILNPSDDLSFKRIINRPKRSI

GEKALKNLEEYAKKRQISLFDALCESDGGVGILTTKKAQNEANIFIQNIHTLKSYDNAKKVFDNIEELFK

IKDYFSEQDDGDERIRNLDEFYANLREKLKEDPEASLEDLLSEISLLSDQDNLDEECVCLMSIHASKGLE

FDYVFIIGFDEGFFPLNSEENLEEERRLAYVAITRAKKLLTISVANSRFYHGSRANINPSRFLEESKLIN

EKSKNQNIQKTSFCKGDLVKHKIFGIGRVVEVNKSGKEEKLNINFGGIMRVIMASFVEKAV

>WP\_002869032.1 flagellin [Campylobacter jejuni]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLAIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISQSADRLNELSVKMNNAALNDSQKGMLRTEATRIQESINNSFNNATYNGKNVFQTMNFVV

GSGTETTNLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSGINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNDFNANYLKENAAAFVAAQSNMQLQSKIANLLQ

>WP\_002868968.1 type II restriction endonuclease [Campylobacter jejuni]

MKFEAINEKEFLNPYHRKKPILETELNEFIKTLKDYKINLENNLKNNEDSLVANALSKFFENLSFQCEVK

SIHKGNSGIDLALKKDGLTQVIIEAKLPNSREFFSPSKPNCKALHECILYYLRERKALNSSLKHIIITDF

YSFFIFKADLFEELFNKNKYFKEAFENFESKNSLFKGNTDEIYKEFEKILNGDSTLKGLFVDLKPILEQD

KLSFSKLKPLFKIFSKDCLLGEFNPNDANSLNNAFYKELLYILGLYESKQNSKLIITKSEESKEEQGTFY

TAINSKLKEENFETILKLLILWLNRILFLKLIESNLVRFNDDKNLKFLNFKKIPDFDKLSELFFEVLAKE

KSTRKKSEFAYLPYLNSSLFEKQSIENTLEISSLSNDLKLFYYKNTVLKDDKCKAKKGQVGLLEYLFEFL

DSFDFGSDDEQSEILSQKELISSSVLGNVFEKLNGYKEGSFYTPSFITSYMCKESITKVVLDKFNAQFDL

DAKDISELRRSLRKEDKKAQKELLNSIKICDPAVGSGHFLVSALNVMLSIYDELNLFDEEFYLEVQNDEI

LITGRKGEFIEYKRPKTPKDKAHLIQQELFHTKKDIIENNLFGVDINPNSCEITKLRLWIELLKHSFYQS

FDDETYHDLKTLPNIDINIKCGNSLVSYFETGKSLNHYPNIKERMGKYKRIVKDYKEGFYTDKSRINQEI

KNLKISFKNFCFADKFKKEMKGFNDKCEKYSKKYGNFLAVDDENLKFFVSANLTLFDFDEKEATKEFANL

KKEYDNIFNLESNHPFEWRFEFPEILDDDGNFKGFDLIIGNPPYIRQEELKELKPHLAKNYKVYKGTSDI

YTYFYELGFNVLKDRGGVLSYITSNKYTRAGYGEALREFLLKNVKFLEYTDLNGIKVFDSATVDTSILCF

EKSKSKDNKFKYLALSNEILKTCAYDIGLYKDFAEFSQNSLSKESFTFSDENTSALKAKIERIGTPLKEW

HGLNIYRGILTGYNEAFIITTEKRNEILANCKDEAEKERTAKLIRKMLRGRDIKRYSYEWAGLWVINTHN

GYKNQNGEKVEAINIENYPSLKKHFDEFYPQLEKRADKGLTPYNLRNCAYIEEFEKEKIVYPCIMAKEPC

FSYETSFAFAMAPANIITSNSDILKYILAFLNSDFIYLMLRKFYMGGGIEGELKTNNLEKLPIPKINSKN

QKLADELINLVDKILKAKEQDKNANTQELENKINSLVYKLYNLTEEEIKIIEGK

>WP\_002868953.1 phosphatidylserine decarboxylase [Campylobacter jejuni]

MKDFIAKDGYLSLIILSLIFIFMWIFYSFSILLLALIVICIFLFRTPKRELVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSAKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>WP\_002868882.1 sulfate ABC transporter ATP-binding protein [Campylobacter jejuni]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALTLRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDEDSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPYSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>WP\_002868816.1 MFS transporter [Campylobacter jejuni]

MSPKKIIKSMTALFAGMAFLFAGNALMVSSIGVILKENGESSLAVGVVSSCFFVGALVGTISAHKIISRI

GHIRSFGLFGAIFGISAMLHTVSENLIFWAILRFFIGICYYGLLMVIESWLNEKSKNTIRSRILGFYEIV

FYLAFGIGVLIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFI

AGMLINGFFSMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMLI

FIFFKLHLYMQYFLGITLGIGIFCLYALALARANDVLVNKNKGVELGRGVLFCYSLGSLFGPLILGFLMQ

YFEIKGFIWFYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>WP\_002868772.1 membrane protein [Campylobacter jejuni]

MRPENYVAFFTVCGFFIGLTFSIISIDEAFDILIFTCFITFMFYVFVHIAIMNFIDVKKISGRIFNKHDY

EKTSNNIINDLVIREKKMDIILEKLNEEREELKKNEFKERRRNAKRAA

>WP\_002868767.1 hypothetical protein [Campylobacter jejuni]

MKIIKILFLGLFLSLSLNAKVVTTTSTKSSTGEGTGLTREDAINNAIIEAIGKMSGVSINSLKKSNTSVS

TDNSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGKYTANVTIFKTTTTKKYQVPGLSADNRRSITV

FDSTLDAAKRGIGSALQQKIISDLLQSRKFNVLDRDSSGYYEMEKALIKSGDAASDEVYKLKNMLATDYI

LLFSISGLEGKQKTSNLTGKSKTEIEVIVDYRVLLFATRQIKFSNTLSMKVNLKDNSLSANETALKQIAN

RIAGDILNAIYPLKVASVENNEVIFSQSLNQGDVYECFALGKVIKDTYTKENTGRVESKTGSIEITRTSP

KFSYAKITEGSVKVGDICRPLSNTGSGNGYTIGRDANYQTQEGGGVNLGF

>WP\_002860370.1 dehydrogenase [Campylobacter jejuni]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>WP\_002860364.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>WP\_002856742.1 amidohydrolase [Campylobacter jejuni]

MQKLVENLALKYYDKVVDLRHQIHMHPELEFEEENTARLVCKILDEFGIKYQKNIAKTGILATIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGAALILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGSLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVVSRRLAPYEAGVITVGQICAGTTYNVIPINAYLKGTVRFLNDKTQDILKSSLE

EVAAATAKSNGGDYKLKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>WP\_002856278.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni]

MIKLKNITKFYDNKAIISDLSLDFHKGKITSIIGANGAGKSTLLALASRLIKPSSGEIYIDGMNLKDYKE

QILAQKISILKQQNNINLRLKVEELVAFGRFPHSQGRLNANDKIKINEALEYMGLSNLRNEFLDALSGGQ

KQRAFIAMIIAQDTEFIMFDEPLNNLDMKHSVQIMQLMKNLVKDFNKSIAVVLHDINFASIYSDEIIALK

DGKLLKQGSKDEIINQENLKQIYDMDIPVSQIDGKKICIYF

>WP\_002855969.1 exopolyphosphatase [Campylobacter jejuni]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALSILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGIDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFGK

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKHLAFRAFDEVAT

IKKELHSLGVKTVVLNSGVPTTLSALKQNISYEKYEVTRVNGKKLCHKDFLNYAIKLFHMEEKKAIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>WP\_002855407.1 oxidoreductase [Campylobacter jejuni]

MAKLSNEELKNILEDRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDTFFL

TIGAQGESGYEILEKLAAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFDDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKTSWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEEQIKILEQ

IDFEFESNIKLILQNIAKNKLGALLVENYKKSFEKNYTFIEQNFDENPMPSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASPYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNITK

ISSLKAS

>WP\_002854580.1 flagellar assembly protein FliH [Campylobacter jejuni]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEENQAITPTQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELENAKEKFAKEGYEKAKEEFQKE

LSDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGELKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>WP\_002851496.1 allophanate hydrolase [Campylobacter jejuni]

MSIKIIETSINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYEFLDENY

FVLSGAEFEAKLDNQKIKTCKVYQANKGDILELDLAKIGFRGYLCVAGGFEVKSFLNSKSSDAKMGAGVF

EGRALQKDDILNTHNTFIPFNLEARECENPLFKSPKEPIIRVILGTNEDAFTQKGIETFLNTTYKVGLKS

DRMAIYAESSESIEHKNSADIISDPAVFGSIQVPKSGIPIILMAGRQSTGGYTKIATVIENDLSLLAQAK

LGSSFKFQSISMQEALELYKQREMKFKAMDQKINLDFENLI

>WP\_011812818.1 Holliday junction resolvase [Campylobacter jejuni]

MNLKILGIDPGSRNCGYAIMEANKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDI

FFAYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPL

DITDAIAVALTHAANLRVRV

>WP\_011812795.1 hypothetical protein [Campylobacter jejuni]

MSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEKCPYSHENIIFHKKFIGNINNENTITLAQALK

DNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQVIFEFHGCNPEEQDGVEKRISLLKKLNEYFIP

IHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGLHYRKECGNLQNLDFPVWPSNPEIPLRF

>WP\_011812778.1 N-acetylmuramoyl-L-alanine amidase [Campylobacter jejuni]

MAKIFVFLVFVFTTLFGAYENELANFDKNFIGSKSEVQVKFHHQLKSLYIQSVINEDEKTKIEILKRLII

SSNTLNLDDKSYANELKESGISEASINALRKAVVKDIKVQNIPQDAEKSTFEPIKTVQKNEKKSSNEQIK

NTEKTNSKTSQAPKSSIVSKVKSDDKIYVLKSSKTSQGVEFELNADLDKNQLKSFALDEKGNYRFISDFD

GVLEGGKKEFKFDEYRLVISQFNPKTIRIVVYAKEKIPIDISFKEEKLIFSKETTSQKKTEQASKISEKK

QDQKTEIKTKVLETKKQDKKTNNEKENQESLYVLDVDKISNAVVLNLSDDLDEKEIAVFDTKDQKFRYVV

SFKGVLEGNRKSFTFGQNAITVTQYNPKTVRVVLSAPKEFKLLKELDNKNLTLGFYTQTTNQNASKKANQ

SSSKTLNTNYKSGKLVVIDAGHGGKDSGALSDKKGSLKEKDIVLSTALKLGNELKKRGYKVLYTRSSDKF

INLRDRTKYANDKRADLFISIHANAAPNATKAKSSEGVETFFLSPARSERSKKAAEKENQGDFEEINYFS

KQSILNFLNREKIVASNKLAIDVQKNILTQTRKKYKIVDGGVREAPFWVLVGAQMPAILIEIGYITHPNE

GKRIANKAFQDLLVKGIADGVESYFYNNR

>WP\_011812719.1 hypothetical protein [Campylobacter jejuni]

MENLSKKECLRIEIDKGLENSLKELEDLMEKLPEQQTQTLFEQCTKNAMDAVTGHFGLASTILNAKDGGN

VTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKIVRSEYTGEEMERGAGKNKAQLD

HVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRDLMEWGKEIDLKTGKTNFEKYGI

DEKKLKKFTIQPNQT

>WP\_011812703.1 flagellar biosynthesis protein FlhB [Campylobacter jejuni]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIMIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVTQLAWLRDRAIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVAGADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKETKTFKVL

>WP\_011799397.1 hypothetical protein [Campylobacter jejuni]

MFKIFFLSKKATIKTPQNVGIIFFFIFSKKYKKINIEYFIFSLFLKLFYSKNIFLIKNHFLKFIIKSLID

FFFSYYDYLFYH

>WP\_011271765.1 pTet01 [Campylobacter jejuni]

MSKKTKRQIEDEKDYGGRSLFDLIELEFSQGEENEQQNRELSEHREVTDNIERTSISSNTPSVDRQENST

IQLDNTREMGRVLSEHNQESRNVRSNDTSIATNTNGISNLGEQRSRQEERTGANRYGDTSRRANKSQSIH

SDRTPNLFSFISRNDDERQGTDAARSYNQQSVLETAARNDGYERRSLKSGQKLDFVSDDEIYLGSLKDRF

QKNLQAIKLSKTIEQENRYATKQEQEILNKFSGWGGIPQAFDHQNKEWEKEFKELISTLDYAEYEKAKTS

TLDAFYTPKIIIDTIYQGLNQLGFNNDDHTKEIFEPSAGIGSFLSYAKNYSDKYHFTCVELDTISANILK

HLHPNQTIYNKAFQHHLFDKPYDAFIGNPPFGQKKILEFKYPTLNKTSVHNYFIGNAIKNLKEDGIAAFV

VSSYFLDSKNSTIRNFIAEQATFLGAVRLPNNAFKKRANTEVTTDIIFFKKGKDLNIDKSWLESVEYYDD

RFDEAEKRGMHPDVFNDFRINEYFKNNPTKYLRKNEYKSSQYGYSLECLDDGRDLKIALENFTKTLPKNI

YKYQETKIKLSYYRIDRESPEYEKYSKTLSKLKDGNYFEYNNEIYMKIGSDDELVFSKPVLNEHDTRRIK

KLIALRDQFNTLIEYEKNESNDLLVENQRKSLNKLYDEFVAKEGYLNRDANKKAFREDVEANKILALEKN

YSSGISKSVALKEGIDPIAPSATKADIFFKRTINAQKEIKISTPKEALIASINEYGRIDLKFLETNLNQP

LEETLKSLEQDRLIFKDHKNPANYVLAEKYLSGNVKAKHKEVKKLVEDGFNEFVNNLESLEQVLPKDLKA

VDISISLGTTWIPIKYYKQFIEETLQITPKDYDLFLMEKTGEWSLKGFGYSLSSYIRSEYATERIGCFDL

LEHGLLRKPIRIYDKKLDPSGKEIRELNPKETAIANSKLENLKNEFIEWIYKDYDRRTDLENIYNERFNT

NIEPRYNGEHLELPNFNANIKLKKHQKNAIYRAIQENSIIFDHQVGAGKTLVAICSVMEQKRMGLLNKPL

IVVPNHLARQWNDEFYHAYTNANILVATNDDLKKDNREKFFSKITTNNFDAIIMTHSQFKLIPAPYEVIK

KQYEEDINILEQTLEKKRNDDNVMRYSVKDLEKRIENFKVKLSDLQTTHKKSKAIDFSELGIDALIIDEA

HEFKNLLITTSMGDISGLGNLKGSQKAYDLYSKTQYIHEQNKKLYFLTGTPISNSITELYTLQRYIQPNI

LKEKGIQAFDSWASTFGEVTNAWELDSSGINYKIVARFNKFKNVPELSTMYKSVADIVTNNDIMKYQKDF

VPKLYNDKPINIVAPRSKEIAEFIGIQDENGRWNEGSIVWRMEHQQDDITRNNLLACTTDARKAGLDFRL

INPHCDDYANSKINKLIENVFNEYNAWNDDKGTQLIFCDLSTPKQHSQKVALNGNIATPNLNKEEFVNIN

ETIEQTEEENSKSLDELLAEQAKFDVYTDILKKLVAKGIPQNEIRFIHDAKTDLQKGQLFADMNSGKARI

LIGSTQKMGAGTNVQKRIVALHHLDCPWRPSDLEQRSGRVIRQGNELFMRDPQNFRVKEFRYATERTYDA

RMWQVIESKARSIEQFRKAGADVRTLEDVTSGAADAAEMKAEATGNPLILLQVQLNSDLRQEEMLYSGYK

RQIHNNEESLITNLSKIELLKKDIAKMEILNSIIKENNSEHFQGKYYINDDEKDFIVFKNDTSDLNKSRQ

AELERNFEKIVKTIADDYQKEYKVLEFKGLLISGERTDLNTLNFYVSTTDGKTIIEPENLIYKRDEKTFF

KLESYVNFGGFVKRLNNFYNDLEKFTQLNKNKIENLEKEIVELKSITGDNTPKYKRKDYLEALREDNRII

MDEIEKMSKQKNYKSDFVPKSAKILEDLNKNNNIQKEYDIEI

>WP\_011187244.1 cpp45 [Campylobacter jejuni]

MKKILFPFCVFGVINSVNALDLQLLSGDTRTSCEVILCLASPVKPPECASSLAKYFSIHFKKPWKTIQAR

KEFLNLCPIDTTNDPEMYKYKNDILVNLDGECSTTALNQRIEKSKQPLKVEKICTGGGHNGSRECVEIKN

LWI

>WP\_011187242.1 cmgB10 [Campylobacter jejuni]

MKLKGISMQDKEQDNLDNDFENHTSDLHDQKNHLRKIQAYVIFAVGGLLLVLILVYFLKSFLSSNTTTEE

VQKEDNKDLAQSVKTKEFIPPPPQKTFDELIAQESPKPTQDLILEPKPPKPRIVKGAGVTVVASSNNDGF

GNNGTGNREEFGEKPNTVFEFGQNGSLQNSNNLQGGSNGDFVGEVFTPTIAKVSEFDQNLLLPKGTYIGC

ALKTRLVSSIKGGIACIVSNDVYSANGNTLLIEKGSTITGTFNTGQMDDGMDRLFVIWQEIRTPNNIIIP

VYSGATDELGASGVQGWVDHHYLKRFGSAVLLSMIDDSLAILADQIAGKDNKNNYANYTENTRDSAKEIA

NTALEKMIDIKPTLYKNQGDLVGVYVNRDIDFSKVYKLTRKKNVNNAR

>WP\_011187241.1 cmgB6 [Campylobacter jejuni]

MNLDLFQTLGKSIQQIVDAIRQVGTNDKVAELSVLLSIIITLVIMYKGYEVLMGRSQSPIRELTWDIVGK

LVAITFALNLGGWLDLTISTMDGLYEWAGGGTQMYKTLDEMYANTAQLTNIIWAKSSGVGGAILAIVAML

LCYVGFAIAVVPALTIFVVTTFTQTLLVITAPIVFWLLVFKATKNVFTQWIGLLLSNTLVILLVGLFLGV

FMEQISTWIKYFAKVTQAGDEVLGTSIFFVIAALVLVIMIISAKLYAEKVANVSMEGAMGGVIGFCFKPC

W

>WP\_011187238.1 cpp32 [Campylobacter jejuni]

MWLRFLEKGILHVLRDIENILNDLREIGTSQDLSNFGETYRNTEIRGFGKVKGKTRKDRCYNLTRDGFSL

LAMGFTGKKALQFKIAFINAFNEMEKLLQKEIKSPNKYLTDLMELIYPNLPQNDYKVSVIITDNPYSKEA

KNVFSLNYLVDNRTPKDPKKLQ

>WP\_011187237.1 cmgB3/4 [Campylobacter jejuni]

MEKNPLFKGLTRPPMIFGVPMTPFVIAMGCIILIAFYSQNIFLVGFSIPVFFIMKAMTKRDDFIFRLMFL

KMRFFSNPASKNYHKVKTYSTNSYRQMPPNSNFPKISVFGLNAEPSFEKLIPFSSLINDSVVITKDYFLM

TTWEIGGISFEAEEDDELDIKNDLLNMLFKSFANESVSFYFHNCRYSIEDKLTSKFNNAFLEEIDRKYYE

SFKQGTLRKNSLYLTLIFNPLKVKIEKTTFMKSSFENKRKTISVFLAKFSEFADRLEANIKDFNPKRLKT

YSKDDKTYSKQLEFYNYLLGGKFNPIRVLPSPIEQYLNGNLQNIQFGHDTIQFNQNDSTKKFARCIEIKD

YTNETFAGILDILMYLDVEYTVTQSFSPIPRVDAKSAISKQKKQLIATEDDGFSQVEQIDEALDQLTNGE

ISFGKYHFSILVYGNTIKECKDNTNEVVTKMNELGFGVTLATIALPATFFSQLPSNFAIRPRINLISSIN

YSSLIALHNFSMGKRDKNCWGDAVSILKTPNKQPYYFNFHQSSGANKNDFGKFFLANTLILGQSSGGKTV

FMNFIVDQMMKYASKDTFPDDIPEDKRKFTAIYLDKDKGALGNILCAGGRYISIENGKPTGFNPFMVEST

QENIRQLQSLMKLLVTRNNEILTTREEEMLNNAVNSLMKGFEKEERKYPISLLLENLTENVDDDNSLKSR

LALFKKGKQFGWVFDNEYDNLDFPDDINLFGIDGTEFLDDKDVSGILSYYILWRVMSLADGRRLCIDIDE

AWKWLENEIVQEEVKNKFKTIRKQNGFLRLATQSLEDFLKLKNAATLIEQSSTMVFLSNPKAKEEEYVKG

VGLSYDEYMIIKGFNPVKRQFLIKRQDEKVICTLDLSPWVMKI

>WP\_011117592.1 hypothetical protein [Campylobacter jejuni]

MGVIWITVMLLMTFINMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>WP\_011117591.1 hypothetical protein [Campylobacter jejuni]

MKSIFQKILTLILISPIFLFGAMVEILLQS

>WP\_011117590.1 hypothetical protein [Campylobacter jejuni]

MDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVKETM

DNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHYHNQ

VSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLDFIN

LFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTKNLK

NFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKINNIN

NYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCEYLN

INDDLKLVSVKSNKINYGGFNKSKDNQKIL

>WP\_011117584.1 hypothetical protein [Campylobacter jejuni]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>WP\_011117581.1 hypothetical protein [Campylobacter jejuni]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFLFLEK

>WP\_011117578.1 hypothetical protein [Campylobacter jejuni]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>WP\_011117576.1 hypothetical protein [Campylobacter jejuni]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>WP\_011117575.1 hypothetical protein [Campylobacter jejuni]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>WP\_011117574.1 hypothetical protein [Campylobacter jejuni]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>WP\_011117571.1 hypothetical protein [Campylobacter jejuni]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>WP\_011117568.1 hypothetical protein [Campylobacter jejuni]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEELKVKE

>WP\_011117566.1 hypothetical protein [Campylobacter jejuni]

MLSFKRTKNLSSNALIAREKIERFFMRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIE

RQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKND

EQHFLFAEVDTGRDYYIKEGAEIIHEEYNIMKNIKFKGKEK

>WP\_011117565.1 hypothetical protein [Campylobacter jejuni]

MYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>WP\_011117564.1 hypothetical protein [Campylobacter jejuni]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>WP\_011117563.1 hypothetical protein [Campylobacter jejuni]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>WP\_011117562.1 hypothetical protein [Campylobacter jejuni]

MASLIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKK

HFQEYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKE

KFFELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERL

L

>WP\_011117561.1 hypothetical protein [Campylobacter jejuni]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>WP\_011117556.1 hypothetical protein [Campylobacter jejuni]

MPKYYEESEIIDLGNQKIEVIKSIKINPLGKGKAMKTSQIKEQRIIKF

>WP\_011117554.1 hypothetical protein [Campylobacter jejuni]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>WP\_010790856.1 hypothetical protein [Campylobacter jejuni]

MMDLKEIAQFLDDNAPAFLATLGTCGNPRVRPIQSPLLVRDKIYFCTANTKGLFKHIKNYNGIEFCSCAK

DGTFLRLRANAVFEPNLEVKKMMFEKYPYLVNLYETPQNPKFEVFYLDHLSARMQFMNGEFKLFKA

>WP\_002869362.1 hypothetical protein [Campylobacter jejuni]

MTLDFDFIYNADNDIFEYLLRFYAKNYNYILSKEENTYHFSIDADEENLKTFCDSLNFMSHSVFLKKFDV

KAGQGFNPCIPEDKEFSRFSYITHLNSNAYQEKKLLNKNEWGVFCECEFSSNLSEFEKINEENFNTFLNL

AFDLLSQEKKIYLKDKNGIYEFSLFKNEFIGDFLLPCDIKAINSVFVCSNENLKLLASLEKPLMKLRLNA

MFRKNHNLDFSDFKIRLARDLFCFALGLKLFENEYKFLSVKKIEEYQKDFYISALDEQVVVLEGFEFINA

KARELIFSKEDKNMARISYLVSRYKEKAFILELSKDYEDILLINKELNLLKLCLPKHSKELYEEIKKDEI

GARLLENFSKEFPLLDESFELQNNFYSLFGLVGRVLNLGKNLQESVSELLKIADESKMPRGVKIDYRLKE

DKSFDYTRTLRSAMSFMLAGVDSVNIAYGAVESLAYFLRDTYDELREKKQSDLALISGSLFEHKSLLKNT

LKHLKNCQLSDVPLRV

>WP\_002869207.1 methyl-accepting chemotaxis protein [Campylobacter jejuni]

MFKSLNIGLKLIFSVAAVVVIGLVILISLITKQVSQNITKNTEDILASITKEYATQTQGIFGEMIALNKS

ISGTLTEMFRSTSKEDLDIDNITNIITNTFDNSAYSNFTYLYLIDPPEYFKEESKFFNTQSGKFVMLYAD

EEKDNKGGIKAIQASDEIANLQVVQDILKKAKYGENKVYIGRPIKMNLEGQDFDAVNVAMPIFDRKNQVV

GVIGMTLDFSDIATYLLDPKGQKYDGELRVLLNSDGLMAIHPNKNLVLKNLKDVNPNKGAQETYKAISEG

KNGVFDYIASDGDDSYAAINSFKVQDSSWAVLVTAPKYSVFKPLKKLQLIILGASFIFIFVVLGVVYYCV

RKIVASRLPVILSSLESFFRFLNHEKIEPKAIEIRANDELGAMGRIINENIEKIQISLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDVLQSKIGSNMNEINRVFDSYKALDFSTEVFNAKGE

VEITTNILGKEIKKMLLASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLETVTKENVEVANVTNNITNEVNQIAAAILEDVSKKRF

>WP\_002869195.1 hypothetical protein [Campylobacter jejuni]

MINPVQQSYVANTTLNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIDTKATAAAIADSLI

>WP\_002869167.1 3-phosphoshikimate 1-carboxyvinyltransferase [Campylobacter jejuni]

MKIYKLQTPVNAILENIAADKSISHRFAIFSLLTQEENKAQNYLLAQDTLNTLEIIKNLGAKIEQKDSCV

KIIPPKEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKYLNNRPMRRISKPLTQIGARIYGRNE

ANLAPLCIEGQKLKAFNFKSEISSAQVKTAMILSAFRADNVCTFSEISLSRNHSENMLKAMKAPIRVSND

DLSLEINPLKKPLKAQNIIIPNDPSSAFYFVLAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMT

ITQNDFETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSSLINAKELRVKESDRIAVMVE

NLKLCGVEARELDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILS

NLGARIDY

>WP\_002869139.1 hypothetical protein [Campylobacter jejuni]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>WP\_002869097.1 hypothetical protein [Campylobacter jejuni]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>WP\_002869018.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni]

MLKKIISLYKRYSISKKLVLDNEHFIKENKNIYGKKHKGFFDFDEKAKDVKSPLNPWGFIRVKNEALTLR

VSLESILPALQRGIIAYNDCDDGSEELILEFCKQYPNFIAKKYPYKVDLENPKNEENKLYSYYNWAASFI

PLDEWFIKIDVDHYYDAKKLYKSFYRIDQENKALCYPRINFIILNGNIYVQNSGNYGFIGGGDQLLIKRR

NSSFIERRVSKKSQWIDPKGLIEELYSEQQVLSQGVKILQAPLLQWHFPALKYRRNDYQQYLDILSLEEF

QAFHRKSKEAKKIDFAMLKRPVIEQILKKFQGEIK

>WP\_002868905.1 hypothetical protein [Campylobacter jejuni]

MLVNKFKVILLFFIIFTSSYAQNLNTNDTIDSILNQNKNHSALTSYVSKKDLKNLEKKLEKNQNIGIRIY

GDSHMAADFFPRVIRGYLIRSNSIGFAYPLQPKYQQNLNLVYSYKNFEILNSRNPANAGHNFPLGGIIAK

AKTKGAKINLDTTLDKKNFKIGFLFKAKQNTNAFSIKDAKNQSYELRTTQINKWSYKELELDLPLQISAL

QKDAELGGYFITNKDNNVFLDTIAINGAKSDLWLSWNQTVVKKELGLLHNDLIILAYGSNDALFKGFEKQ

KFKNNLKKWISILKTYNKNAVIMLISPPTVVQKQGKNYKLAPDFFTIRKALYEVAKEEKTLIFDMHQFMQ

DSGGKNKWIEQKLSLNDVHLTIKGYELMAKKLLEDLKNIIDY

>WP\_002868815.1 hypothetical protein [Campylobacter jejuni]

MINTQLASQIANTQKNDLKVDNSASKDKTNLKDNPKEALAQALKQNLGLSKDASSEEILAKFVQNETGTK

LKELVNKLLDQINAQKNPDSPVLKQGKNLNLAPNFANELKTLSTELAKSDTFTQVLDRLNQILKPASEIK

NNNLAPLFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLSPKDTLKELKN

IINSSKIENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNK

PENLMIKDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENMKEEKLNHNTKNQDEEK

HIKASKEETLTDDTKTDIKQDLKNEENSHAKETDIKEDENLDSDIKTHEEDTQDTKNDIQNNETENKPDN

DIKNFTPNQEKIKDEKQEKSKENIKENPKFYETKTENKTSINTNTNTSNPNTNNTQNLNNSQNIQSNNNQ

TMQNIFKNQEFIKQNIIKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLKELEPYTQNAKLNQAELKNL

EHKLNLSTKDLAQIKPKTEQDIAESLHHDVKSTLLQISNLAKNEGNEAIYNQANRLLAQIEINQLMSLAN

DSINTYLPFSWDDLNDSKIMFRRGKKDKFFAQIKLEFAKLGDLEILISLNNEKYIDINIMAENIEFRKTI

YENAHELKRNINKAGLLSANFFVGDIIRSKFDTRNMKNLDLEMGMDKKV

>WP\_002868785.1 hypothetical protein [Campylobacter jejuni]

MIKIAFFIIFVISFLTAQSPVNFKEDNNITKEQNIFKEQPPKRIKIPTH

>WP\_002857066.1 hypothetical protein [Campylobacter jejuni]

MKIYHLSHTDLDGYACQFIVNFYFKNVRFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLELSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKESQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISCFVVEKLSELKENFSIEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>WP\_002857013.1 flagellar biosynthesis protein FlhA [Campylobacter jejuni]

MAKNKIVDLVFPFLGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYI

PKPTDLTTFPTLILIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVL

INFMVVTKGSTRVSEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFI

KGDAVAGIIITIINIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDE

ENFAEGTLTQLLSEYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSK

PSAAVASQSGAGGTTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSI

AESLGFLMPKIRIRDNLRLKPNEYSFKLKGVSIASAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDAL

WIDANLKDEATLNGYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIVEGALGVAPVS

LIQKILKDLLKHHIPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSA

SSAVLMENVQFRDGSYHLPLSVAQTGTLVDTLRAEVAAVANGRIKPFILCVEPQLRKFIADICYNFSINI

VVLSFAEIAENTNFNTEGIIRIEL

>WP\_002856630.1 hypothetical protein [Campylobacter jejuni]

MKLRIFSSSRQIREYYNQKKQQNALLDSAIHIGEFLDKVCLSNFHKASSYESLLLMQEACLKSKDLEKKL

GISVEFFAFLKNNEYLFSFFKELSLEKKSIEDLKNNDYYATYNEHLEILDEVYKNYLALLEKNSFYDDLS

LPKNYTLNKDFLDEYEAIVYDLQGFLSTFEENLLSEISQIKEVVLSFKTSKFNLEYLLKLDFLKIFDLKI

NTHYEINLSKQEILKEEIFKTKNSKMKLKSFELRALQCAFVMDEISHFVRKGLKPENIAVITPDESFCEF

LRLFDKDNMLNFASGISIKESLFYQKFQALYESASSASFVYKNQEDYFEDTQMIFDYHNTLLHSLKLDFI

EFKKYFDEKCDFEYFEKLLALFLENEKQELIYLIRKELYFIKDLLKNQSLTLKELIHLFFMQISQLSLSD

VGGGKVTVMGLLESRGLCFDGVILVDFNEEFIPKRSVNELFLNNEVRKKAGLISYDRRENLQRFYYESLM

KNALEVSICFVENEEKSKSRFLDELDFDFFYETHIHQKAYLNALKLDYEGIKPNLTPIKAPILKHNPFEF

PLSFSRFNLLENQKRTYYYRYILNLAEPRVLSEESKAKNQGNFIHKMLEIYYKNYANNDFDIKVFANLLD

KEYQKYNISELDLEVFKLKFIQFAKNEKEHFSKGFYVAHTELELNNILKLGTDSIKLKGTIDRIDSSKEG

NLIIDYKSGKVPSNSYQLAFYQALYDENASVGFYDLNSMQILHQKAKSLDELRERLKDLVLMSKEEIEFE

NEQDEYCPYKLIYKKELK

>WP\_002855347.1 hypothetical protein [Campylobacter jejuni]

MKKLELRIFRFDKTKDYEAYYKPYIYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTYMVVNKQIIPLFT

PLEKIAKEFDFSLCIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILH

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLKAKFISYENSIKNNGFSLLNLNPTLSY

KIAADIVLDAYDSGADFMVVKEEKDFYLFDTCAKKLMQTSGREFEDFYILSRFEFLALIEGIQAPSLKNH

TLKVSLI

>WP\_002854578.1 transcription elongation factor GreA [Campylobacter jejuni]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>WP\_002852900.1 hypothetical protein [Campylobacter jejuni]

MKILLLNENPVVSRLVSLSAKKMSYDFEELNAYSENLGNYDVIVVDSDTPAPLKILKEKCDRLIFLAPRN

QNVEDIDAQILQKPFLPTDFLNLLNNKDANKHTSIDLPMLSNDENPYADISLDLDNLNLDDLPDENSLDI

NSEGMEDLSFDDDAQDDNANKTLETQNLEHETIKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEP

SLDELDDKNDEDLEIKEDDKNEEIEKQELLDDSKTNTLEMQEELSESQDDNSNKTLETQNLEHDNLEQET

IKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEPSLDELDDKNDEDLEDNKELQANISDFDDLPEV

EEQEKEMDFDDLPEDAEFLGQAKYNEESEENLEEFAPVVEEDIQDEIDDFASNLSTQDQIKEELAQLDEL

DYGIDSDNSSKVLEDFKDEPILDDKELGTNEEEVVVPNLNISDFDTLKESDIQEALGEEILEKNEEPIVS

DVTKDDNSEEIVNELSQSIAGAITSSIKDDTLKAALKGMNMNININISFKED

>ETN91397.1 Fis family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLKCISFHEGLDIIEVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCDFAFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIKKAKIVVPKSIAQKA

SMIPNLEVYGLENLNEAIEFFKEKNYENFRFSHNHPLFASPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKTSISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNISKTH

ILEALSFRARN

>ETN91396.1 hypothetical protein X910\_00410 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGNKIFIQKIKMIKDKNHSFLSDEQIQNLADFINKGK

>ETN91395.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

TAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAGEHGRGFAVVADE

VRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISST

VSDIANNILEDVKKKRF

>ETN91394.1 transcriptional initiation protein Tat [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDDNDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDILYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDANTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSDENLEFNDAFKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGADTSKILDEGTLYVGQFNGNMG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQVLINTRLAASIVGATPMDRCEWIASHKQSGSKEVFATLTNN

KNRQEPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>ETN91393.1 thioredoxin reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELTKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPSTVEKVKKNEKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTSVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>ETN91392.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKYIELTSDNFAQAKEGVALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>ETN91391.1 hypothetical protein X910\_00460 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>ETN91390.1 homoserine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVAILGYGTVGSAVVKFLLENDKLIRARCGQSITPVIALARSPKKNALIPITHSVEEILNADVDVFVEL

MGGVDEAFKIVSEILKKKKAVVTANKAMLAYHRYELENLAKNLAFGYEASVAGGIPIIKVLKEGLSANNI

LAIKGILNGTSNYILSSMSQKNMSFEQALQIAQNLGYAEADPTFDIEGQDAAHKLLVLSSIAYNLKAKPE

DILIEGISEIGPEDMYFANEFEFTIKLLGIAKVRENKVELRVHPTMIDKEKMLAKVDGVMNAISINGDLL

GESLYYGVGAGGEATASAVISDLMDIARDQVKAPMLGFVNTLEYELLSKDEIYTKYYLRVKVEDKIGVLS

KITQLMSENNISIDSFLQKPKKNDENYSTLFFTTHLTYEKSIQNLLEILRKQDFIKTKPFMMRIE

>ETN91389.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDEIRFNTIERLPNYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLAYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPESKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQATRNIKKYLKE

>ETN91388.1 hypothetical protein X910\_00445 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVKKIIILTLWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYINNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTPKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>ETN91387.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFVKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITPKLDAYSQKSSNAWPFLIVLIVLVIIGSGIYYFDTLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTPKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>ETN91386.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLYFIPTPIGNLSDISFRALELLKTCDLVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGKALVEFAQENNITYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNFPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFEKKFKGNAKELSEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKINGKNAKEIYQKLLLSQD

>ETN91385.1 50S ribosomal protein L31 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>ETN91384.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQFLYNKQAGEEFIQLQGENFNHLKVRRVKENSELNLRNLQDNFLYNYTITNLTRNSCTLKFLNKKSQNI

KQSELNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFIQKFPNAIMVDFQGKQQSHFDEKELYFIGPEGGFNNDERLLFNRKISLKSSNILKSQTAII

AIASKILL

>ETN91383.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNVNIWVMIFSWILIFALAIFHFVCFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>ETN91382.1 6-carboxy-5,6,7,8-tetrahydropterin synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMINGEQGVTLQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>ETN91381.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLNA

NELLKRVIKLKQDFNPIVVITGGEPLIHYENPEFIKFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKEGV

>ETN91380.1 molybdenum cofactor biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>ETN91379.1 hypothetical protein X910\_00390 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDDVLYLVFIIVLLIAMLAYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGVKDDSEEDEDYKTSL

LKEEIMIELDKQISSKITPVLRTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLRIGTGNVELVLKFKKLIK

>ETN91378.1 hypothetical protein X910\_00385 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MELTLFKAGFEAHLECCEIENNRFLGEYLKLGAISQILKWKKLALRIDFDEGEKIIFDLLLSLKEDILRL

ENSLDKNKELIPLKQKGVIESLNFEYLNFLDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKP

EDKMAFDAFVVEIQRNMIRNKKGQE

>ETN91377.1 prenyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNTFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVGARNFAMATNRLM

DEDIDKDNPRCANRPNVSGKIGRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGKIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHRIVHKNFAHINRAFFTLNGYLS

IIFFIFIWIDLLWN

>ETN91376.1 tRNA delta(2)-isopentenylpyrophosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>ETN91375.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>ETN91374.1 hypothetical protein X910\_00360 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVVLISALLGAFAANVFAANTPSDVNQTHTKAHHSKAKADKKHEAKTHKKTKEQTPAQ

>ETN91373.1 superoxide dismutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>ETN91372.1 saccharopine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLLIIGAGGVSRVTTVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDADDSNAVVE

LIKKTEAQILLNVALPYQDLSLMDACIKARIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGVTNVFCAYAQQNLFDEISYIDILDCNAGDHGYAFATNFNPEINLREVSAKGRYWENGKWIETQPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEECYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPSLGE

>ETN91371.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMFQ

NYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCQLLL

LDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSDQIAFLEKGKILAHANPKELYFKPD

FKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFCRLKLLYKNIIF

FILVSSSYDLEEKISFDIINF

>ETN91370.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYKTLKYYKLGAILLALFLALPIFGIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISMGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLALFI

KKRKLNPIKQILSCIYCFMIAFVGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALVTALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYVIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRTSYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>ETN91369.1 iron deficiency-induced protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFLMFLTAFSFLGASELNIYSARHYDADFEIIKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFITADISNLTEAKNLGLLSPVSSKYLEEFIPAHLRDKDKEWFAITKRARIIAYNKNANIDISKMKNYED

LARAEFKGEIVMRSATAPYSKTLLASIIANDGNKEAKAWAKGVLDNLATNPKGGDRDQARQVFAGEAKFA

VMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDAVKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>ETN91368.1 hypothetical protein X910\_00325 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSMKKIILFLLCVGFAFACSEHSHTDFKDLNKTEYNSQ

>ETN91367.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

TTLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>ETN91366.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVVVALALVFLNGFFVLSEFSIVKVRRSKLEEMVKEKKAGAKKALEVTSRLDTYLSACQLGITLSSLALG

WIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGELVPKSIAIAVADKAVLFIARPLHW

FWILFLPCIKIFDFLAAISLKLFGIKPAKESELTHSEEEIKIIASESQKGGVLDEFETEIIRNAVDFSDT

VAKEIMTPRKDMICLNKQKSYEENMQIICEHKHTRFPYIDGSKDTILGMIHIRDIIQNELSHKSQNLDTF

VKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDIMEEIIGEIKSEHEEDSYKKLAENI

YEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDRIEDELCYYEVKKMDGNSIERVKVV

KKTNKDEE

>ETN91365.1 PhnA domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTSKEGEIEARVDKFGVIVLKTEFLKKI

>ETN91364.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEHRDKGRILGLAFAMITRILLLLSLFWVM

KLVTPLFSVLGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKLWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLVAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNG

>ETN91363.1 phosphoribosylglycinamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLVKLAVLFSGNGGNLENILEKLHKKTIGENTYEVVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYNTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESDMKVAGVSVH

WVSEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>ETN91362.1 kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAIIDNIKILEQNAINKGLDELILMENAGLNLAKLIKKEAKKIRIQRKIRKVKTLFLLGGGNNASDGLV

ALRNLKHAKAYKIGFKENTLFKKQEQILQNYAFKFCKKEPNFKKFHIIVDCILGTGSNRCLDEKTSLIIQ

KVNQSKALKIACDIPTNLGFYPCFKADITFCMGALKEILLEDFAKEFVGRIKIANLGISSKKFYPNSQAF

LLEKKDLKTIDRKINANKGNFGHIYIVANASAGTLAGLGALNFGAGLVSLVAQKSFSPLLMLKEKIENNA

SAIALGMGLENLDFLKDEILQNTPLILDANCFLSEALLWYLNRKDIVITPHPKEFIKLYKMCFDENLDIE

TLQKNRFFYARKFSQNYDCVLVLKGANPIIAQKEKLFVVNLGNQALAKGGSGDVLSGMIAAHLGFGFSAL

EAAKNATLAHGLVAKKYKFNKNSFDALKLIKGLKCL

>ETN91361.1 hypothetical protein X910\_00285 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

KDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>ETN91360.1 ATP-dependent Clp protease proteolytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGV

ITSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQA

KEILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>ETN91359.1 trigger factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>ETN91358.1 GTP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIEFYSLCEHHLLP

FFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVIEARHMCVEMRG

VQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>ETN91357.1 ATP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEKLRSKLGKENLSAIFGEITKISATSIEIRGLKTGVGDIVKLVSNENENLNTLAMVVEIKEQFSYLS

PFSFIEGFKIGDRAFISDAGMQIGVSDELLGRVVDPFMRPKDGKGAIEVSKYMPIMRAPIDAMKRGLIEE

VFPVGVKTIDALLTCGVGQKLGIFAGSGVGKSTLMGMIVKNSKAPIKVVALIGERGREIPEFIQKNLGGK

LDDTVIIVATSDDSALMRKYGAFCAMSVAEYFKEQGKDVLFIMDSVTRFAMAQREIGLALGEPPTTKGYP

PSVLSLLPQLMERTGKEEGKGTITAFFTVLVDGDDMSDPIADQSRSILDGHIVLSRELTDFGIYPPINIQ

NSASRVMSDIISPEHKLWARKFKRLNSLLKENEVLLRIGAYQKGSDKELDEAISKKEFMQKFLGQNPEES

FEFNQTLELLSQIDTPNTPLPPTQNINVGSASATLPNPNLK

>ETN91356.1 amidophosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCAVVGVINSKNASTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENVVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNSMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>ETN91355.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>ETN91354.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLALTFRPENFDDILGQYELIEIFKKFTALQKLPHSIFFGTAGSGKTTFARVVAKEFGLDFYEFDGGNF

KLEELRKILDNYKNSLYKPLIFIDEIHRLSKTQQEMLLIPMENYRLILIGASTENPYFVLSSGIRSRSML

FEFKSLGAKELETLLLRVQEKMKFSIDKEAKDFLLKSADARAMLNLLEFVLVLDEKHISLENLKKLRNTI

NSEGVSSKDTHYILASAMIKSLRGSDVDAAIYYLARLIDAGESADFIARRLVIFSSEDVGNADPNALNLA

VSTLDAVKNIGYPEARIILAQCVVYLASTIKSNASYKAINEALNYVKNNEALEIPNYLNNNHQEKQNYLY

PHDFGGWVEQKYLSKNLKFYHSKGLGEEAKLLDNLYKLKTIKLNFII

>ETN91353.1 hypothetical protein X910\_00235 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KINLKFNNYFFLNKIIKGNFTNPFDFLDKVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEALMNKNLEIKNIKIHFDMINFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSKSQQQINFDYLVLD

NNKINSFYSKNLVNFNEENSTINLNIQGKSNEIDIDLKSLLGQNLNFDKTKFNITINKFLNSNFNISHFI

QKNLDLEIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKENNNFFL

NLSYDSLANPQLKINGSEFSNMDLN

>ETN91352.1 hypothetical protein X910\_00230 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSILFASALLASSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGIPATPNTQAIPVARKIEIQCYKKAY

>ETN91351.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFLLKKIENGLFYLNKILYFFLILFLLIGILGFFINSNPSNQIIKKPYLPFLEIGDLVFRAGIGSESFL

IENLSQSPYSHIAMVVKTSPTILIHATTDDDKNAKNQVILSSMDDFLKLSHKIAIKRLKFDEKTKQKIVA

KALEHLGRKFIISTDKDAFYCTTFLEQSINSITPFHLQYTLIKAPFNEGLYLFPQAFFENN

>ETN91350.1 citrate transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGFFSLGLIVWLLLKDYTTPALAFISVSISVACILLILERLGFGVGVALGVKGGVFDIKTLVVFIKDGVK

SVTDTAALFVFSILFFSVLNASGFFTKILNAFLSKMKANVYQVCILTVFIAAAVHLDGSGASTFLIVIPA

LLPIYERLGIRKTSMLLIITSAMGVMNVIPWGGPTLRAATNIGMDANLLWHHIIPIQIVGLVLSLLLAIW

IAKIEIKRGAGAGNLSGINLNIEKSEHHNEKWFWLNLLVAIGVIGLLISGIIPSYICFMIGLAIILPLNY

PNLKTAKKVLDRASGGAMLMYITLIGAGILIGVFDKSGIMEKMGVLILNFVPDYLGAYIPLMVGILAVPM

AIIFCTDSYFYGVMPIVLSVTKAFGAEPLTIAIIMVIARNCATFISPVVPATLLGCGLAEVNIKDHIKRS

FFYIWGISIICLIFAEVAGII

>ETN91349.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVVISMAVLSLFKTSNILENNMVQT

QASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRTMVVESKLAYPEGRAAAE

ILKVANKDQSSKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGAG

YLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSAKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELLK

PVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVGT

LVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTSV

ILATAAISNDNLQDLKTGHLVGATPWKQQVALLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASSA

LAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILKGTQKMSLPPLAVGIGIYLPPAINIPL

VIGGILKYIVMQHLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENPL

ALNLANFHDSELFALIFFVGVVLYFIKRIVKKDA

>ETN91348.1 UDP pyrophosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>ETN91347.1 translation initiation factor IF-3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>ETN91346.1 DNA modification methylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKENPSFLKEQIITYLGNKRALLSFLNNGFKVAKKELGKDKFSFCDIFSGSGVVSRFAKAHSNYILANDL

EDYSKLINECYLANKDKDLLQNIKKYYKNLIQNLDFQKGFISELYAPKDDDDIKKNERVFYTFKNALYLD

TIRQKIENEIPKELRHFFIAPLIYEASVHSNTSGVFKGFYKGKDGIGKFGGEGQNALKRIKGEIELKIPI

FSNFSCEFEVMQKDANMLAKELDFFDVVYLDPPYNQHPYSSNYFMLNLIANYKKPEEISKISGIPKDWNR

STFNKSKFAQDALFELINDLKARVILLSYNCEGFVKKEIFLKRLSTLGKCRILEQKYNTFRASRNLKNRN

IHLHEQLYILVKN

>ETN91345.1 hypothetical protein X910\_00185 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLKLSFCTLMAFGFSNYLFASAIDPKLFSRIS

>ETN91344.1 hypothetical protein X910\_00180 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQGSVLHFGGVTNRIVSSSDNFTYKKENVGFAVLKMSKISLNKSANLSKDLNLIEKNSGDGGDIYEYKD

PFWDSCQSGKCDYSKGKGKLFDSSRYEYFVREGSGIVALGFEDTNKVPIKIFDSNEINLGGFVSLTPKNT

EDKRFKLQFLNYTNDKRNSFTSSSISRDSGSGVYVYDKMDKNGI

>ETN91343.1 hypothetical protein X910\_00175 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNSKDLYFSQNGSINLNSDVDLGASVLNLIKIQIGK

>ETN91342.1 boa domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSANTDKALIFDGNIYNKEGVFRTENAKLNFQGHARIHAYVSKEQAKKLQEHGLSALTKPVSFTQEDWVF

VLKELNLEKKRVLFRA

>ETN91341.1 hypothetical protein X910\_00165 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFEQKLQNTQNAKIEKVYFSVNLNLDHSDVTLQNTFFSGNIKGINDTQKNLAIKDSLLESHIQMSNLQV

EKSAIYRKVDAKKIKCK

>ETN91340.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKKLSANNTIFKINVDFENSKADYINSKESTQGVNNTLVLIFLNNPSKKRV

>ETN91339.1 hypothetical protein X910\_00155 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLKGDIASLKRFSYIPLVVKTAFFIGSQN

>ETN91338.1 hypothetical protein X910\_00150 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYADLIKAGDQILEDQASQRRYEGKKIKECL

>ETN91337.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFINLGNDYKLNDKTRFSFEFEKTFFGDLNVDWSANANLRYSF

>ETN91336.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>ETN91335.1 N-acetyltransferase GCN5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLGEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>ETN91334.1 acetylglutamate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>ETN91333.1 acetylornithine aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLHTS

NLYYNENIAAAAKNLAKASALERVFFTNSGTESIEGVMKTARKYAFNKGIKGGQFIAFKHSFHGRTLGAL

SLTANEKYQKPFKPLISGVKFAKYNDISSVEKLVNEKTCAIILESVQGEGGINPANKDFYKALRRLCDEK

DILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYGGN

PLVCAGVNAVFEIFKEEKILENVNKLTPYLEQSLDELINEFDFCKKRKGLGFMQGLSLDKNVKVAKVIQK

CQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>ETN91332.1 protein-L-isoaspartate O-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALDFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKAAQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDDGILVAPILHNGKQFITRLRKNGTNLQKEILEECLFVPIVDGKE

>ETN91331.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIKFKNHSPKLGQNVFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRELNDEEISFLKQSALNYMDFKNEFLKDLQ

>ETN91330.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAEDI

EFLRKQGIFDTEFLDFLANFKFKGEIYAMREGEVIFPNEPLLCIKATTIEAQLLETFLLLSLNHQSLIAT

KTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFEN

ELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQKGGVRIDSGNLLKLSLKIRQELDQAGL

QKCKIIVSNALDEWSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNEK

STLPHFKKLFRVYDKNTQKILFDELYVFDENPNQDENLERKELLKLVYKEKRLLKKSSLNTMQDYTKEQI

SKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>ETN91329.1 ribonucleotide-diphosphate reductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQRKRIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVRKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>ETN91328.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYDLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFARKDRLNLHDILTQSCIVTKA

>ETN91327.1 orotate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>ETN91326.1 ribosome-recycling factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKVNIHILDHITVDYYGTQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDTYTTKIDESVKSKESELLKV

>ETN91325.1 preprotein translocase subunit SecG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLGY

LYNKASKDSLAEKIKVENNNTTIPSAPIVPTTPNTNSIAPSAPQLPSDVNSSK

>ETN91324.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWILFAVEI

GLLFALQWKKREAPLNLVLLFGFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>ETN91323.1 carbonic anhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>ETN91322.1 mechanosensitive ion channel protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSSINLNSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLAFFISLRRFFANIVYFFLVQLFYR

NKNDVDDIKVIFIENIKKPVGFLLIVYAISLCLTIATYPAPLSVNLSNFFHIVYAVLIAWLILRMLDGYG

VVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVETGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYIKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>ETN91321.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKARNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>ETN91320.1 cysteine desulfarase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVYLDNNATTMLDPNAYELMLPFLKDMYGNPNSLHQYGSATHPALREALDKLYTGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQVGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVPYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKRERRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGAEHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>ETN91319.1 bacteriohemerythrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>ETN91318.1 hypothetical protein X910\_00050 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYNINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLSRDL

ISKLSSGFSTDNGEFLSQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLRSNSIENFLDRRQKQANINKILNSYMSVMV

>ETN91317.1 50S ribosomal protein L35 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>ETN91316.1 50S ribosomal protein L20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>ETN91315.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEGAIKLVIQTIQSIAKSSNSSTQEMNFIRDKSNEFSKIISNLINSGKEISDKLEQRSNVSEDFEKNVNE

LKCYEDVLAKLNQC

>ETN91314.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGIAKSLVAIFFYEVENFNDFKPRYLKTFIQKYSDFKYYYLNIRAQKLEITNEIKIK

>ETN91313.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSQNFNPQSNITFTILDASLYDKTIHEFIDKKTSQSINAVEALCNYFNCTFEELKNKIQEYTFALKIGE

DYLISPMEINPDKTLFSYCDIESAQELCLLKKTNFIEAIKKIMKNFLLINQNH

>ETN91312.1 hypothetical protein X910\_00020 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMLFSEDMIENLCTNKIKLFSNIKDYTERKKLIEKEVLSINVPFEAHCINTLHYLIYDGLSQSESSLLEL

LYKHNPYPCALVGGGSSGNMDFSGTFIFYNGEILKNQALSLHIQFKPKISF

>ETN91311.1 hypothetical protein X910\_00015 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLNNLLSKLPSKAKEN

LNKED

>ETN91310.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFSLGIYVFFLAIIALLCAFIF

SYLNNTQRTYSQ

>ETN91309.1 hypothetical protein X910\_01330 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLMGVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGA

TIIKVAWDYFS

>ETN91308.1 hypothetical protein X910\_01325 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFVAKDKCAGIPQAMSAGRVISPPPPTIESIKPAKRATKKV

>ETN91307.1 hypothetical protein X910\_00485 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFFRFTNVISQIEVNTNSKFNWMFSHAYQNDEYGKYSFIGTRANYIATPNYNLFGGIWFDTQRAHTNMW

ELGYTYQRKCWNYSLMYRERIDPQLTSGGITAKNQSGIYFIFNFYPLGGVKYDFSLAESENKI

>ETN91306.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYTIKKVEKETKISAHTLRFWAKKGLFPFVQKDENSVKYFSKSDIEWVKWIEWLRISGMPIEQVKHYIK

LCSLGIKTAKERQEMLKQTKKKLQNQIKTLKESEKVLSKKIKIYEEMLANEVDGFNPESKDYQPCDKLHK

FKG

>ETN91305.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYHSLCPIETTLNLIGNKWKILIIRDLLQGTKRFGELRKSISFTKNQNISQNVLTQNLRELEEAKLIK

RKVYAEVPPKVEYSLTSLGNSLESILKSLENWGNSYKNIV

>ETN91304.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIAILCASGKVGKEISKEALKRNLEPVCFVRNSSKMNEFLPQAKIVQRDLFELDSKDLIDFDIIIDAFG

EWENLSLHKKHIECLSVILQGSKAKLFVVGGAGSLYMDENHTTRLMDMPDFPKEYLDIAKASAEVLEFLR

NEKGFKWVYVSPSAIFSPDLPKNNHYKIIGEKFEVNANNESKISYSDYASAMIDIVLNSCYENTRIGVIS

L

>ETN91303.1 type I restriction endonuclease subunit M [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>ETN91302.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIVGTNFK

PKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRKELDKY

PEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGLVKNLN

DSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQYVPKNE

VIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDMPSKSR

NDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIRATYQH

CCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>ETN91301.1 type I restriction endonuclease subunit S [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>ETN91300.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKYKFVKFQVKNFRSLLDITLNIDNNNINTICGENNIGKTNFLRALNLFFNHNNGVEYNQNEDRPYHIQ

KGSTGGRKTELIGYFTKNNVTHILKVEFHKDKIVYILNGKMVEWKVARDIVESFKLLFIEASNVNMPSVI

SAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDIEKDINIYLKQMLDFDNTLKDKEIKIRFAEF

EKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQYITDKITTDIIWAIDEPEAFLQPKLQKKIM

EIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKEEKIYARKKGRVFQEINTKPIYIGTAFEKLS

VIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILNLSMPNIIHSGGATKIAGFLEYFNNQCSYTS

FKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKRYGESIQENNRDIWEIEDFMPIKIIVDAVNI

ILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRNEEKERFILNTESRKKEICQNAFRAREKYTK

NDLEDYHVDFMNELIDSFNKVDLIKKDN

>ETN91299.1 restriction endonuclease subunit R [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKIACYHQYYAVNKAISR

TITASSKDGDKKGGVVWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQ

EPKQANDKEHLKELLRVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKS

KSGDVLGQKIVYGFAKYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYE

SRLAKIELSEEGKRLVNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMI

VSISRSVAIKLYDEIIKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDEL

KLVIVVDMWLTGFDVPSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSE

SGGKGDIITTQEDAVKVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFA

ALDKAYTIAMPHEKALSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDAS

GIKKPDISILSDEFLLEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLIS

SSEALDELINMSKSIVSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSI

DWMIKENVRARLRVAVKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>ETN91298.1 NADP-dependent alcohol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGECDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNNIVVSEKFAVCVPKDAPMEKVAPLLCAGITTYSPLKFSNIKEGSSVAVAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSCDKNAVKERFDLIISTIPTPYNPAIYLDLLKFGGEMAIVGLPP

HEVAPSISVITFVHKAGKKVYGSLIGGIAETQEMLDFSLKHGIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>ETN91297.1 biotin transporter BioY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLELIGELSLQNYMGEWLEIARKPAFFQKSCLNSKAKYELKYKNGIPYVEIENFCSKKNEISSIKGKAKI

VSNRQLAVRFNIFMNLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILARNIIDEKNIKELLNIAKQRGFD

ISDVVFDKY

>ETN91296.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKENSPCNFEECGFNYTLALINGKYKMSILYCLFRYEIVRYNELKRFLSSISFKTLTNTLRELENDGLI

IRKEYAQIPPKVEYSLSKRGQSLIPILQAMSKWGKKDKKGKKCLN

>ETN91295.1 NADPH quinone reductase MdaB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKIF

>ETN91294.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTRTKYLYILLVIAMFLWGSSWPTSKILANYTDTSIITFWRFFFVVLGSFFVLNFLKIPLKIEKTALKWV

LIAGVLNGLYAFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAIFFQKNKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALMAVFNHKAKGAHPLAINFYINLISILMFSWILFDVKSY

EIFHFEFKFWISMFVVAFLSTIIGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CALAIGAIYFINIYGKKA

>ETN91293.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIKIIETSINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYEFLDENY

FVLSGAEFEAKLDNQKIKTCKVYQANKGDILELDLAKIGFRGYLCVAGGFEVKSFLNSKSSDAKMGAGVF

EGRALQKDDILNTHNTFIPFNLEARECENPLFKSPKEPIIRVILGTNEDAFTQKGIETFLNTTYKVGLKS

DRMAIYAESSESIEHKNSADIISDPAVFGSIQVPKSGIPIILMAGRQSTGGYTKIATVIENDLSLLAQAK

LGSSFKFQSISMQEALELYKQREMKFKAMDQKINLDFENLI

>ETN91292.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSVHFSGSKALLLRFEQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLAEQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFDIQEQVAKKVYQKEIYEYKNH

>ETN91291.1 LamB/YcsF family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>ETN91290.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLALLIGFPLGFILGFFEFKLKRFIKLIVDTSL

SFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFILALPIVIALFSNLIENMNKKHFLLIKSFHLS

PLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGNIKYDTRTITTAISLETNKGEFASGIALALV

LILIAFCLNFITHKLKRT

>ETN91289.1 metal ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSKNISYFGNFKPNNKQ

KREIYLLFPEPILLNRSVRANFLFTLKTYGIKEDIEERIKESLMFLNLDESLLSKHPNELSSGQSQKIAF

AIALSVRAKYYLLDEPSAFLDKNTTLLFKKTILKMHENFNTGFLIASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFCNFIDFSNCKKYKDFKKPPSKIAIDPYKISFFNSKNIPKNNYDFILEKCYIIAL

RSRKSDVFIRVSCMDKILEFALEKQEFLRFDLKLYEELSLYFYEDAICFLN

>ETN91288.1 UTP--glucose-1-phosphate uridylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQISGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRPLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEENLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTKAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFYEKSKC

>ETN91287.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLQFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVVSLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDVIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>ETN91286.1 DNA polymerase sliding clamp subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSVTKQLLQMQADAHHLWVKFHNYHWNVKGLQFFSIHEYTEKAYEEMAELFDSCAERVLQLGEKAITCQK

VLMENAKSPKVAKDCFTPLEVIELIKQDYEYLLAEFKKLNEAAEKESDTTTAAFAQENIAKYEKSLWMIG

ATLQGACKM

>ETN91285.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVLNFFYENHPKFEVSYERKNQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTNIKDLNINGFEELELDYFDFEEFISVSKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQISISKIFIELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDNFFEQGVKFEVISFDKFSLGF

>ETN91284.1 diaminopimelate epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>ETN91283.1 dephospho-CoA kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKILENFTHPKIRAKILEQMQILDKENKAFFVEIPLFFESGAYENLGKVIVIYTPKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>ETN91282.1 phosphoribosylaminoimidazole synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEESEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIIGEICINEGIVLE

>ETN91281.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKSVDLAI

NDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYPRRLID

YVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRNSYRRI

EFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESRIKHYD

KLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVLDDERE

IDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTHSPFIY

DNIFEDYIVDLEKYRVNNG

>ETN91280.1 hypothetical protein X910\_01590 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>ETN91279.1 molybdenum cofactor biosynthesis protein MoaA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>ETN91278.1 molybdenum cofactor biosynthesis protein MoaE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEHFTLYQGSLDIPKIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGISLLFAHSIGDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYAKERSTKL

CGAGLLKG

>ETN91277.1 molybdenum cofactor biosynthesis protein MoaD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>ETN91276.1 bilirubin oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNRRNFLKFNALTLASMGVAYANPMHDMHSMHKNHSINHDLDTSFINFAPKNLKLLDPKQFPQGEILKAL

PLLKNESKEKNIFRATIEIKENHIELIKGKKTLFYTYNGLVPAPKIEVFEGDKLEILVKNKLKEATTIHW

HGVPVPPDQDGSPHDPILAGEERIYRFEIPQDSAGTYWYHPHPHYTTSKQVFMGLAGAFVIKAKKDALSH

LKERDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPKIKLATNERIRIYNATAARYLNLRIQ

GAKFILVGTDGGLIEKAIYKEEFFLSPASRVEVLIDAPKDGEFRLESAYYDRDKMMVKEEPNTLFLANIN

LKKENVELPKNLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALASMFLINGKSYDLKRIDLS

SKLGVVEDWIVINKSHMDHPFHIHGTQFELISSKLNGKVQKAEFRALRDTINVRPNEELRLRMKQDFKGL

RMYHCHILEHEDLGMMGNLEVKE

>ETN91275.1 carboxynorspermidine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIDEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSTIEGLHFHALCEESADALEAVLKVFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYSVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNARILATRENEKISDLKESEFSYLLTGNTCLAGDVMGEYAFDKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLNAKNELQMIREFSYKDYSLRN

>ETN91274.1 hypothetical protein X910\_01560 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSIQAFF

KEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILVKSKIRRNEKFFKESEDSVGFCLLLMSEFLRQ

NEDDLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQNDLS

RSEFLRREANKQRRTREKSQGIS

>ETN91273.1 Tat pathway signal protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>ETN91272.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARI

>ETN91271.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNHLGDIQRSKCIIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYARIRPGTDIAF

MYGMLKIIFDEGLEDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAKNKPTTLIWA

MGLTQHTVGTSNTRLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPLNEATWRYYA

KIWGVDYEWLLGNFVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGITSTAQQVKV

KEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDPLYESMEDQE

ILFELAKKLGFYEDFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWSPERLKKHTLYWDKFDEVTLEG

KDEVAGEYYGLPWPCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYEGESLLAKNAPLNSPIDTGYPQ

ITKDNIEKVLGITLSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNAKARAVVWTFKDKIPLHREPLH

SPRNDLVQKYPSFEDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLVNLNGAGMENRASMYLTRLTPE

MFCEINPELAKEQDIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLPFHFTGVMQGVDLTHNFPEGTK

PYASGESANTVTNYGYDIMCQIPETKGGLCRISKDGK

>ETN91270.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSEKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>ETN91269.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKVFVTLLLSVVSLFAYGSERMGQDTQIWDFHRITNIPNYDTFGKLWTTLQGEYIATIALIAVIAVLSA

FALHYMVIGPKQFSHDGKKIYAFTLFERLFHFIAAISWVILVPTGFVMMFGEVFGGGVFVRVCKNLHAFA

TILFIISIIPMFLCWIKRMLPASYDIRWMMIVGGYLSKIKRPVPAGKFNFGQKSWYYIAVFGGFLMIITG

GFMYFLDFNSTAIQGLFGLTQIELLRISAIVHNFLGIVCAVFFGVHIYMAVFAIKGSIHSMISGYKEEEE

VYILHSYWYKELSNKKQIEPSFSYDPNVKI

>ETN91268.1 formate dehydrogenase accessory protein FdhD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDPLFTTQILKYKGNESFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIETKDDGMSVHIKAKIDKENLAKLNAEGVVISGCGRAHTANIDPEAIEASKISSDAKFSKGEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHG

>ETN91267.1 regulatory protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKNQEKEIISYMRELLNSNEKLDCGTAFKIAKKFNINIEKIGQLADENHMRIDNCELGQFGHLDFEKAK

IEVLKKIEPSLDEKRRIFCKDARDIAKEGCGLKSMRSALKTYKVDVKYCQLGCFKEKKGKQFIVRTKTWI

ENADGDLLFGRGKTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKL

TPRAMELMENYSILQKDIEEYANKRFKELFLKGKK

>ETN91266.1 MCP-type signal transduction protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKSLNIGLKLIFSVAAVVVIGLVILISLITKQVSQNITKNTEDILASITKEYATQTQGIFGEMIALNKS

ISGTLTEMFRSTSKEDLDIDNITNIITNTFDNSAYSNFTYLYLIDPPEYFKEESKFFNTQSGKFVMLYAD

EEKDNKGGIKAIQASDEIANLQVVQDILKKAKYGENKVYIGRPIKMNLEGQDFDAVNVAMPIFDRKNQVV

GVIGMTLDFSDIATYLLDPKGQKYDGELRVLLNSDGLMAIHPNKNLVLKNLKDVNPNKGAQETYKAISEG

KNGVFDYIASDGDDSYAAINSFKVQDSSWAVLVTAPKYSVFKPLKKLQLIILGASFIFIFVVLGVVYYCV

RKIVASRLPVILSSLESFFRFLNHEKIEPKAIEIRANDELGAMGRIINENIEKIQISLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDVLQSKIGSNMNEINRVFDSYKALDFSTEVFNAKGE

VEITTNILGKEIKKMLLASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLETVTKENVEVANVTNNITNEVNQIAAAILEDVSKKRF

>ETN91265.1 regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIDCRNLSCPQPIVETKNALEKLQENEILEIVLNSIISKNNVVKFLNSLNLTPVVDENAQEFCIKVQKK

NFDSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLSTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>ETN91264.1 hypothetical protein X910\_01510 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFKIVLRPPGLNFAAQPAALTKCVKF

>ETN91263.1 sodium:proline symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEVVQINTPIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLLMGLPGA

LYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAVVILIFF

TFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIVPLVMLY

HLGGFGEAMNIVREIKPQALSMGEGVGIVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMATFIGIAW

MAVCLLSACMIGILGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQLLVSSS

TIAEDFYKKIFREDAPSHIVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSVMLFSLF

WSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLVASAVIIIASLFTNVRSGTKAAYEKMLKEL

>ETN91262.1 hypothetical protein X910\_01490 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKITYSLNLQGEACPYPAIATLDVLPKLKSGEILEVLCDCPQSINSIPQDVKNRGFKVLEIDQSGPTLRF

LIQKP

>ETN91261.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSFKQKYLINFWDNPRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFIGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMVLGIYLGVKICNTSFFKPKAKLERVNKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRDNAIKGALIGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVFAGGCECGWTYRAFEGQSHFIIVGIANIIGTMILALSYD

FLPKAFKEGIKINLLTEFGNLNGFFINLILFILMFVFVVFYKKHFFKNQLKG

>ETN91260.1 adenylosuccinate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>ETN91259.1 hypothetical protein X910\_01470 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSKYNSVVKVRKQQLDKAESNLNQAKQRQLEHEKAYELSRQECESLGVLPKSGSIAELRSNLSMAQVGR

EALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKVLEAEEIKQKQKELAKAEEKFLDEIAISRFFKGEK

DD

>ETN91258.1 hypothetical protein X910\_01465 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKKFILLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEA

EVNATLAKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLE

SRKISGVLSKMDPKKASELTLLLKNLDNNASN

>ETN91257.1 competence/damage-inducible domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>ETN91256.1 carbamoyl phosphate synthase small subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNASFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>ETN91255.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIDFLAIISVAFLSSFGHCYSMCGGFNLLFINLNSKSNNLFLLTFIYNLFRIFAYIVLGIIFGTFGNIL

AINAKVQSLSFFILGIFMMILGFALIFRGNMLSFIENNVFFDSFVKKIIKKSKNFKGLKSAIFLGFSNGF

VPCGLVYFFIANAMSKQNIFEGILVMMIFGISTLPAILFFSKISQFFSDFLKNLFNYLSYGVIVCYGINL

AYIGFKAFQ

>ETN91254.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDFFKDQFFKALEKNTIFSRADVQGNLIFVSDKLCQISGYSKKELIGKKHSIFKHPDVEECYIEELLKK

LSYKKPYQVIFKNIDKLGKTFYLETLLIPILDKNNELIEIVAFSHDVSNSFKLNEELALNHAKLRELSIN

LENTVKNHQQEFIQLGKKFEKKMQIALEKNEKDIKIAYEEILKSSLEQMISDIAHQWRQPLNELGIAMFQ

MKQNLKDEKGFAEIYSQSKDMIKNMSETIDVFRTLFNKGVEQCVFIKETLNKALEIAFETIEKNHVNINI

VSKSDYEVLAYENGLIRVFLNLILNSIEAFKNKKRKIITINFSKFGKNYLKITIKDNAGGIDKENLDKIF

QPYFTTKHPSQGIGVGLYISRQIIESFQGKIKVKNGKDGACFEVFLKLKERVE

>ETN91253.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQECKELIILVVEDEIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSAYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGKEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>ETN91252.1 cytochrome oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHPGNVLNYDYTVARYFMFATILFGIVGMAIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

LVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVTGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>ETN91251.1 peptidase S13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETAYAEALTVKKVFNVPYDAENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>ETN91250.1 cytochrome B561 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEHLSIVFDVIKNLITFDLATVQKHEWEIFQGYGFFALVMFLSIVLYAYLYHLYRTEKKGERNYENYANL

ALKDDIDDSVLESKRSA

>ETN91249.1 cytochrome CBB3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWAIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTANENLV

AKGKEAYATCAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>ETN91248.1 hypothetical protein X910\_01415 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENNNRCVFSLSGVTGMLIATVLLLAILAVLTIWGLKAQQEVMQKPYSLKDVQSVKMFGSKEQDHRSIKE

AQ

>ETN91247.1 hypothetical protein X910\_01410 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKALEYLIVIGLVVAAAITAWSVLTVNHLHIG

>ETN91246.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILQDGFFLAIFFFVLLPSRVFALDAVLFNENILSQKVSNEINLIGKELYQKSNIFIGVMVGDKTEIE

TLLNKQKELPQSYILLLLSKNSHKVDIVGSKGTLALIDKEAVLSPYPGTGSILPILATNKGDIYNAAILN

GYADIVDRVAKSLGLQLEHSIGNANRDTINILRILIYGFICFALLYYAQRRIKRKKNVRN

>ETN91245.1 hypothetical protein X910\_01400 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLETKKSFWPYGILLSLLAIIIACIVTIFIASHHPVYEDDFYFDSYQNVENNYNQIQKQQVNFDKFFKVN

FQNDKITFIGKRKIPSYEVDQNSYVANFKISALQNINSNDLKVQVLLTRPFTKNFDQKLEGQVKNGILSI

ALPKLDKGRWELKLKFYANQETVGFFSYELNAQ

>ETN91244.1 50S ribosomal protein L13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKITKPNEVKREWIVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFTGANKAE

DKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTAQIAKEG

K

>ETN91243.1 30S ribosomal protein S9 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>ETN91242.1 outer membrane fibronectin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLCLGLASVLFSADNNVKFEITPTLNYNYFEGNLDMDNRYAPGIRLGYHFDDFWLDQLEFGLEHYS

DVKYTNTNKTTDITRTYLSAIKGIDVGEKFYFYGLAGGGYEDFSNAAYDNKSGGFGHYGAGVKFRLSDSL

ALRLETRDQINFNHANHNWVSTLGISFGFGGKKEKAVEEVADTRPAPQAKCPVEPREGALLDENGCEKTI

SLEGHFGFDKTTINPTFQEKIKEIAKVLDENERYDTILEGHTDNIGSRAYNQKLSERRAKSVANELEKYG

VEKSRIKTVGYGQDNPRSSNDTKEGRADNRRVDAKFILR

>ETN91241.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKTILFDLDSTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>ETN91240.1 Pyruvate-flavodoxin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKIMKTMDGNEAAAYAAYAFTEVAGIYPITPSSPMADYTDMWAAAGKKNLFGVPVKIVEMQSEAGAAGS

VHGSLQAGALTTTYTASQGLLLKIPNMYKIAGQLLPCVIHVAARSLAVQALSIFGDHQDIYAARQIGFAM

LCSHSVQETMDLAGVAHLAAIKGRVPFLHFFDGFRTSHEIQKVEVMDYAHFDRLLNREALLEFRNNALNP

ENPKTRGTAQNDDIYFQTREVSNRFYDALPDVVNEYMQEISKITGREYKPFTYYGHKEPERVIVAMGSVT

QALEEVVDYLNAKGEKVGILKVYLYRPFSLKYFFDVMPKSVKKIAVLDRTKEPGSLGEPLYLDVKSAFYG

RENAPVIVGGRYGLSSKDVDPAQMIAVFENLKLDNPKDGFTVGIVDDVTHTSLSTGEKISLGDESTIECL

FYGLGADGTVGANKNSIKIIGDKTDFYAQAYFAYDSKKSGGYTRSHLRFSKKPIRSTYLVSTPHFIACSV

AAYLEIYDVLAGIRKGGTFLLNSIWNAEETIRQLPDAVKKTLAEKEVNFYIINATKLARDIGLGNRTNTI

MQSAFFKLAKIIPYEDAQKYMKELAYKSYSKKGDAIVEMNYKAIDVGADGLVKVEVDPNWKNLELKEKEQ

TNAYKGTEFVEKIVKPMNAAKGDDLPVSAFLGYEDGSFEHGTTEYEKRGVGVMVPRWIEANCIQCNQCAS

VCPHAVIRPFLINDEEMANAPRGVKDHALEAKGTKGEKLSFKIQVSPLDCTGCELCVHECPTKEKSLVMV

PLQEEMDFGEQENADYLFKEITYKDDILNKETTKGAQFAQPLFEFHGACPGCGETPYITLITRLFGERMI

VANATGCSSIYGGSAPSTPYRKSVKNGHGPAWGNSLFEDNAEFGLGMKIATENTRHRIEHIMNESMQEVP

NALSALFKDWIANKDNGAMSVEIKDKMIPILEQNKNIKAVQDILELKQYLSKKSHWIFGGDGWAYDIGYG

GLDHVLASGENVNILVLDTEVYSNTGGQSSKSSRTGAVAQFAAAGKPIQKKDLGQIAMTYGYIFVAQVNS

TANYAHLIKAITAAEAYDGPSLVICYSPCIAHGIKGGLGYSGEQGELATKCGYWPLYTFDPRLEEQGKNP

LTLTGKEPDWDLYEQFLMNEVRYNSLKKANPEHAAELFERNKKDAQRRYRQLKRIAMADYSNEVES

>ETN91239.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCFSTLFAQDNFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRHIKITAIMLDKVKIYDRWYKKGDMIDD

AIIYEINTKEIKFQYDNLEIAIQINKNDKININ

>ETN91238.1 type II protein secretion system D protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIQESLDELAKYCSFSIIVKDKIAKEKLEILQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGINTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEAKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLNENHSSGINWQNFNIGLNSQVNNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>ETN91237.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDQSFLKEKIEFLI

SQGQSLIILDEVGMYDYAMLESIRIYSDSISFVLSSHKKLNMLKKEHFKSRLSACFKLKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>ETN91236.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQERIKELELRYKYFLLKKYLKYLLLIILISVIAFCFFVLMQKYNKQKNIYLQAIEHKKHLEQKILQAQI

LQEKNKISREKLYKELEEVKAVQENTHISKIEIDSKILNISDLKKSFYQNPSYEKALNLAKKYFDIKAYQ

KTIFWALKANELDKQKQDSWLIFAQAKRALGEEKEAQSALDAYINYYGLMELDGK

>ETN91235.1 type II protein secretion system E protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MESRMDKIFQAYIDNEISLDEICTKFNITSWDFFKKLANFCNLHFVDLDEDNDFIYEGIPFSLLLKFKFL

LIKNNDGFMIIRSKPCSLELLEQVKTFMICEKIDTAIADELKIAKILNQIRIQEEIKRLSIKLRLEWQEN

HKRDDQSCISQIFDFLLHEILSFHASDIHIEARNDDALIRFRVDGILREFAIFEKDIYEALVFHVKFLAC

LNLAESRKTQDGSFELDFENERYDFRVSCLPLIYGESVVIRILKHDKEILDLYKLNLGNKNLEILKKILH

RPNGMILLTGPTGSGKSTTLYACLNELKSIEKKIISAEDPIEYKIPLVQQILLNSKVGVEFNSVLRAILR

QDPDIIMIGEIRDEESLDIALKASLTGHLLLSTLHTNDALSTIDRLLDMQAKSYLIASALSLVIAQRLVR

KLCPWCKQKSKKHYIEFEGEFFEPKGCERCHHSGFFGRELIAECLEINEDLACAIRENQDKTILMELAKK

YGFQTMFEQGLKKAKEGLTSIDELLRVVR

>ETN91234.1 flagellar hook-associated protein FlgK [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGIFGTLYTGVTGLKASEVQIATTGNNISNANATFYTRQRVVQTTNGYITTGGVQVGTGTAIESIVRLHD

EYSYYKLKGASNQLEYTKYMASTLQEIAQRFPDLQNTGILKDLENYNKAWNDFASNPNENATKIALVKAS

QTLTESVNNTFATLDKIQKKVNDDIKNTVDEINRIGEEIATINKQIYGQEALPTEHANELRDRRDELELT

LSKLVSAVASKNEINQDNRLDTTITDPGHQYNLSIEGFSIVDGINFHPLKLDYDDKNKSYSIYYETPDEK

VRDLTAKISGGQLGAQLDLRGRNYSKSEGKYEDGIIQGYMDSLDTFAKTMINETNNLYASSAKSSVTSDY

LSGLKGDIPLVNYDRTIQPGSFDIVIYDDKGDKKLTKTITIDVNTTMNDIMRQINANTDDNNNKNSNDDV

DDHINTSFSYDAKTGDGLFQINAKSGFKVAIEDKGTNFAGAFSIGGFFSGTDASNMKVKDSILNDPSTVR

ASLSGVDSGNDMANKIIQLQYEKVNFYNEDGTIDNLTMEEYYRKLTGKIASDGENNNVVNSSNETLYNSV

YSEYQSKSGVNTNEELAALIQYQSSYGAAAKIVSTVDQMLDTLLGLKS

>ETN91233.1 hypothetical protein X910\_01310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKQRLDEVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITAKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINDGTNNAYGDKKTNPESIF

KINV

>ETN91232.1 hypothetical protein X910\_01305 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINPVQQSYVANTTLNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIDTKATAAAIADSLI

>ETN91231.1 hypothetical protein X910\_01300 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVDNFLNTYSMNSALLDRAAKARSLESSIKINDNDIVTKTKEDEALKEQTDAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFLKERG

>ETN91230.1 flagellar P-ring protein FlgI [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>ETN91229.1 Ornithine carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKISLECKDLIIEKTLELFLKDHLVMKKNCDFIISDEKIYTAKPLFIISKNSPFLSIPFSKEALFESLNE

FDNALKAAALQLALEQKRLLEEKIDAIALEFKKDYENKIDLAIKDLKNKLVKALNDE

>ETN91228.1 hypothetical protein X910\_01280 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLELRIFRFDKTKDYEAYYKPYIYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTYMVVNKQIIPLFT

PLEKIAKEFDFSLCIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILH

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLKAKFISYENSIKNNGFSLLNLNPTLSY

KIAADIVLDAYDSGADFMVVKEEKDFYLFDTCAKKLMQTSGREFEDFYILSRFEFLALIEGIQAPSLKNH

TLKVSLI

>ETN91227.1 thiamine monophosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKEDFIIKAFLNEKNGDDGAVIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNAVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINDKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGNLKPNHVFIKPKLRASFFYEVAPLISCAMDISDGLSKDLSRLLALNKCG

ISWFKKLDDYTLYSGEEYEILFAFDEKERQNIKTIAKKHGVKLNIFGKAVKGKYEFRGREHHF

>ETN91226.1 tRNA pseudouridine synthase D [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>ETN91225.1 hypothetical protein X910\_01265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKKYPNHKLYDYTSVRTISDINNPE

GKIKEMKRDLEIDKTPYSNYVFLLNPNDKKTIKL

>ETN91224.1 hypothetical protein X910\_01260 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQHKNKATAFKMLKSRLYELELMKQQDSANTG

EKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGDIKKMIEGVLIALKAE

>ETN91223.1 ribosomal protein S12 methylthiotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>ETN91222.1 tRNA(Ile)-lysidine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIKDEILALLKRGKNLLAFSYGSDSSVLFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKHAPKFQSNFEKKARDFRYDFFEKICLEQGYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQECE

KRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLD

EDRKKLYDFENIKEIQGLLICPKNESLIARAVKMKGLLLSTAQRKELLKGDCVLGGKIALAYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPRLLRAYLYNHKIDISSLSF

>ETN91221.1 dUTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>ETN91220.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>ETN91219.1 hypothetical protein X910\_01230 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>ETN91218.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNVIHALFFRELKTRFGKNRYLGYIWVVGEPMSVVLLVTIIGTVIREYHHQVMPEGISIFMFLISGIMP

FFMFRSIVTQLMNGIGANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRLDVFPVHLLG

VLFCIFLLICSAFALGICFAIVWHFVESLRTLLAYFSIVFYWSSGIIFPTWLTPRPLLDIFYYNPLLHIF

ELLRFNFFENYPLQDEYSYFYAIFWILLVLFIGLFIYYYNRQALTAAKKE

>ETN91217.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>ETN91216.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGILSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>ETN91215.1 sugar ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>ETN91214.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDDQKD

YFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSEKIY

KEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFYTTN

FSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYKNLA

NLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFLKQN

NINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSKSQI

LECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLDIIN

DMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKPCIN

CANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNKVYK

IDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYRILK

KFLFHRKEFFRDRKNKNKEKPYV

>ETN91213.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYL

DNFEHSYDCIHILFLDRNDFNKSFKYINLLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIP

IQKILDRVQYPFFEQITLEHMLNYWINHGVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFK

LNNIDNLEIMQNIIFGPYRYILPLIINFSFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSI

SELDFEYLNNPLIKQINDFQKDFLDVLNKKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIK

QYRPDIVASWKYYQEFEQMCKELDGDIQEKDL

>ETN91212.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKVVSVEPN

DAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYFSCMWNH

RDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINAWKSVKN

PYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>ETN91211.1 hypothetical protein X910\_01180 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>ETN91210.1 glutamine amidotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEICLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>ETN91209.1 adenylylsulfate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>ETN91208.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRSKNQDAYIIFKPHPDVLSGNRVGLKDETRILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCKRRTRKLSLEELVAGALIT

YPRYINPKTKTLCEIEVCLDIMLNLQKAYFSKKYIKLAIDFKTFMLRKIRRFYEFLAKK

>ETN91207.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRFNTKIKKEFSGKNVLLLQGPVGNFFHHLAIRMEKKQTKVFKLNFNGGDFFFYPSGTRCKCDEKDLENF

YRDFFQSKKIDAILMYNDCRIIHAKAIKVAKELGIEIWIFEEGYLRPYCITLEKDGVNANSSLPRDKNFY

LSQNIFTKESIKEIPGGFKFMAFDAFLYWLFAFILAPFFNNKLHHRTLYPFEFLFWFRSLYRKYLYKITE

KKLNEKIYNLEKKYFLAILQVYSDTQIKYHYKKSIEHFIEETILSFANHARAKSYLVFKHHPMDRGYKNY

SKLINDLSQKYHVEGRVLYVHDTHLPVLLRKALGCITINSTVGLSAILEGCPTKVCGNAFYDFEGLSYPK

KLQFFWREAHAYKPNPVLVCNFKKYLLQTNQFNGNFYKNFFLDK

>ETN91206.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDREVFYIAGYDPKSYRFYYDLFKKNLKDYSHTFNIKADLSKIEKNEQFPFFKISCEGVQTKYHFLTWND

IVKKNWSENYKDALADCYSFFRIYTITGLFIKFGKESIYQLITGYYPFFYVLFSLLFSLVLAFGSFAFLQ

NYMHFSLAIIIGCFLGFLLNHFLFKLGKKLAVFWIARICAFCATWQDKKTGTMQERIKLFANTIVDKLKQ

NENKQDYELVLVAHSVGTIVCIEVLECILRQNLDLSLLHKLKILTLGECIPLVSYQKKADEFRKKLEFVS

RFDLKWYDYTSIIDGACFPQVDFFRTSGVNAKFTPPFLSAKFHTLYEKHEYKKIKRDKNKAHFLYLYSIS

VKGDYDFFSFIIMPKFLEEKVKI

>ETN91205.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRVRTKIRANFRRRVKRTLKGSLKEKLAGTILLCAIVPLAVLGYLFIVIIGTFFNTARARQGVRALDHF

VNASLFNGYAWESVSSHAWRERNRKKWARIVIKITDFFQKDHCKRANKREQPVVDFILSRNLDKQTIGK

>ETN91204.1 4'-phosphopantetheinyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDEKNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>ETN91203.1 flagellar basal body protein FliL [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDEELENEETKKKKGGSLVIIIVILLFVLLLSIMGVIAWLISSSSSDESEVKEAPKEEAKADKPKVSAPT

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNSELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>ETN91202.1 phospho-sugar mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIK

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKYLDDDIE

ENLEVEKYDILNLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKALNLKAHVMFAEPDGQFPNH

APDPTEEENLSAIREFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKDIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKALPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERAKELESMVFTLFNDIKARFKN

>ETN91201.1 hypothetical protein X910\_01120 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILILLTLCAFAFGASECDRKIDRINKEISFSKAHNDTARTLSLELALKQVQNDCTKDPMFYDKKLEA

KKLKEQEVEKIEKELDALKEQKDYMSKVEYKAKKKALKEQKEKIKKEIEEYIDNL

>ETN91200.1 hypothetical protein X910\_01115 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQERIDLIVKILDEKKAENIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLENLKKGRV

>ETN91199.1 nicotinate-nucleotide adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKIDTISKIKGQ

>ETN91198.1 glyceraldehyde-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKHGAQIVLECTGAHLTMAKCQEFIDMGVQKVIMSAPAKDDTPTYVLGVNSELYK

GESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGA

AKAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVSKDEINEAFRKAAATNLKGILMVDDDERVS

SDFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYIANKA

>ETN91197.1 phosphoglycerate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>ETN91196.1 triosephosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFAANLKCNHTRASFKIYAEILNKTIGVKCDDIIVFPPSVAFLEKENNFIQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEEFIKAKFDFAKEHGYKIVFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQSTDIAKVLEFLASLTKAPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>ETN91195.1 enoyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIMKGKKGLIVGVANNKSIAYGIAKACFDQGAELAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKDKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>ETN91194.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKLSNEELKNILEDRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDTFFL

TIGAQGESGYEILEKLAAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFDDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKTSWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEEQIKILEQ

IDFEFESNIKLILQNIAKNKLGALLVENYKKSFEKNYTFIEQNFDENPMPSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASPYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNITK

ISSLKAS

>ETN91193.1 2-methylcitrate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFYSEILADFIFNLKYENIPNAVVQRAKELMLDSLGTAIAASKEECVLNAFKAFENLSTEKNTPIWINDQ

KLDPIYAAMLDGIASHALDFDDTHTEAILHASAILTPLCLSYGFHVSKDAKKIIKAFIIGWEIAARVGIA

SKGTFHKRGFHTTAIAGIFGSVSASAILLDLNKEQIINALGLAGSFASGVNEFLSNGSNSKVLHIANAIK

NGIMVAHFAKNNMSGPLSIFEGRDNIFKCFGIEEECDKTELNKALGEIWQTMQVSIKPYPSCHFAHGLID

CAIALKNDGLKADEIKSIHCFVDEVPISFICDPLEAKYTPNSAYEAKFSMPFLMALGFFDGKITLNSYEN

LKREEVLEFAKKISYEKRKSQGFPKYFPGHLEASLQDGHIIQKDVFINKGNFDNPLSFEELKAKFLANAQ

IYLDNAKANKILDQIINLENLNHFSF

>ETN91192.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTGISVFDHRLLADSWSTQEMRAIFCEQNRIQKWLDVEAALAKAQAKLKIIPKKAADEIAKKAHYKFMDM

DFIFAEFKKTKHPLVPTVRGLEKACDNNLGEYVHFGVTTQDIIDTGLVLQFKEAMTLIKSELKAIAKALA

KLAKTHKNTAMMGRTLALQALPITFGHKVAIWLSELERHFERILELEKRLYVGSIVGAVGTKASLSDECN

EVEKLTLENLGLDVPNISWQPARDRFIELGFVLGNINTTFNKIAHEILILSHNEIDEVAEPFGKGQVGSS

TMPHKRNPAVSENAVTVSNAFKANLAILSDIERHEHERDGQVWKMEWKLLPEMFLMLSVVLANMKFALSD

LEVKKDKMLKNLNTLNGFVLAERVMFALSDHYGKQHAHEIVYENAMLGIEKQKTFKEVLLADKRVSKVLK

EKEIDALLDATSYVGYAPKLVDEFLAKIKNSAILK

>ETN91191.1 cystathionine beta-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRELRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDAHFLITDAIYGPVRTICELFLEKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGANGMITIEFAEGYSKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDWSARGPFVRFHIGLEDTKDLIADLTQAFDSIKK

>ETN91190.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGIVFSLFSVFLLVFMLYKKINAHMALLLSGLLLLSLAAIFGLSPHIVAKGSLNLGFFDIFQVFNQTMS

STLAGLGLTLMTIAGFSAYMDHVGASYALFKVFEKPLKAVKSPYVLLIVAYFIVQLLVLFIPSHAGLALL

LMVTMYPILVRSGVSKLSALSVIAICQYIDHGPGSGNVIMASKVAEVDPAIYFFHYQLPTTLPIIIAVGI

AIYLCNKFFDKKDNFVFNAQEIEKELNENEGKEKELKKPPRIYAILPIIPLVLILGFSSVLDSILVLMGI

SSAEEVKAAASTAIKMNVPVAMVISTFVAIIFEMIRYKSIVETLNSIMIFFKGMGHLFVITVSLIVCGQV

FASGLLSVGFVDTLIEFCKNAGFGVLAIIIAVSILLAVCAFLMGSGNAAFFSFAPLIPNIAKHFGVETIT

MIAPIQIMTGFGRCVSPIAPAILAISAIAKVSPFAVVKRTAIPMLVAAIVNVIMTYIYL

>ETN91189.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVAFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>ETN91188.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDEGQKQQFIKLTYFLGEVLGEQYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELMQNKKYLE

KDFLCDYKALVGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGDILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSIAQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>ETN91187.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTTLSLEEEKRFEELCKMAFNFARNNEYENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNGLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>ETN91186.1 catalase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIKITADLSA

YTKAKIFQKGEVTPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSFVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKEDKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRALKHFEKISPDYAKGIKKALEK

>ETN91185.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>ETN91184.1 hypothetical protein X910\_01030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFGFDDKQEFIPQIYRYLNNQELMLTFLTQYNASVDSALKIPLLYAKNTKSLKMIFGNFLHNIMHVSFG

KIQNINIKLNTYAFYFQKRKSLIFNTKISKNVDLLRLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLEIENEIYELLNLIKENNFEKFYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>ETN91183.1 flavodoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKMNSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTVAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFEASDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>ETN91182.1 hypothetical protein X910\_01020 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKFALILSFFIALFMSACTNATFIQSFIQTSNEGIFIRSQKQQSFKISFQNPSQLRTTLDRDLALKLKN

LGLKEVKENADYEILINLVDMKKHSYAQKITTSARFFYDFDPLESDGEWMVENYYTMQVNLQINSKNHNS

QKTSLLARTAYLGNKERCQLSLENKIINQIVSFFIFKKRQSRV

>ETN91181.1 hypothetical protein X910\_01015 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLIDLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKEAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>ETN91180.1 translation elongation factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSVIIGTAGHIDHGKTSLIKALNGFEGDSLKEEQERQITINLSFSNLKLKDKNISFIDVPGHKDLVKTM

VSGAFGFSVCLFVVDINEGLKEQSLEHLEILKILDIKNIILVLSKCDLCENIEQKSVEILEELKNLDYPI

LKVFHTSIKNNQGIEELKNYLYTIENKENDEELIFHYYIDRVFSLKGIGTVVTGSLNEGSITLNEKIICL

DTQKELIVKNIQNHDTNLEQIKACNRVALSLNCDYKELKKGYLLSKKGCFKAFKECDALVKAKNLQNSKM

IFCVGSRQIECKINILKKLENDEFFVHFSFDKNVFLSFDEAFILLQNNRVIGGGKVLNPLSEPLKKEQKN

KFLMFLKNKDFKAAFSFLKDAHKYGFGLLSSYQRFKLSHQKALKLAKELNQVFVDEKNLNVYHLQSLEEI

KNFIKFILEKNPYAMLSAHSLALRITWASENFCELGLKEMSNLLDFQNGIYFKKGIDFEKLQEKNNNQMY

EILKKQGIKPEAPYNLYDFLELDRKSGDNILKKLTQKGLVVRLSHNLFIEKQALEKLMQECLNLLKNQSL

DVQSMKEYFNLSRKYAIAYLEYLDKFPQVSKEAEKRFLTNI

>ETN91179.1 selenocysteine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKFRTFPQINTLIEDESLKSYPFYIKAFFCKKVVAKLKENFFQDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELAKEKELLSYYDLGSGWCENLNEKLIKNEPKIRKLVQECDILSFSG

DKLFGSVQAGIILGKKELIEKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

KKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILTINQMENL

>ETN91178.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQDFVYIKNDVLIPLPDAIEILDQANDKEALICNDKNQKAQIYAPEINFYLKNSQDEILEQSKNVLTLYE

ARASVYDLGLDLEQSKEVQNRLIVADGDAQTVEFLKEHEFKVIALSSAEILAVFGSVGELCAVVKNQGEE

VEIDFDFLLFKAEDLSVVRKDFTRQSGCYNLLNFENLEVLLEFLQSKSPKYHYKTYISYNASVCQYHERR

SEHCAKCAEICPTVAILKDDENKHLEFSQVDCLGCGGCISVCPSGSLDYAPMPRESFFTLCEFYKDKKIL

IIPKKMSLENLNLALPKDVLPFMIEGEKWLSSMHFLTLLQNSGANLVFYTDFVSRGSNEAIVLLNTFFER

KFQKKAIFVAKDEKELQNVLKEQEFIQDLKYDFHNNTLTTRENFAKRMQEMIKNEDFGSMESGEWLRYGK

VEINPNTCTLCLSCVGACNVGALIADKQENALKFNASLCTTCGYCELSCAEKDTLKLFRSGMEFRASYFE

YQTMAKDELFACIECGKEFATKKAVEKIANLMKPKFGNDENKIKTLYCCADCKAKVMIKAMGFAGQN

>ETN91177.1 major facilitator transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNNVLPLSFIVGTRFFGLFIVLPVLSLYALKLEGANEFLVGLLVGVYALTQMILQMPFGILSDKIGRKK

TMLIGLIIFIIGSLICSFAENIYTMLLGRMLQGAGAIGAVATAMISDFITEENRGKAMAVMGSFIGLSFA

ASMVISPLMSAKWGLSSLFDLSAALSLLCIILLYTVVPKENKITHENEKTPFFHLIKQKNLALMNLTNFM

QKMLMSIAFLSIPIILVKHLGFASDKLWIVYSASMVAGFIAMGFAGSLGEKRGLAKQILLLGIVFFILSY

LFFAFSNSMDFFITAVVIFFIGFNLHEPIMQSCASKFCKVHEKGAALGLFNAFGYGGSFTGGIIGGIFLH

LDALNLLAIILVILALIWLVALFFLKNPADFKNLYLPLETPLNFSTFGENLGVVDIYKNSKNLVVKFDSK

LTNKEELEGKIKI

>ETN91176.1 nucleoside-triphosphate diphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIILATSNKHKVLELKEILKDFEIYAFDEVLMPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFKQSKAYYVAAIAMVGLMGEFSTHGTM

HGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILNKG

>ETN91175.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFAKLLKFFISRPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDTDLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKAPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

RNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNDLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKSIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKVERIVLETLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSMGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSILSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNEFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVAAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLSGSLFLLPSFLITIYSKKTKFPNQHKEHILKQ

>ETN91174.1 hypothetical protein X910\_00975 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKFISFILIFFAIFAFAKEQNSDDFEQEYQNYQVNDPLSGYNKAMTSFNVALYDYGLRPVLKGYNAIT

PEFIRLGVRNFFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFGGLMDVASKMSLKKHPADLGTV

LAHWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSK

>ETN91173.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDDTKKLDTIE

IFNIPDLSKYKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDF

YWDINLD

>ETN91172.1 guanine permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>ETN91171.1 peptidase S8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYEYKL

SGKTIENNVRFKDFPNQDFVQYHRLNSNLITWGLTSYFIYPNSFFYGFNVVNEFASDQYNINVLGQFGFY

F

>ETN91170.1 hypothetical protein X910\_00955 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>ETN91169.1 nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>ETN91168.1 glucosamine--fructose-6-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCTDFESQGYGFAI

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVVYENDILKSLCFSKLSGDKAYAKKDGFRFFMEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQADEITLCACGTSYHAAMASAYLFERIAKVKAKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYLHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>ETN91167.1 fumarate hydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEYRVEHDTMGEVKVPNDKYWGAQTERSFENFKIGCEKMPKVLIYAFANLKKSLALVNNKLGKLDDAKKN

AIVQACDEIIAGKFDDNFPLAIWQTGSGTQSNMNMNEVIANRATEIMGGDFRKEKLVHPNDHVNMSQSSN

DTFPTAMSIVAVEQVEKKLIPALDELIATFEKKVKEFDGIIKIGRTHLQDATPLTLAQEFSGYLSMLLHS

KEQIIASLPTLRELAIGGTAVGTGLNAHPELSQKVSEELTQLIGTKFISSPNKFHALTSHDAINFTHGAM

KGLAANLMKIANDIRWLASGPRCGLGELIIPENEPGSSIMPGKVNPTQCEAVTMVAVQVMGNDAAIGFAA

SQGNFELNVFKPVIIYNFLQSLDLLADSMHSFNIHCAVGIEPNRAKIDHNLHNSLMLVTALNPHIGYENA

AKVAKNAHKKGISLKESAMELGLVSEEDFNKFVDPTKMIGPKA

>ETN91166.1 hypothetical protein X910\_00930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTTCMVLLF

FAPFVYAMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASS

FTKSGAKFLIDMVLICVFYFFANLYGTELVIYLKSIIPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITIFYGYDGILMGVIFAVSSLIPAIGGALIYMPVSLYEFASNNLNSALVIFIYSVIVISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>ETN91165.1 Holliday junction DNA helicase RuvB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDRIVEIEKYSFDETYETSLRPSNFDGYIGQESIKKNLNVFIAAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMSANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASAKSYSALKLNYEKTLFEE

>ETN91164.1 histidine phosphotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAHNTAWAARRLNLEEV

TDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPLIVNVPNIISK

>ETN91163.1 polyphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLERYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKICDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKTFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKVLEMIRIETSKKNEGVIVAKMNSLVDSDIIQALYEASMEGVQIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKIIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>ETN91162.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKTSNLFTIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGPHSQKVKGEPRA

TCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFAQTAINATT

NPHADKSLNCASCHKDVGHKHGI

>ETN91161.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDEANKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKTTEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGKKVKVMGET

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSVAHDQRTAEYAIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFEDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>ETN91160.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>ETN91159.1 plasmid stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>ETN91158.1 hypothetical protein X910\_00885 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEFSKETQHFLTNYCKDNNLSEKEVLELALSYLEHKIRIDGYKKDIELYKQGKLKTLDFDETFNDIRK

DLE

>ETN91157.1 enterochelin ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILDLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>ETN91156.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLKNITKFYDNKAIISDLSLDFHKGKITSIIGANGAGKSTLLALASRLIKPSSGEIYIDGMNLKDYKE

QILAQKISILKQQNNINLRLKVEELVAFGRFPHSQGRLNANDKIKINEALEYMGLSNLRNEFLDALSGGQ

KQRAFIAMIIAQDTEFIMFDEPLNNLDMKHSVQIMQLMKNLVKDFNKSIAVVLHDINFASIYSDEIIALK

DGKLLKQGSKDEIINQENLKQIYDMDIPVSQIDGKKICIYF

>ETN91155.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKKMLILSFLTLGMIGIFILAGLNGFDEYALKSRFLQIAAIIIVAICIAVSTVIFQTLCNNKILTPAII

GLDSLYMLLQSALIFSFGAANLSVYKNDINFLITLVCMVVFSLGLYKILFSSDRSIYLIMLLGLVFGTLF

STLSSFFEVLIDPDEFMVIQGRMFASFDNIAFDVLILAYIISFLSFIWIFRYMKFLDPLNLGKDLAINLG

INYQKISKQLMIIIAILTSISTALVGPITFLGLLVVNITYELFKTAKHSILLSACILISILALLGGVFFV

SRVFDYNATISVVINFLGGIYFIYLVLKGNKL

>ETN91154.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFKHILSLKVLIALLLFFGMISLFIGVISINVKDILNLNSTQLEIITLTRIPRLIAILLTGMSLSICGL

IMQQLTQNKFVSPTTAGTMDCAKFGILISLIFFAGASFFTQAIIASVFALLGSFIFIQILRKIKLKDVIF

VPLIGLMFGGIISAITTFFAYALNYIQNIQGWLQGSMANVMQGNYELLYISLPLFILAYFLAHKITIVGM

GEDIALNLGISYNGILFLGLMIVSIITSLVIVSVGIIPFLGLIIPNLVALYLGDNLRKNLIYIALCGALF

LLVCDIISRLVIFPFEMPLSITTGVLGSLIFIFLLLKRKAYA

>ETN91153.1 phospholipase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKIALFLNLCVFIWASDLQQALEYEKQGDYKKAMEIYKKLALKNSSVLISQEQNNSSQTTQTQNSITIK

KEEKQDFSRLALANYLGENESFNPLGISSYKMNYFLPFAYSFNSLGTNNNKSEAKFQLSVKKRLFENLLG

LDEKYYIAYTQTSWWQIYEHSSPFRETNYQPEFFIDFPLYLKDYEFFNNLRVGILHESNGKGDENLQSRS

WNRIYVSTAILYNKFLFVPRLWYRIPESKKDDDNPAILHYMGNFDVNLAYLGDDYFINLMLRNNLKFHDN

KGAIQVDLGYDIFNNGIYWYLQYFNGYGESLIDYNKHLQRLSTGFLISY

>ETN91152.1 molybdopterin-guanine dinucleotide biosynthesis protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>ETN91151.1 ferrous iron transporter A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKYTELLQLQTFFSQFKKIDFIKRINDNILELSFDRERFIFDLTRAMSVIYTAKFNAKNYNAPFDFMLKK

YFSNAFIKEVKVLEGNRILCFSVKANKAYKSYESKIYFEFTGKNTNVILTDEKDLIIEALRHIDKSYRVI

KPNVILESLKPYKMDENFEEIKDFADYFSRKFTSIYESKIKQIKNLKLAQVDKKIQNLQELFSSLDEENS

LLLKALEYRKRADVLFANLSVLKDYEREFKLDDFEGKELEFKLEFSPKQSANLYYKNAKKLEQKAKNLNI

QRQNLKEKLDFTLSLKELLLQAKSEIELEILLPKKNSKKNQDHKQEDLVANFYFNEFKICVGKNEKGNEF

LLKNAKKDDLWLHVRNIPSAHTLIISNKQKISLDVIEFAARLCVSFSKLKKGSYWVDYTLKNFVKVQQKA

FVNYTNFKSINITKD

>ETN91150.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNETHEIKEEIKEKAEQ

EEKKKKHNQEAKTSDDEKNEEDESKDPNFKDAQSIHRLDISI

>ETN91149.1 phosphatidate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSHK

ALLFGILALLLVVGSLVYKKASLKPALIYIYPSLPILALWQVYLDQGMFALFWLIIIVAACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFWLSLLCSFFVAIFAVIGDLLESYFKREAGV

KDSGDLIPGHGGVLDRIDAVIIAAFVMVAFL

>ETN91148.1 1-deoxy-D-xylulose 5-phosphate reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>ETN91147.1 hypothetical protein X910\_00830 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIFLTILFFITSIFALDLDFSVGENGKSLDDNNTVLIFGGIQGDEPGGFHAASLLLSDYNITKGKIIVA

PNLAFDSIIKRSRGNNGDLNRKFASISPKDPDYKTVQRIKELILLPEVSMVINLHDGWGFYKPTYIDAMQ

NPKRWGNSSVIDTSEINASKYPDLENIATQTVNSVNSSLADPKHAYHLKNTKTQELGDMEMLKALTYFVI

SNHKAAFANEASKNLPVNLRAYYHLLAIENYLKTAGIEFSRDFELTPQGVDKAINKELEVKLFNDRILLS

LKNPRKVINYVPFPVNKELNYNTSNELTAVIAEGNSFYIQYGNRFQTRLYPEYLEFSDAFNEVTFQVDGN

ETTVPFGTKVKVKENFLIPKIANVRVNIIGFDHGKDESGILVHKKNMQTQYSLDMAGKIYRVEFYELRGA

NLQQLLEANTNSKLIKNAKNLDLNTLKMARSKDKFLGSILVEFE

>ETN91146.1 protein kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>ETN91145.1 hypothetical protein X910\_00820 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKAFTILELVFVIVILGILAAVALPKMSSSKDEAEVSKSLNNLKTLINDISIYTLKNDHLNSIKTMSNV

SGIENIDLSNFNGTKEVNFRVGDDKKCLKLVFINKVDFILMGISSNEASKNAIINAANQSHEDLENVNFT

SSSSNKACVILSKNENFKNLASKTYLLIGGM

>ETN91144.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGFRINTNVAALNAKANSDLNAKSLDASLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAISNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSG

NFTNQEFQIGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSV

GTGLGALAEEINKSADKTGVRATYDVKTTGVYAIKEGTTSQEFAINGVTIGKIEYKDGDGNGSLISAINA

VKDTTGVQASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAI

GMGTTDMISQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVG

SGKNLSVGLSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVM

DIAETAITNLDQIRADIGSVQNQLQVTINNITVTQVNVKAAESTIRDVDFASESANFSKYNILAQSGSYA

MSQANAVQQNVLKLLQ

>ETN91143.1 Motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEILGPTLHHEESLIAPI

YTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRSLI

>ETN91142.1 PseD protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFNLNQKELFNKNIEALDNIPLKESLKEIKSSKFKLILGKDNLDINLQNTSDNTFLYENVIDELNTMLN

TYNDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWTMFHILDFSNELQKNNLIIINTNI

LSEFDLLNFYKKANSIFLQFSRIYFLELISNYYERYNEEILKLNDTILSTIKISIIQYGNDSIDNLMGIK

HFIYNLSKLLTHPHSEIFLKKRYKLSDTAIIVSTGPSLTKQLPLLKQYANKATIFCADSAYPILAKHNIK

PDYVCMLERDDIVSKCFDNDFKEFDKGILFILASVVHKEVIEFLERNNREYMLVPRAYDFFYYLNLAKYF

QPIDGMVSVAHMNYWLAKFLSHKNIIFIGQDLAYSKDQSSHAKDFIHEKLHEGHFQKDENLFTSIAYGGK

GEVESSYFWKLFREIFEKWISHDNNFINIYNCTEGGARIKGTIEKPFLWACENLLGKDLNKPFPKLNPLN

INKQNELMLKAYNKIYKSIYHCKDFNKKLLQEYNEIKELYLTLENLQIEESKELLNFIIQKIDTIKYQID

DAKNMQDLYEILGPLLVQFELNLARIYVLNPKTPEDSFNKSLIWIKEHLEWIEMIYGHIQAQENALFENI

IPLEQKLKERKMQKYLRRIKNANK

>ETN91141.1 N-acetylneuraminate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>ETN91140.1 pseudaminic acid biosynthesis PseA protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNQNINWQEREKEFFELIKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLDNLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELQRVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLEFSGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>ETN91139.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALKEQVL

VQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQGINNK

SDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>ETN91138.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>ETN91137.1 N-acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLKNFTELNSQEIELIFKWRNHPDINQFMKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAKPNLKGVGQILMNEIIKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDK

DFYHICLKQSDCKALPS

>ETN91136.1 CMP-N-acetylneuraminic acid synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>ETN91135.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGSAVPPLNYILGREMEHSYSEYYEDFPHNRIIFFLKTHWTRKENSPYFFNNENYFIRTLL

NKDHLILQSQKNKNIIYVSYHSKEDPLTPANFKEQTMQILKILGYDVSLNLIDENKIDGKFIKNLDHGCG

IPDKALFRKELPLMLEKLQKRKSLMQENSISYPCGKKVFIFKDVGDKFELEIKD

>ETN91134.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKTEFLEELKEAMHRDEELNEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSNLINLA

KLD

>ETN91133.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHAANT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLICGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFELGSDGKYFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVDEKDIAFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>ETN91132.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>ETN91131.1 hypothetical protein X910\_00725 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>ETN91130.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>ETN91129.1 N-acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEHNSNILTKEDFKNCLMDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTF

SYSFCKNEIYDKNKSKCTVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILT

RNNAKIVYLGADWAHTFIHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIA

KLLEESGSLKKKSFGGTNISAIDTNDFKKIIIQALNTDKYILVRKD

>ETN91128.1 SAM-dependent methlyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>ETN91127.1 C4 aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>ETN91126.1 N-acetyl glucosamine/N-acetyl galactosamine epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>ETN91125.1 deoxycytidine triphosphate deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLKADNWIRKMALERKMIEPFCEANIGKGVVSYGLSSYGYDIRVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>ETN91124.1 acetyl-CoA carboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKEEIKELVNLFAEANISKIKIKEQDGFEIELERDMCCDVPAPVCPPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>ETN91123.1 biotin carboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPSQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAEDRNKAIAKMKVALDELLISGIKTTKDF

HLSMMENPDFINNNYDTNYLARH

>ETN91122.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFEDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPKFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNAHYIKTLPFEEINRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDQKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIDNFLKVRGK

>ETN91121.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLKEEALKYHLGGKIDIVPSKPMATSYDLSLAYSPGVAEPCLEIAKDNELAYTYTNKANLVAIVSDGSA

VLGLGNIGAQASKPVMEGKACLFKKFANVNAYDIEINVHSIEEIVNFCKALAPTVGGINLEDIAAPKCFE

IEAALQDLGIPVMHDDQHGTAIISTAGLMNAMEISGKKFKDIKVVVSGAGAAGIASAKMYRNLGVENIIL

VDSKGVISKDRNDLTPQKLEFAVDSKEKTLKEVLKGADVFLGLSAPKILDDEMVLSMAKDPVIFALANPI

PEVMPEDVARLRKDAIVGTGRSDYPNQINNVLGFPFIFRGALDVRASKITENMKVAAAKALADLAKLPVS

DAVKKAYNLSTLEFGRDYVIPKPFDERVKAAVSTAVAAAAVKDGVAKVKNFDEKAYFESLK

>ETN91120.1 uracil phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIHCINHPLIEHKLGILRAKETKPFQFRMLIDEISSFLLFEASKDFSLKEIEISTPIQKTTVKKLDEK

IMICPILRAALGMLESVFKMIPDASVGFLGFVRNEETLKADFYFQKLPKDAKKRTAIVIDPMFATGGTAI

EACNFLKSQGVKKIKFISILAAPQGLKKFSQMHDDVEVFVACIDEGLNEKGYIIPGLGDAGDRVFNTL

>ETN91119.1 hypothetical protein X910\_00655 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFGKIDYINLLPLHIYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNTSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYAKTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>ETN91118.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLNYGIIGLGKFGSVVADELIAGGHTVIVADKDEEALKSIQNPPSYAYILDSTNISALKEAGFHDVEV

VIVSIGENVEKSILTLMALKDIGVKNIIAKATSNIHGQILSKLGATKVIYPEKESAKRLVKEFLTKDADY

EVFDLSANTIRAIKINIDEKLAGNSLKHVAQNMKVISYKKLNSDWEILPDLETTTVYSGDVVILLGTVKE

LREFEH

>ETN91117.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQFGLDRRTFKILLAGYIIIALFGALLLHSSWAHTTPIDFLDAFFTSTSAVSMTGLVVKNTAVDFTLAG

QIIILALVQIGGLGYMGIGLFVYILIRKKVGFSARNLLKESLFYPSMDGLFKFFKKVLLFIFTIELIGAI

LLTMRFALEMNFKKALWFGIFHSISAFNNSGFTIFEHGLIAYKHDIAINLIITSLIIIGGLGYFVLVELY

FFQRKKLQNLSLHTKMVVVASIFLIFSSTLIIFAFEYSNPQTIGHFSFFDKILSSYFIAINYRTAGFSTL

DMGHLHDASLFFGSLFMVIGGAPGGTAGGMKVTTVMVLLLYAYWSIRDGRVRIFGHEIPRETISKAFIIA

VGSAVYIVIAVILLSLLESKFDFIALLFETSSAFATVGISVGNGGTLSLCALFSDPSKVIIIIMMLSGRI

GVFAFLLSVFKQDKAIHLKFPEGKVNL

>ETN91116.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTFLVDENSRLDVFLAKKLNQSRNQVALLIEKDCVQVNDKIQDKNSFKLKNGDIISIASLKLCNEIKPQ

FEVDFDIDVLYEDEDLLVLNKPSNLVVHGASSVKNATLVDWLIEKKYTLSNLGGEIRAGLVHRLDKDTSG

AILIAKNNFTHQKLSEQLADKSMGRIYLALIDLPLKEDKIIVEKFLMRSPSNAIKKIAIDKENKFSKNAK

SAFINIVKTENLTLMAAKLFTGRTHQIRAHLASLNRHILGDSLYGYKGKYDCRIMLHAYFLYFIHPKTKE

QIFVKAPLMEDFKNIMFKQINLGENDEKISLGFLLEFFNSFA

>ETN91115.1 fibronectin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRFRLGFYLSFLTLLLSACSVSQMNSLASSKEPAVNESLPKVESLKSLSDMSNIAFEWESLYNENIKGF

YLYRSSDENPDFKLVGTIKDKFQTHYVDTKLEPGTKYRYMMKSFNEQGQISEDGKVIEVSTAPRLEAVPF

VQAVTNLPNRIKLIWRPHPDFRVDSYIIERTKGDDKEFKKIAEVKNRLNAEYIDSDLKPNENSSYRIIAV

SFNGIKSEPSQVVSSTSKALPPQVEHLSASTDGSNKIMLTWDAPTYEDFSYYKVYSTSSSFLPFSVLAKT

DKNSYEDIVEGVGKSKYYKVTMVDKDGLESPMPKDGVEGKTLGNPLAPSIILAQSTSEGINLEWSDNDTR

AVEYEVRRYGGEQNAVFKGIKEKRLKDVKALPGVEYSYEVIAIDSAGLRSEPSSKVKAAQ

>ETN91114.1 tRNA (guanine-N(7)-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPNFKSKKIKEINLPYSKDDVEFLWLAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKVQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWDKKPHRRVIGK

DFCKECARVLTQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECKNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

PEHCYLHLDKTIDFVFKEPFKIQENIKAINELKEILKVQFKI

>ETN91113.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPNLIQANKLTLGYDELVIKEASFAFKDDDFVFITGKSGSGKSTLLKSFYGDLEPISGKLEVCGSLMNKI

GNLELLKLRQRIGIIFQDYKLVQEYSVEKNVMLPLMIKGYSKKVCHDQAAKLLKHVNLTFKADKLPNQLS

GGEQQRVAMARALAHNPKLLLCDEPTGNLDEYSSDIIWTLLKSARELLGTCVIVVTHRIPSNLRVDYRRF

NIENGKMNEIF

>ETN91112.1 cell division protein FtsX [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFFKTHLSLILPLLFMMFAFEFILITNATLKHYEELVNKDYNIIVVSKTELDQNVVKTKVPFFAGLESL

DPKDLIDRLKNDVSEKNLKVLKDSLPKFYTLKLNSLPDQNELNSIKNQLLNIVGVSKVETFSKTHDKIYS

LLILMKFVFWLFLFIIILLAFVLFLKQMRIWLYEHTDRIEIMCLFGAPFWFRSFMLYKVVVIDCFIAFVI

LLAFFTQIFDLSIIQESLKAVDIIFPPINFILHLTLIFLATLFICLLCVNTVMFKVKR

>ETN91111.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFLFVDISLANAINEKTKSLEENKRIQEQLNKKLEDLASDILNGEKSLKDLSLQIESLNSQTSKLEASA

KAQNQELNTLTSQNEDLLKSKSNMEGKLISLMAKDFAYDLPIPQGYIESEESFMAFEILGSLNKVLNEEI

FKISKDYEGVSRLIDDKQAQIKKINESLKDYNAQLAKLQSLKQKQISEINKQKTDRAIYAKKLDDLQAQQ

EELRKTLNQLKIINDTEDANSNKNDTKIVKNNQKIRQLGSSYQGSSVKRYTGKKTIAPLDSFTVKQKFGN

YVDPVYNLKIFNENVVLRSNKSDAVVKNVLDGKIVFAKDTSMLARVVIVEHDNGIHTIYAHLDKIAPNIK

VGKNIKKGAVVGRIKNDLTFEVTQKNFHINPLELISLN

>ETN91110.1 uridylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALESSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>ETN91109.1 DNA-directed RNA polymerase subunit omega [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>ETN91108.1 potassium-transporting ATPase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKPIDEELLLEQLIDNVKNCKDLEAAKALLFEICGHDAILEKAVDYCIFCHEGQFRKSGEPYAVHPILVA

TLVGFLSENKSNILAALLHDVIEDTNCTEEELREQFGSEVLKLVLGLTKIIEIREDNLISSKSKKSLTKS

ALTFRNMLLASIEDVGVLIVKLCDRLHNMLTLDILREDKQKRISEETLVVYAPIAHRLGISSIKNYLEDL

SFKYLMPDEYKLIDNYINSNNQEMQLGLNEFISKIELLFLSNGFRQGSFEIQKRIKHSYSIYLKMQRKGI

GIEEVLDLLGVRILVEKVSDCYLALGILHTHFNPLVSRFKDYIALPKQNGYQTIHTTLFDAKSIIEAQIR

TFDMHKIAEFGIAAHWKYKEDGSVVAPRLDWLTDISMQSINNLENAEDYNAIELYEYAKDSLYVEDVAVY

SPKGEIFTLPRGATVLDFAYEVHTKVGLHAKSAYVNRIKVPLLTELKNGDIVRVVTSNDKFYRCSWIDSV

KTGKAKASIREFCKQKIREINLASSINMLSFIFGVDKNRIETWIEKENLARRIRQVATDSAYLKDIVNGL

KKYAKKSYWFDKYEIKEQKIGNFTLYCNHKIANVDFDFCCHPKRGDAVLAFVKGGNAIVHHKLCDRADKM

IDNNQDMVFIKWDSNIPKSYKLIFSLENKKGVLAEFLAFLAKMQINLLTINLSSDLNSAVDYFEITIEFP

DNINPDSVKDRLKSRCKILDFTSLNDAYKEG

>ETN91107.1 tyrosyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDIKKILAEVKRGCAELIDEERIENLIKNYYEKGENFFIKAGFDPTAPDLHLGHSVVLTKMAFLQKHGAI

VQFLIGDFTGQIGDPSGKSATRKKLDKEQVLINAKTYETQVFKVLDKEKTQIKFNSTWLNELGAAGIVEL

TSTFSVARMLERDDFTKRFKEQSPISICEFLYPLLQGYDSVALKSDIEMGGTDQKFNLLMGRQLQRVYNI

GKEQAVIMMPLLEGLDGVNKMSKSLNNYIGVTEKANDMYAKILSISDELMFRYYELLSQKSLEEIAQIKK

DIEQGNLHPKKAKENLALEITEHFHSKEEANNAKSEFDRIHSQNALPSDMAEFEIQGKIWLAKALVECGL

ESSTSAARRSISANAVSVNSQKVSDEQMHLEQGEYILQIGKRKFAKLKVKE

>ETN91106.1 2-nitropropane dioxygenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLQPLQIGKHTIKYPIFQGGMGLGISWDRLASAVSLNGGLGIISSVGTGYYEERKYASKELNAKPYGSE

NFYSRKGLQALINNARKVCGDVPLGCNILCASNDYARIARDACEVGFNVIVSGAGLPTNLPEFTADFPDV

ALVPIISSAKALKIICKRWQSRYNRLPDAVVLEGPKSGGHQGFTYEQCLDPNYQLEKLIAPVVEEVKNWG

SFPVIAAGGIWDKKDIENAISLGASGVQMGTRFIGTFECDASEEFKSVLLASKEEDIELIKSPVGYPARG

VRTNLLNLVDKRMGPKINCISNCVAPCGRGKEATKVGYCIADRLFDAWSGKKETGLFFTGANGYRLDKLI

SVKELMEKLVNGE

>ETN91105.1 N-acetylmuramoyl-L-alanine amidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKIFVFLVFVFTTLFGAYENELANFDKNFIGSKSEVQVKFHHQLKSLYIQSVINEDEKTKIEILKRLII

SSNTLNLDDKSYANELKESGISEASINALRKAVVKDIKVQNIPQDAEKSTFEPIKTVQKNEKKSSNEQIK

NTEKTNSKTSQAPKSSIVSKVKSDDKIYVLKSSKTSQGVEFELNADLDKNQLKSFALDEKGNYRFISDFD

GVLEGGKKEFKFDEYRLVISQFNPKTIRIVVYAKEKIPIDISFKEEKLIFSKETTSQKKTEQASKISEKK

QDQKTEIKTKVLETKKQDKKTNNEKENQESLYVLDVDKISNAVVLNLSDDLDEKEIAVFDTKDQKFRYVV

SFKGVLEGNRKSFTFGQNAITVTQYNPKTVRVVLSAPKEFKLLKELDNKNLTLGFYTQTTNQNASKKANQ

SSSKTLNTNYKSGKLVVIDAGHGGKDSGALSDKKGSLKEKDIVLSTALKLGNELKKRGYKVLYTRSSDKF

INLRDRTKYANDKRADLFISIHANAAPNATKAKSSEGVETFFLSPARSERSKKAAEKENQGDFEEINYFS

KQSILNFLNREKIVASNKLAIDVQKNILTQTRKKYKIVDGGVREAPFWVLVGAQMPAILIEIGYITHPNE

GKRIANKAFQDLLVKGIADGVESYFYNNR

>ETN91104.1 FAD-dependent cmnm(5)s(2)U34 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIIAESGFGIGLNFFLTLKRFLQ

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLGFYEEFKELLEQFLKFYPKAKEGIYRFYFEDCFLDLVF

EDIAVLKELDFKADIWYLDGFSPNKNSQMFDGNLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKPKVNLGEFSELSFIEASRFYRQILDLKFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLNTPFPLSSKAYICPVKDDLQVIGASYDRLDTSLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEVFYKEEYKALLWTKNKEQKLAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLIRKLKKGL

>ETN91103.1 quinone-reactive Ni/Fe-hydrogenase small chain [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIDYHQIESRLSALEKLPSLKDNDSITKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADR

LPVVWLHMAECTGCSESLLRSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVE

GGIPMGDTEHFLTIGAHGKTGYELSKIASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVIN

VPGCPPSEKNIVGNVLHYLLFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFC

LYKVGCKGPYTFNNCSRERFNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVS

DKIGIGVLTLTGVAIAAHAVISSMQKDKE

>ETN91102.1 hydrogenase 2 large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQKIIVDPITRIEGHLRVEVVVDDNNVVKEAYAGSTLWRGIETIVKGRDPRDAGFMTQRICGVCTFSHY

KAGIVAVENALGITPPLNALLTRTLMNAALFLHDHIVHFYQLHGLDWADVVSALSADVKKASDEAFKYTP

NPYATGADKLLEVQQRLKTFVDKGNLGPFANAYYGHPTYRLTPEQNLIVLSHYLECLRIQRIIAQCMAIF

GAKNPHPQSLTVGGVTCVMDLLDPARMGEYMVKFQEVQDFVNRAYYPDLVMAGKAYAHEASVLNDIGVNN

LYTFKEFQIGRDEWLFESGIIKNGDLSKVYEVEEDKITEEATHSWYADNEPLHPYDGKTNPNYTGLVDGE

SVDHHGNNVHSKVFDTKGKYSWIKAPRYEGNPMQVGPLANIVVNYAKGNPNVVPVVDEFLKETGLPLNAV

FSTLGRTAARCIEAKIVANNALKAFNNLVENLKVDQSTCAPYVIDNSKEYKGRYMGHVPRGTLSHWCRIK

NGVIENWQAVVPSTWNASPKDANGVGGSYEQCLIGLKIADVKQPLEIIRKIHSYDPCIACAVHVMDTKGN

NLSEYKVNVNL

>ETN91101.1 quinone-reactive Ni/Fe-hydrogenase B-type cytochrome subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNKEEKLQRKAEYEFSIGLRLTHWVRAIAIVILIGTGYYLSYVFQSPISNGEPVNFMQAKYRLVHQAVG

FVLIACIIFKVYLFFCDKVSAKERRSVWDIFNIKLWIEQVKFYIFLGKHPHLKGVYNPLQFVTYFFFYLV

MLGIILTGLILYTHTYHEGLGGLLYHILRPLEAAMGGLADVRTYHRILMWVIMIFVPVHIYMAIFNAVKG

KDGAMDAIISGYKFVKEEKH

>ETN91100.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFLVLGIGNIMFADEGLGVHLCKQLEKNYKFTHSEFTLDFVDGGTLALQLSYIIARYDRLIVLDCIEAQ

GASIGDVFSFPYDAMPNKISWSGSAHEIEMLQTLQYMELAGDLPKTHILACVPKRIEAMSFKLSDELIQG

AKIMEKTLLDFLSKEGFTYEKIADFSLQELADISYKNY

>ETN91099.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKNYSIHTKLIILFVVTFFLVCVLFIVLLKIEGNTYNEEESLKQENLIKNLLISYENTSGVEIGAYLGN

SGFNAIQNPNLVKAIRNNGQSLFKAGGELCTLSSLKYHSNLYFDVQCKDFDGLYEENTSDRVYNLLLIGF

FSFSLLVVFMYFSVLKSLEPLKKLRRQVAEVANGEQPDFLDYQEDEVGKIAFEFQKAFKKNQELIQSRQL

FLRTIMHELKTPIGKGRIISEMIKEDRQKERLIAIFLRMDSLINEFAKIENLFSKNYNLHFKPSRFSTIL

EEAKEHLMIDDFNKVVKVDIRYDALINVDMEIFSVILKNLIDNALKYSNNGTCELFCCKECFTIKNPGKP

LAEPIEHYLEAFTREKHNQVKGMGLGLYIVSEVCKLHNFDLIYFYDDGKHCFKIFFGDKEK

>ETN91098.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINVLMIEDDPDFAQLLSEYLAQFNIKITNFENPKSALNVGIQGYDCLILDLTLPGIDGLEVCREIRQKS

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHTNNENINSAFKIDERRH

EITYEDKVLTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>ETN91097.1 molecular chaperone DnaJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEISYYELLEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGEGFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCSDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNGTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

ESIKVPTIRGEATLNLPKGAKDGQRFVLEKEGVKDVHSSRMGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKITNWFKS

>ETN91096.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGVLRYRYDTGNFDKNFVNNSNLNNSKQDHKYRAQV

NFSAAIADNFKAFVQFDYNAADGGYGANGIKNDQKGLFVRQLYLTYTNEDVATSVIAGKQQLNTIWTDNG

VDGLVGTGIKVVNNSIDGLTLAAFAVDSFMAEEQGADLLGKSTISTTQNAVPFQADSLGNLYGAAAVGSY

DLAGGQFNPQLWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKRHANGNLFALKGS

IEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNET

VRVGADFVYGGTKTEATNHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA

LYKF

>ETN91095.1 phosphotyrosine protein phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFICLGNICRSPMAEFIMKDLVKKANLEKEFFINSAGTSGEHDGEGMHYGTKNKLAQLNIEHKNFT

SKKLTQKLCDESDFLITMDNSNFKNVLKNFTNTQNKVLKITDFSPSLNYDEVPDPWYSGNFDETYKILSL

ACKNLLVFLSK

>ETN91094.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENFNRTLLVCWFGVFTTSMGLSQIAPILPFYIKELGHVDTSEIAFYSGLAFGITPLFMAVFSPLWAFLG

AKYGYKNMLLRASFGMSVLTLWLSFAHSALEVVFVRGLTGIISGFTSAAVVFIAVIAPKEKVAYALGTLS

TASISGSLLGPLFGGFVAEFFSISAVFDVVAFLIACSFVTIYFFIHGRKIQKEAKKNTQKVKENKTLIIV

LFITTFVIQFGTFGVMPILSIYVEQIHQGGNLALWAGIVVAANGISNLFFAPKLGKIADKIGPSKIIFGA

LIFCGICFYLQAVASNVYTLIFVRLLIGVGLGGLLPCVNALLKKSVSAKNLSVIFGFNQTCQFLGNFCGA

FGGGLMASHFSVEFVFTFVCLIFIINAFIFLAFEKKYIFSNQGL

>ETN91093.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEMILFVLVMILLVLLFVVLFRQYKSPKIEEKSTQSFSDIMQLKSIGELSVFQVFSKEIVTKKDSAFNGI

WKNLLGWSLSERQIALIFEFEITFLYDLRDKNFDILPLGDDAYKIIMPECRYKHSIIDMKFYDEKNAKFL

PFLLPDSINSTGISFSESDKNKLIKEAKDEVKDLSLNLIQNLESKIHKSAKDTLEAIAKGFGAKRVEFEF

KDNTQKLDVS

>ETN91092.1 tautomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQARKEKS

>ETN91091.1 DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEFLTHPFEPFFDKDSKILILGSFPSIKSRQDGFYYQHPRNRFWPILETLFDVKLENIAEQQAFLRKKH

IALWDVLQSCKIKNSDDKTISYAKANDLNLILSQTKIQAIFTTGQSAYRFFVKFHPRLEAIALPSTSPAN

LNFSFEQLLQNYEIIKKFTK

>ETN91090.1 polynucleotide phosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQYSIEINKNTEIFDIDKVAKQAAGAVLMRQGKSIVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPG

GYVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPM

KAPVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQT

TSQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKEA

INQMAKSERASELNKIAKEILNLEITKDWSEESVLNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISI

ETNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPG

RRELGHGNLAKRALYPSVDENYPYIIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLI

FEDNKHAVLTDIMGLEDHDGDMDFKVAGSKDGVTALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEE

AAKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAK

DYIINITSSQKGTKKGSKDKDISGFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKSKHLNLSENQS

LKVKISEIKNGKISVDLCE

>ETN91089.1 aspartyl-tRNA amidotransferase subunit B, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEEK

>ETN91088.1 hypothetical protein X910\_01760 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MANIQDFLTDNMLSNLESAASLAIHSKNTEVVPLHLLWALSVDSTSILNQILNKLNISKEALELEIKSRI

SKLATSSNVNRENIRFSNELINSLENAKGLMSANGDSYLSVDTWLISESQKSPIKEILAQFLDLREFQKE

LESLRAGRKMDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIER

>ETN91087.1 3,4-dihydroxy-2-butanone 4-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFVSVEQAIKDLQAGKMLVMVDAEDRENEGDLIFPAQFSTQEKVNFMIKEARGVVCVALDETLAKKFEL

PLMVPKNTSNHETAFTITVDAKDATTGVSAYERNMTIQIFADDNAKASDFVRPGHINPLIAKKGGVLERT

GHTEGTVDLCKLAGLKGACVICEIVKDNGDMARREDLEIFCQKYDLNMIAVSDLIEYRLKHESLIKLEEK

SQSVLAGFKAEKFIFSDHNQTQHIAFCFKDIKKCENVKFHISGSDFELLTSDKFSKLLEQIKFLSENGGV

IVFMQGEKSSTIQYKNYGIGAQILRYFGIEEIKLLSQSCDKDYIGLEGFGLNLKACNFN

>ETN91086.1 ATP/GTP binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKISCNFFLSDYANLFVAKVVKISKNVDESLIPSYYKEKNLEVEDFFIISDLRELVREDFSLLRDKFLA

NFITPNDHTYAIYGNNYTYPLPVRLKEECSYFLGDEKHYLSVYKSKEYLAMQENFIRFVFGKRIFYLLHP

DSISNIIHAELELLQSENDLLNDFTSIVVKYSKTLEYEIYAFAKKVLLKACMKDPSLYDLTYNVQGKSFI

LKDFFTQKPNLGSIKFLLRHENIQCHLGKSLTQFINYPFSKSLTLIQEIRNEAVHAKAPSLNEVKKLRNE

ILGIEGVSLLKSILTHKEIS

>ETN91085.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNHLLILYNPYYQEDVIKQHLSILQEKSQVAFGKIKSKLNDQEKQNSLEEIYQSTNEENFLQLFFKRLC

>ETN91084.1 hypothetical protein X910\_02055 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>ETN91083.1 hypothetical protein X910\_02050 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFLSSLKDKAVNASEAIKDKTIKTAEVVKDIGMEVKCGIGWHAGEYQNEKDKPKCFFSKICPDCGKYLT

KNQHDFEAPEILNPDNCYGYRRCTLCSIQVFDNFHNYYEIKKDAKCRMHEKCNLCGHERLGQTRHNWKYD

ENGQKICLDCKETV

>ETN91082.1 hypothetical protein X910\_02045 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVK

SDGKVIRLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKN

YNDKIVQEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>ETN91081.1 hypothetical protein X910\_02040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>ETN91080.1 hypothetical protein X910\_02035 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDAVTGHFGLASTILNAKDGGNVTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKI

VRSEYTGEEMERGAGKNKAQLDHVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRD

LMEWGKEIDLKTGKTNFEKYGIDEKKLKKFTIQPNQT

>ETN91079.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>ETN91078.1 hypothetical protein X910\_02025 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKQIAFGSIALTATGYGIKKLYEKLSKPERKFDTHAIVPSCKDMINIEEYKLKRELEVEQKKNQIQEFL

CECMECYSGFSKYFNSKEFLEFEQNFTSKNNHKTEFLLSSYKDQMIKVIDYAKKFECLSAFLETQSEKND

LAVVKMISESMERKTQRFYLQTKFQTFPQYIFPSVWSSPMWGKQWE

>ETN91077.1 replicative DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDISPKDFSLKAHQDIFKAVIACSNNKEPISVSFLRKHKKI

DEQILAEILATPSMIDLPAYVNELHEKSVKRQLLSFAHLLPTRINEDRAVSEIADEIGKEIFSITNRVNS

RDIKDVDIVISELFEEFKKQKTLENKGIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KVLRQKKGVALFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKAYQRLFIPNPMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYETTEFTG

>ETN91076.1 hypothetical protein X910\_02015 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYLFSCVLASILTQSATAVEFQEGFSGNLSIGVGARDIKSNISTLANSDYLSSYNADNSDSSFIPFIG

AELYYGNLIDNDRIFIKNYNGRDISGIALGYERAYLERFSTSFSVISSLREKAYANPYAIGNREETDVDR

YGFKISQLYESDFGKFTTSYLFSKNKYDKDTIAQSSLKREGYYHEIELNYNYSLLNLGLNYDYNDADGKA

QSYSRYGFSIGTNLAFANDYIFTPNLNLSKYEAVGTDPIFHKKQDGNIVKLNLKVVKNQFLGYNGLYGFA

NYGIEKRNSDIGFYDETYQIILTGIGYKF

>ETN91075.1 multidrug transporter MatE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSSIFSTLSPFRLFVKCAVPNVISMAFISFYYIVDGIFVGKYLGSDALAALALIIPFIMMSFALADMIAI

GSAVQISMHLGLGKKNLTRKIFSSSMLIIFIISCFIGILEYFLGPVLIDCLNVSDEIKTMTKECMFVFAL

FAPFTMLSFALDNYLRICGKTAYSMVMNVIIALSNIVLDYIFIVELGWGLFSAALATCLGLVLGGIFGIF

PFLFQNLELKISSLYMNLKIFKNILYNGSSEFFGNISGSLYSIFANFVLLKISDTQAVAAFSIVLYIDSF

IIMLIIAIGDAMQPALSYNYAKKDFSRIKAIIKVVFFAGGFLSLFSIVLILIFGENLITLFTKENNQEFK

TFAYTALMLFAFNYFFAWFNVLSGSFLTAFNKASFSLVLSLAQNLFIPLFFLLFLSCFMGLNGVWLSPFF

AEFCVLILAWIFLKRIFKDLSL

>ETN91074.1 pyridine nucleotide-disulfide oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIDLIVVGAGPTGIGCAVEAKLKNKEVLILEKSNNICQTLMQFYKDGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFGSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSVLGNEKILVVGGGNSAAEYAVDLANSNQVSLCYRKKEFTRLNDINLKDIHEARNSGK

VELKLGIDINEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>ETN91073.1 gamma-glutamyl phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>ETN91072.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKIEILKQYLKEIAKLNSSEQVWQMPFFAALGVGIVLGLSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPAIFAFIPIGIMAMGSSILIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAVFVDSLIMGSFVAFSIFI

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELILLMMSLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADKLILARLIDVVIGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>ETN91071.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIDTHAHIFLKKLNTVANTRYKPDYDASFKDYKANLDHYDFNKGVLVQPSFLGIDNEFLLQSIEKDENI

KAIVVVDENIKFDELKKLKERKACGVRLNLIGKELPNFKSMVWTQFFENLSKLKMQIEIQRDLDNNLVDI

VENLIPYGCNIVIDHLARANANLTNLEDLICLKNSRIFFKISGFYRAKIDYANNEQAVKFAKKIYEILKE

HFPLSNFVFGSDWPHTNFEANINFSSALVAFNEVVVSKKEQEQILGDNACALFGF

>ETN91070.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVFLIISSIIVAIILGYITRHNVGIFAMIFAYIIGAFFMDLAPKKIIAFWPISIFFVIFAVSLFYNFATV

NGTLEKLAGHLMYRFANHPYLLPFVIFVVSAIIAALGAGFYTVLAFMAPLTFLLCDKIGLSKIAGAMAIN

YGALGGANFMTSQSGIIFRGLMENSGIEANEAFANSSIIFAFTIILPIVVLSFFVFNAFKNNIKISVISK

PDPFDYKQKTTLILMFMMIVVVLIFPVLNIIFPHNEIISYFNKKIDIAMIAMIFVAIALFLKLADEKQVV

ALIPWGTLIMICGVGMLISIAVEAGAIKLFSDLVENEINVIFIPLIMCAIAALMSLFSSTLGVVTPALFP

IVPSIAASSGLSEALLFSCIVVGAQASAISPFSSGGSLILGSCPDKYKEKLFKDLLIKAVPIGFIAAILA

TIIMSFIL

>ETN91069.1 hypothetical protein X910\_01980 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKPPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLTLEINLLAKENDKAEIWAKNLEGI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLHKNDFVKFFKAYLPNLEAKEPVTLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKILSNFCDENLKILLRNNATEHFDKAIAHIEDDYLGSHWLGSFALLALDVDIL

>ETN91068.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISLDLLYYIVGILFLVFGILSFSNQAKDIKSRISGGVFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAVHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIAV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>ETN91067.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMCYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILFIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLSDDKS

>ETN91066.1 elongation factor P [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>ETN91065.1 hypothetical protein X910\_01955 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQWLSDFKLALIQEDVNKLENLLDELDMKAFIKNLAKESPSEDFLKENANDVFYQVQALLQEAVILIEQ

KKKTKAVEIQKFQKALTYFKS

>ETN91064.1 flagellar biosynthesis protein FliS [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNNLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKVAIRNEDIEQRVYFVKRTTAIFIELINTLNY

EKGGEVAHYLSGLYTREIQLLSLANLENNEDRINEVINVTKGLLEAWREVHNNETVAQ

>ETN91063.1 flagellar cap protein FliD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFGSLSSLGFGSGVLTQDTIDKLKEAEQKARIDPYTKKIEENTTKQKDLTEIKTKLLSFQTAVSSLADA

TVFAKRKVVGSISDNPPASLTVNSGVALQSMNINVTQLAQKDVYQSKGLANDSGFINANLTGTTDLTFFS

NGKEYTVTVDKNTTYRELADKINEASGGEIVAKIVNTGEKGTPYRLTLTSKETGEDSAISFYAGKKDSNG

KYTSDSEAETIFKNLGWELDTTSSIDPAKDKKGYGIKDASLHIQTAQNAEFTLDGIKMFRSSNTVTDLGV

GMTLTLNKTGEINFDVQQDFEGVTKAMQDLVDAYNDLVTNLNAATDYNSETGTKGTLQGISEVNSIRSSI

LADLFDSQVVDGTTEDANGNKVNTKVMLSMQDFGLSLNDAGTLSFDSSKFEQKVKEDPDSTESFFSNITK

YEDINHTGEVIKQGSLNQYLDSSGTGNKGLDFKPGDFTIVFNNQTYDLSKNSDGTNFKLTGKTEEELLQN

LANHINSKGIEGLKVKVESYDQNGVKGFKLNFSGDGSSDFSIKGNATILKELGLSDVNITSKPIEGKGIF

SKLKATLQEMTGKDGSITKYDESLTNNIKSLNTSKDSTQAMIDTRYDTMANQWLQYESILNKLNQQLNTV

TNMINAANNSNN

>ETN91062.1 flagellar protein FlaG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEISKANGQMDTALANISQRTSETQASLNIQTDRSQGQEGDDGQQRGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>ETN91061.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFIQILKENDLLRVIEEPVDVDLEIAHLAYIEAKKGEKGKALLFKNPIDKKLNKQYKFPVLMNTFCNE

KALNLAFGRDYEEVAEEISKLTKLHIPTSFKAKMDFFMNLLSFKNIPPKRLKKNKALYDYEILNSLEELP

ILKTWEDDAGKFITMGQVYTQNLDKTQNNLGMYRLQMSDKNELLIHWQIHKDGANFYHEYKNVGFKKMPV

SIAIGGDPLYIWCSQAPLPKGIFELLLYGFIKKTPAKLTPCENGIFVPYDSDVVIEGYVDLEEFKIEGPF

GDHTGFYTPAELFPVMKVEKIYAKKDAIYQATVVGKPPLEDKIMGLGTERIFLPLLQTSVPDLIDYNMPE

NGVFHNLILAKIDAKYPAHAQQIMHAFWGVGQMSFVKHAIFVDKNAPSLKDYDALIPYMLDRFNTKKILI

SEGICDQLDHASPNSCFGGKAGLDACEEIQVEELEILEDEKLLELFKTKVELLNLKQFYKESKSPIVCIL

LDKKEKIEQSFDKLLEFKKHFRILVFLDVENKLENSYMLVWRVVNNIDAKRDIFIKEERLGVDASAKGEA

EGYLRAWPKQTDCTKSVIEDLILRNILENNPDLFNKFEIF

>ETN91060.1 porphobilinogen deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>ETN91059.1 integral memnbrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNYKLSLSPLFVLEIIASILFIVFFGFGNFLFFILLSMIFGAVLLGIFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLVFPGIITSVFGIFVFFFGIALKLITKSKYQYTKQEYQNSNEEIIDVEIIEDRK

>ETN91058.1 glutamyl-tRNA reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYYCISFTHKNTDIALREKLSFSNEAKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNNFCGVHLSRAV

HSAFKCAAKVRNETQISKNSISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLVEELSYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHTPTVNLKHLQGKMQSDTVINAMRYVFDLQNNLEGLNQYK

CEFDMENNDEIY

>ETN91057.1 octaprenyl-diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAAIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEKDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNENEKEWLKTKFEEQKALEKAILEAKTYAKKARKAIEKY

DNNKLNDIIKAMIDREF

>ETN91056.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYFFIFSNVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVHSKFRKYPRQ

FVMSLRRNLDWVTQTLIPDYTNPHIDRARLILEFSGYNKGLATFTVYIEDKESRLMVEFLDPRKKALQNP

PQNNQVVPMINFNEPQVKPLTSKENNNSN

>ETN91055.1 hypothetical protein X910\_01900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEERQNDIYI

ELGAKILGHEG

>ETN91054.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKDTMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>ETN91053.1 2-oxoglutarate ferredoxin oxidoreductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFNYDEYLRTDKLPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVVDKSKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>ETN91052.1 2-oxoglutarate ferredoxin oxidoreductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASVAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIEIINRKKFTGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGAIVKKNMERLIGKIKNNQDDICTYEEYMLDDAEFLIIAY

GSVSRSAKEAINRLREEGIKVGLFRPITLYPVAEKKIAEVVNKFKKVMVSELNMGQYLEEIERVSSRRDF

ISLHRANGRPITPSEIIAKVKENI

>ETN91051.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>ETN91050.1 succinyl-CoA synthetase subsunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGVTPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIKENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESAAAKKEALKSYGIHVVDSPALI

GEEIQKILG

>ETN91049.1 malate--CoA ligase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>ETN91048.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNIDLLCAKDYTHTKNS

DIVLFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMLESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SLQEKDKLEKSLIKYQYKGE

>ETN91047.1 isocitrate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTSDISLSGRILATFSEYLKEEQRCEDALELLGELV

KRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNYPDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNS

DRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGDFFSNEKAVLIDQDCVANIEFTSVDGKNEILKEG

LKLEKNEILDATFMDVQKLQEFYAKEIKASKDDDVLFSLHLKATMMKVSDPILFGYAVKVFFKELFIEFQ

DEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEILAKSADISMVNSDKGITNLHVPSDVIVDASMPA

MLKNGARLWDKEGKEKDTNAVIPDQTYATIYEAVIEDLHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDK

TFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKFDAVLNWIDLGIERSELSGAEAIFWLDSKRASNK

IMITLVQNRLKEKGKNIAILTPKEACLRSLELIREGKDVISITGNVLRDYLTDLFPILELGTSAKMLSVV

PMLKGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGEFLALQASLEFYANKCSNHKAKVLAECLDEAIGE

WLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQASDMELQSFFKDIALELSSNEEKIRAEFNNAQGVK

VDLGGYYKFDDEKANKIMRPSATFNAILEKIGQR

>ETN91046.1 hypothetical protein X910\_01855 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKILYIVVFFVVLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQ

THSSDNASTEILKITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQRQNKELI

ADIKKLLLKDYDLNIDGNLSINTKSEFYYFQGRASGELFDFNASISYKDKNLAYKIEDLNIRNITEIFKR

VNKRIELPQSLNLWVAYRAKGEFYHLDYLQGFIDFTKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKL

DLNLNKQKLDFVFNKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFY

QKSGKIKSDLELKIDFHDKGEISYSGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADF

NAKFDLQKQQGNFNTQISRLYFDNGELLDLKNQNAEVKLDYSQNVNISIPQWNLILNFKDGLEANLNNPK

ILFSFSPLLKKFGFIDAKNVYYKTLNFEDFNASVNDAYFKNNLLINGQTPYENDSFDIVKNKGIMEIHTQ

SDTASAKISSDNKEIHLKNLSYIYKKDSNSSNSTFDISTNTQNISFGGANVALILPDSNKTLAFDRVEAD

LKGNALDLKGSRGNAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLSIKGSGLEYFDGQIDF

KNTYVKDLRGINQLISFIDTVPSLLMFKSPTFNQKGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGL

GSANLRLNTVDFSLELKTLKSASEAISKVPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTP

FNLIKNIIQLPANLLN

>ETN91045.1 aminodeoxychorismate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTIPFLSTINKANISTTKNTTIYKIFFFIRNFFLIFILGIFYYLTQPLKSNSVVFIPQGSISQIITYLKQ

NKYQMSSIDKYILFFLGHPQSGWINIGTKDLNRAEFLHKLTIAKAALQTITLIPGETSVIFLEQAAKQLE

LDKDMLLKEFQAQAPYDEGVFLPETYKIPKGITENLLIQMLLNHAEISNKKTSEKIFGDYNPKKWHQYII

IASVIQKEAANDNEMPIVASVIYNRLKKGMKLQMDGTLNYGIYSHVKVTPQRIRQDNSSYNTYKFTGLPK

EAVCNVSLAAIRAAIFPLKTDYLYFVRDKNTGVHIFSTNIDDHNKAINLQKGK

>ETN91044.1 flagellar basal body rod protein FlgB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINPFKSKELVTGALAGRNLRNQLINANLANVDTPFYKARDIEFETALVNRANEIFKKNDNKELQLAVTE

EGHQKPWKFPDPSKSTIYLRDGHLARNDANTVDLDVETTEMSKNTVMITALDGVLRRQSNIFSSILDASS

KLS

>ETN91043.1 flagellar basal body rod protein FlgC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYLSDFDISGYGLSAQRFRMNVISSNIANANTTRTAEGGPYRRREVIFKATDFDKLLNEQINKDNNFLK

YENPLNDPSSPEEAKPPIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>ETN91042.1 flagellar hook-basal body protein FliE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNINDLRLNNNISNTNKSQNSTGIGDEFAKMLKNEIDDLNKAQESGEAAMTDIATGQVKDLHQAAIAIT

KAESSMKFMLEVRNKAISAYKEITRTQI

>ETN91041.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MALLFMIIFISSTFFLTSKRHIPNTEKDQYALALRGSIITKDNFTITSSKQIYRAEIDLRSINKDKFDLF

LKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKLYIQGFFKAFTNNSGRVE

TRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYDECLSPVQNEKIQGLKDIG

GNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVMESKTGRILALASSRRYD

PQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSYKLGRFTIKDDHKMDKMT

MEEVIRYSSNIGMIQIAKRLNNIEIVSGLKIFKFGEKSGIDLPYEQKGEIPNPKRLRDIEKSVLSYGYGL

KTTFMQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAAKTMQNVLINVIEKGTGK

KAITQGIIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHPTKPYSYYAAQSALPMFK

DVVDILINEEFLTPIQDNNQTSTNN

>ETN91040.1 Na/Pi-cotransporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEERNSLKYFKFISWSIFTLVLIFILIRYDELANLLAGVAILLIGMTNLGIGFKAFSGGLLEKILAKST

DTKIKSILFGTLSTLIMQSSTLVSIITISFLSAGLISLGAGIGIIFGANLGNTASSWLIVGLTNIKISML

AIPLLIIGVLFFFQKDSVLKGLGNIFIGIGFFFLGVDYIKSGFENFKHIIDLSRFDFAGFKGVFVFLGLG

ALLTGVIQSSTATMAIIVAALLAGQISLENSLAATLGTSVGGVVTAVLASLSTNIEGKKLAFANCIFNFG

IAFLIVLIFPYFIHFLNFLSIVLNIEDIALKVALFHTLFNLIGVVLFSFFTPQIVLFLNKIVKAPKDKNK

DKPLYLDSSLVKFSDTAIESLRKESEHLYNNTYAIVAHAIGFSRKDIQSDKSFKEILENKKWFSKNVDLD

YLYQTRIKVLFEAIIDFSTKAQVYINDETKNHKIFTFKMAAKNLAETTKNLKIIQANIKKYSSSSNEFLA

LEYNKIRSNLGELLRSIEELRVVEDREKLYLIIKNLQKGKEILKEIDTLTLSNVEHLISVRKITTAEGIS

ILNDTTFAAKIAEELIGAVEVIFSKDISN

>ETN91039.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENVQNANLALKISD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAEILREFLMNEFE

KLKG

>ETN91038.1 rhodanese [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIENIPASLWTKQDLNAYQIFDVRTPLEWEEGVLPNAQCVALYDNQGLLNAKFLDEFQSKRDENKKLAFI

CRSGHRSMVAAEFIAEKLGLESINLDGGMLALKGY

>ETN91037.1 heat shock protein Hsp90 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKDDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEIDDANKEEQGTSITLYLKDDEFANAYKIESIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKPDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNESFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>ETN91036.1 chromosome condensation protein CrcB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>ETN91035.1 hypothetical protein X910\_01790 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILLTLIFSVVVLFGRGEISVFSGQDENMQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGS

LVLTNDEYPSKVYVGEVFPITIYARTTENTKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNS

NASLSKISIKLLRNNEAFQEADINLNPIKFENTLFNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNA

TNTNLKSFFIEGIQKQGIENLKGDFNASSAFYYAILPLSKTNFEFSYFNKDSKKLENINLKLKISDDEIS

TQSDLNPVNKDLNIYKQYALWFLAVLFGVLFVWRKNYIILALAVVCFALSFLVDTNTQNAIIKAGSRAKI

LPTEPSTYFYTANADEKVEVLGKRQNYIKVLFSDGKIGWVNKDDLQKN

>ETN91034.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNSV

IEDYELVIEKE

>ETN91033.1 phosphoribosylaminoimidazole-succinocarboxamide synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>ETN91032.1 peptidase S41 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTKRFFAGLAGFATTFILCLFLTSHLQAKVDQKEEQVQKRLEALDKLTKTLAIIEQYYVDDQNISDLVD

KSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVGMKDGALTVVSPIEGTPADKAGIKSGDIIL

KINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENILYLRVT

NFDKNVVDVASKELKKYPNVRGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRITSENQEYKADPK

NKISDVSLAVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSVQQIIPINKTEALRLTIARYYLPSG

RTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKKEDKQENKDNKNLISQKQINDD

AQLKSAIDTIKILNIKQGQ

>ETN91031.1 hypothetical protein X910\_01765 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCQEKHTHTHSQKHLKAVCNRLSRTIGHLSAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAIEENDIQSIEELNKAIDMFMK

>ETN91030.1 hypothetical protein X910\_02795 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGLSLVSLGALSFDELIYKDEVKPSFDCSKVKDDGKSDDELMICNEIGVRNEFENKKLALVDNIYSSLY

>ETN91029.1 RDD family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKENLQDRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDRLIQAKDLFETTQIIGNFYLGFILLHF

SYQAIFTYLYGASLGKILCKIIILDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>ETN91028.1 phosphoribosylamine--glycine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIKETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGAEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIEDPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLEDGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>ETN91027.1 hypothetical protein X910\_02840 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDDELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNAANADPEKLKARQER

LTKLQKEAEYYRTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIVTGLNLCATIMDFKIWHLSLKS

SGIKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>ETN91026.1 GMP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>ETN91025.1 hypothetical protein X910\_02830 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKRNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDENLSKNSYLELSKGEFKNC

FKDEKLFKKFEDLRELIKKGSNLD

>ETN91024.1 excinuclease ABC subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>ETN91023.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILAGIIFIFNLILAYLSIDISKLDSVAEQLKIGMFSSIFVLSLTLFIFAFRQNRNINKIYQKIFYMQND

FLNFQKKIDVDSVLDLLKEKFETTGQNLTKTSHEKDRYLHLLEENLYQLGNISNAMRCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKIFNKNVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLITLLRKYLPKA

>ETN91022.1 uroporphyrinogen decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>ETN91021.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNYKKALFALALSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSQNFYLTAFARFVAGTQHGVFFVIATLAVSAIVPNDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFKVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLTMHSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGIVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSLKKI

>ETN91020.1 hypothetical protein X910\_02790 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKERKICIKNMQNTKAGENPILPLLNASDCMQEAYAKALLELTQRAKKDIKTKEVLEQIFKNKVDKYEN

LLTQSLNTNKDLQDFIDSLAKEDLIDSRAKFKLWNLN

>ETN91019.1 pyridoxine 5'-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>ETN91018.1 exopolyphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALSILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGIDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFGK

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKHLAFRAFDEVAT

IKKELHSLGVKTVVLNSGVPTTLSALKQNISYEKYEVTRVNGKKLCHKDFLNYAIKLFHMEEKKAIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>ETN91017.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKALWLFLSLTLWLFGAQNLELIKGQALFLELDKKDFLSLKNNDKNIPTFAHPKNQEKILAIFSLPYKNP

PQNTKLIAFYKDKKEEIFIKTLEGNYKSEKLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKALFNG

AFNIPLNSFITSDFGKARTFNEKVASYHSGTDFRAAIGTPIYAANSGIVKIAKDRYFAGNSVVVDHGFGI

YSQYYHLSKIDVKVGQKIKKGELIGLSGASGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFR

>ETN91016.1 glycyl-tRNA synthetase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSELLIEIGTEELPAIPLLKELANIEKKWKNILEEYRLVSDFKFYYTPRRLVFFHENFAEKQEDSFAEFI

GAPKNVAYKDGVLTPAGQSFLQKAGISENELTFKEIKGKEVLYHQKAIKGLQSQEILGEMIEKFLKSLSF

GKSMRWGANSFEFIRAIRSIACILNDELVNFQSYGVKSAKKTFIHRSVSYDLQDFNNAKEYFELLEKNYI

ILDPIKRKEKILEQFKLIESQKNIQIGEDEELLAEVVAITEYPNALLGSFEEEFLEIPSEVIITSMRENQ

RYFAVFNDKGLSNHFIVVSNAVCKDYSKIIHGNERVLRARLSDAMFFYQNDLQNGLKPEKLAKMTYLEGL

GTMQDKSLREIKIAEILCQMLHNDKIENISTALKYAKADLATQMVYEFTDLQGIMGSYYAQKMGLDYEIC

LAIKEQYLPNSEQAPLPSTEFSSIVALANKLDTLIGLFSIGKIPSGTKDPYALRRAANGIIKIALNLNKE

FDIQILLEKLSSHYKSFDMQILKDFIFERLYTFYTVNASFVKAVLSSQNTDLIHINQSVNALIELSKKDN

FNENFATFKRLANIATKNPHKVDESLFVQEAESKLYKAFQEKTKANSLQEKLENLFALKPFIDEFFNQVM

INAEDEKLKNNRQALVYEIYAEFLKIADLKELSL

>ETN91015.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSREIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFVKHYEQSVVLFEGVKELLEFLKNKNCFLAIATNAPQSSLSSILKKHQIIPYFDKILGVSLGIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLQKYL

>ETN91014.1 MerR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEQHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRSELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>ETN91013.1 cobalamin ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSLYETLGVSKNASADEIKKAYRRLARKYHPDINKEKGAEEKFKEINAAYEILSDEKKRAQYDQYGDSM

FGGQSFHDFSRNTGGVNLDDILKDLFGGGFGGRSRGGFNGFSSKGFSSGFGGFGGFEEEILDSNLELHIP

FEKAVKGGEHSFNFQGETIKFKIPHGIKEGEKLRIRSKGKQSRNGARGDLIIIVKIEESPIYTREDDDLY

QKVDISLKTALFGGKINIKTLKEGKEEATINITPNSKNNQKIRLKGYGVQNRKSNIYGDMYLNLNVVLPN

LDTLDEKFIELLKEKLP

>ETN91012.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFLSLSLASALFAASINFNESTATANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDIEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKIDRGFL

GVTILALQGDTKKAYKNQEGALITDVQKGSSADEAGLKRGDLVTKVNNKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQASFILKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGVGQSEIKNLKDLEQALKQVNKKEFTKVWVYRNGFATLLVLK

>ETN91011.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIVSSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>ETN91010.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKSSIFYTITFIFIFAGVSVILGFLWLIEYDQQNYTRELNTKYSLIANARLLNFAGVISEKEFEEQTKN

YNKMDEITEAKQIRKILFRGDVLARVEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKA

IAVAVICILVLLYIYIFKKLKPLKRLKKQIDKFAQGKLGDIEDVSTGVDEISQVSEAFYQAIVQIRKLNQ

SRQFFLRNIMHELKTPITKGLLTLEMIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNI

LDVLDEAKEIAMRDDSNIRIFMEESFFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRG

PELNNTLEYYTQAFTQGSKQKSSFGLGLYIVNTILETHGMKLDYLYEDGVNLFYFRNLKSVIVKE

>ETN91009.1 CopG family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRNVKTYSFRMPLELKERLDNLSKNLSKPKSTIVKEAIEAYLNEVEDFSFAVNALEELKDGDYQKASKK

IDKIVKNLKQTK

>ETN91008.1 iron-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLPKWDNSYSVHNAKIDEQHKKLFKLAAKVEVVSDRSVSKNEVKELLAEFFNYMKDHFNDEEKYMQLIGY

PNLEEHRKIHKEIIQTMINLIKDIKSTNDLKEKLYIVAKKWLLEHILYEDMKVEKWRSSSLSTDDGGDIS

FEAAEDEDNEHPQFYLYTCNCPGKIHDVPYSIHQKIELQGHKFTCKTCKQAIKFYKKYS

>ETN91007.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNAQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELAELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSELSLRAYVKNLRKILGKEKI

INQRGRGYCYG

>ETN91006.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKVIRQILLIYLTTTGIFLTIFFALWYQKLYEELVVLKGATLRENHRNIVISILNSRFTPIDISAKNI

AQSTALKFAIFDAKKIVFSNIDFDLRKAKIELKGRGICDNKVFFLAPMSADHYFLRHASNEEVNTNDGLQ

ILIQGEDVGKDLFWIRTKVFSFAIMAFCILGLISYILVKIALKPLEDKISTLNRFIKDSTHELNTPLSVI

LMSIEQLEHQNLGDNTKFTRIKLAAKSLSQVYSDLVFYNFPNTLETEKQKFDLRILLEERLEYFKVFFEQ

KKITLKLDLNQANIFAPKSQISKLIDNLISNAIKYNKKGGVISIILKTNFLSIADTGCGISKSNLNHIFD

RYTRFNTDQGGFGIGLSLVKKVCDDNDIKIICESVENQGSVFKLNW

>ETN91005.1 molecular chaperone GroEL [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>ETN91004.1 molecular chaperone GroES [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>ETN91003.1 hypothetical protein X910\_02680 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFYGVIAFVVVLLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLQGALSPFKLGFDLDYLISLKQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGRGYLLGSNVLLNAR

MYNYSPVALNLDAQNLKIEEILHLLSYPSYAKGFLNAQAKISAQNLKPDGNIIIKLDTSYINYEAIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDMSKNILSTDFNLNIPSLAKLEKLTKT

RLNGSLGVIGETSVVNNALSSLNAQVIGLGGEVKASLKNNKIFADINEASLEKLLALAGYGALVSGNLNA

KLLNADLDFSNFDLEAKINNAKINTNELKKIAKIGLPNTIFSLDAKANAKNSNISYNALLASNLLNIKKL

QGTYNLKNSELNTDLNAFIDDLSQFSAIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVIAGMPNYASGVVNAKVNLDNIDFNNLNGKANLEAKGILNAATLSKILNKNFPN

NISYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDISKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKNLNFVVNSPNLFEGRLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKTDVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDITNDVYRTANAKALIKKENIKLDLNMQADRSYILVQSGA

LNSKSGALNLPFDIKLDRANFKGSITGTTENPKVNLNAGSVLNSIKNVVGGGVSDGAKSTGDKVDKAVNK

LLNKIF

>ETN91002.1 riboflavin synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFYISLPKEAMKFIAEKGSIGVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLARYIYAQLQGKNKGLSWEEVERISYLY

>ETN91001.1 laccase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKIHNENLFSHLGFKDIEKCVFMDQIHSHKVIIYEKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHENGIIAALHSGRKGSFENILKECVDQITMQNSHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFKEFVQDNKLDLKALVKFQAQNLGIENIKDCGICSFDDESFFSYR

RDKTPKRFVSVVYLKD

>ETN91000.1 hypothetical protein X910\_02665 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEISEKEKEELATLLNSLINAKDKALLSN

>ETN90999.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPISDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEVTLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYRAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVVKIAKSELSGKAKE

NFKHIIAGYEQVVKEALVSNQPNPPKEEDFENYIEF

>ETN90998.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKTIVCFLALNLSLFAVGFDLKPIKSELVKVDDIYGYIKDSDDIKLYSSGVVVQHFSNSQSIIARASVI

DKKNGLAKLEFSVFSALKQDALPLPNVLPKVGDEVVLNFLYDRGLVIAPDEQTYNELVREFPQIYFTHID

IFGAQLIRTATLSPKRSDFRQFCDDNAVGILVVALENQAEVVDCQDFNKLYEVPISKPTSVQVPFYSRIG

GYKSNFFDFNSQEIGNYYRYYDALINLPKVQ

>ETN90997.1 ribonuclease BN [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDVVATYIDTFLK

NSVNLGIVGLIAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLSFYISGFIQQT

LDDYKIGFNFFEILPFVIIWGLFFISYSSSVHKGTLKSLALVSFGAGTIWYIGKNLFVYYVVYNKTYASV

YGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKS

>ETN90996.1 competence protein ComEC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLWNSFSYSFKEFHYLFFSVVVIFIFNILLEYNNFLNFKNQKHYLIDNALLTHQYIKYNKKNKKYWVLK

LQTENFTFYTTSFKDLNLSKNQFLSLRIITHNINFKDYLSKSFYAPSYDFEKLKEKEYNPIISYFLNQHT

NEKIKEFYGALFFALPISLELRNDVNYYGIAHLIAISGYHIGLLFSLIFFILAPIYSFFQKRYFPYRNLR

LDLSILIFALLLAYACLIGFVPSFVRSLIMAFWIFYLLCKNIKIINFVTLFCSILLCISLYPRLLFSIGF

LFSILGVFYIFLYMHHFANKFNNLINIILLNIWTFFAMVLPVLYFFPLISYQQILGIILSGIFVIFYPLV

LFLHLINYGDLLNFILDEFFKFKIYGTNIHIPFWIFISYLIASLISVRFKYLAFLCIFANFIPFIMIVI

>ETN90995.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGVLSSQGKMDLSFCITLAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKIALAMIKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFIKFFIINTLASLAWAIVLG

FTAYTFGYVIEAIFDKLSLYPYAAPLFLLFLAGIIWLYLSKFSKK

>ETN90994.1 ribonuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKFDDLSKKEQKLQQEEEKLKEDKEYLCKSQKHIQNLQSDVDKLKNKYQEKLDDVLKI

LEHSTGLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGETIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCKRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRVIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAVEYAK

>ETN90993.1 5,10-methenyltetrahydrofolate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKTDFRALQKIRLFKHSKLNFKQDYKIFKECLKIIKLFKAKNILIFIPLHYEPNLIKFRHILNKNYKLF

VPFMQDKSLKIVKLRLPFIKKRFGVLEPIDSFFKAKIDLAIVPVIGVDKNLKRIGHGQGFYDRFFENLNY

KPHIIFVQSIDALSQNNLTQKHDISGKLYINPYKKYYKKERKNDRITYRTYSRYSRTRYRIFSCKKNQ

>ETN90992.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGGSISVKKENTVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LAKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>ETN90991.1 cell division protein FtsY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNFFKKGLAKTLENIVGVKGENKKITKDLLEEILLEADVSYEIVEEIIYYLPPQNEVKKEDLKRVMGSY

FLYEKKETNQEKPFVELILGVNGAGKTTSIAKLAYLYKNQNQKVILGACDTFRAGAIEQLKLWAQKVDVD

IVLTAQGHDPSAVAFDTISKAKAKDFDRVIIDTAGRLQNQKNLAHELEKIVRISNKALEGAPHRKILVLD

GTQGNAGILQAKAFNELVKLDGVIITKLDGTAKGGALFSIARELELPIFYVGVGEQMTDLQEFNANAYLD

TLLDPIFE

>ETN90990.1 DNA repair protein RadA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKNKALFECQACGNQQSKWLGKCPDCGAWDSFVELKAERIKVLKELAQVSMKTSEAVCIEDVELEHFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQGKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTAKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLGIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

IPSKPLEDIGLKCFVAKELSQVLEWM

>ETN90989.1 F0F1 ATP synthase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>ETN90988.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYILEFFKGASLALMLFGALFFFFKYNSFFYLCLGIIPGLLLSLIFVLLIENHKLKNEIKLR

>ETN90987.1 5,10-methylenetetrahydrofolate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCSFSFEVFPPRKDENIKNLHAILDDLGQLSPNFISVTFGAGGSINSQNTLEVASLIQEEYQIPSIVHLP

CIHSSKEKITQILQKCKEKNLNQILALRGDICENLEKSKDFSYASDLISFIKKQEYFEIYAACYPEKHNE

SKNFIEDIHYLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFVKILEKYENNALALEDAGIAYACDQIVDLITSGVDGIHLYTMNKSKAAIKIYEAVKHLLKEEL

HA

>ETN90986.1 5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>ETN90985.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSVLQKQGYDLKIYEFNDGVIPNVMVENGE

LDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRALRIVAS

KGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLNDVDYSLINSNFAILAGLNPVKDGLYTESKYS

EYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>ETN90984.1 S-ribosylhomocysteinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>ETN90983.1 glutamyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>ETN90982.1 glycerol-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGLS

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>ETN90981.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSVRVKDTNGKLKNLATLLNKGACALELDSSLD

ANTLKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

IFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFDEAAFGIHSVCEFISLCYTFLIKEGFLNWQELCRFTSKNPSEFLGLNSGVIEVGKE

ANLVLFDENEEIFAPKSSLYSEDKLFGKIKMHIIKGKNILEK

>ETN90980.1 phosphate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKDNLIAFVIFIISTIAFVIWGFGYISQHQLILFILASIFGIFMAFNIGGNDVANSFGTSVGAKTVTIK

QALIIAAVFELSGAIFAGAEVTKTIRSGIVIFPNSLDPMLFVIIMLAALLSSGVWIFIATKKGLPVSTTH

SIVGGIVGASIMMGLLKFDGIQTLSMVKWSEILRIAISWVASPLLGGIVAYIIYSYIDKKILKPSEKLND

DLKNIKKERKKFKEEYFLNLKTKSQEEQIKELSAIALDEEEQENNFYRNKMKEFKDQEKDIDIYSILKTH

MPIIACIAAAIISAMFLFKGLNNVSTLDILQNFWIIGIIGTISYVITFAIVKIVKKTELNKTTDRIFSWF

QIFTASSFAFSHGANDIANAIGPFAAILDVLKNGTINATSPVPFAALAMFGVALVVGLWFLGKEVITTVG

SKLATIRPTTGFSAELGASIVILLATQFGIPVSSTHILIGAILGIGVYNKNANWIMMKPIGLAWIITLPA

AGIMAALVFLGFKLSLGI

>ETN90979.1 hypothetical protein X910\_02550 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRGIFYIIALFSLLNGDELTEALAKNNNQNSWEHFDYKNTKEAPKIQEENVDFKSTFDSLLSKTLENNNG

IDKTDGNLDFQNENVQVKNLSSLYEGENNSLLFQKELFVAQNNYNYSGGLINRYEKDDFLFGVNGFIDKQ

KEQKDTKSFGTEFGYSKFIKAYSNYYIPNEAEKNLQLGMSFVIPTYTAFAFDISKDNDKTNYQVSYSPYS

VFSLNLLRRDYSARETVDDTVVQVGFSFNFNESFLKQFRKKDNTLEEVNRYDFLQRTH

>ETN90978.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

METLSQTLAERKPPLYKRIIKSLGFWVIIGIIAGIVLGYIDKELAIASKPGVDYFIGALKVLIGPIIFVT

LVLGIISLESLKKVGSIGAKAVIYFEVVSTLALAIGIFMANVMQPGHGMNLNPSQLDTKSVQKYISQTTE

VSASSEIMHILKDAMPTDIITPFTEGKTIQVLVIAIITALIISLMRTEDKQAIQRVFEVVQNFVFKILQI

IMYFSPIAAFSAMAVLIAQYGIGSLINLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVL

IVFATSSSESALAPLMRKLEKAGLSKATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEIS

ILIVLMIASKGAVGVTGSGFIVLGSTLAALGNMEISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNL

CGNSVAALIVAIWDKQIDWEKFRYAMDNPEKFHNAGMN

>ETN90977.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEIVLSENALITSKTDLKGNIIYANNDFLKYAGYKVDELLYKSHNIVRHEDMPRTVFKCLWDYIQKGDE

IFAFVKNKAKDGNFYWVFANVSASFDTNGNIINYYSVRRAPNRKSLSIIEEVYKILLEKEQKSGINAGVS

ALMDIVSSYKMTYNELIFNLQENN

>ETN90976.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYTMGEVLNKPHNIVRHEEMPKTVFKYLWDYMKEGK

EIFAYVKNKTKDNNYYWVFANVTPSIDVNNNIIGYYSVRRMPNKSAISTIESLYSDLLRAEQQQGLNKGV

EMLKNFCKDADKTYNELIFSLQEAK

>ETN90975.1 tRNA uridine 5-carboxymethylaminomethyl modification protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>ETN90974.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNAAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEEGPEYKKMIAEA

>ETN90973.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGPELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIIAIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWIGFYASIVFLLLLIVVLPVITIMERKGAKQ

>ETN90972.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MREIKIFLVVVVFTTLVYWGVEPYAHSVMKPHVTPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFVKGDAKKGKEFFENNCFACHGIKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPALALKVDHKFGDAFIMTAYNKDTSGESEEATNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQRVALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>ETN90971.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVSDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>ETN90970.1 30S ribosomal protein S2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>ETN90969.1 elongation factor Ts [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQSNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSTEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKAQGKPEKIWDNII

PGKINSFIADNSQLDSKLTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>ETN90968.1 flagellar biosynthesis protein FliR [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITSQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNMGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>ETN90967.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILLLNENPVVSRLVSLSAKKMSYDFEELNAYSENLGNYDVIVVDSDTPAPLKILKEKCDRLIFLAPRN

QNVEDIDAQILQKPFLPTDFLNLLNNKDANKHTSIDLPMLSNDENPYADISLDLDNLNLDDLPDENSLDI

NSEGMEDLSFDDDAQDDNANKTLETQNLEHETIKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEP

SLDELDDKNDEDLEIKEDDKNEEIEKQELLDDSKTNTLEMQEELSESQDDNSNKTLETQNLEHDNLEQET

IKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEPSLDELDDKNDEDLEDNKELQANISDFDDLPEV

EEQEKEMDFDDLPEDAEFLGQAKYNEESEENLEEFAPVVEEDIQDEIDDFASNLSTQDQIKEELAQLDEL

DYGIDSDNSSKVLEDFKDEPILDDKELGTNEEEVVVPNLNISDFDTLKESDIQEALGEEILEKNEEPIVS

DVTKDDNSEEIVNELSQSIAGAITSSIKDDTLKAALKGMNMNININISFKED

>ETN90966.1 guanylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQGFVLLISGPSGAGKSTLLKKLFDEFEDELYFSISSTTRKPREGEKNGIHYHFISHEEFQKGIDSDHFL

EWARVHENFYGTSLKHTQNALDNGKIVVFDIDVQGFKIARKKMADKIVSVFITTKNKDELKKRLIKRNTD

TIIQLEKRLQNASDEMKELSEYDYLIINDELKQSYEALRAILIAHKFRTKGQNLGQIQNIWNEGE

>ETN90965.1 preprotein translocase subunit TatA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>ETN90964.1 arginyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>ETN90963.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYIFIIVLSALLDIVANLLLKKSDGFKNKIWGLAAIVNAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIIIVIIAVFLLNY

>ETN90962.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNIAKKELFVAWFFLITAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIVLSIVGIIMINIGEVKE

>ETN90961.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>ETN90960.1 peptidylprolyl isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKTIDTSKVNEYKFALIETEKGTMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGVGGPGYEIICECDDQEHKHERGTLSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>ETN90959.1 hypothetical protein X910\_02435 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTKFSLILSACLLSSSLFAKNADDEITKLQKQLAQIQAELAQIRKEREAQAKQNEAVKAELADLNDRAD

ETEFQAALSKVKFGLEFSTAVSNTNYKVSGQDYSANNKWMNELHLNMNADINDKTKFYGRLSMAKNWSQM

DWSGSPYDLDAGRNTRSSGPVLYVDRAYLDYYITPEWIATIGRQPGTDGPGSNLRNNALRQSTYPALAIN

ALGDAAVITYKPESLQDHKVAIRAAYGKTYQWDEEGKVRDWMSDQKDADANLYYAAVEGELPIEGMGDNL

IIFNVAHMTDFALPLPSIPSILNQGVYNLGDLTLANIHFENYNAFGTNFNYFVSLGYSNGANAHTLSANP

VAQSQLEFNEKDGYAVHVGGRYDFTKALKVGYEFFWGSRYWYTMSRPSINDPLNIRMTRGTAHDFYVIYQ

LDRYQFLRLSYTNIQNIWGNRGIPFGGAKKDKARADNIMLMYNVKF

>ETN90958.1 hypothetical protein X910\_02430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKILFASLLPIIALADCASLMAKYEAPEPESKTMKQVERWINKKVSDPADAAVLKECMIARAADNPNQV

SVAGK

>ETN90957.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEIISFVVETASAWGYLGIIILMTLESCFIPFPSEVVMIPAGYLAHKGELDITLCILSGTLGSVLGALI

NYYICFFWGKNFVLKWGKYFGINEAKFAKFEEFFNKHGEFSTFTCRLLPGIRQYISMPAGLVKMKLVNFI

LFTALGSAIWVAILVFLGYYIGQNEELIKTYLTQILIIIIVFVILASLIYIKIKKPFKKA

>ETN90956.1 lactate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKIGIVGLGYVGAASAYSIVTQGICSELYLYDIKQDLALAHARDLEDMSAIHFSYTKIFHVSNLENLAS

CDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIVATNPNDTITYYTQVLSQLPKNH

VFGSGTNLDSSRLKKFLAKDLNINSKDIFACMIGEHGDSQFAALSNASVLGQNLLDFYKQKLGKDLDIQE

LEKAVISEGYFIYERKGRTEFGIGTSCANLAKAILEDRKSLHPVSVVFDDIAFSMPAIIGKDGIEKVFEL

KFNEKEKIKLENSKQQIKNAIQSVKDKI

>ETN90955.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIEFILRDMFFAAVAGFGFAYACNPPLKTLILSALLAAIAHGLRFTLVEYFHFQTLAIATFVASFCIGCL

GIALAKIIKTPAEIIAFPALIPMIPGIYAYKAILYLISFIRSDDLKAKSEFLVQFFDYFFTTVSVTLALA

IGVSVTLLIFFEQSFMMTRHAKKH

>ETN90954.1 hypothetical protein X910\_02405 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQAPRQESRYNDSAYHQHND

YYKKKKKESWLGELFDF

>ETN90953.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYKFLSHEPLANKSCHHNHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IVLSILLLKWAIILLKQSANVLLESSPVDIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRVC

DLKEFEKLSQDLSHKLLHEFEIGHITIQPIRSENEI

>ETN90952.1 heavy-metal-associated domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFKVKNVNCMNCVNLIKNSLEDEFGNIEVDLDQKILSLNLEENQVTNFTKEFQDLGFEIVERL

>ETN90951.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEELRIKIGKMTCVNCSNAIERACRKIDGVKDASVSYVNSSGVFLLENQEKRKDIIAKIQNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLKIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

AVVLNGALRIKANKKAMDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFVFWVLKADL

NTAFLHSCAVLLISCPCALGLATPIALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLN

IFKHNLSKDDFDKLCQIESLSSHPVAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAKFLHENE

IDTKESDVFFDTFKEYVRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIA

KELQIDEFYAQLKSEEKLQIIQKFKKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPIAAGFVPFITLSPHIAALAMCFSSITVVFNSLRLKRI

>ETN90950.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIRFSKIIILLTVASLAGIVVFGNVTDCNSNFQFVSHVMSMDTKPDYLGNAIVYRAITSPVIHHIGYIAI

ILFETFITLTALKGAYDMFKARNLDAQSFHNAKIFGIVSLTCCCILWFFAFQVVAAEWFGMWMSKVWNGL

PDATRLVTYMFLALIFISLKNDD

>ETN90949.1 DNA polymerase III subunit gamma/tau [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLQALAIKYRPKTFDELIGQKTVSVSLKYALNHNRLAHAYLFSGLRGSGKTSSARIFSRALVCEQGPSDT

PCGTCKHCLAALEGKHIDIIEMDAASNRGLEDIQALIEQTKYTPSMARFKIFIIDEVHMLTPQAANALLK

TLEEPPSYVKFILATTDPLKLPATVLSRTQHFRFKQIPQSEILNHLKEILLKENVKFEEEALKFIARSGN

GSLRDTLTLLDQAIIFCQNEISISKITDMLGFLDPQKIKAFYQAILTKDKEKVFAYLEELQDYEASNVID

EMLFYLKESFFAKSTEFSILIYERFFRILSKAKNMLCDDDGFTLCVMAFMMMEASHLKEIDAQIQEIKQE

NTTNITPRITPAPIIPNLEKKIEKNAYEILLDSIYDRDFDLAECFKQSTKFISFENNTLNISSNAQGQNR

DTLNKGFKLIQELFKTKFGENAKINVQKALTIDENKLQSLTQELPNNENKNIDIQSSINMLKEGAKKFDP

QEDLKEALKDCFGEPSIEN

>ETN90948.1 transcription termination factor Rho [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPREFRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRVLDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNIADRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>ETN90947.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKCEHCKLDYKQAQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFITK

TKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIGYK

ASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPVLF

YTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYIYSLWAMFFRVGEVYFDSVAMIICFVFIGKYLEMFSK

KRALDTIDGLNDFLQNEVLVFDGKEFAPKEVQKVCLGDRILLKTGDKILIDGICKSGEMSVDTSSLNGEN

IPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIQLLELASSKKAKLESLVNSLSAYFSRTVLLI

AFICFAFWFFYKEESFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSKCD

CVVFDKTGILTKIELELKEVFLDKALDLNELYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSIQA

KGLSAELNEGLLLGGSSKFLQEKGIVAKEFDNTHFIFAKEGKILAFFEFDSVLREDAKELITYLKKEKKE

LMILSGDHQKAVEKIARKLEIQNYQASCLPEDKMKTIEKLSKNYKVLFVGDGVNDALALKYASVSMTLRE

GSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMSFS

SIIVVLNALRIKE

>ETN90946.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALDKKRLS

>ETN90945.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGLTEEDFKAIEAHIETLK

>ETN90944.1 D,D-heptose 1,7-bisphosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARSYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYHCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNANIGTLILVNEEKKEGDFFRQFKNLKEILSFFKEKDI

>ETN90943.1 ADP-L-glycero-D-manno-heptose-6-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVGK

DEEPKNPYAFSKLMMDKLAKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPRLFEGS

DQIYRDFTYIKDVINANLIALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>ETN90942.1 cytochrome C biogenesis protein CcdA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>ETN90941.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>ETN90940.1 lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>ETN90939.1 ADP-heptose--LPS heptosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTALFKEFPNSKIIIENKQSRYKQALSLRK

ELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLSIKAHFKDLKLPFKLK

FQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSHEILIFGAGKAEQELCNEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENAKLVHLDL

ACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>ETN90938.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>ETN90937.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKITLKCNKNILNLLKQYNIYTKTYIENPRRFSRLKTKDFITIPLKNNQLESAAGLGIEEYCAFKFSNI

LHEMGSFSFSGSFLPHYAKVGRYCSIADGVSMFNFQHPIDRISTASFTYETNHSFINDACQNHINKTFPI

VNHNPSSSITHLIIQDDVWIGKDVLLKQGITLGTGCVIGQRAVVTKDVPPYAIVAGIPAKIIKYRFDEKT

IERLLKIQWWRYHFADFYDIDLNLKINQYLDLLEKNHKKSISYYNPNKLYFRDILELKSKKILIYFNLFF

TPTSSLSKTSNNF

>ETN90936.1 N-acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>ETN90935.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFITGTRADYSKIKSLMYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYY

QTDKALATTIDGFSRYVNELKPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISK

LAHIHLVNDEFAKRRLMQLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEI

TSIKNQADNLVKALIQSNKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFII

GNSSCILKEALYLKTAGILVGSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLF

FEYLLSGEFFKLSTQKVFKDIKHA

>ETN90934.1 polyhydroxyalkanoate synthesis repressor PhaR [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>ETN90933.1 alpha-2,3 sialyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>ETN90932.1 glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKISIILPTYNVEQYIARAIESCINQTFKDIEIIVVDDCGNDNSINIAKEYSKKDKRIKIIHNEKNLGL

LRARYEGVKVANSPYIMFLDPDDYLELNACEECIKILDEQDEVDLVFFNAIVESNVISYKKFDFNSGFYS

KKEFVKKIIAKKNLYWTMWGETYKKEIVFRSFCEFKTRERC

>ETN90931.1 benzoate transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEDVLLYYPMLSQAQKIAYMNCNLYHYVPNNNSICNTKNEVLVKNNIQELQLVLNYLRQNYILNKYCSV

LYVLIKYLLYIQIYKIKRTKLMVTLLAKINILTLKILFKYKKFLKQC

>ETN90930.1 glycosyl transferase family 2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>ETN90929.1 lauroyl acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARIAFHLNKKHRKIINTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFTTAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSQSRTQFDIELIDKKGGIRQMLSALKKERALGILTDQDCVENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPVYAYKEGGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKGAK

>ETN90928.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FMLNTDFNAKNLAFKQDVFSVDENLKQLLNNKLKLDKNEKNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQTKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFNLEELMAFTKMMDLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDTGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>ETN90927.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIYEYCESDVLNTYM

LFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>ETN90926.1 UDP-galactose-4-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETSPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>ETN90925.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKKLFFILSKEDKNFLFFLLIFSVFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHAIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLVSEIFVVLLLYALMLLINYKITLFLSVFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKLKTKEDGVLSLFKAQSEAFSKANITNESVTAVPRIYLEGIGFCVLVFIVVFLVL

KNESDISGILSTISIFVLALYRLMPSANRIITSYHDLLYYHSSLDIIYQNLRQEEENLGEEKLSFNQELK

ICNLSFGYEGKKYLFKNLNLNIKKGEKIAFIGESGCGKSTLVDLIIGLLKPKEGQILLDKQELNANNAKN

YRQKIGYIPQNIYLFNDSIAKNITFGDAVDEEKLNRVIKQANLEHFIKNLPQGVQTKVGDGGSNLSGGQK

QRIAIARALYLEPEILVLDEATSALDTQSEAKIMDEIYKISKDKTMIIIAHRLSTITQCDKVYRLEHGKL

KEEK

>ETN90924.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVKVTSLEQFKFDTLYHKIASR

FKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCDA

LSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPVMFLKAIAHLDKNL

QENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRIENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEVC

RISSSYYNGAKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWLK

LIAEVKNA

>ETN90923.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQASGEFVTFLDDDDELLSGALSTLMQKASEGYAHVFGNCLMEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSVFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQDSVTL

GASKNAYRVYLGYLELAKILENELRMSKDKDYKKTCASYYKMAAYYAKLAKNYKALYKCLFKSLSIKINA

PALILLILSIIPNNMIEKLSKIRVALCKN

>ETN90922.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVHLILMNDKISYEIPECQIHFLECSKPSENPILKFLKL

PFLALKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTHLVINECTTPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTDLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>ETN90921.1 peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>ETN90920.1 UDP-galactose phosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>ETN90919.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLQQRNLMARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>ETN90918.1 aminotransferase DegT [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELENSRSNR

WLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>ETN90917.1 UDP-GlcNAc C4,6 dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>ETN90916.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYIKDIHRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQDEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMVYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>ETN90915.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>ETN90914.1 ribosomal protein L11 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKKYYELFFIVEERYKNLFLDFAFDLGIEAIEEKDNGVYIRSHESLEDLSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTYSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFYKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

G

>ETN90913.1 cell division protein FtsH [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNNTPNNKGNLQGNNFFNKNPIFIFAIFAIVMIIIFKGFFDGNGSFGGALNGNEVNKNVPYSELKKLIE

SGQINQVSIGQTTIKAISSSHNTVYTAKKVNDPELVSLLDSKNIAYGAYSETNWFTDILFSWVLPVFIFF

GIWMFLASRMQKNMGSSILGIGSSKKLVNSEKPKVKFSDVAGVEEAKEEVKEIVDFLKYPERYIKLGAKI

PKGLLLVGPPGTGKTLLAKAVAGEADVPFFSVSGSSFIEMFVGVGASRVRDLFENAKKEAPAIVFIDEID

AIGKSRAASGMMGGNDEREQTLNQLLAEMDGFGTESSPVIVLAATNRPEVLDAALLRPGRFDRQVLVDKP

DFKGRCDILKVHMKDVKISPKVKVEDIARLTAGLAGADLANIINEAALLAGRDSKKYVEQNDLVEAVERA

IAGLEKKSRRINEKEKKIVTYHECGHALIAETTKGAKRVSKVSVIPRGLAALGYTLNTPEENKFLMQKHE

LIAEVDVLLGGRAAEEVFIGEISTGASNDLERATDIIKAMISMYGMSEIAGLMVLEKQRNTFLSGGQTIK

DYSEKMAESLDDYVKKTLDERYKDVKDTLNTYKGAIETMVAALYEEETIEGNKVREIIKEFEDQNSLPTR

LQELEEVKTEVKVEE

>ETN90912.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDFIAKDGYLSLIILSLIFIFMWIFYSFSILLLALIVICIFLFRTPKRELVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSAKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>ETN90911.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLCPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>ETN90910.1 hypothetical protein X910\_02165 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKEFFQELQDILYEKNITIKFHSFQNFYEDFKSRKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFLN

STHALAKIIHSVAHIEFNAINLALDASYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGIVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNRYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQKECEVIEKFYS

>ETN90909.1 methionine sulfoxide reductase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIVCANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>ETN90908.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSSMGSELYLMFFAAITLLAILNPFGNLTQFLAMSDGLPLMLRKKLFRTILYTAFTIVLVFLLSGPLFM

NYIFRVSLDDLRVSGGLVLIIMAIKNLLFSTKIATKDFSSYQDMDDKEILRQSLIPMAFPMLVGPGTLAS

VIVIAEDGGLDVALGGVMIAFIFMFILFHFAATIEKIVGKLILHVFSRIAQVFIAAMGFKMIIVGLKDIF

NL

>ETN90907.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFGAKKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEIKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLCLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

SAEVAKAMS

>ETN90906.1 ATP-dependent Clp protease ClpA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKYQENLQKYLDNAKNLSLINHHEFVTCEHVLFALLKLSTDFKDIFEEFSDGDLELLETELKNYISQNNQ

VIKQEIEPTISVVLDEILLSSKNKNNEIKIIDFLEKLIQDSRSYSSYLLKKHNINLNKIQELQNHENIQN

LSNHTSDLTLLAQNGKIDPLIGRKFELERMMQILSRRKKNNPILIGEAGVGKTAIVEGLALAIAKKKVPK

NLQNAKIFSLDMASILAGTKYRGDFEKRIKEILNELEKIPNAILFIDEIHTIVGAGSTGESHTDFSNLLK

PALSNGTLKCIGATTFMEYKNTFDKNKPLSRRFAKINVDEPSQEESLQILKGLKNKYEEFHHIKLNDEIL

QYAVIWGKKFFNDKFLPDCAIDLIDELGASFALNPKAKKNVNLKDLENVLAKMTHHHKMFEFDQNKALMN

LKTNLKAKIFGQDEVIDSLVSSLKQSFAGFKNSNTPRGVFLFTGSSGVGKTELCKSLAEFLGLNLERFDM

SEYAEKHAISKLIGSPAGYIGFEEGGLLSNAIRKNPFSLVLFDEIEKAHPDLSNTFLQIFDNAELTDNSG

LKVDFKNTIIIMTSNLGLKESNELGFLSKNEEKSNRAIKDFFAPEFINRIDKILHFNDLNDTILVKIIEK

ELDEISKNLNNIKLSVDDKAKIYLAKKAYNKEFGVRLLKRIISEEIGEKISDEILFGKLKKGGIAKIKLG

KNGKLEFIF

>ETN90905.1 ATP-dependent Clp protease ClpS [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>ETN90904.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILTLFLISLAFFLNACSKEEEIQNDFMFEEYHKGDKIVLNSVNGGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIIGLTHFEDVSDETVKKFADDYGAYYFLSNGGSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>ETN90903.1 4-diphosphocytidyl-2C-methyl-D-erythritol kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>ETN90902.1 carbon storage regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>ETN90901.1 tRNA pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKIFAAFKPRGLSSNAFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYTKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKEIKNIKEFDLANLQQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YIDLKPNFIKELNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>ETN90900.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLFEDLNDSQKQAVSHIDGAMLILAGAGSGKTKTITTRLAYLIGEVGIPSHNTLTLTFTNKAANVMRHR

ALNFLQGNHNPLLCTFHKFGLLFLKLHFERLERKNSFIVIDTDDTKKIIKDLIHDKNKDNVYDIIQYISY

CKNEGKRVSNVFEDLNLLKEHNFEKYQNEYKFANYYRAYEEYLLKQNFVDFDDLLLLSNLILENDINFAK

EQSLLYNYITVDEYQDTNTLQYKILKNLCCMHENITVVGDDDQSIYSWRGAKIENILNFQNDFKNVKLVK

LEQNYRSVGTILQAANNLISHNEQRLGKTLICTKDTGENIKILKNENEKDEGLYIAQEVKKLLNSGVEAK

EIAILFRVNALSRAIEEAFMKKQISYKLLSGMRFYERLEIKDLISYLRLILNPSDDLSFKRIINRPKRSI

GEKALKNLEEYAKKRQISLFDALCESDGGVGILTTKKAQNEANIFIQNIHTLKSYDNAKKVFDNIEELFK

IKDYFSEQDDGDERIRNLDEFYANLREKLKEDPEASLEDLLSEISLLSDQDNLDEECVCLMSIHASKGLE

FDYVFIIGFDEGFFPLNSEENLEEERRLAYVAITRAKKLLTISVANSRFYHGSRANINPSRFLEESKLIN

EKSKNQNIQKTSFCKGDLVKHKIFGIGRVVEVNKSGKEEKLNINFGGIMRVIMASFVEKAV

>ETN90899.1 hypothetical protein X910\_02100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLETILKNENFIHTMQKHCYEVISHLIEENIEFSIVANTNFIDFNPELPKELDIKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNDDFDSFVKVDLGAITQIQVENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>ETN90898.1 oligoendopeptidase F, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYTLDANEFLQALKDYENLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIMLYLSNTGANAFSRLFDESMSALKIPFEGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFNLVSQFYKRKKQILGYELKDYD

RYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFVL

LNYTNKRRDLFTLAHELGHTIHQKLSYHVSYLNQNTPLTTAETASVFAEMLVFDFIKDKLKKEELLSLYA

NKIEDIFATFYRQINFTCFERRLHAQENELSTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIHS

PFYCYAYAYAXXEHHRCTL

>ETN90897.1 peptidase M24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVKNKFTITITDINGSRHFYLNQIIKKIVFYTIAFIVLFLVFSGFYIKYLDSKLSDISEKREELLKKSKE

LELSNSQMQKSIEEKTQQYAAIEDKIASFEEALGLEVENNLTISARLDNLQLTNEQQLGILGQIPNGWPI

ENKGITGNFGWREHPLLKRREFHPGIDLRAEIGTPIYAPASGVVEFSGYSDNGYGYNVILLHNFGFKTVF

AHMMRKEVVKAGQFVSKGQLIGYSGNTGLSTGPHLHYEVRFINKTLEPLYFLNLQRKNMNDFLIKKGEFH

GNL

>ETN90896.1 aspartate carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>ETN90895.1 serine/threonine transporter SstT [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSKIIQSYAKGNLIVQICIGIVLGILIGISSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGAKIKNIIILYIVGTFLASACAVLANFFFPVKLVLDGVQTATNSSPTHMSEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGIALKHCSNEAKQVFIDINEGVLKIVKFIVKLAPFGIFGLVANSVAQTGAQGL

LSYVKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAACGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>ETN90894.1 S-adenosylmethionine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKADYDNLV

KDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGETGAGDQGIMFGFASCEAEEYM

PAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMKIEDLR

SLVMKLILDSNLPKELFDPNKTRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQSSKDYT

KVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQNFSLTP

NWIRDQFHLDKPSKETFLYADVAARGQVGQKDYPWEKLDALEQFKKLL

>ETN90893.1 preprotein translocase subunit YajC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNVTAKISREFIAKKIDA

>ETN90892.1 preprotein translocase subunit SecD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRNSKINYRLIIFIAVFIFGVAFSLPSFLQSERGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEAASYGLILVPDSRNPNLKYTLKSIPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>ETN90891.1 preprotein translocase subunit SecF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQFFSEKKIYDFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPTLLWFKFSVLEFRNKEIEKAKRKQDKERNRAMYEKGTV

>ETN90890.1 hypothetical protein X910\_03430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILIFCIGLFLGACGYIPTSKIANNIFDEKVYVNVELSQQDPKNSIYVADTLKEMVISKLGRKLALKH

EADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYNFEISPNSIISDSAR

YEAIRAASSEAFDEFISVIAIKGQKRDSKY

>ETN90889.1 hypothetical protein X910\_03425 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIPNTNEIAKQTLIALKERKLKPTPENYTEIFEELSLKYGITSSNKAKLDKYKTLLLPIYQQELNSKTIR

SLEELISFLISVLNRQSGKQFSEFFDFLYTISKTLQISKDKKIRDLAKVTSIRISKTMDSESIYLLTKKW

KELERNYDENDLEEQARKYGISKYDDYDSVIKKLLVKLEERSYEHFSELLCLGLNPSLVEDLKIQGFIQN

LTQKPFVIGEENFKNELMEFINHRIMVDNMYVQKNLNFFNDNLKKIYELLVLLNKSNEKNMDFINTLKPD

ENGEVKLSFEDLKLKFKQLGEKITSLNNQIEFTQSLEEREAWSVLKELDKMDENFNKYKVNYSLALFSIV

NYRFIMEKYGMGSLNEIFVRFKKILKDSCSEFDELWMIDEKSYLIVSPGKSKDEITQLVNTNLKTIENFR

FIYKQDIITPKIHVAYLDKQSKPSINILDELIKQIAAVNEQYNES

>ETN90888.1 hypothetical protein X910\_03410 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIFNKGGISPTSSSSSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGRFNGTSKIKEDTIKLIENNNEE

>ETN90887.1 nuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTGARIFTKLLNLDLNYHDFDWLENQGLSEFELLISVILTQNTNWKNVLKALENLKKENIVSLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDSILNYLCKREI

LVVDNYSLRLAFCLGYEFENYEELREFFQSGIESEQENLCKILGRKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>ETN90886.1 phosphomethylpyrimidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFYAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>ETN90885.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNKLDLSLYLVASQGNKSEECFLNTLENAIKGGVSIIQLREKELNAREFYKLGLKVQKLCKAYKIPFLI

NDRVDIALALDADGVHLGQEDLEVKLARKLLGDEKIIGLSLKKLEQLEFIQGANYLGCGAIKATPTKESS

LLSLELLSQICDKSPIGVVAIGGVDKAVLDELKGINLSGVAVVRAIMDAKDAFLAAKELKRKIYENLPLK

>ETN90884.1 uroporphyrinogen-III synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIYLLNETPFKGVENLILNEIIFYDFSIDLSLYDALICTSKNALKALQNAKITLNFKLNLYAVGQSTAQ

YAKNLGFKKIKIPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNVGVDLDEVIVYENVFKKG

DKKLTHPAIFIFTSPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>ETN90883.1 hypothetical protein X910\_03375 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQAKQENKECL

DNIYFNYAKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>ETN90882.1 hypothetical protein X910\_03370 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTALHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISTNFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLNQQGLISKNISSFNLQNNKLKICLKRQT

KYCLEKRILL

>ETN90881.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKAFILIESISAITIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIILQTSALKPI

VLQEQFVNDGIFQFQKLYFQDQNYSVYFKE

>ETN90880.1 pyrroline-5-carboxylate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALAKEGFKTLLYKDFNIEGKDVILAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIIPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEIQMNAAMAISGCAPAFLALIAESIANAGVYEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSAK

>ETN90879.1 flagellar assembly protein FliW [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>ETN90878.1 Lon protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIEEIQNYPANLPVLVEDELFLYPFMITPIFINDSSNMKALDLAIKNDSMLFVAPSKLENGRNFDEIYN

CGVIGTIMRKVPLPDGRVKILFQGYAKGKIIEQISNKPLEAKIELIKEDFLEGTKKEALLEVLKEKVKNL

ANISHYFSPDLLRTIEEGFDASRICDLILNTVRIKKQVAYEFFVLTDLEQKLVKLIDLIAQEIEANKIQK

EIKNKVHSRIDKVNKEYFLKEQLRQIQKELGSDTQKEDEVREYQKRLELKKKFMHEDAYKEIKKQIEKFE

RIHQDNSEASMIQTYIETALDVPFEKISKKKLDIKEVSKQLNHDHYALNKPKERIEEYFAVRELLEKRKI

AEKDGAKVILCLYGPPGVGKTSLANSVSKALKRELIRIALGGLEDVNELRGHRRTYIGAMPGRITQGLIE

AKQINPVIVLDEIDKLNRSFRGDPSAVLLEILDPEQNSKFRDYYLNFNIDLSKVIFIATANDISNIPAPL

RDRMEFIELSSYTPSEKFHIMKKYLIPDELKKHGLKSNELFIDDETIELIISDYTRESGVRNLRRKVAEL

CRKSAKKLLLENIKKVIINTKNLNEFLDKKVFEIEKNNGENQVGQVNGLAWTSVGGDVLKVEAVKIKGKG

ELTLTGSLGDVMKESARIAFSMIKVLIDEGKIKIPKKIIIDPKVNVYDSYNIHIHVPDGATPKDGPSAGI

TISTAIASIFSDKKVKADVAMTGEIDLKGKVLPIGGLKEKLIAAYKADIKTALIPRKNYERDLKDIPSEV

RDNMEIIAVDTFSDVLEYTLV

>ETN90877.1 30S ribosomal protein S18 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>ETN90876.1 single-stranded DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNAPQQGGFGNNSFSNNNYSGNYENQSYDPYMSE

NQNFNKAKANPAPQRNQNPQHEEKLKEIDIDAYDSDDTNLPF

>ETN90875.1 30S ribosomal protein S6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>ETN90874.1 zinc metalloprotease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRSLLLLIVILILGIKFYSIEFLATVLVISFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIGNIAPNSAAQEIGLQKNDTILEINGVKIQSFDEISKHLSLEPLKILIDREGKNLEFTLTPKIGQG

YNDFGQIVEKPQLGVSPNGTSTLVKHQGLESFKYAIQESFQASTLIIKGIIKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRRKVPQRAFEYLSYAGMAIL

LSLMLFATYNDISRIAGE

>ETN90873.1 NAD(P)H-flavin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFKELISKRRACKLFNDKKINEKDLHFILESGVLAPSSHGFEPWKFVVLEQKEHNLKLSTLCYNQQNVA

SASHNIIFLARKDLQSKDEFAQKQVRRFSGSSEENFQKILEIYTHKTNAMNDNELYHYAQLQCYLAMMQM

SLAAMSLGIDSCMIGGFEKARVDNFLNLTYPFETAVILSLGYKAHEPKYSTQRLNFNEVVEFYKEK

>ETN90872.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEIKLKEDLEKIYPLIKQLRNNLSLKDFLDKIQLATQTQHYKLFAYENEGSYKAACGVMPFNVLYHNHC

LYICDFVVDEALRGKGIGQAFLKKIQIWAKDQGYEELELSSSFFRTQAHEFYIQKMGFEKSGFVFKKNIK

L

>ETN90871.1 competence damage-inducible protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKHLLYLIGDELTINEKFKNYIYRTYEEKFKEINEIRIQNKTDKDLPFLLENLLNQYDFITLFTSPLHYA

TVAKILATLNDDNLILKDDTLVPDKAEFSKNSFVCNFSNSKINVVKINPSEKLPDLLGHIKLNFAYFCIF

GMDDESAILLLQTLTKSYEISIKSTKFLDNLVLIKATCANFGKLDGFLNSVKNLFGQKVFLGKDPIHFIS

SKLLEKKLKISFAESCTGGLCASTLTKISGVSEIFEGSIVSYSNRIKHEWLGISESVLENNGEYSERCVY

FMLKGIFKTANPDFALAISGVVGEKDEGKIKSGTIYIGAMFRDGTFIQETLYLDGDREFMQEQAVLATFC

LLLKLKPEIFEI

>ETN90870.1 isoleucyl-tRNA synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYKETLFLPSTTFAMRANLAELEPQRFKKWFEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKDLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDVKACEKLGVSKASAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

SGCYDETLRAKGLLPSHLLEEFIGLHIFKANEKILELLGEKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIGSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFDFVAAIFEKHGADAWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNAVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIASEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVKEFSFIDKWILSRATKVF

KASKEAFFAYEFAKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALMAKELLNLLAPN

LSYSVDEALEHANVLIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDILKKDKIIKSTLELN

LNISFNKFPNEELADWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKLQSKNEETPCLRCEE

VLKGVQC

>ETN90869.1 hypothetical protein X910\_03285 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLENPIPNSIIITTIAVVLAFSALAVFLIKKTKENK

>ETN90868.1 aspartyl/glutamyl-tRNA amidotransferase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>ETN90867.1 inosine 5'-monophosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVVVLDSAHGHSKGIIDTVKAIKAKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGVGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>ETN90866.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>ETN90865.1 carbon-nitrogen hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVSVEAKSYKKLCLKVTPNGVKSYEQQILMPYEHWNEEKFFSNKTPSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMAKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>ETN90864.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKILLQIFIFSVLFIVTFAINRILMQNSFIPTGLISDKNEIFLMYLLGVFHDIRFLSAAFLPFLLCGFL

SLIFSNIKINNKLVIYSKNFYFIFSSVYIIVLSCLCIGFSYVKYYYYEIYKTKFDIFMFTLKDDNTKTIL

SIIYHDYPILKILALMLIFGVFVFFLNLKILNLKLKPVNLRLFPLIALNLILIIVYVIALRGPFKHVAIN

VQNYSFSEYSVVNDTMLNPIMAFSWALKQYKEEAALKVITPLKAQELKEKLFDYLHQSPINLKAEKNHPS

VFVNLMESFGLNLADFTNTEHNFLGSLDKHFKQDFLFKRFLSSSNGTIPSFANLFFVSPFSNISTSKFQK

TYLDLTPIAVYKKAGYKVIFVSAGNGSWQNIKNYLSILGVDEIIDENILMKEYNGAKDSENGYGIADEFL

YKKVYDLLQKNPHKTLIIALTISNHPPYKIPQNDLPKLQNIPQTLLNMLPYEKDKQDNIIKAYTYANNEF

GKFLDKVKQSPFKNSVIIAATGDHRVREMSMDLNSQKAFAYSVPFYLYIPKDLQDNIYYDKDRVGSHKDI

FPTLYALSLNNVKYLSVGGRNMLARPSDEKLEFGINDAVWIDKKGIYSGGKGYYFESNDTLKDMNKAFNL

DGYTKDFDKFYRELNLYQLAERLGISK

>ETN90863.1 UDP-N-acetylmuramate--alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIETI

RTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLATN

LKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>ETN90862.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSRVFLYFLIILILALITFALREKLGKKTKPFFGILLVIFIVLAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>ETN90861.1 DNA strand exchange inhibitor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDTKEELISKLDLNSYLEEFKALFARDKEIFLQGDSNLHFKRIHELCEVEFPTMPELSNLDKALVHLSK

QGILHLDEIFEFVKIFRYFEKLKKLKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDERLVDLNA

ALRLKNENIIVEFKKFCHTKALMPYLIDTQIHLISNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLSV

ENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQST

DLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGAFK

EFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLITNNLKII

ITTHHKHLVMLLAKNEQVELIAALYDEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGDD

KENLEELVGKNINLELELKAKLENVEKKEQKVDEILLSLKDQKEKNEQEFRTSLRNLEFKFHKAIEEAKK

TIQLKDTKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRVP

LKLLKKSTPTPKISPKTSISVAKPTNLSVSLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTGK

LAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>ETN90860.1 NAD-dependent deacetylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIMILSGAGLSAPSGLKTFRDNDGLWEEYDVMEVCSATGFRKNPKKVLDFYDARRAQLQNVKPNHAHE

KIAQLKEKWGKNLFVITQNVDDLLERAGCKDVVHLHGFLPELRCLKCEGIFNIGYEKIIDKQCPKCKSKD

LRHNIVMFEEQAPAYATLYSLLNQTSLFISVGTSGAVLPVGRYASMCEKSILNIYEKDANLERYFDKIYT

EDIISAIDKIALDIENFMKDGNV

>ETN90859.1 lysine transporter LysE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDSFLSGVFLGFGVSVPFGPVNILILTYALKAFKNSIAVGLGAFSIDMLYLFLLQFGLLNFLGNVIFMR

SLAIFGFCFLTYMAYLMLRKKKESLNLEHKEFKESLLKSYIKGAFLNGSNPFVIGFWLSAASVVLSSDYA

YLMTLGLVVAILFWVSALAFVVARYSHVFSAKVVFIINIISAIIIEYFALNLLYKTFLG

>ETN90858.1 succinyl-diaminopimelate desuccinylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>ETN90857.1 thiamine biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIINGQKLELKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>ETN90856.1 thiamine biosynthesis protein ThiF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNENDELFCIEKNTLPPKDALDAMMR

ARHTPKLHDKLKNGRVAVCGLGGLGSHIAINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTEA

LKEQISEINPYISVEICTLKIDEDSLKSLFKDIDIVCEAFDSAIAKAMIAQNFHRFYKDSVLICASGLAG

YGDSNSIQTRKIAKNFYVCGDLVNGAKLGNGLMAPRVNICAGHQSNLVLELLANKE

>ETN90855.1 thiazole synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>ETN90854.1 thiamine biosynthesis protein ThiH [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQDYMQYLPHMQEIKSEILNKVLSQVQSYDESQFSAKDVENALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLNEAEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEDEYKILHEKGCDYVTVFQETYNPLKYSKIHLAGEK

RIFPYRFNAQERALKAGMRGVAFAALLGIDDFRKDALATALHAHFLQQAYSHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDEQF

EISDDRSVDEILAMLKRSNLQAVMSDSIYVG

>ETN90853.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MWDKKIIAISDRKCVQIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLTKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKMGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINVVGVCMREILMKEKDLKKYLLECRQNLR

>ETN90852.1 AraC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKILSLPEDLKQLKGVNYKKIKSCTFAKYTQTDTSHSTFVNVGSHLLTFVRKGYKILHTASKDYKINSY

ETLFLKAGSYTLSNVGLSKGVYEAYLFFFDNAFLIELIYKYKDFFKLDQKFQNYEIFWVKNDKILQGILE

SFSPHFEENTQILDPIVSLKFEEIFLHLLLNKNIYFISFLSGILKEFRLDLSQLFEYCGREFLSVNEMSN

FAKLDLATFSKEFKKCFGQSPKKWLDEKRLQKAKILLKFSKKNINEIANECAFSSVAWFIERFKEKYEQT

PKQYQKTKNLYFLSKN

>ETN90851.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYVLSLALLGSLLGASELKYQEFDGFKSPESIFVDKNYVYISNVGEKLEPLAKDNDGFISKLDKNGKV

LEHKFLTHLNAPKGMMEIGKTLYVVDIDVLRGFDLKTKKEIFNLPIKGAIFLNDIEKLDDNTLLVSDTGT

GLILKVDLKTKQYDELLKLDLAKFGGPNGLYLDRKKHKLFIAGYHPDGVSGGVVMAYDLNTKELSIIKNE

KESYDGIVPYKDGLLVSSWGNNLNGYIYNLDNVKSVKLELPLMKGPADIFIEGNILWIPKMAEGKIFKVE

LNK

>ETN90850.1 UDP-diphospho-muramoylpentapeptide beta-N- acetylglucosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>ETN90849.1 cell division protein FtsW [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVADKRLFYLSCILITIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNTEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGVICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>ETN90848.1 acetyl-CoA carboxylase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVARIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIHKMGNKNIARKLMAKNGIPIVPGTEKLNS

YSMEEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKVIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>ETN90847.1 hypothetical protein X910\_03170 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFLDSLKSIKKEMQANTNTSKLAKKSSKSGASVKNLEKLAKDIREKNQETNIDKEMQEIFLKQEKLQDE

FSEFIKNTDIKKI

>ETN90846.1 arginyl-tRNA-protein transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>ETN90845.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLIFEQNNMLKPMLFIKIDFVAGRILMKLSSNEKLFITYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>ETN90844.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFLLLVFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVSKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSRMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYNNIMAKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVRLGDDFFYKIDQNGTELKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>ETN90843.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEKYLKSAIFLALYPLAMLASNLHEFIALSQNNESYLIKQMQSEQANLDKEQAFRNYLPSLSLNSAYVA

NNKDRFIIDPQESLFAKVSLNFLLFDGGAREANLRALESREKLSFLDKEQNKNYLALNAITLYFNTLSLE

KILLANQQKVSFLKSTFKRLQKFYDAGLSSKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSDTDF

KVQGNAFLENPQQEKSQNYEVMIAKEQINLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFANL

ADQFLEKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARFSERKNKEELNYLDKSLKVLQEQ

ILALNLSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNS

KVKE

>ETN90842.1 elongation factor 4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>ETN90841.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPGGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEEQKVLNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDAIGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>ETN90840.1 phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRCINCGAFALLCFCELCELELSEFSLNVRKLDNNFKVYSFYKYHEIQHLLHSKHYFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVIALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>ETN90839.1 DNA gyrase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDSKDASLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARARAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSVGVRAINLDENDELVTAIIVQRDEDEIFATGGEENLENQEIENLDDENLENEESVSTQGKMLFAV

TKKGMCIKFPLAKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSISAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>ETN90838.1 hypothetical protein X910\_03120 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIYFMLAIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>ETN90837.1 hypothetical protein X910\_03115 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MERIVCLLIFLSFKLFAQDEFIFWAELSSKNFILFHQNQNLSLAMTQSENVEEQWVCEISYSDQDLKVLP

RTSLALIDDNMPKTIKFNFLNSHKDELSDCFIGARISVKDIVNTDLLHAQSETYVKILPLRFTVEFGEQN

AIIYYLKKK

>ETN90836.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLVIVEDDINMRKSLEIALAEYEEFNIKSYKSATEALKKIDDNTDLIITDINMPGIDGIEFVKACENKY

DFIIMTGNATLSRAIEAVRLGVKDFLTKPFDVDTLVEAIKRAKIIREKTANKKSKKNEKKEENKDFFSTS

PNLEKTLNLSQKAAKTDASVMFFGESGVGKEVFSRYIHTHSKRSNKPFVAINMAAIPANLIESELFGFEK

GAFTDANATKIGLFEMANEGTLFLDEIGEMPYEIQAKLLRALQEKEITRLGSTKSIKIDVRIISATNANL

DEKIKNGEFRSDLYYRLNTVPVNIPPLRERKEEILGIAQKVLEDTCKEYDFKEKQLSQEAKNALLEYDFP

GNIRELISVVQRACILSENDEISSEDLFLEARSIKKDVKNLEKELICEVLLSVDYDKDQASQILGMDIKI

LNEKIKKYQIKDR

>ETN90835.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDAFNLKRVDVSTYQAASGAGKEGMQELVEAMQSFFAFKLDEFKSQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEIDVKKAKEILEKAPSVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>ETN90834.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>ETN90833.1 hypothetical protein X910\_03090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKHIDIKIKHKRKLQ

>ETN90832.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDMS

PEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHNI

FLK

>ETN90831.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDVIKLITIDTKG

DKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLKSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYSNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQDQKQNYKTIINP

>ETN90830.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>ETN90829.1 branched-chain amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVRIKVSHLIFLIASIVFIFVSPYIFGDYGLNIVNQIAIFIILAVSYNLINGVTGQFSLEPNGFVAIGAY

AAALVLLSADAKNDQFFLDGPSSFILAIHSNSFILALIVAGICSSLLALILAFAVFRVRGDYLAIVTLGF

GIIIKIAAINFPSITNGSRGLVDIPQFSTIYWTGGIAIVAVILILNIVYSKYGRAMKAIRDDEDAASAMG

INTFWIKTLAFSTSAFLEGVGGGLLACLLTTVSPTQFDFLLTFQLLIIIVLGGLGSTTGAIIGAILVIGG

SEWLRFLDELNIKIDSLNLDIQSMPGLRMVVFSIVLILVMLFARKGIMGYYELSDVIRGIKKRFKRSEK

>ETN90828.1 branched-chain amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILELKHISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYAILEELGI

AEFAYEKAASLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>ETN90827.1 amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIVKDLHVYYGLIEAVKGIDFKVETGHIVSLIGSNGAGKTSTLNALLNSVKRTGEVNFLGYDTKRHLTH

TLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLTSKKHALAGTLSGGEAQML

AISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRIV

MENEAKNLIGDDEIRKKYLGL

>ETN90826.1 cytochrome C biogenesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIIKSIGDLRVSVVLFLLFALFCALATFIESAYGTPTAWAMVYDTFWFEYIQLLLGINLLCGMFRYKM

FGLKKLPLMIFHISFLFILVGSAMTRYAGFEGILPIREHTQNSLIESSKTSLRISAIKDGERYSAVNDRY

IGNLPFANSFKLKLNLGDDQAVLKYKDLILNAHYTYKENNNSDPLLVLMLSQKGSQGVDVKFEKGEVKNI

EGVNFAFMNDNVKAPFVKIDENLTLSSSENLHFLSMLDGQNLDLKIGEKANAKERRLYEIKDISFVVKAA

SLHAQEALEGSNRPQDESFWLWFKSAWLEVGRTMLISTFGEPQNWKNSLLLHFKDFALSNENKNLELTGS

NALKLELSYKNESKEFYIFEYNKPIMIELAGQKFFISWALSYEQLPFDIYLRDFVLDRYPGSMSPASYAS

EITVKNNNENFDYRIFMNNVLDYDGYRFYQSSYDQDEKGTVLSVNKDPGKIPTYIGYFLLCLGMFMNFLN

PHSRFRTLARLINKDTLKHTSVIISILLLSFGSEKTFAQDLNSTLPVVNTNHAKALATLIVQKSADGRMV

PFDTLSREILEKIHQSDSYKGQNSNAVMLSMLVDVDKWQMEPFILMPQNQAVRDAIANILEIPSAKYISY

KDFFDENNRYKLQKYVENANRKNPNARGVFDKEIIKLDERANVVNLVFSGELFKFIPVQNNPNNVWLAPF

SAVTTLKGDEGHIVLALIQNYFSAVENAFKDGNWTRADEGLKFIKEYQEKIGYKVMPSKTKVEMEIFSNK

AEIFVKLAPVYLIAGFLLLILVFSKMVVPNLKISFIFKVVYVLNVLAFVIHTVGLGLRAYLSGHAPWSNG

YESMVYIAWALSLSGIFFSRKSPIALSLTSILSGVVLMVAHLSEMNPQITNLVPVLNSYWLSIHVSVITA

SYGFLGLCALLGIFTLFLMCFLKKDGKYNLNILRNITEATRINEMAMIFGLCLLTVGNFLGAIWANESWG

RYWSWDSKETWALVSILVYAAILHLRMIPKYCNQFVFALWSMFAYWVIIMTYFGVNYFLTGLHSYAAGEA

AQIPNYVYWGFALMVVLALFARRKRNFVGKL

>ETN90825.1 magnesium transporter CorA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFNDEKIYKLQNEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQNLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSISILSKNTKEHLARVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQTK

>ETN90824.1 queuine tRNA-ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>ETN90823.1 potassium transporter TrkA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRGKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGVMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGEASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNTTDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGRNLSTNLNRHYYKMRQNYQLFIPVE

>ETN90822.1 3-dehydroquinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDSILDFIEKIDEKSFLNATCENEIFTQI

IARSIELKSRVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQKIKDILLKFGLPISYKINNVDEFYEAFFMDKKSSNKKINFVLASPLGKGFIKGDISKEDIIATLREF

Q

>ETN90821.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIIILTFFVVFAFGDVNRTIINNINEKINTLNTVISASIWNIRYENFIKYQDINDELIILNLNLKKTS

DIHQQEELKRKIANLEEQLSLLKEYKDLNFAQSLSAPDNIETLSKLTNPLAIIGAFSHIKKLKGEKEEYI

FKFNDFKNLVDKIREKNSELKELVELKPSVENIEALKASDKKLEEFEQALNFASVSYSVYEKKIDEELSR

VSAEIKVQSLRAVNILVAIVIVIAIAFMLKFIAKKYIKDSERYYTATKIINFININIIFLILLFAYIENI

TYLVTILGFASAGLAIAMKDMFMSMLGWCVIIFGGSFRVGDRVKVFQNDTTYIGDIIDISFLRITLYEEL

TLETYNKNRRSGRIIFIPNNYVFTNLLANYTHHGMKTVLDGIDISVTFDSNLDKAQEIVENIVTRHAKGY

TELARKNIARLQHEYSIKNPKVEPRFFMFFEHWGMRISAWYMTNAYAALVLRSTISKEIIKEFNKHKDIK

IAYPSQNLYLGNLNQNHFEQHHENMHFHARNKD

>ETN90820.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNKKIILASFMVLCMLLGILYFKNEPKYIDENLYQSLLSQNLIQKAVIDKDEIWLKAEGENYIIIKDGI

DIKTLLSKVPVEVKKDNTLWVFFVLLIFIIALFISLGYFARKKELAKYPISNKNQNHTQAQNSNINLESS

HIKPVISNITFNDVAGVDEVKMELSELVDFLQNPKKYKEFGVKMPKGVLMVGPPGVGKTLIAKAVAGEAG

VPFFYQSGSSFVEIYVGMGAKRVRELFSKAKMMAPSIVFIDEIDAVGKARGEMSNVERDSTLNQLLTQMD

GFEDNSGVIVIAATNKIELMDPALLRSGRFDRRIFLSLPDFKDRLKILEIYMKDKNNNVNLNKIAKASVG

FSGAGLETLVNEAAINALRRNSALVEESDFYAVLNKVLLGKKKILSFNDEEKKIQATYQAAKALSAYYFD

IGFDKITLIEDRFKEYEHNIKSKSELINRIKVYLAGSRAMRLIYNESYTNSQDDFLKIKELLDYMLSFDM

LKEPNLNEQKKEMDEFLNSMKDKILKLSELLLEKEKIEHDDVKNIMQV

>ETN90819.1 hypothetical protein X910\_03000 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKFLSIITILSLSLNADIIISADNLPSVSKEFLQHNFKAPIGIVQKDKNSYEVYLSDGTELEFDIDGT

WKEIENKAFPFDLDFLPQNLANIIKNEFPNIKAREIERKINHYKIKLDNDVKILIDFNGTILHKEIDD

>ETN90818.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTIFLIFLNILCYFLISYDYYNILGLNILFFNGAYWQLLSSMFLHGNLTHLILNMIVLFQFGRILETYL

GALRFIFIYFIGGLLCSLLSVFYVYFDFKYFGENINVIGASGAICVLMGFYAVLDKNSTKGLIVAILLMS

FAPLLMGVNVAWYGHIFGFMCGYILAKIKEVK

>ETN90817.1 phosphoglycerate mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIYIIRHAKASKSGDIDDFERKLTKSGKEDLKKLFKNLALHEIHPDLVLSSPAVRTAKTAKKIAKFYN

FDKNKICFDERLYLCNVENLLKILQDIDDEFNEVFLVGHNPGLMELGELLSSLCLASFPTSSILCLEFDI

KEFKNLKKHSGKLVFFEHVRKLKEEKDLGF

>ETN90816.1 LysR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKDMEIFLDLLNTQSPTHTANNFSITQPNVSIVIKNLENKFDGILFERLGKKLLPTPKALELGKNWLK

IIQAYYQSLEKLNDESMLLGEIKIASTQSISEHFLAPILFDFKAEFKNIEIRSQTQNSKECLNLLKNGNI

EFAIIEAELDPALVEYENLEINFWQDDELIVATSDKKLNEKEFYIDELLEQKWILREVGSGLRDKFLNEI

GASSKKLNIFLELDRMAAIKELVLQKKAISIFSKKSIEKELKNSTLYEIKLKNIDLKRKFYTLKRKNYNF

NRALEKFEKIFKS

>ETN90815.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTSFLAHSVAIVRSNFKGLLFTACIVIFAMYLSSVQSIKDTTHLAATAFAIIVGVLLSPWFFKYQHHFQ

AGVHFSAKKLLRLGIVLYGFNITLTELLSVGLKGFLLSAIVIFFVFIIALFVGMKIFKLDKETSMLVGAG

SAICGAAAVLALESSLKSDPFKGILAVGTVVIFGLVFMFLYPIAFSLNLFPFFDQNAMGVFMGATLHEVA

NVAGAAEMAKDMAGFEQGASNVAVIIKMMRVILLVPFLLIVTYFFAKNQHSSSGKTAKSITIPYFAFAFL

GMIVLNTYLASKESILGIATSDIISLGKTLCTLCIVFAMAALGLQIDFKKFLKSGSRVFGLAFVLGLVLI

FGGYFLTLAFKGILW

>ETN90814.1 hypothetical protein X910\_02970 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILVSVLSSCLLASALSAVSFKEDSLKVSFEGYKTKDMIGTKGEFKNVEYNFSKNIKDLASYLKGAKA

TIKPSNAFMGEGNDIITNNITKVFFPALLGDTDIKVVFQDVIAGENKGVISAKITMDKKSTIVPLTYTIK

DNKFEAKGQLDLHTFKNGSKALKALSDVAAGHGGISWPLVDISFNANLAE

>ETN90813.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFKDYDFLQNYDLKNFEEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKAAFLRTLKIECELPNLHIYKEKVQEYKNTFKADIITSRALMDVK

PLLEICKNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRRYCILK

>ETN90812.1 GTP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKISEIANLPSKWGNFQIQSFKENDKEHLCIFKNTPKDTLNLRIHSECLTGDALGSLKCDCGEQLEFS

LKYIEKNGGMVIYLRQEGRGIGLFNKVNAYALQDKGFDTIKANHQLGFKADERTYEIVEFILKHYEISKV

NLLTNNPEKLDSIKEKIITRIPILIEPNRFNVEYLNIKQTQMGHLK

>ETN90811.1 delta-aminolevulinic acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKRFRRLRLNENLRAMVRENSLSVNDLIYPLFVVNGTGIKKEISSMPDVFQMSLDEILKECQNVVNLGI

KAIILFGVLENEKKDSCGSDALDDEGLVARSIREIKKNFPDLFIISDLCFCEYTDHGHCGIIDPKTKSVD

NDVTLEISAKQALVHARAGVDMIAPSGMMDGIITTLRKALDKEGFENLPIMAYSTKFASSYYGPFRDVAE

SAPSYGDRKSYQMDFANGKEALEESLEDEAQGADILMVKPALAYLDVVKEISLHSNLPLCVYNVSGEYAM

LKAAKNAGVIDYEKVLYETMIAFKRAGAKLIITYHAKELAKMLKGEK

>ETN90810.1 hypothetical protein X910\_02945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELEKYNTCLKRIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFDSPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIERVNQNERL

>ETN90809.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRDYKAFVKYSKAGPRYTSYPTAVEFNANFKYEEYIEILKKQDRSLSLYFHLPFCRSACYFCGCNVIYTA

KEESKERYLTYIFKELDILSTILDTKREVVQMHFGGGTPTFFSAKQLQNLILKIRSVFGNFSKDAEISCE

IDPRFLNGEQATVLTQNGFNRISFGVQDFDEKVQKEIHRIQPFELTQNALNLVRSKGIKSVNMDLIYGLP

YQNLQSFTQTLEKVMLLNPDRLAIFNYAHVPWLKKNMRKFDENTLPSPDVKLEILEFCEKFLSKNGYKMI

GMDHFAKENDELFKALENGTLHRNFQGYTTKGGADLVGVGLTSIGEGQRHYAQNFKDMSSYEAALDRGVL

PFERGVALSDDDELRKAVIMELMANFKLDIKSIEKEFCIDFQEYFKEDLKALEEYKDFINFDENFIKVNE

TGVLLIRNIAMCFDAYMKNISEDKKVFSKTV

>ETN90808.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFSQISDACVKCGKCIPVCTIHEENRDEITSPRGFLDLLAAYKEGSLELDKEAKKVFESCFLCTNCVEV

CPSKLRVDNAIEEVRYDIAKKFGIAWYKKLIFFFLRRRKILDLVAKLGYVFQSCAFKIQNENENTGMKAR

FSMPFVKKGRLLTSFNKKSFLNSNPKFINNDGEKTIGFFVGCLANYFYIDTANAVLKIAKELKINVDLMK

EQVCCGAPQFFTGDFKSVEVLAKKNIEYFEKKLEKLDAIIVPEATCSAMLKIDYEHFFIMQNDLDWAKRA

KCVSSKIYMASEYFYKFTSLEEILKTKNKFNYSITYHDPCHARKMQGVFKEPRELLKTNYHFVEMSNSNT

CCGFGGVSMQTDYYDRALSVGLKKAQMIDESKASVVSAECSACRMQISNALEQNSSKVVFVSPLELIVKA

L

>ETN90807.1 hypothetical protein X910\_02930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIVFKGKSSEYEIQRSCFCVDAFVIKDKIEERDGVDFITSNVDLLEFSDDSFTFEEIVKHFNICDTEDM

IIVEDFDMKSNKDNQNQEDDIEHNILKSEKIMHENTKQTSMQFKNLKFFSRIFKNENFLSDFKESKQEVV

TIKKHEKLEIFKNLSQEDQEISFVKIEILNYDSNEDSLIFNLDIFPSGMSYKYGILKGSMHIILQGKTSS

TMLFPFLKSMIYKNKSENSSEKIFTLMINQKKHYKLIANLS

>ETN90806.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKSLLFHFRRIGVEFIIFSVYAVFSISWAATGSLMPLISNDLALNTQQATLITSMIVVAKIFGASFTAF

LVYKFGLKKGYFLGCILMSSGIFLSFVDSYSGILVIRFLTGLGSACALVCLVPIAQQWFEKKLCIL

>ETN90805.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHFVISFNITSNLVGITLGLILAESISNYFGNWRDSLSFYAWINLILLILWLFVGKDENKKEEKKNNAKD

LIYALKSRVTWGMIIFYIGPILFLNSLFTFLPTFYAQYAGFSKELADFAKKEIPALANFAIIFGPYLGLF

FKRKNISFKIMLLSGGACIFICGFCMLFLQNLVLIQIFAVLSGIFYSMWFPFFFNLPSELKNSNPNQTAY

IMSAFWSITFVILSFNLWVVSWSVDKTHSFTLGFVYIFALIFISAILAQFVLPRRENFIQGEK

>ETN90804.1 peptidase M20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLIPEILDLQGEFEKIRHQIHENPELGFDELYTAKLVAQKLKEFGYEVYEEIGKTGVVGVLKKGNSNKK

IGLRADMDALPLQECTNLPYKSKKENVMHACGHDGHATSLLLAAKYLASQNFNGTLNLYFQPAEEGLGGA

KAMIEDGLFEKFDSDYVFGWHNMPFGSDKKFYLKKGAMMASSDSYSIEVIGRGGHGSAPEKAKDPIYAAS

LLVVALQSIVSRNVDPQNSAVVSIGAFNAGHAFNIIPDIATIKMSVRALDNETRKLTEEKIYKICKGIAQ

ANDIEIKINKNVVAPVTMNNDEAVDFASEVAKELFGEKNCEFNHRPLMASEDFGFFCEMKKCAYAFLENE

NDIYLHNSSYVFNDKLLARAASYYAKLVLKYLK

>ETN90803.1 hypothetical protein X910\_02905 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILFSPSESKNENCVKNPINENSFIFKELFPYRIKALKHYEEFIKNASLQNLQELFGIKNENEIDKFKH

DLKQAPTQEAILLYTGVSYEYLNFKALDKKSQAYILENTLIFSNLFGVVRANDTLPFYKFKQGAKIGNFA

IEKFYKEHFSKALDAYLENEEILDLRAGFYDKFYTPKKKFYTYKFVKNGKVISHFAKAYRGILLSISAKN

QVKNNKELLANLPSNLKLKEIQIKGLKEEIVLEILD

>ETN90802.1 hypothetical protein X910\_02900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKGIFLSIGIAVLFSACGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNADGDFIACL

SPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFEDFKLGEK

VVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLNINLKEDL

LNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVFSSYIATA

KENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKLSINNQDA

TEALKIILPFIMFSMLMGGASF

>ETN90801.1 glutamine ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLSVLTTFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIALAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTQTPERAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQDYPNIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>ETN90800.1 aminoacyl-histidine dipeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNVIENFKQLCKIPHCSYETEQMKEFLSSYAKDKGFKVSVDKAGNIHAIKGKPKICLQSHYDMVCMGDA

PNLEVYEENGFLRAKNSSLGADNGIGIAIMMSAMAEFENLECLFTNDEEVGLMGVNSLEHTLESKMLLNL

DHESDDEIMIGCAGGVDIEASLSFNTLRKKGKIYELCAQNFKGGHSGINIIRNEKSSIKEMAKFIQENEG

EIISFEGGERINSIPKHAKALVHFKNEVKSNNWIKCEFKEEGEFEICDQSKKLLSLINSFTHGVRAYDEN

LGMVQTSINLATLRMENQQIKFALFARSNILDGLKQVEFETLEFFKAFDFKVRSFNFYPPWEGKPNTLSD

MVFKALKKVSPNAKVSAIHAGLECGIIEKKQELLCASIGPNIHNPHSTDEHCEIASVEKISKVVFEVLKD

NA

>ETN90799.1 nuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRINYKKIFNLRKLLSDPKKLFSVLIFTLVVVFIQNYIAQNSSFEGKVVRIIDGDTIEVNHENKLARIRF

FGIDAPELKQSFGKQSKEALSRILSGKQVEIIYKNKDTYGRIVAIVKLNDVDINRFLVSKGYAWADTYYS

NAYIKEQENAKKNHLGLWKESNPIEPYKWRKHNKF

>ETN90798.1 hypothetical protein X910\_02875 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYTLMILLALGISGCFVNERGISNRFYDDCKEYYDGSGTYHKDCPKNWVDIKMTP

>ETN90797.1 Hot dog fold protein HP0420 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKDNFEEYAQLEEYASAEDISRVRAELLTCPELNTSLAGTIIEIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFFYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>ETN90796.1 tRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQENLLEKQFLNHPLYTKIQELKALNLTCNFSLDDSVNLSTNSQAKDEILAITKELKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMNEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPSYSLKFDVIFCLGVIYHRSDPVKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>ETN90795.1 translocation protein TolB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIVAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGSSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLASVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDKPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGVQSALGVIRVNANKTFYFPLRVGKIQSIDW

>ETN90794.1 energry transducer TonB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNYGLSNLNSFLLALAIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQVDIEKLFAQTTNKTVKTEDIDQKASNFNELFGNIKEIQEEKTTKIQSSAKSGASSAPKPQASELV

KQLNDSLLQEESSTQGQSTKAQKIGIYDEFLGKVVRIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDAKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>ETN90793.1 biopolymer transporter ExbD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPFDDEKPELNITPLVDIMLVLLAILMVTAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>ETN90792.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFEAIFHFFNNSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>ETN90791.1 F0F1 ATP synthase subunit epsilon [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>ETN90790.1 F0F1 ATP synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>ETN90789.1 F0F1 ATP synthase subunit gamma [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>ETN90788.1 F0F1 ATP synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>ETN90787.1 F0F1 ATP synthase subunit delta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>ETN90786.1 F0F1 ATP synthase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKASAAAALITAKKEAEILVQNIKKETQDELDLLQKHFEEQKDYEFRKMEKEL

VSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>ETN90785.1 F0F1 ATP synthase subunit B' [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAIAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>ETN90784.1 chromosome partitioning protein ParB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLGQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKN

>ETN90783.1 sporulation initiation inhibitor Soj [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>ETN90782.1 hypothetical protein X910\_03655 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGDKRVYSLR

>ETN90781.1 biotin--protein ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKGLKVKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEED

LPKDLPLASVSIYFAYLLKELLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFSPQN

TALCDIEILLKDLVSEFLQKVEKKFYGRIFLASIC

>ETN90780.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNARMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>ETN90779.1 gamma-glutamyl kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRIVVKVGSHVISEENTLSFERLKNLVAFLAKLMEKYEVILVTSAAISAGHTKLDIDRKNLINKQVLAA

IGQPFLISVYNELLAKFNKLGGQILLTGKDFDSRKATKHAKNAIDMMINLGILPIINENDATAIEEIVFG

DNDSLSAYATHFFDADLLVILSDIDGFYDKNPSEFSDAKRLEKITHIKEEWLQATIKTGSEHGTGGIVTK

LKAAKFLLEHNKKMFLASGFDLSVAKTFLLEDKQIGGTLFE

>ETN90778.1 GTPase CgtA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKILTI

>ETN90777.1 50S ribosomal protein L27 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>ETN90776.1 50S ribosomal protein L21 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>ETN90775.1 hypothetical protein X910\_03620 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIIKILFLGLFLSLSLNAKVVTTTSTKSSTGEGTGLTREDAINNAIIEAIGKMSGVSINSLKKSNTSVS

TDNSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGKYTANVTIFKTTTTKKYQVPGLSADNRRSITV

FDSTLDAAKRGIGSALQQKIISDLLQSRKFNVLDRDSSGYYEMEKALIKSGDAASDEVYKLKNMLATDYI

LLFSISGLEGKQKTSNLTGKSKTEIEVIVDYRVLLFATRQIKFSNTLSMKVNLKDNSLSANETALKQIAN

RIAGDILNAIYPLKVASVENNEVIFSQSLNQGDVYECFALGKVIKDTYTKENTGRVESKTGSIEITRTSP

KFSYAKITEGSVKVGDICRPLSNTGSGNGYTIGRDANYQTQEGGGVNLGF

>ETN90774.1 hypothetical protein X910\_03615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFIGSLVMASLLYAQGSQPVEITQQDINTQNEMSDASTKDITPKSIEDFFEEFADNFGIEYGITKD

GKTFYTGKSTVAVNDTDPQFAQALQNAYQKAMLNLQSEFIRDVFGRIATSRIQNYEADNSTNAKEFDELP

KGDKVDQILNKLTQLAGAQLDKALKDLGIDTNSLSEDRKKTLLKQEFLNKTMTNAIGSMSGLVPVQTIVT

QRRGEYDVGVIAVISNKTRQLAKDMALARQSAIKGKGKAISEYLPKDTKGFLNEYGIRLVYDENGAPIIL

SYGNWGYVADPSNAKKTNILEDRAKETALTMADAAIIEFINTNLSLKDERTTGDTYEEIIKQSINVNDSS

TQEQTQNITNIIDKVNSKIKASASGKIRGIRTLKKWSYTSENGIEHVGAVRFYSYENLANTNEALNSKSN

ATKNEAKKSSSIQRSSNVVNSMDDF

>ETN90773.1 hypothetical protein X910\_03610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKTKILGTALIGALLFSGCAQTAYTDGKASQVKKGDALTLGLDRQDFESAAETMINSMLSDPAFANIKP

GTRKVIAIGRVVNDTPQRIDTEKLTAKITSALRKSGKFVLTSAVAAGGALDSMSEDVRELRDNDEFNQKT

IAKKGTLVSPDFSLAGKIRQDNVKLSNGKTQVEYFFLLRLTDLTSGLVYWEDEQTIDKTGSSKTVTW

>ETN90772.1 hypothetical protein X910\_03605 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIILFILMFLLSACAPSYQINSNQNTVILGSNLPKSLVKQFQKRINSNGYLEFEVILRSTFAKDVIYK

VDWLDKDGFVLRDVLNEDYQALRIPAGQEVILRKLASDIRAKDFRLEIKAKN

>ETN90771.1 hypothetical protein X910\_03600 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKVGLIFSGIVCLFLTACVNQVKQNTTFENALTQKYCGDDFFNQNLEKIKKNDDVIYTGLNAGLIARN

CGDFNKSNVFFDAAEESYKYDVDLENVGSKAAKFVGTTLLNDTIVDYDGSLYERIMVNIYKALNYMEEDD

YENARVEFNRALMRQDKAKEYFAKEIEKNRADLDKAKEDKNYDKNMNENSKVIEAQYDNLFKEFDTTKNF

INPYATYLASIFFFMDKDYRKATDLFREVAIIYPKNKTIKKEAKIFKEYATKIKVKKAKKYVFVVYENGF

GVVKDEFALTLPFIVDKKIISTNIALQTLKKREASFANLNINGQNTNDFVDLDNIVATEFKINMPAMIAK

ALAQTIIKTTLNVAVANNDSTGGWLSLATAVATAATNKADVRSWRGLPKSIAMATIENDGNLEIKDPQGN

ILFQKSLDKNKNALVIVRSFAPYLPASVAIMEK

>ETN90770.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDIMIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVILGLVLGMKPGNIPWDVILIIAAAIAAISAMQQA

GGLDYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVS

SQIGITASPVSAAVVYMSGVLEPLGWNYPTLIGIWISTTFIACMLTAFIVSLITPMDLSKDSVYQERLKA

GLVKDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITW

LCKVEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEASIKEVAGDWVKQTPAMLAVAFFFASMLLY

SQAATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNH

SFFIPGVLAIAIAVALGFVLAPMLI

>ETN90769.1 aspartate ammonia-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKDVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMEAKK

>ETN90768.1 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>ETN90767.1 aspartate racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSAKILLYSVNFEEIENLQSQDKWQEAAQILTQCAKK

LELAGANFIIIATNTMHKVFNEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMTQDFYKKMLIE

ENISVITPSDEDIKIVNDIIFNELCKGKIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>ETN90766.1 hypothetical protein X910\_03575 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLHALFLLAWPLVIYLSYKFIMLNINQLEKDSKL

>ETN90765.1 cytochrome C oxidase assembly protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFGLELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFG

GAAFAAFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAV

SSFFSGSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKL

MINSILFLPFFLGFLAWIFLKDGFSVDTNGVVSMSANLYLYNFLNQMIFAVLLVIGVILVLLGMVQGTKG

CSKAIFTLGLGTVLTVFALLSSIGLGQSAFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYI

IYVWNAMDKVKITREEIANDDHAY

>ETN90764.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKNHQIWLSLFAINFAIGVATGIIMEFEFGTNWANYSWFVGDIFGAPLAVEGIMAFFLEATFFAVMFFG

WDKVSKGFHLLSTWCVAIGSNLSAFWILVANGWMQYPVGMSFNPDTARNEMQSFFEVALSPVAISKFLHT

IGSGYVISALFVMGISAWFMLKGRHIIEAKKSLVVGASFGLVCSIFLFFSGDESAYRVTQTQPMKLAAME

GVYQGEHRAGLVPFGILNPKKTIDNNESVFLFDITIPYALSILGNRDPNSFVPGIEDLIYGNESKGIEPM

QNRIDRGKIAIQALKDYKLAKENNDTIAMANHKSILETHFKDFGYGYLEKPSDTIPPVALTFYSFHIMVA

LGSFFFLLFIVTLYLTMANDIEKFRKVLWVCLLSIPLGYIAAEAGWIVAEVGRQPWAIQDLLPVHIAATQ

LGKVNVQISFWIFAVLFTALLIAEVKIMLTQIKKGFDAHAGHTPLMGKGEK

>ETN90763.1 hypothetical protein X910\_03560 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNELSSVDWSRAQFALTALYHFLFVPLTLGLSFMIAIMETIYVKTKNERWKKITKFGFHYLL

>ETN90762.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYLKHLYFSISQIFNFYKEGFKNLTLGKTLWKIIFIKLFVMFVILKLFVFDVNFNSIFKSDKEKSTFVLK

NLTLEGK

>ETN90761.1 cytochrome C oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKIILINNGF

>ETN90760.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIICLFLSFNLAFANLENFNVGTWNLQGSSAATESKWSVSVRQLVSGANPLDILMIQEAGTLPRTATP

TGRHVQQGGTPIDEYEWNLGTLSRPDRVFIYYSRVDVGANRVNLAIVSRMQAEEVIVLPPPTTVSRPIIG

IRNGNDAFFNIHALANGGTDVGAIITAVDAHFANMPQVNWMIAGDFNRDPSTITSTVDRELANRIRVVFP

TSATQASGGTLDYAITGNSNRQQTYTPPLLAAILMLASLRSHIVSDHFPVNFRKF

>ETN90759.1 cytochrome C oxidase subunit IV [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIITLFFMFITLAFATPTGDLKDFTEMVSIRSLETGIFLSAFRDTSKDPIDQNWNIKEIVLSDELKQK

DKLADELPFGYVQFTNPKESDLCLAILEDGTFGAKSCQDDLKDGKLETVFSIMPTTTSAVQIRSLVLESD

ECIVTFFNPNIPIQKRFGIAPCTLDPIFLLK

>ETN90758.1 lactate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEQILTWQQIYDPFSNIWLSALVAFLPILCFLVCLVVLKLKGYQAGFLTVILATLVALFAYKMPWNLVGA

SFIQGFTNGMWPIAWIIIAAIFLYKLSIKSGSFEIIKKSVMSITPDHRIQVILIGFCFGSFLEGAIGFGG

PVAITAALLVGLGLRPLQAAGLCLIANTAPVAFGAVGIPIIAMANLVGIEQHSVSAMVGRMLVPLSLTIP

FFIVFLMDGFKGIKETFPAILVAALSFTTTQFLSSNHLGAELPDIISAVVSLAVTTVFLKFWKPKNIFRF

DNESNFTQDNTLSFNQILKAWSPFILLIVCIIIWTQPWFKALFDKDGILSYTSITLQFSNITTGILSPSI

TGIGEAKPLSLALGVDLINGKTVAQAGTAILLAAFLTIAILKIKAEDAAECFWVTLKEMAIPCITIGLVV

AFAFISKNSGMSTTLGLAFAHTGDAFSFFSPIIGWIGVFLTGSDTSANLLFGTLQQVSAQKLGISEALFL

AANSVGGVVGKMISPQSIAIACAAVGLVGKESDLFKFTLKYSVAFIILIGIWTCIIAFFLQGIIPEVIVK

>ETN90757.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMKKVYFYATCLGSAAMQQSVLNAIKLLRREGIEVIFKKNQTCCAQPSFNSGYFDESREIALYNVDLFDK

DYPIVVPSGSCAGMMSHDYKELFKNRPEFSKIKTFSPRVIELSQYLDEVLKVDYEDKGAPIKVTWHSNCH

ALRVQKSIQASKNLIKKLKNVELVELQYEEECCGFGGTFSVKEPEISNAMVRSKIKDIQNSGAKYLISGD

GGCLLNIDGTMKRMGLDIKGIHLYDFLLKRLEGERL

>ETN90756.1 iron-sulfur protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQKIPHEQIVQIKLNDKQMQENLMTAMHTLQKNRLNVIDARFKDWQGLRAKAKQAKNNALMSLEERLLE

FEKNATKNGIKVHWASSDEDACEIVYEIMKEKNITKLLKGKSMASEEIGLNHYLEKKGLKAIETDLGELI

LQLNEEPPLHIVVPAIHRNRHEIGEIFKEKLGANLENDEPESLNAVAREHLRKDFEGLKLGLSGVNFAMS

REGAFWLIENEGNGRMCTTAPDIHIALCGIEKVMESFEDAATMVSLLTPSATGQFIPTYNNIITGPRKNG

DLDGPKEVHVILFDHNRSKMLAHEDYYEALRCIRCGACMNFCPVYDQIGGHAYQTTYPGPIGEVISPNIF

GIDHTGDILNFCSLCGRCSEVCPVQIPLADLIRKLRCDKIGQGKNPPLGANNVHHNALEAFAFKQFKNIA

TNGDKWRFSLSKAHYFNWTVQNFASILPVIKKWYAFKELPQIKMDLYKEVQKLEGVSYE

>ETN90755.1 hypothetical protein X910\_03520 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKIDEISSKSKANILEHLKKAYKETTFTRIESIDPVEHIQTTQDMLTEMKQKMSDNKYIVENATKDTLE

EKINEIVAKYGFKSMIYGADLNLNLEQIKAEKKICFDKEIENLRSEVFHSDFSIIHARAGVSSHGVALIP

SSKTQPRMLSLAPKLCIVLLKKENVVKSLSEALNLVKKENEILPTNILFIAGPSRTADIELITVFGVHGP

QIAHIIIY

>ETN90754.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLLDKLIPTWNEKYSIHNTMIDIQHQKLCELASKVESAVYKFVKREELKEILTELFNYMKEHFSNEEDYM

QEIHYPYLNEHKIMHKISFVICLILYKT

>ETN90753.1 cation-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSYLIQNIKTTNDLKEKLYTVSKKWLLEHILYKDVKVEQYRRSSLTSEDDGEVSFEEVKEEKDDENTVYL

YTCECVEQMHDVPFGIHQKIQLKGVKFKCKKCKEAIQFYKKYSENF

>ETN90752.1 hypothetical protein X910\_03505 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSILLLQNGHSFSIVFKFELYSIEKKFSQNEHFVSLVSIG

>ETN90751.1 hypothetical protein X910\_03500 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKKDEIYKYVKENFDGYVSRINPGNLKEENEYFDMLRKLCADKLVGMPHPDAMIGYGAKDALTKLADTD

LVPSDTYAYYDIKTFKENFPKSLAKGERVLKQNRGSTGEGIWRVSVEGNVSGDSLPLNTKIKCTEAKDNH

VEHRELGEFMDFCEQYIIGDNGMLVDMTFLPRIKEGEIRLLMLYNTPVNVVHKKPAEDADAFSATLFSGA

KYRYDKPEDWKTLVDMFLGELPKVREKLGNYDLPLIWTADFILDTDEKGNDKYVLGEINCSCVGFTSHLE

LADEVASNIINIVSKTKA

>ETN90750.1 endopeptidase IV [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQILKSFFKALGCGIKFINTYFKTFVLLLIVIWILMPSANSSSNLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKPVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERALD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPVWKEEDKIDKFLNRLEGQTSSLIS

KSLIEIVYKTNSSFISAR

>ETN90749.1 chlorohydrolase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

LHFGEFLIWLKSVINSRSILNAQAKEELILQSIKKMQKSGIGTIGEISSFGSDLDPCLKASHKGMRIVFF

NEILGTNENQVEDKKQEFLKRFENSLKFKNDFFIPAISIHSPYSTHPSLAYFALDLAKKQNLLASTHFLE

SKAENIWLRESKGGFKKWLENFTLHPKPLYTPKDFVKLFKGVRTLFTHCVYLKEYEWLDKNLHSITHCAF

SNRLLSQKSLDLKTALKSGLNIHLGTDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMVTLYPAR

ALNLNLGELKKGKIADFSVFELGECDKKQAPLQFILNAKEVDKLFIKGKECKF

>ETN90748.1 hypothetical protein X910\_03840 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIAIKGITCKITAIITAIKNSRKCKNYLPNLQGVGTSQNTVAIKYTAPTREFSFYPLFIL

>ETN90747.1 3-dehydroquinate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKSLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>ETN90746.1 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKIQGVKHFEKSRFFPFFSQNIRSFKYLALIGLGSNIEPEKKRFDMLFRVMMDDKRFKILSTSPMLINE

AFGFKEQKDFTNAVMLIQTNLHARALLKVLLYYEVKFKRKRTFKNAPRTLDLDLLYFSQKVKRDKWCEVP

HKGAKERVSVILPLGMI

>ETN90745.1 flagellar biosynthesis regulator FlhF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGQLIHTFTVEDTEQIIPKVKEDYGNKALIITNKQIRPKTLNRSALYEVMVAIEESDYEEHLKKQGKSLP

AKKSSPKPSSTSLAEEKIRSQIPQEDEDVVLDFSNTRLNTNLNTVKNNDLTKKTYQDFPQNKINPHQNKT

LGFDDFKEKLSEVSNEISKVTNTPLENYTPNPNYNKKIENFEKQFEKQINKLNDKIDLLADMMWDDKAEA

RKNLMIPPEFASIYKQAKESGMLENHLEAIMKATIENMPAAMKTNKDAVQRYFHSLLRNILPCRVESDIK

KQKIMMLVGPTGVGKTTTLAKLAFRYAYGDKRYKTGIITLDTYRIGAVEQLFQYAKMMKLPIIDSIEPKD

LDEAIKSLNNCEVILVDTIGNSQYDQSKLAKTKEFLMHSNAEIDVNLVVSANTKHEDLMEIYKNFSFLNI

DTLIITKFDETKVFGNIFSLVYETNIPLSFFSIGQEVPDDLEVANSDFLVHCILEGFNKGKNNE

>ETN90744.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNQANKLRNLMSQNGTKKSQNTHFIAITSGKGGVGKSTISANLANVLANNGYKVGLFDADIGLANLDVI

LNVRIQKNLLHVLRGECSLEDILIEVKPNLWLIPGESGDEILKYNDKNIYERFLNQASILDELDFLIIDT

GAGIGGNILNFLEMADEVIVVTVPDPAAITDAYATIKTTSKTKENLLMLFNVVKNENEALKVFENIKKVA

DANIKNPLNLEFLGHLSASKDVSGSIKKRTLFSDENTASSDEIKALASKLLYRLERKVLDNVSNRSFSSF

FRKIIERF

>ETN90743.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRPENYVAFFTVCGFFIGLTFSIISIDEAFDILIFTCFITFMFYVFVHIAIMNFIDVKKISGRIFNKHDY

EKTSNNIINDLVIREKKMDIILEKLNEEREELKKNEFKERRRNAKRAA

>ETN90742.1 RNA polymerase sigma 70 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKEPPKAYAQMLKKEQDELVLSYMPALRAMAFRLKERLPSSIDVNDLISIGVEEMIKLSRRYDKEQNDN

FWGFARKRVNGSMLDYLRSLDVMSRNNRKIIKDIDAIMDEYFLEHECEPDDEYLAKKLDLDVEKIKEVRT

AHAISYTLPIDEQIELYNEDNTLEKIEKEELLEKIHEVLDDLKERDQLIIQLYYYEELSLKEISEILQIS

ESRISQIHKKLLKKLRERLV

>ETN90741.1 flagellar motor switch protein FliM [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEILSQEEIDALLEVVDDNTDTPIASNSKDEKDERNIVVYDFKRPNRVSKEQLRTIKGIHDKLARNLAS

QISSMMRSIVETKLHSVDQMTYGEFLMSLPSPTSFNVFSIKPLDGNCVLEINPSIAFPMIDRLLGGQGDS

YEASRELTDIELNLLDSILRIIMQRLKESWATVTEIYPSIEAKESSPNVVQIVSQNEIVIMVVMEIIIGN

SSGMVNICYPVVHLESILSRLANRDIMMGETSAKKSRNKELKTLIGRAEVVYEAILGKTLINVHEFLELK

QGDILRLDREADDKAIVSIDKKDVFLAQIGLHRFRKSIKILELIRTDKDEIKEILEKYEEERKAKASVYD

EPEEEDEEI

>ETN90740.1 hypothetical protein X910\_03880 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEVKGGYITYLKRLSDNEVIAFAKPDWNLELTLFQDSNGDQYYWNREGLVRFGGMCGIETTNCLVNGKH

SYINQKRLWETMSIVGDDPYRNFLGYTVKRNIGISNLGKRFVYFSYGVAVINEQSGSWYRVKSSPVLNNY

RVVKEISSNYKDFLERYLGGYSIK

>ETN90739.1 hypothetical protein X910\_03875 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINSLNSNLNYDYNTSNFKQDKNIDFKINKHGVAVITGEGALPYRGKKFEYNPKIFGLDESISKKDMQEF

NNFMKSNALKDPNKIEKSPLKDFNPAYTKWDPTTEKMMLGFFVSYSKMFHLGYDIIKKADEFYKEFDALI

SKDLSLNEFKTKYIDFKQRHDEFVKEYEMAMGDKMLLSSDNEIITQQSEKPFKAIQGESKNKETYKDDST

RNELVKKLLEGKFSTSKELELLFGMKFSDDDAGEFNKILSLNSTPKSIDIKA

>ETN90738.1 thiouridylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKSLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGAHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYDHDKVIASGFIE

>ETN90737.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLGEISIMIFLSLAFLYTHYFFASTTAHISAMFFVFYSAGLALGAPPLLYAFIMIASGNVMMALTHYAT

GTAPVIFGTGYVTLKKWWSIGFVISMVDIVVMIAVGLFWWKILGFY

>ETN90736.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MALLGLSLVLISGVLTFGEVLAEKAAWNTLVWFSALVMMATLLGKLGVTQFLAEA

>ETN90735.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLPGIAAMLLMPLMLYFLSPLEIKSTPNASTFAKDKLKELVKMKNSEKIMLSVFVSLLLLWAGALGLFF

WNFS

>ETN90734.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARGVIKTGLGEHLAYHFISILGKKTLGIAYSIAFCETILAPVTPSNTARAGAIINPIVQVIARSFKSTP

EDGTQNKIGTYLSLVNYQEPILFHQLCLLQLQLQILWWLIL

>ETN90733.1 hypothetical protein X910\_03830 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFQVKTLETFNPFESLNHEQANTEQILDFRVIDFKLLCSSVKPAKTKTYERKDFDLFYADDFFVKNYNT

IIQKFLIEIYPKKSFPFTVKLRSNSNLTHLKASINLTENFKYYPNLNLIFCQNIYKIMIKQKFLILRLDK

NLFTKIDDFILSIQKNPSIKELELEIAKGVDKIEHKSDEIIYHRNVEEVCFSENANYDEGNYCKPIEKNE

LLFEYIYRILGKEGRNLRGEILHLNPIAFLNNPFIIKDESIYVEELEDRIKYFSANYGFLNKDHSGYSVI

NNLKLSQVGLKTTGSIKTNTNENINLEITNFDISDDAIKSGIVNVQASDIKVNGSIGATKLYGKNISIKG

LTHAKSEIFAQDVFVAIHKGTLQADTVYIKNLENGTIIAKNVFVENCMGGKIEAENIYICNLLTDNTLYP

RKNLIIANNIKFKNNIVVSPLVSIENNSDTECENLKNLSLKIKSKLDDTISKMQNYYDYLIKNQIKIIKL

QKTKNPSAIEMKFSNLYHDIIKKYNHLSILYKKLIKLKYQIDAKLNFLNEMVYNVKIYIKAKNIGKDNFL

KFYPKTNTNLELKHHINLKDYEKVLYLEKGQQVSYIKSSHNYSESDIEEIKIIFEKLEKDNS

>ETN90732.1 flagellar hook protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMNSFYNGISGVKSNSFGIDITANNIANVNTTGFKYSDAQFKDIFYTTITTQSTNPAQGGYGSGAASSQV

VFEQGSPVASDGEFDVALQGKGFFGVLGADGNAYYTRNGSFRRDANGYLVDSYGNFVLGTMNPAFTGINY

SDRVAGLMGDYLNTGTPVNNGFTVNSNNSFSIGTTASQGAIKVPVNMYLPPQVTQNVKWSGSLNTNTTTE

VVKVDLDPSKFNITKTEDGKYVVSGSVSKEDVFSAKAGDRIILNFTDDNGVKTSFEATLDENLNFKSNEL

DLKGLDENSIKLDTAQISTEQQKANKDILESPIYNADGSKSTLRVTLERVLPQEGDNIQYKAIAQIYDSN

GNAVGNPTEGNMVFDKNGALLQNNITSIANPNGGTINIDLGSPYDANKPGSGYSGIYIKEGVEKNVVTQQ

DGVAEGFFEQYNISDDGSIVAQFSNGKNAIVGKLALYNFINEQGLVAMGDNIFAATANSGDASFIMKDGQ

VVNTAKFKGGFLEQSNVDLSAELSNLIVTQKAFDASSKSITTSDQMIQKAINMKR

>ETN90731.1 flagellar basal body rod modification protein FlgD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISSSDWNLNTTATTSGTTSSGSTSGTTRTDSSSSSGIVSNPNATLDKDAFLKLLLIELQHQDPTDPMDS

DKMLTQTSQLSALEMQQNTNTTMQKMVETMQKLSDSFSTSMSTSALGAIGKMATVSDNKIKLTGADELIA

LKMYLPEDSDENGVTLEIYDSNNKLVFSEKSDAKSISQGLFTMEWPGRNNDGVYAGDGEYTVKMVYNNKN

GEKITANYGTYPIEGVVFKDGVAYAKMAGQEVPFDAIQEITDYKLGSSSSTGGSGSSGDSSGGSSDGDSS

GSGSTEDGDKEEKA

>ETN90730.1 hypothetical protein X910\_03810 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKPLNEEIFIEFKSDLAERKNEVLLQVLELLETFRSDKNEKMARISSELTEILENEENLEKILNAKNLE

ELLNILIALNEDKMIKVYEDSYLKEKFPNVMVDKFLK

>ETN90729.1 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENIRNIAVIAHVDHGKTTMVDELLKQSGTFSEREQISERVMDSNDIEKERGITILSKNTAINYKGTKIN

IIDTPGHADFGGEVERVLKMIDGVLLLVDAQEGVMPQTKFVVKKALSLGLKPIVVINKIDKPAADPERVI

NEIFDLFVALDANDEQLDFAIVYAAAKNGYAKLDLNDESDNMEPLFKTILERVPAPSGTNDNPLQLQVFT

LGYDNFVGKIGIARIFNGVVKKNQSVMLAKADGTKVNGRISKLIGFMGLEKMDIEEAGSGDIVAIAGFEA

LDVGDSVVDPNNPMPLDPLHIEEPTLSIVFSVNDGPLAGTEGKHVTSNKIAERLEAEMKTNIAMKYESTG

EGKFKVSGRGELQITILAENMRREGFEFCMGRPEVIVKVEDGVKTEPFEHLVIDVPEEFSGAVIEKLGKR

KAEMKTMAPTGDGQTRLEFEIPARGLIGFRSQFLTDTKGEGVMNHSFLEFRPFSGAVEKRNNGALISMEN

GVALGYSLFNLQERGVLFIEPQTKVYTGMIIGEHSRPNDLDVNPIKGKNLTNVRASGSDDAIKLVPPRKL

SLERALEWIEEDELVEVTPVNVRVRKRYLDPTQRKRMEKAKS

>ETN90728.1 poly(A) polymerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLKSLENNRLYILKRLGILKFLSIIEALLVGFLAFVFIRDALIAVILAVFVGVFFFRFTAKKLKLAQKE

LQINALNLFLRRFGAKFKKQSLSQKDFLKLGLTKDLKEFKSQNCFEFKDFKIYDIQFLDENKRFFCGILL

EILSANKNPSFENEEQIYIKLQDKNFTLNHVFSKENHYLIATLSNPFFIDIKKDLESNFKDLEENLNSIK

NKLFK

>ETN90727.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKHILLLGLCLSLSLSAKSVSDYKVGEELSDKEGVEYFKELSKRPVQEWPNKNLSINDVPKGKQGDLIR

YGIELLSKTESTLGPYSKLKKTSNEVNCISCHMDNDGNGLPGTKKYVIPFLNVLNNYPRLDIETMKIISV

EDRIRGMGGTDSHRFPNDSKEMKAILAYFKWLKEAYGIKDGVKLEGDFFAKMNFPNRPADPVRGKKLFEE

NCVACHGERGLGVKNDNYEQGSGHLYPSLLIYPDGGHMAMIPFLARFLKSAMPFGASADNPILSDEDALD

IAAYVNTGFVRMPITTTENRAGLDTAYSKSPSLKPEYFASPQQNLDPKEYIKVKYGPWKNPNHFPGE

>ETN90726.1 multidrug DMT transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKHTKIHGFAKFKLIVILALMSSIAPLSTDMYLPALSHVEQSFQTNSFLTQLSIASFFIAFALGQLIYG

PLSDIFGRKIPALVGIFFFIVSSLFCVIIDDIYAFIALRFFEALGGCAGVVIARAIVNDLFEIKEAAGIF

ALMMVFSSLAPMLSPTFGGFLLEYFSWHSIFATLFALGILLFLMILFGLKESAPHLKNKKFSHHEAMKSY

KFVLSDKRFLVYILCASFALAAMFAYITGSSFVFTQFFGLSEQKFALLFGANALGFVICANINARLVLKY

ESEKILAKALMIMFISTVILLVNAFFHPNFLLFELSIFTSIAMLGFIAPNTTTLAMARFKEHSGTASAVL

GTVQFGFAGLISFVVGAINANTPIILAFVMCACVLVANMIYFLIKIKEKNENK

>ETN90725.1 hypothetical protein X910\_03780 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTNNIFMALAIVLASLILAFGFNKALSDFKTLERSVSVKGLSQKEVEADTLILPIKFTRSNNNLTNLYE

ELEQDKENIIKFLKEQGVKEDEISYNSPNIIDRLSDPYGNDTQATYRYIGTANLLIYTQNVKLGKSILEN

ISSLAKFGIVTKIDNYDIEYLYTKLNDIKPQMIEEATLNARNAAIKFAQDSNSHLGKIKKASQGQFSISN

RDKNTPYIKTIRVVSTIEYYLKD

>ETN90724.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNTQINDKILELANYLKIDNKCVAHNARLQSIQINGAVIKNFSFKLFNEYKLSFFNCKFLCEINEAPGF

FEIENPVYIYGCTFEENVISYNIKFKSNVVIAYCRFNKNFYFEANTFCNSSNFERNFYNYASFKKSHFEK

NVTFYNSTFKGLDFSQAIFNENLNIVNTKLNFTFSNLEEKIEQEYEEFNKNKKEEDQKSLDKFANDFRDS

FRTFKSALIKDNNALDASNFHKYELYCKEIELKQNWDKKGENVKNTTDLEKNVSRIRDFMDFLLLGFYRK

LCDHHTDFLKVFNNLILLIALYALFVFGFTWLHDDKLEDTRAILTLFGFFDKFRLYFDIISTIFVVFGCG

FFVCKLDSYEKKNNVSKKQNINFIYIIGDFLNLIKSLLFASFIPCVFYGLFSLFGFFLNLGKDFGYSLLI

NTLFVSLYICLVYTKSLFFGRYVVLIFSYIVFIIMLIKQPNVIHPLIGKIANESDKFFNYPSLIVLNILY

TILLALVLFSLQKTARKNSIVPS

>ETN90723.1 transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNYNKVLKTKKTENFSNSKNYEEQVVNWQQYFPTYHFDYKKNRDIALEEYKFCCKILESEERIFDNLIK

YMLTFGTIIISLLSGASEKIKAIFKDVTENPNYIIWFIIALVLLFFIFMTKNFAEKQKSIIFAKRKIIIL

RRMLGMDYGTQEFLFKKGMLEGANMPFSIKLRFNYLYHIIPILCVTALLIIIHMFLGYSLMYAIVFNSII

IIALYLFYIYCILDINETILLVIIRILFSRLGINFVDNFEHVLYRAKLSAYECKRQKIDLDNLKKILVAI

EDQKFYQHKGVDFKALCRALLSRGRKIPFFNKISFIKNIPFTGGSTITQQLFRTLFIENMNKKRYRRKIA

EILLSYLWFNKILSKEEQLEIYLSAVRFDKKIFGIMQAIRHFYGGDKYIKNLSKAQSFFLIERVSVTSGT

MLPKVIDTIVRLEKEKILNKEDIEDIIKIYTKAQQDNKITVFFKNRNILEELSKKYKHQN

>ETN90722.1 hypothetical protein X910\_03765 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MERKIYNIKRGWLFKTKRDFAKRWNIEIEDRFYERCITLIGDIINPKQLSELEQKIFLIVGEIYKGEKKF

SGVISIFNHFNGLHDSYFAFHETALYSLLMQLKDVKFLEALENIINFCKKDKDDEFLLTFNDIVLMSNKP

FRLYYNDKYEFHPSNIEIFDQVLINDVLEFLKDYPKAKKQLSEALKIFITKENYRDVVDKTRLSLELFLT

QLLNNEKSLENQKDEILRYFGNLLDENFKKMFLEILNYYQRLNNNRAKHCKSNGQEFKDYEVEFLIYLVG

NFLQLFMTFNKFKK

>ETN90721.1 gamma-glutamyltranspeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRYLAIFAISITLSFGAANPPIQDRTGTGLVLSSHELANKIGKEVLDKGGNAIDAAIAVGYALAVVHPAA

GNIGGGGFAVIHLANGENTTLDFREMAPLKASRDMYLDSKGEIIKDASTIGYLAAGVPGTVKGMSAMLDR

YGTMKLKDLMAPAIKLAEKGYLINDRQEQTMLEAKDMFKEFPSSSKYFLKKDGSTYKSGDLFVQKDLAKT

LKLIAKEGPDAFYKGKIADLIAADMAKNKGIITKEDLAQYQAIWRKPVEGTYRGYDIISMSPPSSGGAHI

IEILNIMENANIENLGFASSKTLHIMAEAMRQAYADRSEYMGDPDFVKIPLDKLTSKEYAKEIYAKIPKD

KALPSSKVKPGLGQIHEGHNTTHYSVLDSKGNAVSITYTINASYGSGATVEGAGFLLNDEMDDFSIKPGV

PNLYGLVGGEANAIEPKKRPLSSMSPTIILKDGKVFMVVGSPGGSRIITTVLQVISNVIDHKMDISTAVE

SPRFHMQWLPDEIRTEPFGIIKDVQNNLEKMGYKITKEPYMGDVNAIMVDPKTGKIIGSMDTRKEF

>ETN90720.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKKLILGFIILLFCACNDEKIDENILSKGTKTTEQYKQDANNLDLNSYKEIAEFFKDNQNIVFSDKPVL

IIFSANNCVYCDKLKHEIQNDKEVQNILKNTYNSYYINTSYHKIHNYDNKKTSTEELSREFNIDATPTLV

FFTPKHKTLLIYPGFMSAKRLALTMEILKDEKNQKLNEDELFKTLFLAYKEKNV

>ETN90719.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQSLIKFILLAVFCFSTPFLLADGKIQIGIVEGVTPISMKDAEKLLGQKNVYFVDVNSKEEREVAGNIP

NAVLVDAQNWQNLLPDDFNATLIFYGSNRFTFDASNIANLSQKLGYTHVYVMLDGIESWVLSGRKVQKEQ

IEKWQNAKNLDDFKDSIHSRMYFGDVPSCRDCHGKGEDKKSIRYNNAANLDLINKNCASCHKDVDKEFKH

SIHQNISQIQLDKDGKKKKIPTCTTCHDIHNNDPLMNAMTLKQRSDFKCGECHQDKQDRYHDTFHGKAMV

LNSPGSAPKIAACYDCHGKHNILKVEDLNSTLSSLNRVQTCAQCHPNSNENFANFIAHADHSDGENYPLL

HGAYIFMTALVIGVFVFFGLHTLLWSIRLILARLSHPIEWKKAKENAHNDKILIKRFSTFHKIQHFFMAA

SFLGLAFSGLPQKFYTAPWAQTMIDLMGGPIGATIVHHISAIVMFIVFFSHIGEIILVNWKRRDLVRDPQ

TGKLDKMKILKALFGPDSLMPNWQDFKDMKAHFKWFFGMGERPQFDRWTYWEKFDYLAVFWGMFVIGLSG

LVLWFPTFFSAFLPGWMINLCSLVHSDEALLATGFIFAIHFFNTHFRADRFPMDMVIFSGTQSEAEIKQE

RNAYYQRLKESGRLESLYEKNSKFNSYKGIAKLAGYLMLITGMIFLFLMIYAFIVDLLK

>ETN90718.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLISKGKVLTLLLGVGFALNVSSAENSNVLIQGEAAQDGDTKPRTLEGYVHQEDAFFKYLKEHHPMFK

YEKEGRIVGKYAISDREEEYVEFSNGPTFAQQNNLAHTSVTYRLGMESFLDFPNKFVGPKKCGECHPAQY

KAWERSRHAKTVRFPDEFEEVGNDLKKPMYNSQSTILPDGIYPDDVYAVIGTPRTKYGFIDRWLVRGTYH

VEDGNLSNMTGKIVAGGNQFSRLWSEFLTPEMTKKIAEFSPGFPTTMEQFGGNGSQVWGTNSYAAQYRKN

MLFQPASSYCETCHSFKFDFKSKEEFYKALGNTQELRKHTISKGISCEECHGAGAHLYGARGAGMPSNCE

RCHQRFSYNEEDAKKNPRKPFNAFFKSSCPACGTEGAQMYSSAHYDKGMRCSTCHDPHEVTFNDWKDGYT

KVGLKKTCTDCHDTQASFFKQGGIHSKDNCTACHMPNMMSCENFGAVQNPDKGGFDNVRASHIWKIKVDK

TAKTLNPPEGKERSPKTPGWTIARDDDGRFFLDLMWACGRTSFSDPNLMGPGASGCHSAVQSNLPKKLHF

TDQETIYDIVVGWQKPVKDGYENILKGVKEIDKAMAENPKLSVEKKSRVITLANQARAIAEKLQKDGSWG

VHGPVYSKKIVDEALVYIQEAKNILK

>ETN90717.1 hypothetical protein X910\_04280 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>ETN90716.1 hypothetical protein X910\_04275 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>ETN90715.1 hypothetical protein X910\_04270 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAAKALMLKKVTMESLKQNFSIPPPSEVKKLNSWHRCPWKIKLK

>ETN90714.1 tRNA 2-selenouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLSEVEFAEFQKENFSLLIDARSPREFLHSHLIGALNFYALNDEEYQEIGTIYKKNQALAKARGASYICQ

NTAKHILKITQNFRIGEKVGIYCSRGGLRSKSIAVILSELGFRVVRLKGGFKAYRTFVTHYFENEINFDF

FTLCGNTGCGKTELLEQLPQAINLEKIANHLGSSFGDILGKQPTQKAFEAELFHNMQNLENFAFIESESR

KIGDIILPLKFYEKMQKAFKIYCFCSLENRVKRIQKIYQEKMTPLKFQQCVQKISPYISLNLRQDLLQSY

ERKEWQKLIVMLLEYYDKTYKKPDKIDLELNTDDILKAKEEILRYFKLKNYILI

>ETN90713.1 HIT family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEDLGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>ETN90712.1 indole-3-glycerol-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKATAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPQIP

NSKIIIAESGLENKEFLEHLQNLGVDAFLIGEYFMREEDEGKALKALL

>ETN90711.1 hypothetical protein X910\_04250 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYRYLLFVLAAFFLVACGSSKINVVYPDYTKYKSNDFDLRVMKAYNYEYYKQYKEARDEFLSLYQDYNNT

NFLENAFLLTLANNLDRQAELNNLAKPYLNQNDNLKRLSALYALNSNDINNAQKLMKELLVKKDSDPRNL

ELYGDILVKKNDLKNATKYYRSAYNQVQNEEILFKLIGIYAILNDTLNIKNVLEFSRKTNGCTLKTCVLL

AKIYFDEKNIEALKSIYKELYQLTKNKSFALALVELLNSQGKTEEALKISLQYDLDDDIKFALYQNLKRF

DDAKKMSLALYHKTKNKEYLLRAAVFEFEAANEAKKITPKVIDSVKEKFEQAIDKDSNALYLNYYGYLLI

DYDLDVKKGIELVKLALEKDPQNLYYLDSLAWGYYKLGDCRQAWEILKQTLDDKEFANSDESKAHIKAIK

ACVKP

>ETN90710.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDLITLAQLSQGYRYNSDSLILADFILKQGIKGAVFDVGAGCGIIGILLKKNIANLSLSLIDIQKENIK

LIEKNLKSNQIQGDIFYDDFNQFQSIKKFDFIVCNPPFYRQGAYKSEDQHKAISKFQEFLPLHSFLTKAN

SMLKPNGTLYFCYEALALDEICFILKDMKMKITKLCFVHTHQNKKARLVLIQVKKGSKSPCEILPPFFVY

ENEILSKQMQEIHLRFRLKSYDI

>ETN90709.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKIAFFIIFVISFLTAQSPVNFKEDNNITKEQNIFKEQPPKRIKIPTH

>ETN90708.1 elongation factor P [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVPNIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKTVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFDHYDEVPKNVADEIIKKRNG

>ETN90707.1 30S ribosomal protein S7 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>ETN90706.1 30S ribosomal protein S12 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVRDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>ETN90705.1 DNA-directed RNA polymerase subunit beta' [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKFKVIEIKEDARPRDFEAFQLRLASPEKIKSWSYGEVKKPETINYRTLKPERDGLFCAKIFGPIRDYE

CLCGKYKKMRFKGVKCEKCGVEVANSKVRRSRMGHIELVTPVAHIWYVNSLPSRIGTLLGVKMKDLERVL

YYEAYIVENPGDAFYDNESTKKVEYCDVLNEEQYQNLMQRYENSGFKARMGGEVVRDLLANLDLVALLNQ

LKEEMAATNSEAKKKTIIKRLKVVENFLNSNLNANTDSDEAVPNRPEWMMITNLPVLPPDLRPLVALDGG

KFAVSDVNDLYRRVINRNTRLKKLMELDAPEIIIRNEKRMLQEAVDALFDNGRRANAVKGANKRPLKSLS

EIIKGKQGRFRQNLLGKRVDFSGRSVIVVGPKLRMDQCGLPKKMALELFKPHLLAKLEEKGYATTVKQAK

KMIENKTNEVWECLEEVVKGHPVMLNRAPTLHKLSIQAFHPVLVEGKAIQLHPLVCAAFNADFDGDQMAV

HVPLSQEAIAECKVLMLSSMNILLPASGKSVTVPSQDMVLGIYYLSLEKAGAKGSHKICTGIDEVMMALE

SKCLDIHASIQTMVDGRKITTTAGRLIIKSILPDFVPENSWNKVLKKKDIAALVDYVYKQGGLEITASFL

DRLKNLGFEYATKAGISISIADIIVPNDKQKAIDEAKKQVREIQNSYNLGLITSGERYNKIIDIWKSTNN

VLSKEMMKLVEKDKEGFNSIYMMADSGARGSAAQISQLAAMRGLMTKPDGSIIETPIISNFREGLNVLEY

FISTHGARKGLADTALKTANAGYLTRKLIDVAQNVKITIEDCGTHEGVEINEITADSSIIETLEERILGR

VLAEDVIDPITNSVLFAEGTLMDEEKAKILGESGIKSVNIRTPITCKAKKGICAKCYGINLGEGKLVKPG

EAVGIVSAQSIGEPGTQLTLRTFHSGGTASTDLQDRQVSAQKEGFIRFYNLKTYKNKEGKNIVANRRNAA

ILLVEPKIKTPFKGVINIENIHEDVIVSIKDKKQEVKYILRKYDLAKPNELAGVSGSIDGKLYLPYQSGM

QVEENESIVEVIKEGWNVLNRIPFASEILVEDGEPVVQNIKAGEKGTLKFYILKGDGLDRVKNVKKGDIV

KEKGFFVVIADENDREAKRHYIPRESKIEFNDSEKIDDANTIIASAPKKERKVIAEWDAYNNTIIAEIDG

VVSFEDIEAGYSADEQIDEATGKRSLVINEYLPSGVRPTLVIAGKGDKAVRYQLEPKTVIFVHDGDKIAQ

ADILAKTPKAAAKSKDITGGLPRVSELFEARKPKNAAVIAEIDGVVRFDKPLRSKERIIIQAEDGTSAEY

LIDKSKHIQVRDGEFIHAGEKLTDGVVSSHDVLKILGEKALHYYLISEIQQVYRGQGVVISDKHIEVIVS

QMLRQVKVVDSGHTKFIEGDLVSRRKFREENERIIRMGGEPAIAEPVLLGVTRAAIGSDSVISAASFQET

TKVLTEASIAGKFDYLEDLKENVILGRMIPVGTGLYGEQNLKLKEQE

>ETN90704.1 DNA-directed RNA polymerase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDNKLGNRLRVDFSNISKQIEIPNLLQLQKKSFDYFLNLDNGESGIEKVFKSIFPIHDPQNRLSLEYVS

SEIGKPKYTIRECMERGLTYSVNLKMKIRLTLHEKDEKTGEKVGVKDIKEQEIYIREIPLMTDRVSFIIN

GVERVVVNQLHRSPGVIFKEEESSTVANKLVYTAQIIPDRGSWLYFEYDAKDVLYVRINKRRKVPVTMLF

RALGYKKQDIIKLFYPIQTIHVKKDKFLTEFNPNDFMDRIEYDIKDEKGKIVHQAGKRLTKKKAEQLIKD

GLKWIEYPVEILLNRYLANPIIDKESGEVLFDSLTLLDESKLAKIKEQKSFDIANDLANGVDAAIINSFA

QDGETLKLLKQSENIDDENDLAAIRIYKVMRPGEPVVKDAAKAFVNDLFFNPERYDLTKVGRMKMNHKLG

LEVPEYVTVLTNEDIIKTAKYLIKVKNGKGHIDDRDHLGNRRIRSIGELLANELHLGLAKMQKAIRDKFT

SLNADLDKVMPYDLINPKMITTTIIEFFTGGQLSQFMDQTNPLSEVTHKRRLSALGEGGLVKERAGFEVR

DVHATHYGRICPVETPEGQNIGLINTLSTYAKVNELGFVEAPYRKVVNGKVTNEVVYLTATQEEGLFIAP

ASTKVDAKGNIVEEFVEARQDGETILARREEVQLIDLCSGMVVGVAASLIPFLEHDDANRALMGSNMQRQ

AVPLLTASAPIVGTGMEQIIARDAWEAVKAKRGGVVEKVDNKSIFILGEDDKGPFIDHYTMEKNLRTNQN

TNYIQHPIVKKGDIVKAGQIIADGPSMDQGELAIGKNALIAFMPWNGYNYEDAIVVSERIIREDTFTSVH

IYEKEIEARELKDGIEEITKDIPNVKEEDVAHLDESGIAKIGTHIKPGMILVGKVSPKGEVKPTPEERLL

RAIFGEKAGHVVNKSLYATASLEGVVVDVKIFTKKGYEKDDRAIKSYDKEKMALEKEHHDRLLMMDREEM

LRVCALLSKAPLNSDQKIGDKNYKKGQTADISELEKINRFTLTTLIKAYSKEIQKEYDDLKNHFQNEKKK

LKAEHDEKLEILEKDDILPSGVIKLVKVYIATKRKLKVGDKMAGRHGNKGIVSTIVPEVDMPYLPNGKSV

DIALNPLGVPSRMNIGQILESHLGLIGLRLGDQIQEIFDRRQKDFLKELRAKMLEICSIPRLASEKEFIK

SLSDEELLNYARDWSKGVKFATPVFEGVNIEEFSKLFEMAKIDMDGKTELYDGRTGEKIAERVHVGCMYM

LKLHHLVDEKVHARSTGPYSLVTQQPVGGKALFGGQRFGEMEVWALEAYGAAHTLREMLTIKSDDVEGRF

SAYKALTKGENVPATGIPETFFVLTNELKSLALDVEIFDKDEDNE

>ETN90703.1 50S ribosomal protein L7/L12 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAAPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>ETN90702.1 50S ribosomal protein L10 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKVKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>ETN90701.1 50S ribosomal protein L1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>ETN90700.1 50S ribosomal protein L11 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>ETN90699.1 transcription antitermination protein NusG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSTHKWYAIQTYAGSEMAVKRAIENLVKDNGIEEQLKEIVVPTEDVIEFKNGKEKISERSLYSGYVFALL

DLNTELWHRIQSLPKVGRFIGESKKPTPLTEKDINLILEKVHNRAAPKPKISFEEGENVRITEGPFANFT

AIVEEYDMVRGLLKLNVSIFGRSTPVEILYSQVEKII

>ETN90698.1 preprotein translocase subunit SecE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>ETN90697.1 50S ribosomal protein L33 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTLHKEVKLKS

>ETN90696.1 elongation factor Tu [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>ETN90695.1 glutamine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSILKIENLQKYYGSHHALKDINLEVKAKEVVVILGPSGCGKSTLLRCINGLEEIASGNIYIDNEKIDKD

FKEWPRMRQKVGMVFQSYELFEHLSVEENILLGPMKVQKRKKDEVLKEAKIWLEKVGLLHKIHAYPRELS

GGQKQRIAIVRSLCMNPELMLFDEVTAALDPEIVREVLEVMLNLAKEGMTMLIVTHEMGFAKAVADKIIF

MDEGKIIEENDPKSFFENPKSERAKKFLNLFDYHK

>ETN90694.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEFLNTDTLLRLWQGLFVTLEISFISIIITSIGGLFLGILMSFKNTYIYAFCRLGLEFVRVMPLLVWLF

VVYFGFPRWFGWDLSSVSAAIIVFSIWGCFEMMDLVRVSLQSIPKHQYESASSLGLNTVQSFVYIIIPQA

MRRLTPMSMNLLTRMIKSTTFAYLIGAVELVKVGQQIIEFHNRNDFAPFIIYGLIFFIFFILCYPITLYS

RKLEKKWS

>ETN90693.1 polar amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFDFILVQAPAFLTAAWLTIKLSFFGIIFSLIIGLFCILMSYFKIKILENICKLYIEFSRNTPLLIQLF

FLYYALPKFNIHLEQIPPLDLICLSVEETLRPSFACAIAGLSFLGGSYMAESLRAGFEAIRKQQFEAGLS

LGFSKFGNLRYVILPQALAISMPSISANIIFLIKETSVVSIIALPDLVNLMKSLNSLTYKTDELLFLLFM

GYLCIILPLSFILLKFEKRLLHA

>ETN90692.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDYLELLSSVGKLKKFQKNSILFYEGEEAKKFFILLKGKIRIYKSTASDKEITLHYFNPPNFIAEMPAF

KKLNYPANAIFEEDGEILEIDFINFQNLCSENKEFNFLLISSLFDKIKILEKKLSQNALDLRTRLLKYLL

ENEKNLDTISQKQIAIDLNVRAQSLSRVLKELKISELIDTKKGRIEILNKDMIMKELW

>ETN90691.1 group III hemoglobin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFETINQESIAKLMEIFYEKVRKDKDLGPIFNNAIGTSDEEWKDHKAKIGNFWAGMLLGEGDYNGQPLK

KHLDLPPFPQEFFEIWLKLFEESLNIVYNEEMKNVILQRAQMIASHFQNMLYKYGGH

>ETN90690.1 ATP-dependent DNA helicase RecG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKESDFEFFKKLKIRSAIDLALLLPKKIENLNPSKNPKENEICTQKITIKSVSSRKNQLFGLGFCEEW

QENISFVFFHPRAWHFGICKVGKELIFNAKLSHFNHTWQFNNPKILTSFEGFSPKYQILGLKDTKIAAFI

HKYLNYVNLKESGIEDKYIHFLLNLHAYDEKSFFMFENLQNFSKDLKYIEIYNFLKRLKAKKTHFKAHQI

NVFNIANWLKDLPFSLTKDQLNALKDIEKDLHSKEAKRRVIMGDVGCGKTLVLLGAALMVYPKQAILMAP

TSILAYQLYEEAKKFLPDFMNILFIKGGKKEKDLEQNIQKANLVIGTHALIHLESHNAVLVMIDEQHRFG

SAQREKIHSLNKQEFTPHFIQFSATPIPRTLSMIQSELLNFSFIKQMPFEKDITTYCIQNEGFSKLSEKI

KEEIVKNHQIIIIYPLVSASDKIPYLSLEQAKEYWQSHYEKVFVTHGKDKQKDEILERFRDEGNILLSTT

VVEVGISLPRLSMIVIVGAERLGLATLHQLRGRVGRVGLKSTCYLYTKLKEIPSRLKEFASTLDGFKIAE

LDLKNRLSGDLLDGFMQHGNEFKFFDFSKDEEILQKVKKDLAKKLPN

>ETN90689.1 peptidase M16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQYLESRGIKIPFIFEKNSDFPIVVLKLVFRNCARSYDEIAGLAKMFSRILNEGVDDKFFKDLEFRAINL

EASSGFESLEINLSCLKENFDFALKSLEKLLLKPRIEEKTLQKLKINALGELASKNSDFDYLAKNLLNAQ

IFKCKEFQSPNDGDEKSIETLSLKDLQNFYKNFIHLSDLVVILGGDLEEKQAKEDLLKLLSKLQIGKKNT

PKKYELGKNIKDEILVRPESEQAYIYFATPFFADFKDKDLYLAKIALFVLGQGGFGSRIMEEIRVKRGLA

YSAYAMLDMNMSFSRVFGYLQTKNESAKEAKKIVKELFEDFIKNGMTQNELDQAKNFLIGSTPLRYESLS

KRLSMSFNEFYQGLNLGYYKEELKLMEKVKLETINAYIKKHQELLNISFASIQNEN

>ETN90688.1 hypothetical protein X910\_04100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRLDKKEALDLLHHASLTELGEMAYKRKLELHPEKITTFVVDRNINYTNVCCIDCSFCAFYRHHKEDDA

YILSFEEIGKKIEELEAIGGTQILFQGGVHPKLKIEWYEELVSWIKEHYPNITVHGFSAVEIAYIAKASK

ISITEVLKRLQAKGLFSIPGAGAEVLSDRVRDIIAPNKCDTATWLEVHRQAHKIGMKSTATMMFGTVEND

EEIIDHFEHLRKLQDETGGFRAFILWSFQSDNTALIQKHPEIMKQSSNKYLRLLALARLYLDNFKNLQSS

WVTQGSLIGQLALKFGANDLGSTMMEENVVSAAGASYRMNQDEMIRLIRSLGENPAKRNTAYEILERF

>ETN90687.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNYIELLKNNKNIRILASVQFIVYFGAWFSQTGVFTLLVELNAPTWATATSAMLAFLPGVLLAPINGVIV

EKNKPKKLLLSMISIELISIFCLIFVTSLSMLWLLFILIFIRLCVASIYFQAEMSLLAKILTPQELKLAN

EMHSVIWAISYTAGMASAGIFIYFLGVKTTFLFDCILILIGISFLVRLSIPDFHQKTQSRFFTMIKEGFF

YVLNNKIIFHLILLHAFIGLTAYETLVTLLAQHQYKEVLSAALVIGFLNAVRACSLAIGPMVLSKFINDK

NLFYMYLGQGLGIILWALTQFNFYISFLGLIGAGFFTSALWAYTYTMIQKNADKEYHGRVIAYTDMIYLS

FSAIISMLMGFLFEIGLSLELITGLLGMIFIFAAFYWKWFYKKYL

>ETN90686.1 transcription elongation factor NusA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKIADIIESIANEKNLNLENVREKVATALINTAKRIYGQEYEFFVDPKNLNLYQKITIVADNDERLQNK

SESFIALSKAKSEAPDVEIGDELTYECSLENLGRTAVNTLHKELEYHIQKLLEQTIFEKYKNKVGQMVFG

TVVRVDNEENTFIEIDELRAFLPRKNRIKGEKFKIGDVVKAVIRRVYTDKGIKIELSRTSPKFLECLLEA

EVPEIKDGYVNIIGCARIPGERAKIILQANGTNIDPVGATVGVKGVRINAVSKELHNENIDCIEFTNESE

ILISRALAPAIVNSVKIEDKKAIVSLNSEQKSKAIGKNGINIRLASMLSGYEIELNELSSSQLNNAISNE

EAMKNLQDLFKI

>ETN90685.1 (dimethylallyl)adenosine tRNA methylthiotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGVDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIYKEAQKAIEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEGLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKEW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETVDVLEKVRFEQIFSFKYSKRPLTKAATMPNQIDE

EIASRRLSTLQNRHSEILDKIVKKQENKTFKVLFEELRAGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEIV

>ETN90684.1 hypothetical protein X910\_04075 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKSFKIHCLTYIIFILQWLIFLSCKKHYKGEKVDRKAGVILFWHGKLALMPFAFRHYRQKNKKAYVMIS

HHKDGEQIAKIIKLFGLDTVRGSTSRGASSALRAAFKVLEQNDDIVITPDGPRGPYHSISDGSIILAQKK

ELKIRILNYEANRFWEFKSWDKMIMPKPFSRITYSLSEPLDILSLDKEKAKEFLMEQFDKISLADQFKE

>ETN90683.1 clan AA aspartic protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFLLKKIFPQLFISIILEDKKNIVKASIYRGNKLISSNEKTFDKSENLLEYVKNLSKHFLFYHTALFLD

AKEQGLIPSTNIQDCEHFNIGKISLQHILFNNALVYTATEHVEYYSELFEEYRGLDFLYSPFALLYYNMQ

KEKQPDDQILLYGFKQGHLLAIIVAKGNTILYGDFKIFEQELGLELELPSEDNQEIENNNDDTEVTLDNF

NEALNNKFDLLDQENNLETLDNNDNFNLDELNQFSNDMELCRYIITSIEKFYNDDKYAGVFINGILLYSE

SDINISAIDFLESETFLEIKTKQINTLDLMIELMQKELK

>ETN90682.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTYSFIQPRKKPIFTLFDKIWLGLFGFSISFILLVYFTYTIKIALINSSINNEKQQVIVLQNQTKQNEML

YEILFDQSQIAKNFNTQNQIVKESLRNLFDIIVKTDNITLESVEQDEYSLKLIGVTPTREMFTLLLETPL

KSIFDQSYTTYYRLDNGWYRFVSISKQIPGVADER

>ETN90681.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDKSLEEIDLLKLIICALSFISVCTALILFLLLPTLKNYKQANLRENSQLAILKAAKLKFDFSEDKIST

LRSENNKSLEQFEQNFNIGNFDIFLQKYFQNVKIQETKPEKQEKYLKNRLAIKATMNNPRRLYDFIDALK

NYNNLIKLDYPLNLKAGEQGISIDLTLKVYSS

>ETN90680.1 phosphomethylpyrimidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTQMNYAKEGIFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQINA

KDFLDVVYHHAKSGVDFMTIHAGINSRAAHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGIQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVIDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLA

>ETN90679.1 DNA polymerase III subunit epsilon [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLQQIDQIISILNKQSKPYDWVMQEFAKVEELKNFDLDLETFELLGLGLTLNKDNIFTLKTRTTKIKDE

IFCIVDIESTGGVSKGEILEIGAVKIQNSKEIARFQSFVKVKEIPENITELTGITYEMVENAPSLAKVLS

DFRLFLKDSIFVAHNVRFDYSFISRALNECGFGILLNRRICTIEFAQCCIESPKYKLEVLKEFLGVENTH

HRALDDALAAAEIFKYCLGKLPYHIKTTEELINFTKTARIKQK

>ETN90678.1 ribulose-phosphate 3-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYVAPSLLSANFLKLEEEVKAIEAAGADLLHIDVMDGHFVPNLTFGPCVIEKISTISKLPLDVHLMVKDV

SKFIDLFIPLKPKFISFHIESEVHPIRLCEYIRSQGIHPAIVLNPHTSIDSIKHMLEFVDMVLLMSVNPG

FGGQKFLPLVHEKIKELRQMIDKKNAKVFIEVDGGVNGLNASDLEESGADILVAGSYIFSSNDYKTAISS

LKLEF

>ETN90677.1 50S ribosomal protein L28 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARVCQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTRKMRIAASTLRTLKKQNSK

>ETN90676.1 hypothetical protein X910\_04035 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHVKDELSQYLANYK

K

>ETN90675.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFGSKINHSDLQKLEEENKNLAHKIEKFQSENLELKNKITSLEQAALESKLKTDLLNVLLTGVLKNITIV

QGDMLENVNKAEVISSYSKTSLAEMDELNHIANSINASLGDITESANKTRDVAGTLHRSVDEITNVINLI

KDVSDQTNLLALNAAIEAARAGEHGRGFAVVADEVRKLAEKTQKATTEVEMNINLLKQNANEMYTQSEQV

EKISIDSNAHIMSFSEKFTHLVNEAHSTNSNAVGIASEAFVSLAKLDHIAFKLNGYKEIFSKSGKQLADH

TSCRLGKWLASTGKERFGQNKSFLKINEPHEKVHENMNNAITIANTEDISKDITQHSIINKCEVAENASL

DLFNVFKEMLDESDH

>ETN90674.1 NUDIX hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFKNLKELSFEKSNYIKPKRFAYESNGRLCTWDFIESKDSVSVLLYHKELESFIFVRQFRIPLWYHQMH

DKDYVKDDDMGYTIELCSGLVDKKLSLEEIAKEECIEELGYAPKNLEKIGDFYTGFGSGVSKQSFYFVEV

DEKDKISSGGGVDDEEIEAVYVKVQDFEKKCKNMIRTPLLDFAYMWFLKEKWGKLKII

>ETN90673.1 ligand-gated channel [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTQIKNMKFKKSLLCFLILSGALLKAEEKYQLNDVVVSASGFEQDLVDAPASISIITKEELEKKPIKDIG

EAIGDIPGVDVTMNKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYDNGFSGSESGYLPPLSMIERIEV

IRGPASTLYGSDAVGGVINIITKKNPDKTEANIEFNTLLQQHSNHYGNAGGFNAYVATPLIEDILSISAR

LKYYDKAASDLKWPTPVWNNGNQRPDNYQIASHSPGAFTSLGFGSRLNWTVDDKNNIYFDIERYINEISV

NSTSSRAIKSERQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGKVVLPWNLGQYGNLV

NTFGARIDYEILKNDQASAGSQIRGKNLDQTTVALYGENEYFIADDLIFTTGLRYIYSDLFDSEFTPRVY

LVYHLNDNIALKGGVSKGYKTPAAKQLTNGYYNYANNNAYFGNPDLKPEESINYELGVDFMVFDFAHYSI

TGFITDFTNQISSEDLTGMQNDINCSNGIVCKRPINLGKTQTKGIEFAFNTKTYNGFSLNSSYTFMDNRY

KDGQKNWFGGDRIENLPRHIAMLKLNYERGKFSSYIKTRARLDAIAKAKGGGNGSLPWQKYKPFYIVDLG

INYKINKQSSLSFAVQNLFDKNFFNPQVTRWDGANPAGYANRYQDYTEGRSFWLSYKYDF

>ETN90672.1 acetyl-CoA carboxylase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYALDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKVMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>ETN90671.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRVVVTGIGMINALGLDKESSFKAICNGESGVNKITLFDATDFPVQIAAEVKNFDPLEVVDGKEVKKID

RFIQLGIKAAREAMQDAGFNEELDKEEFGIVSAAGIGGLPNIEKNSIICSERGPRKISPFFIPSALVNML

GGLISIEHGLKGPNISCVTACAAGTHAIGEAYKSIALGNAKKMLVIGAEAAICPVGIGGFASMKALSTRN

EDPQHASRPFDKERDGFVMGEGAGALVFEEYEEAKKRGATIYAELIGFGESADAHHITSPTLDGPLRAMK

KALNMAGNPKVDYINAHGTSTPVNDKNETAAIKELFGNNIPLISSTKGQTGHCLGAAGAIEAVVSVMALR

DGVVPPTINQLVKDDECDLDYVPNISRKVDLKVVMSNSFGFGGTNGCVVFKKVD

>ETN90670.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MATFDDVKAVVVEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>ETN90669.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFSNLIKENQKIWNAYLHHDFVKKLEDKSLKQENFLFYLKQDYIYLLNYAKCYARLALNSNTAKELRFA

MKFQNYIVEGEMELHRAILSLGINADELDAKDESLVNIAYSRYMLSVGENGDFLDMLVALSACAIGYAKI

GAEIINRLKNENLKDHPYKEWILTYGSENFQNEAKEFEDFVNSYTSSVSAQKFQKLSEIFHTVTRLEVAF

WEHSLRMELNL

>ETN90668.1 heterodisulfide reductase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKEYAFFPGCVLSQAAKESKISLEAIAPILGWKLNEIKGWSCCGASQAQCVDPIATLVANARNIALAEE

MKMPMLTTCSTCMLTLTKAKNTLDKGAKERINTFLAKGGMKYQGSTPITSLLWELYEDLDNLKSKVKKPL

SNLKVALFYGCHSLRPEDTFGKKESSTNPKSFESVVEVLGAKIVPFEKRLDCCGFHASYPAEKSVKKMSS

QIVNNASENQADCVVTPCPLCQMQLDIYQERFQDYTNSKARLPIIHLSQLVGLALGLSKEMVGLDYNIID

ASKIA

>ETN90667.1 (2Fe-2S)-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIIIDRFNGKEKYEQSYDIDDKDIQGKTLLSLLLFIKKTKDITLNFTASCQSAICGACAVRVNGHSYLA

CDTKMQDLLKEYDNPSSIRISPLGNFRVISDLIVDWEPSIENLRKIRPAMVAKNEFSAEKGCKQSQEEFD

RISKQWDCILCGSCASECNKLEADSSDYMQPFVFTHAWRAAADSRGKDPMLHVKPSVMNGLWLCVHCQEC

ADRCPKGISSVSDIANLRVMAIKKGLNEGLGPDHAEAFYKDLVEGSGRLNEIYLALRSEGVIGSMGKTDI

AFKLMRAGKMNPMHVFGEDEIEGHKDLVKMIKAAQEAAVKE

>ETN90666.1 succinate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGEFSRRDFIKTACISVGALAASSSGVYALDDSSKMDKDTNLPSCDVLVIGSGGAGLRAAAAVRKENPKL

SVVVATKMMPSRNATCMAEGGINGVTDFSNGDSYKLHAYDTIKGGAYLVDQDAALKFCELAGKAIFNMDF

IGTLFSRNEQGGVAQRLMGGASKKRCNYSADKTGHILMHSCLDDAISSGVKFLMDHELLDIGVVDGKCEG

VVLRDIQSGGIYPVLCKALVIATGGYTRIFYNRTSTPFIATGDGVAAALRAGLGFEDPEMIQFHPTGVAN

GGTLITEAARGEGGYLLNNRGERFMKNYHEKMELAPRDVVARAIETEIREGRGYGEGLGAYVLCDVRHLG

KEKILKDLPKIRHTAMLFENIDLVDTPVPIRPTAHYSMGGIEVAKFEDMSTKIAGIYVGGEASCISIHGA

NRLGGNSLADAVVTGHLAGIGATNYAKDASFGKGAKTHELAQKWQARFKEITNNGGNGQEMYELREELGS

QNWDNMGIFRTQEKLDLLAKNLEDIQARYEKIRIPNPNEVMNTAFTDYVELGNLILLSRCACLAARNRLE

SRGAHTREDYPKRDDKNFLKHSIVNLENDELKLSYKDVVVTEFSLDGRRVQ

>ETN90665.1 pyridoxamine 5'-phosphate oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLKEIAQFLDDNAPAFLATLGTCGNPRVRPIQSPLLVRDKIYFCTANTKGLFKHIKNYNGIEFCSCAKD

GTFLRLRANAVFEPNLEVKKMMFEKYPYLVNLYETPQNPKFEVFYLDHLSARMQFMNGEFKLFKA

>ETN90664.1 3-ketoacyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFSGKNVLITGASKGIGASIAKTLAGFGLKVWINYRSKPELADALKDEIIASGGVAAVIKFDASKEDEF

ENGVKIIVESDGELSYLVNNAGVTNDKLALRMKLEDFSGVVDTNLSSAFLGCREALKTMSKKRFGAVVNI

ASIVGEMGNAGQVNYSASKGGMIAMTKSFAKEGASRNLRFNCVTPGFIKSDMTEVLSDEIKQTYQDNIPL

KRFAEPEEVANCVAFLLSDYASYVTGDVLKINGGLYM

>ETN90663.1 3-ketoacyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRLYFSLFAFFIRNLLRLQFLKLNLLRIDNEI

>ETN90662.1 phosphoglyceromutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIENKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVNPKSGLNFIKDLKEFCENLGVHFATLCGRFYAMDRDKRWDRVKECYECLLGKAYKVPNLLE

YLQKSYDENVTDEFIKAVQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKIFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLIPSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQAKGVSKIKDNMGLSNIAASVLKILDLEIPKEMNEA

LF

>ETN90661.1 phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFLMPKFITWAKNKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLSCIKFDNIFAISALLCLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLTQIIAGLICI

LPLYFSSELSTELFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>ETN90660.1 UDP-N-acetylmuramoyl-L-alanyl-D-glutamate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKISLFGYGKTTRAIAENLVDKFGPFDIYDDHFIETKKDTLGNLLLNPNDFDDNLSDIEIPSPGFPPKHK

LIQKAKNLQSEYDFFYDIMPKSVWISGTNGKTTTTQMATHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFDNYVQDKLSVLKRMNECDVAILPKIYANTPTKAHKIS

YEDEKDLAVKFGIDTEKISFKSPFLLDAIMALAIEKILLDTLSYELLNSFVMEKNKLEELKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKNFNIELYAIGISTEKMLDYAKKANLKA

YKCEVLSKAVNEISNHLRVNEVALLSPACASLDQFNSYAERGKVFKECVNKI

>ETN90659.1 hypothetical protein X910\_03945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLALAKLLIEARVNGGRNYNGPKVAKFLVG

>ETN90658.1 hypothetical protein X910\_03940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVGERSICVEGIPVRSAGANRSEHAGMSSDN

>ETN90657.1 restriction endonuclease, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

KTLSVEHLGTIYEGLLSYFFEIANEDIYYVSYKEKSKEIECYFDNYDFKILEKSKKVEKYTFYKKGQIYL

KNTSNSRKASASFYTPQSIANFLIQSALKDKLNNENILKFKILDNACGSGHFLVGVLNAITHIVLSDFDH

FTNLKELYEEEKENILNHIKDFVQDYEVDESDILKRLLLKRIIYGVDLNPFSIELTKLSLWIDSFIFTTP

LSFIEHHIKCGNALINSNLSDFKDLIKQNSSNLFTNSITQEFEILQEVFEKLDNLKDTNEEQIKQSKQIY

QNEITPKLNKLNLYLNYINTLHFVNKEELQILKALSQDDIQNLSQNEQAKAIISKYQKEFNFFNYELEFP

EIVENQVFKGFDIIIGNPPWDKTKFSDDDFFPQYKSDYRSLIASKKKEIQDNLLAKDYIKQNYEKQKAYI

NDLSEYYKKAYPLNKGSGDGNLFRLFVEKNLSLLKKDGNLAYVLPSALMFEDGSLTLRKEILENKTLEYF

YSFENNKAIFIDVHRSYKFALIQVKNTQANHAHKIKTMFYKTDMNSLKNKDEILTLSLKDIKKLSPTHLA

LMELKDKQALEILRKCYNAFQNLSFDYIDFRRELDMTNDKDLFIEEFREGLLPLFEGKMIHQFDANFSQA

TYFLEKAKFDERLKSKELSRAKKTTGKELNPKLIKYDREFFRLGYRAVARDTDERTLIASLLPKNCGFGH

SMFANAPKQYIVKDDEICMDIVPYERILFVLALFNSLVVDFIIRNMVQINVSKTYLERIPLPQPSDEEIQ

NNEIYKTLAKNALLLQLYNDKNHHFDELKQKFDIKNEEIPKTKKAYDILKTKNDLLVKKLYGLSDDEFSY

MISTFKVLNEKQSEYITLIKTI

>ETN90656.1 acetate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>ETN90655.1 phosphate acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQTVKSAYGFTFR

EAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPIAAIINDEDKLI

AQKYFDHALDGRNYVLINENFNFEEVQKLKEYDFITPHRFKYELIKQSIKNKKTVVLPESNDERILKAAE

ILLKSKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKLVQ

DKTYFGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVLAFADCAVNPSP

TAEQLATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELNIDGPMQFDCAY

DPKTAAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDLSRGCLVDDIVD

TVILSAIQAQ

>ETN90654.1 flagellar L-ring protein FlgH [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>ETN90653.1 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>ETN90652.1 invasion protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNLLLYIKNNLTPTLAQILLQALKNSNNEKFFTFVLENIETICTWLNSNEFRDRYLSTKHPYPPLINPN

FIEIDSSRHCAELAWDLNLPLPKHYKFIYISPHGVGAAAFLRYLNQCCDVTCFASWVLPPDSKERYCINY

MCLNDNTIAQYAINISEINLPYFDKYLSLLDFNSKIICGVRDPIGLLKHSWGRDWSKVLRNYPPEFNLTY

DWRYYINYLTHQNHKIKIDINELQQGVFIISYLLKYFNKDNVYYLDMEEIRQSKAFDTMNLLAINFNFTP

PHKDKLDLFKIKEFRGYIRYLFPITLYANSKDINNTFYLNTPKNNKNFNIDRTSSIPIILDRKHINHEKI

DVIQEIIKNDLCNDMGVYIDKNDFKQLEQNNLLFSTIKHYLYDFLYQIKITIDETESKMMKEKDVIDYFI

KNKSLIYTFFNIFENELNHLKQTHPHIIDSWKYYKEFEKIYKDK

>ETN90651.1 primosome assembly protein PriA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLKSKKNLKAIVLKECQKPDFKTIEIKEITKYF

LTPLQLELANFIVYYYASKLGFVLGFFETSPKYECQKMFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLEQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLECFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELSITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNILKCHYCNYTSLIEQNCPSCKGEMLEARKIGTAELLELLQNALPLAKIAKFDSDEITSV

KKLNTILKNFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIENYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQKSAQKLCEKFASQFRNI

KQVELVGYGICGVEMLYGKYRFYLLLRSENHKALVAIENYILQFKNASVDIDPIDFV

>ETN90650.1 hypothetical protein X910\_04845 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKAFTLLELVFVILILGIFSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDTPIYSDFKSWIKIGKNHYRFALNAKEMVEFIYDSKEGLLKCIGSSR

CKDLI

>ETN90649.1 hypothetical protein X910\_04840 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>ETN90648.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>ETN90647.1 excinuclease ABC subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNMPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGETRLKQAIKDIKAELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDIPYTLFDYFAIKDRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEFLFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKITKS

MQEAMDTTNERRKLQMAYNKKYNITPTSVKRHIEESLKNEEDLGEIYRKGKKLEKMPASERAKLVKELRK

QMLEAAKALEFEKAAAIRDEINKLRDL

>ETN90646.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQRQSPEQILKKLEVKAKEEEKNKLAKLKIFLGYAAGSGKTYAMLSEARTLRDNGVDVVLGYIEPHDRPE

TMALTQGFESIANLEIPYKNIVLKEFDLDATLKRKPALVLVDELAHTNAKGLRNEKRFQDIEELLKAGID

VYTTLNIQHLESLNDLVANISKIEVKERIPDRIFDEADQVELVDIEPNKLLKRMQDGKIYKEKQAKLALE

NFFRQERLIALREIALRRLASRVNLRASEQRLINDDLAYHTGEHILVCINASNAKVIRAAARLALAFHAK

LSALYIKNPNIKEEKALEENIELAKSFDAEIISVYDDIARQIAEYSSLSNVSKIVLGKNKDKKKFKEEIF

EAVAKKAPNIDLYLVNENQISTPKIRSKKGFDFLGFLKITGVLLLATFIAFVFHKFNTQPSNIVMIFILA

VFASSFISDNKIFAFYSSLVSVLIYNFFFLEPIFSLKVHDSGNIITFTTMFIVGFLTAVFTRRLKLQSKE

LTKRAYRTAILLENSEKLARVKSKQELWEQLGNQALKLLNLPIIIYPINKNNILSKPLLFFNDDKQMLKN

CFSADEIAIAQWVATNKERAGVCTNTLPNANAMYLPIEDGEKTKGVIGIVLKEKRPLQDFQYEILSALLN

EVGVRTRDIFLL

>ETN90645.1 potassium transporter KtrA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLRTLLSFFVVMLILCTLIYPFALNTVAKFIFPYQSSGSLVDKEGRPTLDISKAVGSKLLGQDFNKPYFL

HSRASVSNYNTSDTNESSVSSGGFNYAMSNPALKERVQKDLQKFLDENPQITKEQIPLDLLSASGSGLDP

HISLQAALVQIPRISQSSKITKEELEKIIQENTESKFLGIFGEEKVNVLAVNIAIAKAMKKE

>ETN90644.1 potassium transporter KtrB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKQNKLITKEILNNAIKGAFLKFDPRFMVKNPVMFMVEVGLILTLILSIFPTLFNGNSDERIYNILIT

FILFITLLFANFAESIAEGRGKAQAATLRQSKKDSKARRIKSDGSEEMLNSSELKIGDIVLVKAGELIPN

DGEIIEGAASVDESAITGESAPVMREAGGDFSSVTGGTTVLTDFLKIKILVGAGESFLDKMINLVEGAAR

QKTPNEIALNTLLIVLSLSFLVVVVSLYPFMQFLGVSLPISWLVALLVCLIPTTIGGLLSAIGIAGMDRV

TRFNVIALSGKAVESCGDVDTMILDKTGTITFGNRLANEFYEVQGISKEEMIKACVLSSLKDETPEGKSI

VALAQKMGYELEGNDIKEFIEFSAQNRMSGVDLQDNTKIRKGAFDAIRAYISEMNGKIPSDLETKVMEIS

NLGGTPLVVCKNEKILGVIYLKDTVKPGLKERFDELRKMGIKTLMCTGDNPLTAATIAKEAGLDGFIAEC

KPEDKIEAIKKEQAQGKIVAMTGDGTNDAPALAQADVGIAMNSGTQAAKEAANMIDLDSNPTKILEVVEI

GKGLLITRGSLTTFSMANDIAKYFTILPAMFSVVLPQMQILNIMHLATPQSAILSALIFNAIIIPLLIPI

AMRGVKFKPMKSEHLLLRNLSIYGLGGMIAPFIGIKIIDIPTAWILRILGV

>ETN90643.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEILITLIIAFILALIFGNYLYKIASCNKTIFDFIFNPIDNLIYKICAIDRKNMTWQKYSLHLIAFNAL

VAIFSFVIFYLQDKLFLNPNSINSMKGDLNLNTVISFITNTNLQHYSGESALSLLSQNTGILLAMFVSSA

SGYSACMAFCRALCGMQMGNFYEDFTRIITRLMLPLSFILAVIFISEGVVQNYHANFSVLTLENKFQSIA

TGPVAALESIKHLGTNGGGFFGANSSMPFENPTSLTNFLQILSMMLIPSACVVAFGLMVYHRKERQGFAL

MGKEGGVIFGAMGIIFIISLLLIYFSEKMSNPNLDSLGLNANLGNLEGKEIRFGTDGSSLFSAVTTAFTT

GSVNNMHDSLNPLSISATLLNMMLNVAFGGEGVGLMNMIIYVLLTVFICALMIGRTPEFLGKKIESAQMK

LIALVILIHPLLILVLSALAVVFAKDSISNPSFHGLAQILYEFSSSAANNGSGLEGLKDDNLFWNLSTAF

AMFCGRYLVLIAQLAIAGSLLAKNTQENTANSLKTDNLTFMFVLVCIIYIFAALTFFPVLTLSSVAEYLS

LWH

>ETN90642.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKGYPMDVIFALLLLLAFGSLWFFIRFCEIQTRTRG

>ETN90641.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFLTSLSEGGQFAIQIIIVLICLFYGAKKGGIALGLLGGIGILMLVFAFHIKPGKPAIDVMLTILAVVV

ASATLQASGGLDVMLQIAERILRRNPKFLTILAPFVTCFLTILCGTGHVVYTIMPIIYDIAIKNGIRPER

PMAAASISSQMGIIASPVSVAVVSLTALLLNANHKLAGFDGYINLLQITIPSTLFGVLCIGIFSWFRGKD

LDKDEVFQEKLKDPEFKKYVYGDSKTLLGVKLPKSNWVAMWIFLGAIALVALLGVFDFLRPNWGQVVKNG

IPQVDALGNPKMDVLSMVSVIQMFMLLAGSLIIIFTKTDAKKIGSNEIFKSGMIALVAVFGISWMADTMF

AVHTPMMKVALGDIVKEHPWTYAVMLLLISKFVNSQAAAISAFVPLALGIGVEPGVIVAFAAACYGYYIL

PTYPSDLATIQFDRSGTTHIGKFVINHSFILPGLIGVITSCIAGYFIAMAAGYL

>ETN90640.1 RNA polymerase sigma54 factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQDSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKIIECLNEEGYFEYDEEFLKEYSLEEIERVRA

RFKFLDPVGVGAKDYKEAFLFALENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALTVLKRFSTPPF

LEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDALAMRKATLYK

IGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAFALDEEGETS

NVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKLYELEG

>ETN90639.1 lipopolysaccharide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFMSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDV

TKDPLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSL

SGGERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAY

VIRSGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>ETN90638.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFILAKDEIKTMLQIMPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISTIQIKISIKDDKRKYEIYE

>ETN90637.1 hypothetical protein X910\_04780 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFQKLIFFAKIAFMRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQK

YKVLAIPSTKSIPKNAQNEYVVKL

>ETN90636.1 argininosuccinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>ETN90635.1 50S ribosomal protein L9 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>ETN90634.1 peptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>ETN90633.1 ATP-dependent protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRAENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKALYEILTRPKNSLLKQ

YSQLLKTENLELEFDDEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>ETN90632.1 GTPase Era [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>ETN90631.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKINSLNKINFIKSTDLLYAQRTGISKEDELFNNLTADFKLSKPFDYQIAFFKHNEIYHCFLAPVYKLKK

SRFCFPEPLIFQALFDERFIEESDYCVLNLYDQTLYLYFYQEGKFINLKKIENFNPSNMDLFFKQNRFIE

LLKHYESKLLLYQDLDTIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISFK

IILIFIFSFSLSMMILLFKDFIEYKQNKEIQNKNFIIQEEISKLKQDKQKLLTNIQDLNFTLSNKISSTQ

QQFHILSTITKEINLDKNKAIILNQIISWLNSNELKITNLEFKQTKIILSFIDENHFKRALENLNSAFKI

LDKNEETLNIILEVIHE

>ETN90630.1 hypothetical protein X910\_04745 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKIEVFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKTLVEHNYLALNEAKIENSHLKEIET

KLTKQIKTEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGNFK

DLLNFIQNLENLPIALKIDKIKLYNTQGLKLKLDLMFKFVNL

>ETN90629.1 hypothetical protein X910\_04740 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKQEIQKLDTNFLGHPKPLFSLSMVELWERFAFYGIRSLLVLFMATTISKGGLGISTEYASAIYGIFAG

CLYLAALPGGWITDNYLGQKKALFLGSFIIALGHISIALSILSTPIFFLGLTFIVIGTGFFKTSASVTVG

MLYKQNDTRCDTGYTIFYIGINIGAFIAPLICGFIQAKWNYHLGFGIGGLGMLISLLILYFKAIPELEEF

HKNCTLRQNWEQPFKKSKNLTLILSISLLSIIGFFLIFINLADINPIILSKNF

>ETN90628.1 hypothetical protein X910\_04735 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKPVCWNFPIKNISICKILRKKIISGRFLFKSAPKKVATKNKTIKIVNCCFSLLFKVLKTKRYMK

>ETN90627.1 di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDIFREKNIYFSSIGKFTLGILFAGIGFMMMTFASQNLINNNGLPISMAWIIISIFFLTLGELCVSPVGL

SIMAKVAPDLIKNQIMGLWFVASALGNFVAGLIGGNVNIKNIDQLPNIFEQCMWMLFVVALLLFIAKKPI

YKILNEKNKQLSN

>ETN90626.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKNVKNLDTSFFGHPKPLLSLSLTELWERFSFYGIRPLLYLFMIASFEKSGMNLKPEEASAIMGIFASC

LYLAALPGGWLADNYLGQKRAILLGALTIAFGHLCIAFSYFNNKMIFVGMVFWL

>ETN90625.1 hypothetical protein X910\_04720 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVIGTGLFKTCASVMVGMLYKKMMQGVTLVLLFFICALILVLL

>ETN90624.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCFNFGAFVAPLICGFLQKEYGWHFGFGAGGIGMLLAVIIFYLKTMPDLKEFDEKVGIDSTWDRPSKKSK

NAFYIIIVSGIVLLGAIFLILGGFIKLDAQVINKNIILTILACAGIYFLYLFAFTSLKIEEKRNLIIFIV

LFLAAALFWSVYEQQYTSFNFFAEKLTDKTILNYEIPTIWFQSLGGLFVILFAPFSTFIWTICAKNNKEI

SSIIKFALGLLGAALAFLIMALASNHAISLNGDANTLRENLENSSQIILVSPWWLVSSFLLMVLGELCLS

PVGLSIMTKIAPNLIKSQVMGLWFVASALGNALAGFIGGKASEENIAYLPNLFYQCMWILLGAVIILLIL

KKPINKILKN

>ETN90623.1 peptidase M24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFALLPLSLQKDLKINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNSELEKKLNLDGFWLKNYDEIIMELEKLANTNLLIEPSKMTALLINSLDKS

VKIIQEINPSTHLKAVKNTKEIAHIQDAMIEDGVALCKFFAWLEEAIENKELISELDIDAKASEFRAQSK

HYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRAPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KVKEGMLTSIEPGIYKVGKWGIRLENLVIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>ETN90622.1 penicillin-binding protein 2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKIEFLPPVRGQITDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELTNLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLLEGNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSVVKMGVGLSFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKHAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPHFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDKNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>ETN90621.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRRNLSAYKAKFNGAYVFLGFFFLIYQILGSTFIYAPLLYGIFFCYMFCLLEERERTFSKLDFRWYFSLF

FLFFTDITYNFFIFSSWLAFFIFYYLCADWIKTNLKIGKFIPVVFVLCAYGIILFLDMILSYIGDEKIKI

LGWAYIVSVFIECCLAYVFFKGKI

>ETN90620.1 GTP-binding protein YsxC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>ETN90619.1 organic solvent tolerance protein OstA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNRKPIRY

EAMQNARFKIVLKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDK

>ETN90618.1 hypothetical protein X910\_04685 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIKIFGILIALFTITFTILSLQDPYSLNLQTNALNFKNIEAKNLKAYESNTSIIKAYYKANSWVRYADR

DEFNDFITLNLDFNLSANRLEFFNKDMSKVLFEGNVTYIGSNNVKIISQEVEYQPKDKILHTNTNFKALI

NGSIINGNTLNYDVKNKILNIQGVNAWLQDK

>ETN90617.1 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIKILYQGIK

DKLACAKEILQKLNLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAVAQMIEI

LVEKNHLEEEWNKLWL

>ETN90616.1 RlpA-like lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>ETN90615.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLCFLICFNFLFAQINTPEFYERQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSMQNFS

KVTPMIRKILAQQEVPDEILYLAMVESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQVIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSASLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIREFNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>ETN90614.1 TatD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLNLDFQDGLRIVDTHCHLDSEAFKDDLDETLNRAFKNGIEKIIIPGADIKDLPYAATIAHKYKNIFFA

AGVHPYEIDNYDEKILRQYLCDEKCVAVGECGLDYFRFKSDLAEEIQKEKENQKKIFIAQLELAIEFKKP

VIIHSREANHDTYEILHGYSKDLVGGVLHCFNASEHLLTLFEEGFYFGIGGVLTFKNAKKLVEILPKIPK

DKLLLETDAPYLTPEPYRGKRNEPLLTQFVANKMCEVLNLSRKELLEICFNNSEKLFFKGY

>ETN90613.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIVLTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIVKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVRERFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLVDKASKILSQAKDNGKDRVEVCS

>ETN90612.1 DNA repair protein RecN [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINRIFMKENLGFKKAELEISKGLTVFTGLSGAGKSVLFKGILSAFSLSESEAKIVEIELDDKLDLESFG

IESEEENVFKLLKEKNTKYFINNQSIAKKSLQNLSKTFIKYLSAKENNEFGNEKFLNLLDALEMQENTNF

ISFLEDFKKDFNAYSQISNELNAILEEEKKVEELKELARVQIEKISSINPKIGEYEELLILKKKLSKKDK

LEEAWSKAERIFELEKVVIEALNLSEVDASFFSECLNELRVICENQKMEDLDFDVETLLDRIENLSYLIK

RYESIENALEVLKQKKHELEHYENLSFEKKELEKKFQELKQKLEEKAQILTQTRKKNLKKLEKCLNNYLK

DLYMKDASLTLKENEKISILGKDEMMLDINLAHLKNLSSGELNRLRLAFIATECKILNAGKGILFLDEID

ANLSGKEAMSIAKVLEELSKFYQIFAISHLPQLSSKAHNHFLVEKNGEESKVKKLDQEERIKELARMVSG

ELVSDEAIEFAKTLFKD

>ETN90611.1 inorganic polyphosphate/ATP-NAD kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>ETN90610.1 aspartyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYFILHKKLYQILAKQKNKNTIILLIILKNLFQGINLRSHYNTDLGISHVGQSVKLCGWVNSYRDHGGV

IFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVLIAEGAIRPRGEGLVNPKLKTGEIEVVVSKLTIE

NESAVPPFTIADESVNEELRLKYRFLDLRNPKLYENFALRSKACIAARNSLANMGFLEVETPILTKATPE

GARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDRYFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEQ

KDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMENYGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIA

KDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGAQGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRC

ELEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLIDPNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMP

KNIDETDLEEISSIAYDVVLNGVELGGGSIRIHKNDIQQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPH

GGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMTDAPSPASNEAMRELGIKLRENIK

>ETN90609.1 adenylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>ETN90608.1 inorganic pyrophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLSKIKIGDIPNKINAVIEIPYGSSIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLNKIKNFFETY

KILEPNKWVKVQDFKDEKAAIEILEKAIKNYK

>ETN90607.1 methionine sulfoxide reductase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>ETN90606.1 hypothetical protein X910\_04625 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKCKIFYLLLLKKKNVCVFANTLKTSIEELEKEFLKQNLKFKKINAYCYLFDAKDKAILSSMKAFNEAHF

YIQNYSSYLCALNLEVKAGQSVLDMCAAPGGKSINLANFMQNTGYLACNEMSRDRFFILQKNLKNYGVNA

KVFMKDGKNIGNLCPLKFDKILLDAPCSTFAKIGFDLEKSYKEIKNIAKTQKKLLHSALKALKIGGELVY

STCTFTKEENEEVIENALKSEFKLELLDIDLENVEAKAGQSEEFAEISKCRRILPSLDYDGFFIAKLRKL

C

>ETN90605.1 Holliday junction resolvase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>ETN90604.1 DNA processing protein DprA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCVVS

GGALGVDITASIAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYLPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELNKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>ETN90603.1 hypothetical protein X910\_04610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKKLVQIQRYLIIAILFLLCIALALGILVKYQNSQDVFSVKPDYFIDKQEDLISSNKDHYEIGIFQEN

EFDNNKSVSILEQKIQEIDDLNTSLNEQNLSSVEQNLSLEQNQSLEQNFIPKDTNLTQDQNLTFDEDIHL

NKISKKPKLAIIIDDMANASQVRGLKALNLKLNPSFFPPDKNHSETPKLALKFDFYMVHLPLAAINYNKP

EIDTLNPNDSKERIFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSK

ANKIAKELSMPYIQRDVFLDNEDDVNYVKKQLESAVKLAQKKGFVIAIGHPRKNTFKALEQSKDLLKGVD

LVYLSEIYGK

>ETN90602.1 ketol-acid reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>ETN90601.1 ribonuclease R [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKSKYYLNNGFAFGVLDISSKGTGFLQCFDESFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKRANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDIQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLAYCFKIALDHENKVIKEELFEGIINSKRRFNYDEVDEILIQKPDLKE

LSWLYELFEITKNLRKMRLKNAFEFRTEELRMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGVFRNHLSADARKIDKLLNELRELGIDVNFKPNLPELIRDIQALSDELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKTMKNFLIIYF

>ETN90600.1 hypothetical protein X910\_04595 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDRKFARWAAKNIGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIVMAKIYA

KITQRLIKEENV

>ETN90599.1 DNA polymerase III subunit delta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYRKELQTLLSKDSIPNFFFLYGADNFQSELYAEFIKEKYKPDETLKLFFEEYNFTRASDFLSAGSLFSE

KKLLEIKTSKKNPTKDLKILVELCKNNTNNFFLLELYDENSKQSDIEKIFSPHFARFFKANGAKEGVELL

SIKAKQLGVEITQNALFTLFTSFDENLYLAASELNKFSGLRVDEKTIEQYCYSLNTGSFESFFEKILKKQ

DFKSELEKILDNFNEIALINSLYNSFYRLFKIALYAKVNGKIDFKDLLGYTPPPQVGQNLSSQAFSLKIE

QYKEIFTLLLKCEYELKTNSKLVKKEFLISNLLKLARILKIN

>ETN90598.1 hypothetical protein X910\_04585 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTFIMPFLKTLGYDVFNPSIVVPEYTADIGTKKGEKVDYAIFKDSKPFILIEAKNHTENLDNHNNQLVRY

FNTNPSIKFAILTNGIEYRFFTDIEQQNLMDKIPFLVVNLEKLKPRDIKDLKRFICTDLNLDEILSIAME

KKYYRSIQEIFKSEIENPSDEFTSFFAKQMTEKRMTSAVLEEFKNYIKKSFKEIINDLAYEKITSIKNNL

QNINDDENDEQIDEKRYCHNRRRITRFLYSKINSC

>ETN90597.1 hypothetical protein X910\_04580 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKDIVTTEEELQGFYIVKSILASVSANLEDVSYKDTLSYFSILYQGKVTKWICRLYFNTSKKSISFPDG

ASYNIEKLEDIYQYKADIIKAFESRK

>ETN90596.1 hydrogenase nickel incorporation protein HypA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHELSIVESLIELCEENALNNKAYNVQEIYVKIGRLSGIEADLFKRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVFKCPKCQSIEYKITQGEDLHLMRLVME

>ETN90595.1 hydrogenase assembly protein HupF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNISLAHGGGGEEMNELLTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELEKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEIISKKESKNIKAGLSILLSGDIGRHGASVLIKRNELEADVKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>ETN90594.1 hydrogenase formation protein HypD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNLNKNIIFFAIGF

ETTTPMSALLLQKIIEEKINNVFFHINHITVPAPVEAIMNDENVKINAFLGPSHVSVITGYGIYEPLAAK

FKTPIAVSGFEPVDILESVLNIIKQSNEGTFKVYNQYKRAVSKEGNIKAQNLVKKYFRVCDFEFRGLGLI

KDGGLELKEEFSAYDASKKFDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNV

>ETN90593.1 hydrogenase formation protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDLGLNEFHR

>ETN90592.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCKDCGCSINSSHTHDHHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEANTLCINLMSSPG

SGKTTLLESTIKALKNELKIAVIEGDLETNNDAIRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDD

VDLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADIVLITKADLAHHFDFDVKEAT

RLIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>ETN90591.1 3-hydroxydecanoyl-ACP:CoA transacylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYHLGYKIKISGLVQGVGFRPLVYELALKSKLFGEVRNDGFGIEIILACTQKECENFIENLKNHLPPLAR

IDQLIITQISILNYENFSITPSLENTKSTPMLSDFALCKECKKEFFDEKNPRFLYPFITCTHCGPRFSII

KSLPYDRFNTSMQELLMCEFCKSEYEDPKNRRFHAQPISCPKCKINVFLKNPKGEILAKDQEAFIQSAKF

LKEGKILAIKGMGGFHLMCDAFNEEALKTLRLRKNRPKKPFALMCKDLQSTKELAFIDEKEEALLGGVLA

PIVILKAKKAFSLIAPDVDKIGIMLAYTPLHLLLFEYFKGNLVATSANLSGESIIKDEFNLRQKLDKVFD

FYLDYDREIINASDDSIAQVVNGKTMFLRTSRGLNPFYLERNFNKKGTFLALGAELKNEFVIFYENKLLI

SPYIGDLKSLDVHERFFKLLEFFKQNYDLKFDAILCDKHPHFSYAKEFEERIKISHHYAHFCAAYFEYEE

NFAKDEKALAFICDGTGYGEDGKIWGGEVFVGNLKEYERIAHFENFTLINSDIKNIQNLALSLIFHYDLE

DKAKEFLAKIPKIELENLKKIYSHSNLQTSSLGRIIDAFGSIVFNLEKSSYEAQVGLMCEAFYDKNLDFS

YKLFVEKGQVNFKNLILGALQDEKTKAITGMFNALANFIIDFSKDYDLKVLLSGGVFQNKTLLEILKAKN

FDFFIPLKYPCNDSSIALGQMVHFLKKE

>ETN90590.1 hypothetical protein X910\_04545 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLDFDFIYNADNDIFEYLLRFYAKNYNYILSKEENTYHFSIDADEENLKTFCDSLNFMSHSVFLKKFDV

KAGQGFNPCIPEDKEFSRFSYITHLNSNAYQEKKLLNKNEWGVFCECEFSSNLSEFEKINEENFNTFLNL

AFDLLSQEKKIYLKDKNGIYEFSLFKNEFIGDFLLPCDIKAINSVFVCSNENLKLLASLEKPLMKLRLNA

MFRKNHNLDFSDFKIRLARDLFCFALGLKLFENEYKFLSVKKIEEYQKDFYISALDEQVVVLEGFEFINA

KARELIFSKEDKNMARISYLVSRYKEKAFILELSKDYEDILLINKELNLLKLCLPKHSKELYEEIKKDEI

GARLLENFSKEFPLLDESFELQNNFYSLFGLVGRVLNLGKNLQESVSELLKIADESKMPRGVKIDYRLKE

DKSFDYTRTLRSAMSFMLAGVDSVNIAYGAVESLAYFLRDTYDELREKKQSDLALISGSLFEHKSLLKNT

LKHLKNCQLSDVPLRV

>ETN90589.1 hypothetical protein X910\_04540 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTRWGSCNHNKAYVNLNLKLIQKSLRAIEYVILHEISHLKFPNHSKEFYTFIEHFMSDFRQREKEFLS

>ETN90588.1 hypothetical protein X910\_04535 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARQSSSLKSFIYKDECYFYSKKCIKTLRLRLNEKGEFVLSIPYFCTFKSVYEFLDKSSSWMNEAKKDLK

KKP

>ETN90587.1 multidrug transporter MatE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKQLSLTRLSFPIFWDLLSKYLTVIINTAMVSHYSNFLVGAMGAGNQILDLFITIFSFLSVGCSVLIA

QAIGAKDHVLARKVIHQSLFLNALLGFVCGVLILWHGEYLLYLLKIPQELLKDSEIYLHMLAICLFFDAI

GIVLAAIVRVYNMAYWVMFIGFLMDIVVICGNYYVLHYTKSELFGVGLSNIFARIVAIVALFAILFYKLK

IHLKIKEMIKLEKEVLKKVLNIGGFSAGENLLWIVQYTIAFAFVASLGEASLSVQTIYFQISMLIMLIGQ

ATSIANEIIVGKLVGARYENIAYKHAWRALYFSVIASALVAFLNYLCQDFTMQILGLKEELKNLMIPLFA

LSIFLEISRTFNIVMVNSLRASGDAKFPFFSGLVFMMGVSLPVGYVLCFHFNLGILGVWIGFCADEFLRG

MVNSYRWKSKKWQGKALV

>ETN90586.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFGNSYGGYLANLCAKIAPWSIDFILDNSSFVNLFGNIFRLIGFGKEIDFTRYHGTYDDTLFKNIFLYLS

DKTYWNNNKFSKNYFSNARKIIREPLNKEHLIIQSLYPNPKYILYHSIFDERSPFKNKENFVHILKELNF

KVEFFAISQVDNKFIKNLNHGMGLSTKLFFKKHLLQILKEPLQDKICKKEVSYKCDELVYTFKEENHQII

LNITN

>ETN90585.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIINQIYSIDSCDDVELNIKRGSKLEFRLTYDDSKEIEAIICIIPGGAEDMNSYIYIDDYLTRNYKVAVI

NINYHCIGNRPHLGSSFYLDDIDKFILDTSLKAINLKCINVYGINSYENLNNAFIRIDQEIQKLKLNQQL

HQNYKLKTHVSFLPFKNEYQNFGIMQAMDILNAIFYIKENSPFKLMRGGY

>ETN90584.1 phosphate ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDEEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>ETN90583.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGFPAFKQTYIFVEANRNSPSYDLLSRAEQR

KIRTGQIAEKSWLLANSEVDQYMKQKYNRLSEKQRTLVDDLVQKGEIELKFNSNFFLNGDSKSPENSGIL

SSVIGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>ETN90582.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKEKIIKFALFLCAFVSVIVSFAIMLTILIEALKFFQKESVVTFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGIQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACLLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FVITLIINMFSVYLINRFHKRKNL

>ETN90581.1 phosphate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILSLSVTSLALCGALNAVDLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKAGVTDIVGMMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>ETN90580.1 ferritin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHAKKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALSRKK

>ETN90579.1 acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTYFSLEFSILMIAFFAIYWTFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKREFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYVDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYIYIPLGGNRKGIPRTVANILIAFILSGMWHGNTLAFIVWGLLHGIGIVFIHLLTLSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLEDAIEYFKACYYNFFQIPSYNDIYMLVAFGVLFMIYPLFINFKEYCI

KILNLTPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>ETN90578.1 hypothetical protein X910\_04485 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSVVRFFFILIIVLGLVVVVMNQSISSYIEQKYHFAFYPHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

EETTNQENKSIDENLSKIDKVLNTLENDENTSHKETNPTLIQDANISFIDNTKLELQNGDEFLFIGDSLM

QGVAIALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFIKNSNIKYLVVLLGANDPWDIKKGGN

YHRFGSLSWIDIYTSRVDEIIKIAKKHKAKVFWFEIPPVKKEDLNKKIQVLNKIYSDEILKNKEIFINTK

LFFSVNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>ETN90577.1 hypothetical protein X910\_04480 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLVNKFKVILLFFIIFTSSYAQNLNTNDTIDSILNQNKNHSALTSYVSKKDLKNLEKKLEKNQNIGIRIY

GDSHMAADFFPRVIRGYLIRSNSIGFAYPLQPKYQQNLNLVYSYKNFEILNSRNPANAGHNFPLGGIIAK

AKTKGAKINLDTTLDKKISK

>ETN90576.1 hypothetical protein X910\_04475 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQISALQKDAELGGYFITNKDNNVFLDTIAINGAKSDLWLSWNQTVVKKELGLLHNDLIILAYGSNDALF

KGFEKQKFKNNLKKWISILKTYNKNAVIMLISPPTVVQKQGKNYKLAPDFFTIRKALYEVAKEEKTLIFD

MHQFMQDSGGKNKWIEQKLSLNDVHLTIKGYELMAKKLLEDLKNIIDY

>ETN90575.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRVIFSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALTRADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIEQSLLR

AKQNLLSNDQNRNLLIKNLQDLLAKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFTYEQL

LISYEQALQSAMNEFALNYKDYQSNTLLLQNLQSINIKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYQITALSFNDENLEFLKY

>ETN90574.1 macrolide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>ETN90573.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGAQVSGQIIKLYVDVGTHVKQGDLIAQIDKDKQQNDLDITKAQLESAKANLESKKVALEIASKQYQREQ

KLYAAKASSLENLETQKNNYYTLKANVAELNAQVVQLEITLKNAQKDLGYTTITAPMDGVVINVAVDEGQ

TVNANQNTPTIVRIANLDEMEVRMEIAEADVSKIKVGTELDFSLLNDPQKTYHAKIASIDPADTEVSDSS

TSSSSSSSSSSSSSSSNAIYYYAKFYVPNKDDFLRIGMSIQNEIVVASAKAVLAVPTYAIKSDPKGYYVE

ILENQKAVKKYVKLGIKDSINTQILEGVNENEELIVSSSADGLAPKMKLRF

>ETN90572.1 hypothetical protein X910\_04455 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKVILIVLIAILGSVGAYFIFFNNDEKISYLTQKIQKKIYLKP

>ETN90571.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKLVENLALKYYDKVVDLRHQIHMHPELEFEEENTARLVCKILDEFGIKYQKNIAKTGILATIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGAALILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGSLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVVSRRLAPYEAGVITVGQICAGTTYNVIPINAYLKGTVRFLNDKTQDILKSSLE

EVAAATAKSNGGDYKLKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>ETN90570.1 polyphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQENNSPKTQAVVKKNEIYVSVKRKKSTIEYEKDLKNLQIELLKFQNHVKAKGLKVLILIEGRDAAGKGG

AIKRLIEHLNPRGCRVVALEKPSDVEKTQWYFQRYIAHLPSAGEIVIFDRSWYNRAGVEPVMGFCTPQQH

KDFLREVPLFENMISNSDIIFFKFYFSVSKDEQKKRFEKRRSDPLKQYKLSPVDQKSQELWDKYTLAKYS

MLLASNTPTCPWTIISSDDKKKARLNLLRFILSKVEYPNKKTGDFSKIDAKLVRSGEEEIRKMEANLEKL

DSKKADEKIKDLD

>ETN90569.1 thiol:disulfide interchange protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIFGIILLSFCLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKLKLYINEKDISSLINLPQ

SSTRGNENVYYQKLNLALPNLLLEHFAKNTTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKDAFEISKPY

KTQKTDKKTKIESEESSIANFLATDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIVAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGASIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVLGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFGFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFTIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISASKSALSYDYINNFEQLKQEIQTNTKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSENNNEQIKTMKEFNVFGPPVLIFFENGKEKLKITGFISADD

LLKKLEP

>ETN90568.1 sulfurase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIQSLQIGKIKNYKNFQSAFIKDTYLEETQIDFLGILDDQIADKIHHGGYHKAIFANSCQNYPIWERFL

NKKLNFGSMGENLSIDGLCEQNVCIGDIHQISNAILQVSEPRKPCVKISKIHNNSNFTHEIFKTGLSGWY

YKVLQVGQIRKYENIKILEKNSTSLSVFELNQLFYSPHQALRQNPILLDKLEKLNSLISQNWHETIHKRL

KNTYDISYMDSL

>ETN90567.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLGNFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIINYIILKRGIIDGIEKSVKFLMPLLFICLIIVVGRNLTLDGAMAGVKFYLEPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFVLLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>ETN90566.1 1-aminocyclopropane-1-carboxylate deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFVSYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKNNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGTGTSAAFLAKYSKFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEFLTSDKKYHFAKPYKEFYELYMDLKLKCNIEFDLLYDILGLSIALKQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>ETN90565.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANITNYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGFIRENLSKELQSKLDNNITIDEKTGSISLPAEVLFDKDSYVLKNEAKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKLQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>ETN90564.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVIMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

GEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETSQMMSKLSGDENQNKGNETKQIEDFSESKTEENQDEIQAEISKQESNDELKNEDKENK

>ETN90563.1 fructose-bisphosphate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>ETN90562.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>ETN90561.1 endonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKAYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFGGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTGIFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>ETN90560.1 endonuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIFIFLLAISLNIFALEPYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEASNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQIAQINNKIWN

EIEQRERNLAFKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYVKIIKTPKFKECYQVPNHEVNNENIKQYQ

INCDKF

>ETN90559.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEINALTITTLYIIGISAEGMTGALAAGRHKMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIIAGAIYYSLIIWLELNALVCTLLTLFIGVFARLLAIKYQWSLPIFSYNEEK

>ETN90558.1 hypothetical protein X910\_04385 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRRLSILLTILIVINITACDSKTENYYKNHPSEAKEKAKECKESGTLSEDCINALKVGVKPTNEESKYSP

NTPKNLIIRY

>ETN90557.1 hypothetical protein X910\_04380 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAYKVGFPKDEWEDENISN

P

>ETN90556.1 tRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>ETN90555.1 riboflavin kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNIFTTISKINITSLAIGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIEVD

FENIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYDAKDIESLSGIKTIIVDEFSIGGVGVHASL

IKDFLSKANLQKAKEFLGRDYSIKGKMIKGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGEKFTQGEFFELEFISFLRENQKFQDLKKLKNQIAKDIEQARELLRK

NDER

>ETN90554.1 hemolysin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRFDFFVSKRLNISRNKALELIENEEVLLNGKSFKASFDVKNFLENLKKTQDLNPEDILLTDGLKLDLLS

EIYVSRAALKLKNFLEENGIEIKHKNCLDIGSSTGGFVQILLENQALKITALDVGNNQLHLSLRTNEKII

LHENTDLRTFKSEEKFELITCDVSFISLINLLYYIDNLALKEIILLFKPQFEVGKNIKRDKKGVLKDDKA

ILKARMDFEKACAKLGWLLKNTQKSSIKGKEGNVEYFYYYIKN

>ETN90553.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVLLMSLLKNSSYILTLLSLFGFLLTWQRTVFSLFFLIPIFLTLFWEFFLFLKLRKNIIKEATLIKGSL

FYRISIGDFYLYIFSFFLAIFGLISLFLNFLNLEKIDFVFIFIILPLLMIFLKKELHLQFVDNAYNDFRI

VVIASFFTALFYAFYGLFFTYNEILNLELFSRKIIAYKSASFVYFDFLSEFLHFISNLKFFIFSYFGYLG

FRALNFIFDFFNFFMFCSLLAFVFNFVLKIKIKIIVLFLCFIMVLASYFLKEQRNNALKSEQEQILLWMN

NFDFLKDHNLSLIQKEKDLFEKDLKDLREIFKKNAFEIGIWWFSKEKEDLEKRINESLK

>ETN90552.1 NAD-dependent DNA ligase LigA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>ETN90551.1 dihydropteroate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFFKINPNTDFNLLCSFINPHKMGQKIMSEKTKIHFIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEE

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKVLDLIYEKNYYEQAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYGAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAGHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALAQAMDNIGV

>ETN90550.1 DNA polymerase III subunit delta' [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFISKIIISEDFLGIKEEMINNFGIKKLRFFMPQNEFLLDDARAVEKESYIAETEEKIIVLMADSYRIEA

QNFLLKLLEEPPKNIKFLIVIPSKNLLLPTIKSRLICEKRKVEKEVKKLDLDLKRMDLRMLFDFLQKNEN

LDKNELMDQIALLAKECVKYKDFNAEELEFFYESYELAKLNSKSGVLLATLLLNYYTKK

>ETN90549.1 hypothetical protein X910\_04340 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAA

RPMLPFVSLNSLCKKKVQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSRVQLG

>ETN90548.1 aspartate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIVQKYGGTSVGTLERIEAVANRVIQSAQQGNQLVVVVSAMSGVTNTLIEQAEYFSKTPNGKDMDMLLS

SGERVTSALLSIALNEKGYPAISFSGRKAGIITDSVFTKARIHHIDTKAIKSELQNGKIVVIAGFQGVDE

EGNVTTLGRGGSDLSAVAVAGALNADLCEIYTDVDGVYTTDPRIEPKAKKLDKISYEEMLELASLGAKVL

QNRSVELAKKLNVNLVTRSSFNNNEGTMITKEDGMEQALVSGIALDKNQARVTLRNVEDKPGIAAEIFSV

LANENINVDMIIQNVGVDGATNLGFTVPQNELELAKNAMQKILSSKTTIESDSAVVKVSIVGVGMKSHSG

VASKAFKALADEGINIGMISTSEIKISMIVHEKYGELAVRALHECYGLDK

>ETN90547.1 RNA pyrophosphohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>ETN90546.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFQALKEDIVFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKVGFKNINLDLIYDTKLDNKKMLEFELLHLKQIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LMKFFIKQLLELNFFQYEISNFSKTKAQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>ETN90545.1 preprotein translocase subunit TatB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSFGEIIVILVVAILVLGPDKLPEAIVQIAKILKAVKRNIDDAKSSIEKEIRINDLKEEAKKYKDEFSST

NENIRKKLSFEEFDDLKRDILDKTKVDLTFDSRDDNTKNNLSGQNLNTEEKPNLSKLETQDKTEK

>ETN90544.1 preprotein translocase subunit TatC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFEELRPHLIELRKRLFISVACIVVMFIVCFALRSYILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

VSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITIGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPAPKDKESDE

>ETN90543.1 S-adenosylmethionine tRNA ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKDLLLSSYDYTLANELIANYPANPKEDARLLVFDRKNKEIFHTTFKNLKDFLPDCAIFFNDTKVIKAR

IYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKARVVELLDDGLRKVQFFQNDKT

LDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSETMFENLRKKHKIYH

LTLHVGAGTFKGVECENIQEHKMHSEFFNIPQQACEIIDSKQAILGVGTTVTRTIEYYARTKTKSGFCDL

FLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYKLAIKEKYRFYSYGDAMLIL

>ETN90542.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFTELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

ALITQSPHLSFAFLSKLFAKPLISTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAINFKEKSQD

>ETN90541.1 acetolactate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRRVLSVIVLNEHGVLSRIVGLFSGRGYNIDSLTVAPLENKEFSRINIVTSGNERTFEQIVKQLHKLIPT

YKVIESEEFIDKEMALVKIPLNENLGGLDAVLKAYNGTIANSNENFLFLMVADDANRIDNFLKTIKKYNP

SDIVRSGSVLMEIK

>ETN90540.1 acetolactate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELSGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNTITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPC

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKFAELLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSVGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENSNTTFKEWHETLK

RYNELYPLSYEDSNEILKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNIQELMTAYEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISNKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>ETN90539.1 aspartyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEELGVSSLKEQGLIMKEAKIKLGASVDGKRLNL

ALKELLQ

>ETN90538.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKTLNQKDIKVLGLSSLGGTLEFYDFIIFVFFANYISTNFFPKDLSSFWQMFNTYGIFAAGYLTRPLGG

VILAHFGDKFGRKRMFMISILLMVIPTFTLAFIPNYESIGFLCIVLLVFIRICQGIAIGGELPGAWVFVY

EHAPQGQKRTYLGILTASVVGGILLGSLVFLIMNKIYTQEELHEWAWRIPFFLGGIFGIISAYLRKFLRE

TPVFEQMKKDKALEKFPLKEVFKKAKMGIVLSMMITWVLTGCIVVMILLMPSYMAKILQINTSIQTYLQI

GGILLICLGCIISGILADKIGIIKSCVFFSVFFGIVSLLYFNTLYRQNADFNLVACLYLLVCFFSGVMNF

CPLIMSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFLWGFMFSFWLL

>ETN90537.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYEDEEDLNYDDYENEDEEYPQNHHKNHNYDDDDYEYDDDNNDDDFYEMD

>ETN90536.1 molybdenum cofactor biosynthesis protein C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLSHLDEKNHPKMVDVGDKNITSRIATASGMIYMSQEAFDVIKNNTAKKGPVLQTAIIAAIMGAKKTSE

IIPMCHPLMLSKVETDIMEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRS

>ETN90535.1 hypothetical protein X910\_05775 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVNLCDLKKEPQINYPTFWDYKVIFEVHVRASEIFQEILGQREYKFEHSNSSASGKYQSYLLNVYVDSKK

DRLDIFDKLKAKAKFVL

>ETN90534.1 hypothetical protein X910\_05770 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNTLIIFENSLSNLGKDEASDLLEDLSFNLAYKQISHNPHETKKVLNSLLVEFLTILKKLDFFDDENVT

KVIKALVKASIVDAQNSLYEYISEAELLNKQIENQKNLIKNQISDNFFEFENILQECSFCDEFSGGLNDA

ILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSIILNTAFEIA

NESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDVSLKSKELIGIEDDFIALLKKEIQLQNDP

CKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEIFELEKIAS

EKYKDLNSKKAKKLGVRLWEKAKKIVKK

>ETN90533.1 exodeoxyribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLLSWNVNGLRAICDKNALDWIAQEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRAGYSGVMS

LCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYADFLVYLDKLLKDGFEI

IICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFIDTFREINGEIKEKYSWWSYRMKARER

NVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>ETN90532.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLRLTWFQFTFFNSLMIVLLNFNLFYFVYEKNTQNWFITFVFIVAYFALVHVICSLLFIKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVKDLLNLKLILFIVLALLLVFYVVKVKIDYYGSFKSH

IKIKIINIISGLIVVCAVLIPLSKTFLPFFRNYNEIRMYNTPFYQIYAVYRYYVRFVKAKPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGVCDRLAYKQKLSSDLDENLLIPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDEKLMNLAKEHKGLKLSQDNLFSTLLGYF

NVKTSVYEPEYDLLNPKLKANP

>ETN90531.1 DeoR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKPKYHFLNNARYALEGLFALFKNEMAFRIELCIIIPAIVFSFFLKVSFLEHLLLISVLILILIVEALNS

AIEACVDLITNKWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>ETN90530.1 ArsR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFENLIREILGKKRFELLKFLCENADENGFIMIKISDLEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGGKNDT

>ETN90529.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILKNPLDMHLHLRDNQMLELIAPLSVRDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLYSAKDEIFGIKLYPVGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKHFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLIITLDDVIGGKMNPHLFCKP

IAKRYEDKEALCELAFSGYEKVMFGSDSAPHPRDTKECCGCAAGIFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMAGEILKFQLKH

>ETN90528.1 hypothetical protein X910\_05740 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVKNLIIKFGRLILDAIAAISFVVALLYSLFMMFSIGFLAGLLSLIVSFIALFLSFFVIYLVIDIRDALV

NKA

>ETN90527.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLWDKKAKTYARYQNTLNTIQKQTFEYLQNLNISFQNKSIIDIGCGTGVWTLHLAKEAKEILALDSANT

MLEILQEDAKKLNLNNIKCENLSFETWMQNNPNVKFDLAFLSMSPALQNEKDYTNFLNLAKIKIYLGWAD

YRKSDFLDPIFKYFNTEFKGFYKKDLENYLLEKNIFFHKIVFDETRKVQRTKEEAIENALWHLSMNKITT

SKEAVSSFVENDIIETIESKIKLLIINNL

>ETN90526.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLD

VLQARVGSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQT

AVQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAI

EAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQ

TTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>ETN90525.1 zinc transporter ZupT [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQFTFEQIFIAMLLTLFAGFSTAIGSIIAFFSRKDDLRVLSLGLGFSAGVMIYISFMEILPTALKDFKNH

YDSHWAELLGLACFFGGILISLLIDKLIPEDVNPHEPKEDLSELKICPLPQKGQNPPKFHPGEKLHQINT

KALKRTGIFTALAIAIHNFPEGFATFISSLDNLTLGIAIAIAVAIHNIPEGLAVSLPIYHATGDKKKAFI

YSALSGFAEPLGAFVGALILLPFIGDLTLAISFAVIAGIMVFISLDELLPAAKTYDKAHDSLYGLIAGMA

IMALSLNLLGQ

>ETN90524.1 trimethylamine N-oxide reductase I catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDRRKFLKIGASLSALPLIPSLSAGKTVEASKVSLGLVKNGEVITAAHWGILKLTIKDGKIVKSEPWEK

VTKMDNPLQHYTADMVYKSRVKYPYVRKSYLENPDNPKPELRGKDEFVRVSYDEAIKLIAKELKKTRDSK

GASAIFGGSYGWKSSGNMQNSRILLHRFLNVTGGFVGATGDYSTGASQVIMPYVVGSIEVYEQQTSWENI

LSDSKYVVIWGADPLSTLRIAWTSNEQRGLAYFEKLKNSKIKVICIDPVKTTTAKFLNAKWIAPRPNTDV

ALMMGMASHLIAKKKVNYEFLDTYTTGFDKFKDYLEGKEDGVKKDTKWASKICGIDEKTIKNLAETFYDN

PTMIMSGWGMQRAHHGEQPHWMLVTLCAMLGQIGTKGGGFGLSYHYSNGGVPTCKGGVIGGMTAGSLGIW

KNGKFKGLSKAEASSEGAEWLQNAASYSFPVARIADALLHPGKTIDHNGAKITYPDIDFIYWVGGNPLVH

HQDTNTNVKAWRKPRTVVVNEIYWTPTAKMADIIMPVTSSYERDDITMTGDYSNMHIAPMKQAVEPVGES

KDDYVIFSDICKIYGKDVFNAYTENGKKAKDFIKEYYNSALKQTQSFGEAFATPMPSFEEFWAKNEPITF

EPTAESLEWTRFSEFIEDPILNALGTDSGLIEIYSETIKNYNYDDCKAHPTWFEPIEWLGNASKEAPFHL

LTNHPRDRLHSQLCHTSLRDTYAIKDREPILINSKDAKKLGIKNGDVVRVFNKRGEVLAGAVVSDEIMQG

VVRLCEGAWYDPNENGLCKCGNANVLTMDIPTSKLANGNISHTGLVNIEKFKGELPKLTAFSAPKGAN

>ETN90523.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFISFVVLATCLWAKNIAYTDEVVSLYLNKDDTKVIGRLLPTNPFEVLKSENNKVLLKIDGYVNPKA

LSVIYFNDSQRIIVAAFSKNTKLNFSQRVAGKDGKWDKVSLEIWADKKEFAKDNKEMLNRAKELFVNNCG

ICHAIHKEKEFTANAWPAIFRSMADRTGIDKKDRWLVIEYLQKNAKDFKTK

>ETN90522.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHFTIFHIIAFIILLICFALICILIFLKVKQKEMALISYTIATIFTALLIYSIFLTINQFTTQADLSKLT

YTRDLRHESVIVSGKVQNLTKFEIRKCYLMLSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>ETN90521.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKLREIVLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIAALFIIAFDIIICFLVYIYGYKLID

NEVRTRKTAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKS

REIKDLKKNATQVQRIAFENFNYENNYTIRLVSECF

>ETN90520.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIILFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSSGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIAAQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSAANMN

>ETN90519.1 branched-chain amino acid aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISADKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEDHTKRLLESAKITLLNC

PFSQKDLENAQIELLKANNFQSNVYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLKIAHDLGITVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARIIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>ETN90518.1 tautomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPLVNIKLAKPSLSKEQKAELIADITELLSTKYNKSKERVVVVLEDVENYDIGFGGESVEAIKAKANK

>ETN90517.1 bacterioferritin comigratory protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSANYDKFGGKNAVIIGIS

PDSVTSHEKFISKFNLKHILLSDSEKEVAKAYRAWGLKKNYGKEYEGIIRSTFVIDETGKIAQIYSNVRV

KDHALKVLESL

>ETN90516.1 hypothetical protein X910\_05680 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSSVNKQILPASIEARIALYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPVKSHILFYSHFKNAYTRFSLDEESLKQNLKEGFYRS

TKDEMVFVEFWRFNAFFKNKWKNFEDFLKKPLSIQAEVRWRNQVFGAYNLSPVIILEEIFPSRYEVIAKS

EIYHDNQEVLAKI

>ETN90515.1 3-hydroxyacyl-ACP dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>ETN90514.1 UDP-N-acetylglucosamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>ETN90513.1 ATP-dependent protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKELKAYL

DRYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAIC

DATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLK

IIEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEK

IEPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIA

QLALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>ETN90512.1 rod shape-determining protein Mbl [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGFDKYLSEIVRLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>ETN90511.1 rod shape-determining protein MreC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNKIFYVLVLAFLVFISFYYGGLIKQNVLRVNDFVIGNFYNIKDYLGKKISEHFNQANQIQQLKARNKE

LEDIAVKVTSFANQLNRILEDQNSTKYLPQVSLTRVISYVQLNDYKKLWLDWSKIPVGKNRGLIYQGYAA

GIAINKNGRAMALLQGDDQCVFSVYIGKSKAPGLIQGEDGRIVVKFIPKWAKINTGDEILTSGLDNIFFS

DIPVGIVNRVNDEDMYQSVEVKPYVKISIPAYLYVVDNL

>ETN90510.1 carbamoyl phosphate synthase large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGTQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAADEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQVMRNASFAILREIGVDTGGS

NVQFAINSKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFGAKIIGTSARVIDVAEDRKKFAEFITKLGINQPKNSTATSVE

EAVLKASDIGYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKIAAEYV

KLGFKLMATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIR

FKIPYFTNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKS

>ETN90509.1 Sua5 YciO YrdC YwlC family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYLAQTDTTVGFLSKNLEEINALKGRDKNQPCLITSAKFCELKSLARIPKSFKNLVRRSKKTTFIYPNN

QAIRIVKECKHANFLSKNGYFYSSSANKHGKEFDEEWARSVADIILDEKFFENIPSKILKLSKNKMIKIR

>ETN90508.1 transaldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>ETN90507.1 phosphoserine phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLCVFDFDATLMDGETIDILATAHGKGNQTSEITRHAMAGELDFFESLQKRVSLLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGISLGFANYLHHKNDILTGLVGGEMMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLTMFNESGLKIAFCAKEILRSKADICIDIKDLKEIIKVI

>ETN90506.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>ETN90505.1 chemotaxis protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLDLLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGNDTAIGMDIEPICARLTAISEGESPVAATDSN

EKSTPQAEPEAPKQETTTPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNTSSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGVEDPATRAANGKPEKGIVQLKAYNEGNHIVVEITDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLVEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>ETN90504.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDENIVKTGSNEMELVDFRIFKQGHDKVYEGIYGVNVSKVREIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

EKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>ETN90503.1 hypothetical protein X910\_05615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGDIFDLLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPIKLNLHTS

KGNNLVLNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITCNFISNKILQNQNKKTFFIK

>ETN90502.1 transcription elongation factor GreA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>ETN90501.1 ipid-A-disaccharide synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTFLVCALEPSANLHLKEVLKAYKKDFGEFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELINLSFAQKINGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDEIKEFKNQEDINHTFSKKDDEKTIAFLPGSRRSEIRRLMPIFKE

LSQKFKGEKILCVPSFNLEKLEIYGDISEFKIESNTPKVLKKADFAFICSGTATLEAALVGTPFVLTYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>ETN90500.1 ABC transporter ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIITLFGACALAFSMANADVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATWFEKAKKDADIL

FGASDQSALAIASDFGKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSG

TGVWEDMIGRTQDIKTIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLV

VYRTFNVVAKEGASKETQDFIAYLSSKEAKEIFKKYGWRE

>ETN90499.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRTWSLSGVFIGYMGYYLVRNNITLANWYPKKERGIYTAVWNISHNIGGGIVAPIVSLSGFALAALLGVS

MANFNETYWHMNHFYTPAACAVIISLYALYAVKGNPKNEGLVDITEINEMRGIKTEEIKAIETPNLSSFE

IFYHYVLKNKNAWYVAWMDTFVYMVRFGLISWLPIYLLETKGFNKEQIGIAFWLFEWAAIPSTLLAGYIS

DKIFKGYRMPPAIGAIVIIFFMIIGYFTSNNLYMVIFFAAMAGCLVYIPQFLASMQTMEVVPAFAVESCV

GLHGFMSYVVGASLGTKA

>ETN90498.1 acid phosphatase SurE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKSFKIFLIKVFLWKKKNF

>ETN90497.1 hypothetical protein X910\_05585 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAAANLDFEDEKNSDIALLKKGY

ATITPIMLDLTAYERMKKVKKWLKANDE

>ETN90496.1 MoeB/ThiF family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDRFTRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFQNLTLIDADKFEITNQNRQIHSEN

LGEEKAKVFARIYNVKGIVSKIDNEFLANFDLSEFDLIIDAIDDIPAKVALANLIDFKRQIFISSTGGAR

KLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLAL

RKVLAR

>ETN90495.1 aspartate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>ETN90494.1 pantoate--beta-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>ETN90493.1 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>ETN90492.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>ETN90491.1 molybdenum ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>ETN90490.1 molybdenum-pterin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNILNGKIIELLNEGEIVIVKISIKEHIFKVLMLDLHSLQDLKIGTKIQVLFKEHELGFALPHSILSVEN

SFLARIKSIKKGKILYHIFFDFEGDEISSIIAKEKALELKLEEGQEWLCFVKENDIILKAIYG

>ETN90489.1 molybdate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLVLIFIVLFLSLNLNAQNLSVFVASSASKAMEEVKNEFLKSHPNDNIDLVFGASGKYYQLLKQGREF

DLFFSADTKYAQAIYEDQNALDKPKVYVLGILALYSLDESLLEGGIEKLKDKANKIHHLSLANPKVAPYG

VAAKEVLENLKLDKLFEDKIVLGENISVPVLHVDSNNADLGIVAYSLVSSINHPKGKAILIDQKYFTPLK

QSYVITRYAKDKKLAFEFSDFISSQKAKEIFKKYGFDTP

>ETN90488.1 biotin biosynthesis protein BioC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFLKAKDYQKHAKVQDLMGLKLCEILKNLEISHFKKVFEFGCGRGEFSDKLSKIITFDEYLKNDILDYP

DNLNVEIFDMNTLATQILSKQKFDLITSNASLQWLDLKQVLPTLANMLNEKGILLLSTFGKMNLKEIKQS

TGLGLKYFSTKELEQIFKPYFSDIKITEEIVNLEFQNALEVFKHLKLSGVNSLGFYRLNKQFLKEFEEKF

QNKLTYHPIFILCKKDTK

>ETN90487.1 hypothetical protein X910\_05535 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>ETN90486.1 8-amino-7-oxononanoate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLENILEALEKNHNLRKLTSLKHEGNFVFKEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSS

SSSRSLSGNFTIYEELESFLKSKFKEKEILHFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKL

GGAKFFRFHHNDMNHLENLIQKHYDHYENIIILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSV

GCFDEEGLGLVKALNLEEKVDFIVFTFGKALASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTK

FIFEKMSELKEKREKLQIIGNFFKNQLIEKNHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKE

PTVPKNTARIRFSLHAGLSKEDLKKVIELL

>ETN90485.1 adenosylmethionine-8-amino-7-oxononanoate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNEILKKLDLEHIWHPCTQMKDHENLPLIPIKRAKGVWLYDFDDKAYMDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGVKKSKF

LSLSNSYHGETLGALSVGDVALYKDTYKPLLLECLSTPVPQSKDYTQELEILKDILEKNASEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHKFGVQVIFDEIAVGFGRTGTLFALHQCKQSPDFICLSKGITGGFMP

LSVVLTRDEIYNAFYDTYESQKAFLHSHSYTGNTLACAAANAVLDIFEDENILVKNQILSEFIKKEFSRL

EKFDFLGNFRTCGMISAFDILSTKYKRVGLFVFQKALEKGLLLRPLANTIYFMPPYIITKEQIVYVLESL

EQIFKEF

>ETN90484.1 ATP-dependent dethiobiotin synthetase BioD [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>ETN90483.1 quaternary ammonium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEWFYLFLATACEIFGVVIMKELISTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIITCTAGLKFLS

>ETN90482.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWQYILTAIGVCISFTCFLKACERLEVSITYSVFVGI

GTIGVVLNEMFIFNEAVSIIKLVLIAILLLSIIALKWVSKEA

>ETN90481.1 50S ribosomal protein L25 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>ETN90480.1 peptidyl-tRNA hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>ETN90479.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MWIFFRFISGIYLKNFFIIFFSLLGFYCGIDLLLNFKDLPKAANLDLLYVMFLSFSAVPYVLPISLIFAL

VVSLISMIRANEFVSLYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFAYANDYKRNILKNGTIMNQSG

EVFLKFNNNFVYISKINNGQNSAQNIKIFNINDLNLSSFVSAKNAHFEGESWILRDGNITLLPKNYELAN

DGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNTDTLKINLYKFVFTPFFAPFL

MLIMYYFFPVIARFFNLAIVTFVTFVVTLMIWGVLFLLTRLSENSVIASEIGIVVPIIILGCLSAYMYYK

HR

>ETN90478.1 diaminopimelate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAGAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIARKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIHEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECESDLYDYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFENQIALEEKFLKA

>ETN90477.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYVIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLKPCKVAAFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFVDFASMIELARREVRFIAMHETS

IYKKDGRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRKQNSKIDFEDIKIISDDFRGDLLK

AKELGMKTLLVLSGKISDTKGLDTDLLDGVYPSVFEFLKELKCQI

>ETN90476.1 chloride transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGAIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALANIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFAGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>ETN90475.1 histidinol-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>ETN90474.1 flagellar M-ring protein FliF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFKNMLHQIGQLYQNLTRKQRIVIAASIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQVYRQRMFIASEGLIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRVQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

TKKQFATVLRTSAAVTIDGKYQDVVDENGDVKSEYVPLTKEELASVESIVKNTINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAARKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>ETN90473.1 flagellar motor switch protein FliG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQKLAEQGLVQTGDADEMIE

>ETN90472.1 flagellar assembly protein FliH [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEENQAITPTQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELENAKEKFAKEGYEKAKEEFQKE

LSDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGELKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>ETN90471.1 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKEFNPCEIKLGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>ETN90470.1 peroxide stress regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYTEIKKEYPSISLATVYKNLNTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCAKCGGIEDLSFKDAKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>ETN90469.1 hypothetical protein X910\_05445 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVYEIQKNFLLSDCTLLGNLKKDNIPFRNSKFETFYTQITSNHSVKFQSFCNEFYKITKFNNSILEQNQE

EKISKKKFEKARKKIIGKSIKKERFEFKFCSLKSYIDMYEEPKICILKIFFPTLDSSNEFKIPKDFKIQK

ELHHDLNSKHIVLYGFEYQNFDIEKYFKIIEKNQNFSLDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLE

RKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILALKFKDITKKTQDILASENSNQDLLLFLSDEKIQ

DLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKIILFRKNILKNFDLELFENSFFELAIFLEYFYRF

LEIKNLNKLYEKYCKDRDKNIFSKIINNKNKFCKLLKKSSKNLKIYKG

>ETN90468.1 ubiquinone/menaquinone biosynthesis methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>ETN90467.1 exodeoxyribonuclease VII large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>ETN90466.1 hypothetical protein X910\_05430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFLEK

>ETN90465.1 hypothetical protein X910\_05425 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAECKKNAGISGLSCIFIRKDMLERSKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGG

LDKVHEKNSQKAAMLYECIDLSNGFYKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHR

ILGGIRASIYNALNLDQIKTLCEFMKEFQGKYA

>ETN90464.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKRFDECDRMSQIIVFDKYFKTAGQVAFEPSGDIKKQTKEALAELDALFEKIGASKGDLIQIQIWLANM

QDFDAMNEIYDAWIKNYPKPVRACVGSALAEGYLVEIQAFGKLREN

>ETN90463.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>ETN90462.1 phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEASEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>ETN90461.1 50S ribosomal protein L32 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>ETN90460.1 hypothetical protein X910\_05400 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAIMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEVYLSDYFYCINCNN

>ETN90459.1 nucleoside diphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>ETN90458.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>ETN90457.1 peroxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>ETN90456.1 flagellar biosynthesis protein FlhB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIMIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVTQLAWLRDRAIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVAGADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKETKTFKVL

>ETN90455.1 flagellar motor protein MotB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QEKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQVALNLPSKVEFERGSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKAP

>ETN90454.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGKKLKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPRISQFDKG

>ETN90453.1 DNA polymerase I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMISGFANFIYSLKNEYKSDYIVFALDSKGKTFRSEIDP

NYKQNRTPPPPELLEQIPICIKMIEKMGFISVSQEGYEADDIIASFVKTCENRDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEAACLEKYGVKPNQIRDFLALCGDSSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLVRNERSRNLLLEGKENAFLSKKLASLYDNLEVQNLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLVQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMNENEAFYV

PLTHNYLGVGEQISLQSAKKAIEAIFNHFVIGHNLKYDFKIIQNNFDLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLETPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEILMKKFENEIKNLSEEIYTLCEDRFNLNSPKQMGDILFEKLKLPSGKK

GKTGYSTDEKVLNILLDKHPVIAKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFISLDYSQIELRILAHFSEDEKLLNAFANDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEANLAKSYIEKYFENFTSIKKYFEKVKNEAKQNGFI

VTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADVIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>ETN90452.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNQQIDGIADKNFNTPEGRKVFKKAVFSCWLGTAMEYADFALYGLAAATIFSEVFFPEQTPVIALFLVL

>ETN90451.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFGYLGDKHGRKNVMMATIALMGISTTLIGFIPSYAVIGVWAPICLVALRFM

>ETN90450.1 major facilitator transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGEYAPSKRRGLVSSVIALGSNSGTLLASFVWLLMVQMDEASFKEWGWRVPFMGSILIALFAVYIRFHV

KETPVFEKQKNEMMKLRLNNEKHMKKDERSFWQRSRAFWTMVGLRIGENGPSYLAQGFIVGYVTKILLLD

KSVATTAVMIASLVGFLVIPLAGYLSDKFGRCITYRMFCLLLMIYAFPAFMLLDSKNEIIVILTIIVGMS

LASLGIFGVQAAWGVELFGVKNRYTKMAFAKELGSILSGGTAPMVASALLAYYGTWWPIATYFVLTAGIG

FVTTFFAPETRGRDLNKIEDAI

>ETN90449.1 nucleoside hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRLILDTDIGNAIAGANTDDGLALALILSSKEIKLEMLSTVCGNVPSLVAYSVAKDLFKRLNLNIPVYLG

ANEALKEPSKAWRQRLDESVKNFKLEYLWENIKSPEILENINPDAIFKMGELVSKNPKEISICAIGPLTN

IAMTMKIFKDFDINLKELFIMGGSFDMPYYTKDTNFGFDPEAASIVLNSRAKITLIPYNATMQTLLTHED

LKELQGKNILCDFIVETLGVWIDYASKTRGTKGTWMHDALTIAYALDSSIADFDECYADVICDSSLARGM

SWRCFKEPKMSMGVDLSTKNCVKILKNVDNAKLLKLIKERFLKGVCYENYESITT

>ETN90448.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDFLYNDISYLGLFMVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIVATLGNTLGSLSTYALAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSIFAFFTFLPLVGDLFALGLGFAKYSFLKTIFFILLGKLSRYAFI

IFIANSF

>ETN90447.1 UvrABC system subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVSEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKIIDENLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFMQLSEEQKRL

VLYGNAKTIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAVKVAKKGL

GEILDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQR

IRIASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKA

GKFGGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRTQKEWLELKNVNINNIQDLSVKFPLQNLVAI

TGVSGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGAM

DEIRNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCEGKRYNDATLEI

KYKGKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSD

TGKTLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGIKGGKVIST

GSVEKVAKEHKKTRSYTGYYLDLELKNTQKS

>ETN90446.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASVSGIISFSNSGVIDSEVIHKGILV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNFINF

>ETN90445.1 hypothetical protein X910\_05325 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>ETN90444.1 anthranilate synthase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFVKNVNFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKNKICDFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPMKKKQKNDF

EILNSLEDEKNDFLKMCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSAYMFYFPSKYG

VVLGSSPEFLLKIKKREIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQT

RVENLFSIIKNKFVMHIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEITSELEDCDRGIYGGA

VGFLNFNEDITLAILIRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>ETN90443.1 anthranilate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILLIDNYDSFVFNVKSMLEQLSNDEILVRRNDAISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKNSLIKQCRENELFSNLPSNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALGHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKPQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKDYEILQVAALLILITEKSLNEKSLSAFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNITTPNTLESVLKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYDNAKDLKDILSGRMQGAKFDLVVLN

AMFALYTANKASSPLVAKDMILEAIYSGKVIEYFKEYQAYAKA

>ETN90442.1 N-(5'-phosphoribosyl)anthranilate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKLKICGIKDEKNAKDLAFLNIDFFGLIFAKSPRRVSLEQARNLSAIFHEKDKKVVGVFVDENLEQILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVENSLDLKSEIFANLVLFDAKGILKGGNGISFDW

TLLGSYTKDFALAGGIGLDNIHKAVQTGAKILDLNSKLEDEKGLKDINKIKQILKELKK

>ETN90441.1 Tryptophan synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKWERKKS

>ETN90440.1 tryptophan synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQALNVYKMELLGAKIHAVQSGLKTLKEAT

TAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECKMQLQKLNKKVDYIIAAVGGGSNAAGIF

YDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKTKVLQDDLGNILPVHSVSAGLDYPGIGP

LHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHALAFLEKLCPTLKKKSVIVVNLSGRGDK

DMQMIRDYKKGVIYG

>ETN90439.1 tryptophan synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>ETN90438.1 hypothetical protein X910\_05290 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKILEYSITHFCEHILRLRIEAAQDISGELYGASIPIMGKSEGECNFYLFFPKEFLKKIAEILINDEKF

KEDDWCDLTKECANQIIGYAKNLLNDAKGDDEYKLGIPEYLGKVDFSEIVLDEALTYKFENCYFRIGYCK

>ETN90437.1 flagellar motor switch protein FliN [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>ETN90436.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRLLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKEL

NSQLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVPTTTANNSQELMPKP

KSTSLEGYDYTNYILVMLILVILLIVLWWFKKTMVYKNNNVSRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLIEQRQKGKKS

>ETN90435.1 guanosine polyphosphate pyrophosphohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKTAVVDLGSNSIRMVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCA

LKHKCKKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGG

GSSELCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAIS

NSIMQKNSYPLKNLHDFRYMLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKEGIFIFLKIAEKIKAKQ

VITSGVGIREGVYLQDLLRPKITFPPNFNPSLKCLQDKFLQSKQKNKTPHFALQIFTTLKNLHKLNDNYK

HTLLNAAKLCHIGEYLNFYFANEHSAHFVLGGLNYGFSHKEKALIASIIKLNGKKVNPYNLEPYKQLLPN

IHTISWLNFILCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>ETN90434.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLLITKDCVCCDACREECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>ETN90433.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTIKHKS

PRTSVMIMSSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIEDLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>ETN90432.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPNLTNLNIKIFKPHIIKNATVGVKLKKKY

>ETN90431.1 glycerol-3-phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>ETN90430.1 cytochrome C biogenesis protein CcsA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVKSLLIASLVAFSSLNAASLIDEAKNSGLVALPKDQKGVDEILKQNGVKASEFTLEKAELGKKLYFEP

RLSKSGIISCNTCHNVGLGGTDGISTAIGHKWTANPHHLNSPTVYNAVLNNTQFWDGRAGTLADQAKGPI

QADPEMATPAKLAVEKISSLPEYVSEFKKIYGKSGVNFDNIADAIANFERTLITPSRFDKFLEGDEKALT

KEEQKGLKLFIDKGCVACHNGVNLGGNMQAFEVAGKYKFANLGDFKGDANGMVKTPTLRNVAETAPYFHN

GAIWNLKDAIKEMGSVQLGIKISDKEAKSIETFLKSLTGTKPAIVYPQLPISTEKTPKPEL

>ETN90429.1 hypothetical protein X910\_05245 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTFLAKFKDNYNKAKIKKFKQALKIELVWNLIVQV

>ETN90428.1 phosphoglucosamine mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIAALQFS

ALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>ETN90427.1 peptidase A8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>ETN90426.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEIVKIQERKLYFYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>ETN90425.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLFQNLALKYSHTMMEKSLQKGFNVELLKQPEEKIPKQDKSYMLYAHVPFCHTFCPYCSFHKYYYDENL

AKVYFQNLREEIKIMKDKGFDFTSMYVGGGTTLINEEELLKTLELCKKLFNIKEISCESDPNHIDPNKLS

MFKGIIDRLSCGIQSFDDETLKKVARYNKFGSSKELQEKISKALGILPIFSIDLIFNLPGQSEKQLLNDL

EIAKNLAPQQITTYPLMKSNLTKDNIAKSLGVSIKDNEFAYYQIICEFFKDYTQNNGWSFSLEKNKLNDE

YVSSHHEYLGVGSGAFSFLDGELLINAFNLNDYAKFIQEKQNANIAKACFDKKEIIKYVFLTEIFSGKIE

IDKFNKTLNCNLEKELFIELLGLKTSGAIIKDQNALIATEFGQYLFVVLMKDFYTGMDLVRAVFRDDKRL

KNKDYIDIMKENIDPLNSASMEFKAETN

>ETN90424.1 chain-length determining protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKAKIVQNLNALFKQRAEFYSYFDENIAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>ETN90423.1 outer membrane channel protein CmeC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKENNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>ETN90422.1 RND transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGAIFYLYKAVPNS

LVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLFTSSLKENAAAMFIGLQ

DWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSGKSYDEIQKDVNKLVAA

ANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVNDFSMLGKNFQVNIRAK

GDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQPAPGYTSGQAIEAIAQ

VAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLAVVTAVPFAVFGSFLL

VYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKLRFRPIIMTSLAFTFG

VLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKRGKVHE

>ETN90421.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLFQKNTILALGVVLLLAACSKEEAPKIQMPPQPVTTMSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQALMAKATFENASKDFNRSKALFSKSAISQKEYD

SSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSASTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>ETN90420.1 TetR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>ETN90419.1 4Fe-4S ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYDGHTKLHKKPPEGECIGCEACVSICPTHIDIRKGMQLECINCLECADACSKVQSKFNRPSLINWTSA

KAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELVISNAYTFLF

QNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIRATKNLANNDKKDVIFPLHIKAYA

KDNEKISVFRKSIFVYPKSTLIKDKNELK

>ETN90418.1 hypothetical protein X910\_05190 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQGHITNYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFLTQEFYLMPFVLIFLFL

FIFLLQL

>ETN90417.1 30S ribosomal protein S21 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>ETN90416.1 colicin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDFFDFFHKFILKTENLNLEILTKNNKYFLIPNEVCRYKKSPFGLLG

>ETN90415.1 hypothetical protein X910\_05175 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>ETN90414.1 glutathionylspermidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANAYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLIPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANISIIKDGKTLHENVGPYGNNKAIYQEYVEFNSCE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>ETN90413.1 2-hydroxyacid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKNLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFMFAFLNQVLYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVVKISKAFGAEIYYYSTSGANKNADFVHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEALNALMDIVYNNLKEWIENGK

>ETN90412.1 hypothetical protein X910\_05160 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>ETN90411.1 hypothetical protein X910\_05155 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKHCLALCFIFFLCACSAKNQNFSSQSLMVLIASPMIKINDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKQVFNQKFFKNVYYDDILNDILKANPLWQGRNLEKTDCGFEQNLKAKNYEIFYYVCDNKV

SFFDKISHTKIILTHIQN

>ETN90410.1 hypothetical protein X910\_05150 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYFYHLQDKEIFAIVYDNTPMTPLFDRDKNQTSSSFLIVDDINGNLEIPLFKTNDFWQDEHKKYKINSSK

MLTYDNKNFQGENLGTTTLELVETQDGIRIKRSLDFIGFKDDFKEFHPVHKGVFSFEQIRQKPIFLQDGK

ISFEEWYYFYEDGMSRAILELNNFVYDINAHAFVKLNDLYNTKNQKFQNLLHEKLKNTCDECFEDLQNLQ

FNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>ETN90409.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLENNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FARIQLYERLSFIQKSAYNSEIKNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSTDINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFQKPDF

KDRLKIWEKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSKDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>ETN90408.1 ferric reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTKYFKFLAYFSFIISLIYGFYHIIKAFDFVKEAYIYTGIFALIFLNLSLLFSLLKFKKTKNYPKILGI

FAAFWAILHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCL

VLASYHYFLTPKIPMFWEWSALIIALFYFIVRYTKTLKKLKSNNLTFIKT

>ETN90407.1 sulfoxide reductase catalytic subunit YedY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIITPENLYKKRRDFLKLGAGALISSSVLASKLSALNFTSDTNPNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSMEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEMAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>ETN90406.1 orotidine 5'-phosphate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>ETN90405.1 transcription antitermination protein NusB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDNQITALGHVERAILRLGAYELLFTDTPSAIVIN

EAIELAKELANDNSPKFINGVLDALIKAKK

>ETN90404.1 hypothetical protein X910\_05120 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKNTQ

>ETN90403.1 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>ETN90402.1 hypothetical protein X910\_05110 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGKSEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPN

MLNLTRLKNCVNTLLEIQNIIKENK

>ETN90401.1 2-dehydro-3-deoxyphosphooctonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKMVFL

>ETN90400.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFFIVYLLKRSKAHKEGGHFWL

LVFRGVVGTLSLYMFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQ

PWAHNLNHSGFDLKNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQ

HLDSLHLDFILAPFVMPSLTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIIL

GDSLPSAMVFLGIIGIIFGGLILVKNKGKK

>ETN90399.1 GTP-binding protein Der [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>ETN90398.1 shikimate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKVSEIFEQKGENFFREQEQKMSDFFS

SCEKTCIATGGGFVNVSNLEKAGFCIYLKASFEYLKKRLDKDEISKRPLFYDEIKAKKLYNERLSKYEQK

ANFILNIENKNIDELLSEIKKVIK

>ETN90397.1 tryptophanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRVLTGLQPSGDLHIGNYFGAIKQMVDAQEKSQMFMFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

PQKSVFWLQSDVKEVMELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMAADILLFDTQIV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEAKVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDFKNCNVFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELANAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>ETN90396.1 seryl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>ETN90395.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEQEDIILEKPEDGLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPQENSESGFKFTRESAPEDVST

FEEVESQEPTPWYKDRKFMSLVGLSLGIICILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDMEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLARLQNSYDNDKDRYKILDAYKIQVRLNKDLFNIAVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQAALYIKKANVTDFVDDSADAGVYLNTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDETKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPNIAREFYVNLMHIAGLLNLERQKIKEL

INVSGAKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAIGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>ETN90394.1 hydrogenase-4 component G [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQVNTFSNIASMAQTQVSNKKADDAKENTKDKNVQSANSSKDVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNAVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSGKNPLDMNTDELQQLVSEDGFFGVENTA

NRIADFVIKGGGDDVEKLKKGLEGMKKGFEQAEKMWGGELPQISQNTIDAALKKVSDRIDELGGKTLDLQ

A

>ETN90393.1 pyruvate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKNLDTIRKVAKELHIRIGILQDISG

PKIRTGELKEPFELKKGDRLDFYRETILGEKIAQNHYKISINQKSILDMLKIDEYIYLYDGSIRAKVVNI

DDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFVQNAHDIDEVREIL

AQNNAKISIFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQKANNASKPVITAT

QMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVGIMCQTIIETEKRYPYNKFNDFN

DLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLNSLSIVWGVNPAIL

VNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGTSNLIRILNKEQIAYYLQ

>ETN90392.1 malate:quinone oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGLMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYVKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIIHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

VDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLVCNYLGMEFNEDKFSSELL

>ETN90391.1 pantothenate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLLCDIGNSNANFLDDNKYFTLSIDQFLEFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYGVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>ETN90390.1 tram-like protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKILEQTIKALKLNLKPYDLSMLTRKKSYICAKDQNNILFMYTGKTKFLMKDALFLENLAQQININNKY

FFSMTSLCSKAKNHLEMKGFNIYAAL

>ETN90389.1 hypothetical protein X910\_05045 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLAYQDGEYFTADNNGNLKIFDNSYNEIYNFQFDASVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQIIKDVVISAENFFNNAIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFVKSNIYN

NYLYIFEKTGYLIKMNLNLDNTQVFKLSEAVDKISFMGNGKFYYGNKILDLL

>ETN90388.1 hypothetical protein X910\_05040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPSNKNLLEQLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNTQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKFLEQNKIEEANVLLSQIKENSSLNQITKNLKHYQGITQ

>ETN90387.1 glutamyl-tRNA amidotransferase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFVVPKIIE

>ETN90386.1 colicin V synthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQAAEFIQSTFYKIENQSLAGFA

GFLAILIIFWIVCLLAGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFA

KNSYTLNLLKETGSFIMNQPLTENSLDHANEKLQDIVSDLNNTQKGE

>ETN90385.1 Fur family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>ETN90384.1 lysyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>ETN90383.1 serine hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>ETN90382.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALNEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHM

>ETN90381.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLINGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTASSSNNNDSTNFAMPDQEVPAEPTAATSENT

APQASAPKQEVKQTVKPKEEAKKQTAVKKEKESTKQTPKKEQNANDLFKNVDAKPVHPSGLASGIYVQIF

SVSNLDQKSKELASVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>ETN90380.1 shikimate 5-dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDKIYAYNTDALGFLEVIKDFDNIKKALILGAGGTALALAYVLKQKGVEVH

IANRSKERFKDFLAYRAYLYKDLQDFDFDLVVNSTSAGLKDENLPCDRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>ETN90379.1 hypothetical protein X910\_04995 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVEPIDSGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEEQIKTIARLKGYKIVTANPDYTLKNSISIYTEEKNAQKTSNFMSGDYIKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSGFNSFDGDATFEESLPQTNSNQNNTIESTPTQNIPTNP

SSINQNNKSKNQDGVEIFE

>ETN90378.1 prolipoprotein diacylglyceryl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>ETN90377.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQTTAMIKNYNGANYEYTI

>ETN90376.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNIQYSDALVIGGGLAGLRAAIEVAKSGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRMEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGPKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>ETN90375.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>ETN90374.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVNKDNYERYFLLKEFQELCKKIDLRVDIFSMQ

NAQICILNLFKSGFISKQDLLKALKILEKISKNTEIFDFILQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKSRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLKNNISIVDTPGLDDVVVQREIVTNEYLRESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIVLTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQEFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLKEAQDEISNSIAKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNLSRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGISKNIDSIFQSEKFALLRLKIEKLSNL

KSDLYELETNLDTVIFDTFKEFKMSEILNSLNINGAFFEFLNDKLKHYEKNQKSKLESLEKVLQSLKNQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>ETN90373.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQINLLNDFIKAYENTYSVSFDDSFKGRIQELCKELNEPFMHASYALENELKELVFSLDKNVNIAIIGQF

SSGKSSLLNLILGRDCLPTGVVPVTFKPTFLRYAKEYFLRVEFEDGSDIITNIEKLAFYTDQRNEVKQAK

SLHIFAPIPLLEKITLVDTPGLNANENDTLTTLDELKNIHGAIWLSLIDNAGKKSEEDAIKANLELLGEN

SICVLNQKDKLSAEELDNVLNYAKSVFLKYFNELIAISCKEAKDEQSYEKSNFQSLLDFLTQLDTTVLKE

KFVKRKILNLCEILEDENQLFVGIFDRLLNQFQSYEKHLLLAYENFLKEIEILNHQILEQLKSISERISS

EIFASVKEKDAYFYKESKGFLKKDLYTRYDYKAPYISSDDAFLAMFYNSDVMSKEFKKIKNELYKSFEEI

KMKLKDFINILEREILLFKAEFSNIQKDHIFQSDKNFSELRAFCNASDEYFLKDFKELLFKSILELDLFF

EKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEFVLFYPKKSEIYERVLNELNVYEFETLLINK

PILTKIAKNFLEQSQNLIQEKNKFLDLKKAELQKRRAQILNVRESIKED

>ETN90372.1 hypothetical protein X910\_04960 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIFLTLFLFFNSLFALSELEEGLKLYEANKFDKAYEIFKSLCEKDISKACFSLAFMHESARGVSKDLNQ

AYKFYDKACKLGLANACSNMALLLQNQGYENEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASVKSALAFYSKSCTLGFGDACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>ETN90371.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQDNIIDRRSFFKLGLLGGSVVAASTIGGGAVLKAAELTHSHQASQGKSNKIRGRMFFQTQTEFDTLSAA

CERIYPKDEQGEGAIGLGVPYFIDNQLASAYGYNDREYMQGPFMEGKAEQGYQTPMQRKDIFLEGVHALE

ENAQKRYKKSFSLLKGGDQDKILSDFEKGKIQTTGFKSSYFFTLLRDMTVAGVLADPIYGGNDNKNGWRM

MQYPGAQMSYVDKIASDEFFNIEPMGLADMES

>ETN90370.1 GMC family oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEVLKKVDVVTVGAGWTGGIVAAELTKAGLNVLSLERGHMQSTENFNYIHDEWRYGINYGLMQDCSKDT

VTFRHDPSGLALPYRKMGSFLLGNNVGGAGVHWNGWTFRFMPYDFEIQTLSKQRYGNKLGNDYTLQDWGV

TYKDMEPYYDRFEKTCGVSGEPNPLAEKMGAFRSSPYPQEPLENTKMLKRFESAAKSSNLHTYRLPASNS

KGGYTNPDGQDLAPCQYCAYCERFGCEYGAKASPLNTVIPKAMSTGKYTIRTYSNVTQILKKDGKVTGVK

FVDTRTMKEYIQPADIVVLTSYMFNNAKLLMVSSIGEQYDPKTGKGTLGRNYCYQMNMGTTAFFDEQFNT

FMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGTRPIQSAPLPAGAPTWGAEFKKALNYNFTRAI

TVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTDQDRALHKFITDKTAEVAKRMQGVKSIKKGAY

LKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDADNLFVVGAGNFQHNSGYNPTDTVGALAYRCAE

GILKYHKSGKSLA

>ETN90369.1 hypothetical protein X910\_04945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITLSSFNRYFGNNPLQTLTKIRDESIENAKI

>ETN90368.1 hypothetical protein X910\_04940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNILHANSSHRFHKCMPKEVHQIYDTLKLMEQQEGTKKVEAKKEEQSNSTNTDKVDNKK

>ETN90367.1 hypothetical protein X910\_04935 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>ETN90366.1 histidine triad (HIT) protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREAIKLDLPKFEEFVKFLNSKIF

>ETN90365.1 hypothetical protein X910\_04925 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>ETN90364.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLG

>ETN90363.1 hypothetical protein X910\_04915 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILKNLIKTFQILDFNKSDNCIEKNLKAGFIYFNYEILDYQSQLFSSFFLIQSLKIFISKKFKENHG

>ETN90362.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSTLQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFAGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIAHAISPDTGSMHLGATIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIALGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>ETN90361.1 hypothetical protein X910\_04905 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLSD

KEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>ETN90360.1 hypothetical protein X910\_04900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQVNYRTISSYEYDAISGQYKQVDKQVEDYSSSGKSDFMDILNKADEKSSGDALNSSNSFQSNAQNSNSN

LSNYAQMSNVYAYRFRQNEGELSMRAQSASVHNDLVQQGANEQSKNNTLLNDLLNAI

>ETN90359.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTINQIFQTQIDIKKSIFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLARAYSDAANAVINNSSLLSFELKKNISIAIDLK

NLNRFEYFLKTYSFNFTKDFKDCKAILHIKLNEKEDQEFEIFCKNFAPFEIEKL

>ETN90358.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFSHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGASISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYHLTFQKYKNLLWFLMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIFLIFCYFLIVANQLLYYFINNSNRHFANNYHFAKELALELKKQDVL

ELATAPSLQKRLRFYGIKNSNKFYLKALKQADKHDMDKKIVKVKLGKYEKVYQILNYD

>ETN90357.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKAFSLLEFVFIILILGIVFNLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNLTKRFGIEKVEFKGSCSGFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYVYIPDFKTLKSQFVNIKNKNYECSKI

>ETN90356.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

FITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNL

LVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>ETN90355.1 paralysed flagellum protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQKFITEAKVHFECDIVGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKIQARMFDTSQNIYIDKELSSSSSHKSKAFTFIFTPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVVIDAQNAINRYRGSIFTSEFI

LYKLRAQNKLYTQDPSMRDQQILEKMIDDAKNWTRTFTSDKNFSEVLHIMLRTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENTYFNTKNLDLAARAAMSLAKNLLSNEQVNKAIEY

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISASIYEDAFAKMSKLDPSYEETLKDLALVLSHANRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAINDLKNAIKADNCINAANIFMRFSAYDIGQKIENKK

QMLACLIRTSNVEQALDYIDKNYNEDSIFYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMVEAYDALLSYANDHNMQTTILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALTKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

SASNWQNLCKSKNQILNQ

>ETN90354.1 NADH-quinone oxidoreductase subunit N [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNNFLNLELLNISLSYPFLFLITTAIVLLLCSGFWKFHRSFYIGISSLSLIVSAFLILNNANAQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMVSSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGAGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFAALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFMKNDRVHNIKFSFIQNFILAFCVCVSTFVILLML

>ETN90353.1 NADH-quinone oxidoreductase subunit M [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGVSFDYNLSFKILKFFSFHVGV

DSIALVLILLSSLMIFLSFLFLKLEQKALISCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFRAGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNASAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPILVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYRAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYMFAVFRKIF

FMQKQSFIEGFSLLFREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>ETN90352.1 NADH:ubiquinone oxidoreductase subunit L [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNLALISLFSPFVAFLFASCFALSEKKQFVGIICSLLVALSAFCSLYLLFCNEAFNVSLFEWFAGVNFG

FDIDAISLTMMSVVGIVATCVHFYSIFYMAHDEGFNKFFAYLGLFVFSMLFLVMSDNFLGLFVGWEGVGL

CSWLLIGFWYKNDTYSFAANEAFIMNRIADLGMLLGIFWLYLQAGTLKYDEVFSMAQSLDHNALILIATC

LFIGAMGKSAQFPFHTWLADAMAGPTPVSALIHAATMVTAGVYLVIRASTLYDLVPEVSYIIALLGAFVA

IFAASMALVVRDLKRIIAYSTLSQLGYMFVAAGLGAYGIALFHLATHAFFKSLLFLGAGNVMHAMNDKLD

IKKMGGLFKPLKITAILMCIGSLALAGIYPFAGFFSKDLILGYSFISFHHGIFLVLLIAAFLTAFYSFRL

LMLVFFTPARHDEHPHEASKIALLAMSPLMVLAIIAGFFEHSFFEYLSTKLVFIDAQNQIVMICASVAAI

LGAILAIFAYKNSWFKESIEENKIHKLLSNDYFIPQFYHQFIVSKYESLCAILKHCDLYIFDRIVEKIAL

YSQNISQKMIMPNSLNLMLRFLVAAFVILLILVWMV

>ETN90351.1 NADH-quinone oxidoreductase subunit K [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIEKYFFVAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>ETN90350.1 NADH:ubiquinone oxidoreductase subunit J [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALAGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSTILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAIVLTHKELTKEKQ

>ETN90349.1 NADH dehydrogenase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>ETN90348.1 NADH:ubiquinone oxidoreductase subunit H [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>ETN90347.1 NADH dehydrogenase subunit G [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTVKINGIDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKHWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKESMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISNQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGMLLRYDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFIPHIHKNGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESINEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIIEVQRSVFAKNLGIDEDKLEDLLLKKANFTLVVGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDNNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINKGFSPIDFDHLDNFYTNAGDCKRGYELNLECFKQV

AKKEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASAINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>ETN90346.1 NADH dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIYDNALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEVKYLIIDKNIHSYKDSENIKYFLNFLSVKYGLKILDSDEEECDFK

KAKLNTLKELDNYDGLVLFRANLQDKNLHCSRQFLQIAKCKDQSEVEILAKDFSFKTKLCLDENLQGTIA

FLNYENNGFDFTPIRIKEAK

>ETN90345.1 NADH-ubiquinone oxidoreductase chain E [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRRVDLRKSKELFEDLAQIIKEAKQGEVLVVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVI

KKERV

>ETN90344.1 NADH dehydrogenase subunit D [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>ETN90343.1 NADH dehydrogenase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRIKTFVGVKERLQSVAHVFKGANWSEREIY

DMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFADDKD

TLNFARLYHEVPKGGQKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>ETN90342.1 NADH dehydrogenase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>ETN90341.1 NADH-quinone oxidoreductase subunit G [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLFPWALIFKDLGWFGFLEVFVFIVLLGVGFLYAYKKGAFAWQSIK

>ETN90340.1 hypothetical protein X910\_05845 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSHIDASHPYFGIFLMLVLASVIFLDWFF

>ETN90339.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLIILGKSGAGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKSYELSGGEATRVGLIRALVLNPKLLILDEITSAFDIKISKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>ETN90338.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKDINLDIKTGKTLMILGQSGVGKSLLGKVLVRLLDSNFTISFDELSFHNSCIFNFNKEELRNFRSKVA

LVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWHSYANELSLGMARRV

SLALALLNQPQILICDEITASLDKENASKIISILKELKNTTALVCITHDLNLVNSLADEILMLEKNSSNL

YSLDEFLRYYNA

>ETN90337.1 peptide ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKFLIILAPLIFLFLCALFAPFLAPFDILSTHLENLYQAPNFTYILGTDFLGRDLFSRLLFALRNSLII

GVGGSLLSIIFALCYLFLARCFFYVFWMRILEFFLALPAFLLMMFFQSMITSDVFLMIFLIALIHWCFIA

RIIESELKRLENLDFYKANIVLGRTKFRAFFKDLIPALKTLIFTLFIFNIVHAIATEATLSFFGLGLGFE

IPTLGTLLSESSKAVFIGAWWIILFPLLSLLLLFLPLLWLGNFLQKIWGIRS

>ETN90336.1 peptide ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKRLVFSIVVAFFSTFLCFVLLYFSKGSIAYTNGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGVSFLSGESVLKLIKERIFNTFILGFNALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKILPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSPIVAYFGGSALSFMMGTYVVESVFAYEGLGSLLFKSIIFKDYPVVL

ALIFFSVLLAAFFTFLSDIVARILNPRLRRLDFV

>ETN90335.1 peptide ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>ETN90334.1 dimethyl sulfoxide reductase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFGGLTLSPISLSANLLKTPPLISKWAGCNVNCGTKCPVKVHTQDGIIKYVSTDNEGDDSFDNRQARACI

RGRSSRYKVYNANRLKRPLKRVGKRGEGKFMPISWEQAFDEISAKMQEIKEKYGNEAFYINYATGTTGTI

INRCTQGPWARLLSLYGGYLNYHNSYSTAQISNAMNFFYGGSPASDIYTLRSAKLAIFFGANHVETRMGG

GGVGYAYQKALEESGCKIIHIDPRCNDSMIGHCDEWIPIAPGTDAALIAALTYVMIKEDLLDRTFLDKYT

IGFSENTLPQDAAKNSSYESYVLGLNDGVEKTPDWASKITKIPARRIVQLAREIATIKPCFIEQGWGVQR

HSNGEQNARAIATLACITGNIGIEGTNTGCRTGSSKTYDIMGMPFKNPIKDSIPCFLFTDAIYRGKEMTD

ISDGVRGTTQLKQNIKFIFNTAGNCLTNQHSTIKEVHDILSDENLCECIVDVNVTRTPSNNYADYILPDA

TMLEQEDFIRPSAGYYSNKPYIIYCQKAIEPVGEAKPIYEMCLELAKRLGIEKEFSEGRTQKDWLKYLYE

ESMKKIHFCLVLKKCAKKDL

>ETN90333.1 hypothetical protein X910\_05810 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPSFEEMCEKGLVKFEPVKPVVALQSFIKDPINNPLKTPSGKIEIYSTKLAQMQKTWKLKEGQQIVPIPV

FESQREGILDPLKQKYPSQFFGYHYKGRTHSSFWEIPQIREANPQEIWINTIDAEQRSIKTGDVVQVRND

LGIIQGIAKVTPKIIPGCAVTPQGAWAKYENGIDVGTCVNSLASIVPTAISKGNGQHSILVEIAKV

>ETN90332.1 dimethyl sulfoxide reductase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>ETN90331.1 Cj81-083 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>ETN90330.1 cytoplasmic chaperone, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKLAIDIFINFLQNPPNHFLLEKLKKEEFWQNWFLKNNSKLQCTALKLLSSSNEDDKLIASDFTSLFLS

DVDYVKAPPFASFYLDENKEIYSDNSDKVKQIFAQNNFFSFFNEEPADSLINELLFISFLIKKQDDITLQ

KFLKEEFFIWFNMWSFDVINKAKTHFYKALTMLMQDFS

>ETN90329.1 globin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKEQIQIIKDCVPILQKNGEDLTNEFYKIMFNDYPEVKPMFNMEKQISGEQPKALAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEHYPIVGACLLKAIKNLLNPDEATLKAWEVAYGKIAEFYIDIEKKLYDK

>ETN90328.1 multidrug ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPFIIELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVTLLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDTLIDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>ETN90327.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKSKFGTKEIKILGLSSLGGTLEFYDFIIFVFFAEYIANVFFPKDMSEFWALLNTYGAFAAGYLARPLG

GIVMAHFGDKFGRNNMFMLSILLMVLPTFVLAFIPGYETLGFLAPVLLILIRIFQGIAIGGELPGAWVFV

REHCQEKQKAFFLSCLNSAMALGILLGSIVFLIINAFFSIEEIAAYAWRIAFFVGGIFGIISIYLRRFLQ

ETPVFKQMKKESSLSSFPLRDLFKEKDIVKNLFSSMMMTWVLTGCVIVLVLLMPKFMPSILNLSGVEGSY

LQVLGILGIALGGAFMGYLVDKFGLFKICIFFSLTFVFFSFLYFYALYELKNLVLVCILYSIVCFLGGIN

VFAPILMSEVFRAKIRFSGISFSYNIAYAISGGITPQLVFWLNTLASKNENPFLYGMSIYMIFLALLAIC

AVFIVKDKIKF

>ETN90326.1 metallo-beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNFITTLLKTNLYFLEEKTTSKSSNQTHIISLKQSDDEFLNLLFSFLVPQSDEDKNFIGKTRTKIKRNE

HNIALIKNPNFNALIDTGFLDTIDTLKEKLHIHKTDFKDITHIILTHAHPDHIGALMSEENLFPKAQILI

DKKEYDFWIKSDRQEIKNTLLKLKNIEFINHSKDLIFQNSGIKAIPAYGHTPGQNAIIIDDKIVFWGDLL

HLYDIQIPKPKIAIKFDIDQNEAIQTREKLLKQFKERKLKVIGTHVPFIEPKFLD

>ETN90325.1 translation initiation factor IF-1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>ETN90324.1 50S ribosomal protein L36 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>ETN90323.1 30S ribosomal protein S13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>ETN90322.1 30S ribosomal protein S11 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>ETN90321.1 30S ribosomal protein S4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>ETN90320.1 DNA-directed RNA polymerase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>ETN90319.1 50S ribosomal protein L17 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>ETN90318.1 ATP phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQENTRLRIAIQKSGRLSKESIELLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELERQSLGENPSYKLLKKLDFGYCRLSLALPQEKKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSVEVAPRANLADAICDLVSSGATLQANNLKEVKVIYESRACLIQKENALSKEKQTLV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>ETN90317.1 bifunctional histidinal dehydrogenase/ histidinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIVKEVQEKGDEALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQDAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCEKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGATIDMQAGPSEVLVIADDLANEKFVASDLLSQAEHGADSQVILVCLSQDFAQKASN

EVQSQLELLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>ETN90316.1 imidazoleglycerol-phosphate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>ETN90315.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIIIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHMGWNQVHSSHALFKGLEGAYFYFVH

SYCAGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGENLISNFIKDIG

>ETN90314.1 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTQIIPALDLIDGEVVRLVKGDYEQKKVYKYNPLEKFKEYEKAGAKELHLVDLTGAKDPSKRQLALIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKNATLCLEILKEFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPNICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSIEEGIRCLAN

>ETN90313.1 HrgA protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSSKLSYKELTLEILKQSDRPLSVNEIWQKALEQGLDKKLSSIRQTPIATLGARIYVDIKELQHNSLFIK

ASQKPTTFWLKERENELLKLDNKNEITNEKQEKNKFHERDLHPLLVKFLYENLDFNLNCKTIYHEQSKKG

KGGEDKWNYPDIVGVYFPYDDYEKETITLLENIKQNSYKLFSFELKIALNFSNLKECYFQALSNSSWANE

GYLVVLQEIDSEVLSELRRLNQSFGIGVIKLDIQTLNMLINKNPNFKEFIDDINKQIKVGKEAKIQANFD

EIKSDEEMEKYLKEKCILEK

>ETN90312.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKYSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKVPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>ETN90311.1 phosphoribosyl-AMP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNFKELNEKIAWQKVDHLLPVIIQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDISCFEKISKNADFVFLARLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>ETN90310.1 2,3,4,5-tetrahydropyridine-2,6-carboxylate N-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDDEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLSH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISVGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>ETN90309.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDDGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISMAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSRRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>ETN90308.1 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>ETN90307.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVLIIENEIYLAQSISIKLSDAGYSCEIINSFNEYNGEKYYDIVLLSTNTNNFLKAVGQFKHSIIILLI

SYISTDTVSNPLKLGASDYIQKPFMIEELIRKIKHYQDFRKLSILNKAYQSYIKSRLETIKIPEYNYKKL

KLPLILKSNKQSSADAFVFNYANECDITLSFIDLTSTNSVEKVMKLPTENNLLFLSNFQALKAAEKEKLL

DFIQNKNVILHTNSNTDDLKINCINLNDNEKNIDSNEILTIDEYVKYVIINYQNIFPDTDLSKKLGISRK

SLWEKRKKYEISKKK

>ETN90306.1 sulfate adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSARKNKNITIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLMLDEKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIEKIKENFQ

QIKNNLNAQKITAIVSSFDPLHRAHERMFRWTIDKADLVVIFLVESFDVNGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIYQMSYMV

>ETN90305.1 phosphatidylglycerophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKLFLTFFYSGSIKKASGTFGTIAALIPAFFILKYLGINTLFLLSILIFVASIRVIDDYEKKTGIHDDK

HIVIDEVAGVFLACAIAASVENSIVNFVLAFVLFRFFDITKPSIIGKIDKKVKGGLGVMLDDMLAGLFAG

LLSAVIYGFLLKFNLVFWDINLKDLF

>ETN90304.1 30S ribosomal protein S20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>ETN90303.1 peptide chain release factor 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>ETN90302.1 hypothetical protein X910\_06240 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFESIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNTNGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KVNPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVTHVGASGNPHKFPHKH

>ETN90301.1 ligand-gated channel [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHPNKKAFKLSLFALLLITNLNAQESNKAINLQKVVVSTTGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGHAINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGGLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWEFNLEAFWQNQKINYLKDEISMKGTTAYQNGSGFEDTLTGISLKNKLNYANNSYFIFGY

EFANHDAKRTSIIHYDVNAGRFQMSHTMTTLMDMDKQSHSIFALDSHEFNDIFSISGGARYEYSLYDTNR

NYTSNMIIPGRPNIKTELFSTDDTSHNFAFEITPNFKYSDTGKLYIKYERGFVSPSPAQFVNKDKNLQKY

YSANLNPEIFDTFELGIDDFWWDFYGFNLTLFYTLSKDEISYLGNPHSTSGSWWKYYNIDQTRRLGVELS

LSQNFLDDDLIFRESLTYLDAKISKGVNDGMRIPYVSKIKATAGFEYAWNKNFSNFIDLTYFSRAKDGGA

IDENTGKMSKNSWIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLVGNGRNYYVEFKY

AF

>ETN90300.1 iron ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNLNTHSKILVIIGLLVAYIIASFTALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIG

MLLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKAS

IATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNEL

NILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCT

AFGGLFLLICDTLARTLLAPVQIPIGILTAFFGAPIFLYLALSARRFL

>ETN90299.1 heme ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLSPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKEFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKLVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYKNSKPYILALKEKK

>ETN90298.1 hemin transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMLKAEDQIVGIATLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKAERLEDITKNITTLGQITKKEKEAELLKQEFTQ

NLKKLSDKPLNKSVIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GINAKNNLLDTNALLKNTKAVKTGSIYFNKDTHILLRLSPKIIDRIQEFKTKLENNNF

>ETN90297.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFKKIYIELSDICGLKCDFCPSRKGIRGVMSEEKFQNLAHEISNKAELFTFHLLGDPLLLPNLENYLKI

AKSEAMKLEITTSGFYLNSKNQALLLGYENIHQINISLMSFLSQSKISLEQYFKPILELCKKHLEQKSLS

FINLRLWNLDANFKAPKSNLKIYEFLAKEFEVKIDTNLSKNRLQRHILLHQNKLFKWPNLKDEPLYKKGK

CHALKEQIGILSDGSLVPCCLDTKADINLGNVFENNFDKLFKSPRIKMMKKAFEEDKRIEKLCQTCEFFK

ARLGD

>ETN90296.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRILFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENTGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIATLCLPKKSELN

>ETN90295.1 adenine glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFEAKLPKEVEDLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNLNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFHTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDKLYKGMYNFPFFKEGEYKLSK

DMGFVGEFKHSYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>ETN90294.1 hypothetical protein X910\_06200 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLAFFKGLGIGFLCLLLFVAGVVFNVEFLGKKDSNHDLYFSRNIEVSNTLKPDILYANINFWANENLSSK

ITLDNSEKAEITNTFNQILERSKKENFCSGGSFSLEPNFSYKDGIQTPKGQRFDANLECEFKENQLADFN

KLLNDINSIIAKNNFISVSTPAIQTKFSKDTLNNNKENLYKELLKTSYEYEKTYSLDLNKTCVLKNLQVN

TNANITPRMLNAKSDNIELSSPIISEKEQILSAKALFICK

>ETN90293.1 hypothetical protein X910\_06175 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNNTSVLLFLLYPKKLRKTITNITKNKKYKWKI

>ETN90292.1 riboflavin deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFYMNLALNEAWKYQFLTYPNPAVGCVILDKNGKILAIKAHEKAGLAHAELNAITHAFKSLRPEISLP

KEANALHEFICKNHQGVFKDSIAFVTLEPCSHQGKTPPCAKLFSELGFKKIFISVKDGNKIASGGAEFLK

KQGIEVEFDILKEEGKKLLKPFLKWQKGQFKLFKLALSMNGSPFGKIVSNELSRTYAHKIRAVIDLLVVG

GETIRKDHPILDARLCKAKAPNLCILSRQNIDNFDKNIPLFKVPNRQIYTQIPSEAKFLMYEGGENFLKT

FKDGIDMFLIFQSSSLNDEKNVTIPLNFKPLYRNFLGSDTYGIYEL

>ETN90291.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFMNFSGFFYARNDLRLFKIEKKNELKSFFYKDYTLSSYKDALNLNNEIFFYQSLKEGLFKENDEILVS

NLGKKIILFRNFTQNCDNFNEAKLKQILLLFFLLLASVFFASLAMINEFGAIDLVFLMICLLLLVMGAIN

LGLLFKQIRILKSFSKEEMKEFLSQRMKKYTKV

>ETN90290.1 serine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNLSIFKIGVGPSSSHTLGPMLAGNLFCKKVAKKLDEIDRVEVTLYGSLSLTGKGHLSDKAVIWGLNGL

EAKNLSAAIQDEVNKNAIENAQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGGLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNKKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANAFKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMVSL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>ETN90289.1 serine/threonine transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNTPKWTSHDTRWVLSLFGTAIGAGVLLLPISAGLGGLIPLLVILVLAFPMTYLAHRNLCRFVLSSSNPK

DDITFVAESYFGKGGGFLITLLYFFAILPILLVYSANLTTTLLEFLINQFNFNADLTHAARWWVSFLIVG

VLVLISILGENVVTKAMSFLVFPFIIFLFIFSLLLIPQWNSSLFTNVDFSVISTSNFWVTLWLVIPVMVF

SFNHSPIISSLACYCKKEYGDYAEPRARKIISLAIILMVFVVMFFVFSCALTFTPEDFASAKDQNINILT

FIANKFPEVSLLAYVGPIVALVAISKSFLGHYLGSQEGLNGILYKASNGKIQGKFAQTLTAIITFAIAWL

VAYKNPSVIGIIEAIGGPVLAILLFLMPLYCIYRFDILARFRNKFLDLFILVMGIVAISAAIHDLL

>ETN90288.1 hypothetical protein X910\_06145 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAKLTLLALLGATVLLAKDMVVPASELPNNAKEFISKNFKTAQIGLVKKDIDSYDVILNDGTEIDFMIN

GDWKEVDGKYKALPHTILPSVMKKVSATQPNAQILEIDKEINGYKFKFNNNMKVYTDMQGNVLGQKLD

>ETN90287.1 hypothetical protein X910\_06140 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTIDLNHNFTSFVLLDEVDFDFLELKSILEDKFNIKITDENFTKEGVIFSYENMLITLNLIKNPIPNHEA

EYYANFNFMWKDALEQTKKHKAHLLIAVLSQDQSKLEQAKMFTKIAALCLDNKHALGFYTGAVVLEPSFY

IENAKMLDDNRLPVYNWIYVSVYPSENGVNAYTYGLRNFDKLELEVCDLNIEEKELFFCIYDIVLHILTY

DINLKDKDILKFEDGKEIKFIKSQGISVENESLKIIF

>ETN90286.1 biopolymer transporter ExbB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEFLKDYIDLIIFLILGIMAFIAFWCVIERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKVSLLSNAYKANKN

A

>ETN90285.1 hypothetical protein X910\_06120 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIDTSTSLTHSLTNDVDKKELSVLKKEDQDKIPVQDLSSLNSDSVKVVFENKQGELIALNLSNENYSSL

QKNFSSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGSLNSNLNNKQQSVKLNFNTSTLQQSMQNLG

FKTSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPTMREILSDIKEASGGGANAMKTIDPQKINK

KDDRENNIKEKEDEDLLQKAQEKGLSALSADEQAKLEASNPEEFEKLKQKSLQELSQNLSKDFKDKIENQ

EAQIVDKRV

>ETN90284.1 hypothetical protein X910\_06115 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKIILVLSILSSFAFANSCANYEQELKKCNSLKNSHERKMCRLGLFAKCKKG

>ETN90283.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKALALFSGGLDSMLAMKLITAQGIEVKALNINIGFGSTSDKSEIMKKRAAMVGADFEMIDVRNSYLQEV

LFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRPMSQRSDAMAKVKKLALDEEDLI

LRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAVKFGLEDFESPGGGCLLTLDSFAKKIRDFI

EFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKYEVIELGDLIGAYSLVDEKISEK

DLELALKIALTYTKHEVGKSYELKFKNQAYTSIAFENKADINQFFIS

>ETN90282.1 chorismate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>ETN90281.1 ribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIEKLERSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFAKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLIE

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGAL

>ETN90280.1 ribonuclease H [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>ETN90279.1 hypothetical protein X910\_06090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFFFVEYRDPLVGLIILTILVFVVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIALEKCKDKQEREFIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIEDNPMLG

RLVFEKYHMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>ETN90278.1 DNA primase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITKESIENLSQRLNIVDIIENYIEVKKQGSSFVCICPFHADKNPSMHINPTKGFYHCFACKAGGDAFKF

VMDYEKLSFADAVEKVASLSNFTLSYTKEKQENKKELKSILPSLNAYFKDNLKHHKEVLTYLYQRALNDK

DIAKFELGFAGASEDSIRLLRNQKIPLEDAMSVGALKKDENNEFYASFIWRITFPIYDHKDLLVGFGGRT

LNPNVPAKYVNSPQNILFDKSRIFYAFNIAKENIAKKKEIIVCEGYMDAIAFHKAGFNNAVAVLGTALTE

HHLPLIRRYDAKVILCFDNDEAGLKAATRSAFLLSTNKIDGKVAILQGGKDPAELVAKNESTKLHDILDE

GIELGEFYIRRLISTHSIISALDKQKALETIQKFTFNLEPLVANSYTSLVSNLLKVDEKFIVLSQNSKKT

IHTPLISQNKYNFPKEKIHIAELELIAFLKQHPDICNDFKQISDSVCFKHKILLDKILEKKGYEDSDIRE

FENKNIRKNLNYSEFLLGICKVNLAFLNNVKIKNSTLALKKQLFTLIDKNLNLLIKNLNTEELNNFLKEY

LSFLKYEKNEEILQQSFRNLNGIFSNKNFTAYDLGFSTQDNDEPF

>ETN90277.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>ETN90276.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNYKKLGIEHFYKKDFKTAKMYFSMAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILSTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIINSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>ETN90275.1 hypothetical protein X910\_06065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMVAQNRSSMANDVLGGFGGMKL

>ETN90274.1 peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILIICMLFTLSFGIERPKFEDFLAGYERNKASMLNYEGMPAFALSENLLAVLKQPNTKLNKYVKYDP

FLNLYLVRTDFSLIPTPMGDEEKLTRNDWVGIWDPNKPYIGHIKYLAQNIDEKDQLDFNSKIGLLGTPCC

EMMGIALNNSSFIGNRYLKHFMKYNDVYWGDIGVDFVVRENKIYVNNVRKNPQFLINDQVISVDGLPAND

LRKLNEKILFADRGSTLYFQVLRDNMDLNISTEVFAKDLSKFNLPDSKPKPKITNFTSNLGLTVNTSLVV

TKIDPKSKASNAGFMVGDKILRVNNIILNNFKELQNILSAGNDFSILIERKSTKLPLSNFNNELGGNANS

GGDGKFQFFIRLTK

>ETN90273.1 geranyltranstransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKKLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPTNNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNKKLAQMIQNLIIQY

L

>ETN90272.1 transketolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLQEQANTLRFLSADMVQKANSGHPGAPLGLADILSVLSYHLKHNPKNPTWLNRDRLVFSGGHASALLYS

FLHLSGYDLSLEDLKNFRQLHSKTPGHPEISTLGVEIATGPLGQGVANAVGFAMAAKKAQNLLGSDLIDH

KIYCLCGDGDLQEGISYEACSLAGLHKLDNFILIYDSNNISIEGDVGLAFNENVKMRFEAQGFEVLSING

HDYEEINKALEQAKKSTKPCLIIAKTTIAKGAGELEGSHKSHGAPLGEEVIKKAKEQAGFDPNISFHIPQ

ASKIRFESAVELGDLEEAKWKDKLEKSGKKELLERLLNPDFSKIAYPDFKGKDFATRDSNGEILNVLAKN

LEGFLGGSADLGPSNKTELHGMGDFIEGKNIHFGIREHAMAAINNAFARYGIFLPFSATFFIFSEYLKPA

ARIAALMKIKHFFIFTHDSIGVGEDGPTHQPIEQLSTFRAMPNFLTFRPADGVENVKAWQIALNADIPST

FVLSRQKLKALNEPIFGDVKNGAYLLKESKDAKFTLLASGSEVWLCLESANELEKQGFACNVVSMPCFEL

FEKQDKAYQERLLKGEVIGVEAAHSNELYKFCHKVYGVESFGESGKDKDVFEHFGFSVSKLVNFILSK

>ETN90271.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNANFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKAIDTAGVRFFLALENDLKDKNI

KITKEGLNSSFQTLFELCEKNYQRLSKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLAKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>ETN90270.1 sulfate ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALTLRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDEDSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPYSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>ETN90269.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENRANYFFVGLFVFGVFFASLGFILWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIQGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEILLQNLAELSANLNANSKNLSLNLSNASLKIGKMAN

NISLSAQNFNSSLKDIKESTMILKKFIKKADEKLNTYDDIKASLMQNLELFKRVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>ETN90268.1 hypothetical protein X910\_06030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKQLFYILTFIFMLCGCSLRHETINKNENIILKDEGIDSNIFFKKTGKILKIRNANAPLYLNSRAIVYI

DNGFSNKYAHYFWGDLPSNLYSFLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>ETN90267.1 hypothetical protein X910\_06025 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSDLDIFKKHLGEIQGVNEFKANQICSQINDANDFIGALQVLDMSLKKIEKSILERIDENSDDMQKRTL

DATASQLIQNCSFMGTALFGNIFNVYVGKKLFEFEIANPLLILQTSNYEGVLAYIQDKRDEIKIILSELA

TAITLGETMDNAGIYNSTMDFKNLFK

>ETN90266.1 methionine aminopeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGAICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIRDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGASAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDAGSIDGLNAAHYEHCVAVINGRAEILSMI

>ETN90265.1 glutamate racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQIDMLIIAC

NTASAYALDALRTKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLSQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGCSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>ETN90264.1 hypothetical protein X910\_06010 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRHIFFIIAIIFFISGCSFYQNLNYTRPIYNTNKETKLKTIANEWKKTPYVLGGTTKKGADCSGFTQSAL

AQLNIRIPRTTKTQLGSGRKVSKSKLQTGDLVFFKTGRGPNGMHVGIYMSKGKFIHLSTKGGVKEVELNS

SYWKARYIGARRY

>ETN90263.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>ETN90262.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>ETN90261.1 hypothetical protein X910\_05995 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVSDVSMGNANLMTAVNTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>ETN90260.1 hypothetical protein X910\_05990 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILVTPCGVMDTTNFGKSEVNKRTIDFSLKFQEKKEKVEAKAEKEEANKDNSNSTNTDTNKKDKLLDISA

>ETN90259.1 iron permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIFKIIFLIISIFLSSSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQINALIDSLYYDLDEVAPILQNGYRLKAEASDTNYDKAKA

EKSSLEANAKREADAEALIAQMMGVDKKDLAQSSLTTQASTPANNDTSKLTDDNAGTDLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNYQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKGLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALSIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGIAMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSAKTLWITVFLAVY

REGAETVLFYQALLFDAKTSTDFGAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLTMLIIGILITKQISKKGVKS

>ETN90258.1 iron transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>ETN90257.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIYFVHFLISVLPLSILMAFIASDKKYIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFMLFLLLILIESDKALANILLTLMRNSIIETHTFLVSFVGKSNYFGVFGIYIYLIFI

AFLAFLSLKIRKKNISKKQILDINYRKNEAKTSLINRYFSSVFISCVISFCIILYFFMVSSKPLTIDEPK

EILPDKNGKFIFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDRDSPVAVFDACMICGDMGYIKKDGQ

LICISCNVRIFLPSVGKSGGCNPIPLKYEYDGKKITIDVKDVIAGSNYFSQIKEIEVQDPVSKTKVINTQ

APFSYSYKGITYYFSNQNNYEEFKKDPTKYVEENEAQFLIQRRNDVG

>ETN90256.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLSIEIG

NELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDFI

TGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSNK

IIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRMGEEKLDQLEYDKWYCSAYVGSIASQISDGL

PGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQIY

LIFAGENLIVALFAALFGFIFGTAFSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQL

SAAGVLYGR

>ETN90255.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVDKFFLNELFKSISFSYQRLFIIVLSVFIGALTCSAFLNIYFDIDTKLSKELKAYGANVMISPKRDENF

ISNAEYEKIKEILKARALTPFLYDFLNLGSTSGVVLGTDFRALKITKPFLEVKEGSFSLNDFDENSAFLG

VNLAKQLGLKTGNELQIYNPNNGKSIKLTIKGILSSNDEFDSIVLAPLSVVQNLSDRAGINYANAVVYGN

FDEVKAKTQAINNEFIDAKPISSVSLSEGLVLGKIKALMFLIILVVLIIVTTSVNTTLSSIIFSRKKEIA

LRLALGAKKSEIFKLFASECFIVSFFASLIGAFCGIFLANVFGYLIFNSSIDFRFIAVFIALIISLIFAF

LAAFFPIKRALKINVCENLKGE

>ETN90254.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENLE

QMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQLS

GGEQQRVCIARALINNPELLLADEPTGNLDEANEQIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLIL

QHGVLK

>ETN90253.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVVKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>ETN90252.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGIFRIQAYFFALIIALFFVACDSGENFKALNSDKTYNFAYNGFEKSLKLNDKAQNFALIFFTKDCGVCK

EQIPILQNLAKNYDFNIFVVLGDANDANDAKAWADEKGLSNLAMFYEKRAAKYLSSAIGEIYGVPVLSFF

KEGKMDEKFIGLTPYSILEKEIKKVKS

>ETN90251.1 hypothetical protein X910\_05945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIILTILFLLTLTQAKEIQVYESPTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYSEKYPVILMKKDGSYELYGYFI

GDKKL

>ETN90250.1 hypothetical protein X910\_05935 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLASALAALVALNVSAFADLIVINKKI

>ETN90249.1 50S ribosomal protein L19 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>ETN90248.1 hypothetical protein X910\_06385 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNYYQELKKYLNNNLFTSYSLEIDFPKIYNFNANQKAFRDILTKITKIYNKNKFIKQNEHQFEDEFISKV

LEILGWCFVRQDEKIIQGKLEKPDFLLFSNDKLKSKYENLDKETKKSSNDFTIILESKAYNIEIDNKKVK

DNPHFQILRYLGNLKKNYGFLTNGRFWRFYDNSILNSNKVFYEINLEKIIEDQNIEAFAYFYSVFSAFNF

TEKEDHLEITLQNNKLSKIKIEDDLKSIIYGTNGNESLFEFIGSRIYNKTKADLKLIYENSLYFIFRLLF

IAYFEDKFEIILEKHKYFKSKISLRTLLENLQEDENSSGGFGELENIFNIYNKGKGNFDMPVFNGGLFDE

SKTALLSTPKIFNDKDLKFILNQLLNFKDKNLSFKRDYKTLSVEHLGTIYEGLLSYFFEIANEDIYYVSY

KEKSKEIECYFDNYDFKILEKSKK

>ETN90247.1 hypothetical protein X910\_06635 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINEAMVGFLENQGGVVSKDYNNGY

VSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDTKTWTYTDSKGVVGKDEASEI

TQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMDKIKTGEGYFASFKEELQKYQE

ALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFADLSGNEGFRYKLENEILNSQGFSIE

GKDVDGKVYTGNFNFKGKLASLPEKPNISIYEPDKQGGEDPDKPSVLPPEIPEKVVEAPIKIQTEVDAKK

KEEDDDQVEIGEADARSSGLRCIVSDNFKTMNICVNAK

>ETN90246.1 hypothetical protein X910\_06630 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIYAKAGDGVGGWFGNDYNNYEFNAAGGFLGGFLILELEM

>ETN90245.1 adhesin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKLFLKQGASFSPAFDVSKQGNIINLGKINADNIVLIGNKVEIGVGAELAGQDGQTNAKTAHLIGNYVY

VSVGKDKENKNTIKIDKDGFKGTAIVEGFMQRDMTSFANDKYQFGDFGSIKSQSYDGKNSVDFYRAITIG

GHYYNNGQNINHYMNANEWKLFADGWNSDALNGDIFKDGLTTIRLMSDIDFSYLTSNGKQIAIDPVGANK

YAFSGNFDGGNYTLKNILINAQNTDKGWNTGIFGKVEGKDSNKKAKIYNLNVDGLKFSGKTNSGGAFVGQ

SSNADFSNIHLKNIGDLIFFDPNSKNGTDGFLYGGGFVGYAQSGSSFNRISLDNFSKIALQPEGKFSSAY

IDIYLGGFAGYSEGSNFSNILLNNIGGVTILGSETGGNIFAGGFVGYAGDKSYFSQIDLKNIGSVQADGK

TFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>ETN90244.1 hemagglutination protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKMSKHIVLSFAVSSLLFSQAYALPQGGKFTHGTSGTIHTSGNTVTITGKGQNHVIQWGGGFNIAQGES

VNFTTSGKNYLNIAYQKDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFF

KARS

>ETN90243.1 hypothetical protein X910\_06615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGVENIYTLPLNGAPYISGSVAFDGEAKDNKLILESNTKIDLHNFQYFSDEEGKDIYDERITRLMGAFGI

NSNLQNNKVLIDSANIVLHGPDGEYTARSTFEILGALADVNNLKKYNVSKNSVIIKNLNLDLMVNSQNKI

TFYDAVLFGEIYGGRTLQGNAEKNSIEVYHFNSLDHLDKNIKTHASLNLYGGYSNDGEANGNKIVFRLKK

PLKISDNFYGKNYYNLYGGFATEGANFNIIDIQNDLTYEKVPQNYSDKFTVYAARTLSGKANNNTLSIKD

SVISLPLYAFITSETTLDGIDYIADESNNNEVNFENIKSSKNLSLMINAKNVSNNKINYNLIQSLTEASS

LGKGSKIILKATQNANNNLIKLKDCSSAAVESSCIIKADKESAFNKIIINNTVFSTASDKRQGYVGLIAG

VSANSHDNIMELVNLNIDEYKNQDAIFLAPSGTSDISNFKSYNNTLYLGGELNFFKDVNIDLLSGSVFHE

VNKKGKIITQILPHQEDFSKNNRLIIDTQDVKSEVVNNFENFTFILPNKIKNPILTIEKLINLPSNGSME

ILTKNKPTKGKYILIQSDVGIYDGVNRLLNQQELENLLEKMKNNKNKFNYNKIEKLAKSTLKNVNFSFEV

SDDAKIIYINIL

>ETN90242.1 hypothetical protein X910\_06610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYFNIFKIFTNKTNAKFGLGVCSVVLSSSVCFAAVQATSKDGKIFYISEHSFKDNQVYDPQAEIFKKI

NGKNFYASKSKYPISNLTMIYNNPKSGNKNLSKLEILTPDTSKEEIITAFSTLGTVSSDTQAVPSSFIPF

IVTAYAQNTNATNNKLILENGELSSVYFCKPSIGDCGVPNNSQKGDRFKYLITAAFTDRRGGGFNNQTIL

KENSYINNGCRKYLHLALKWSSLYFRICSF

>ETN90241.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLVLFDLDDTLIQGDSAKLWLKFCVEKGFLPQEYLEKIVFYQKQYQEKKLDMDEFMTFFLQSVKGKNED

RISSLVDEFIKIYIKPYEKAKELIIKYQDQRCIIISATAEFLVRKIASFLGVRESIAIKCERVGDKFSGK

AYGIYSFKEGKVLRLKEYLGKDYEKWMKDSYFFSDSINDLPLLESVSKAFVCNGDEKILKIAKERKYEIL

TF

>ETN90240.1 spermidine/putrescine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYLKIKNFKKAYGDKIIFEDINFSAKKGEFITLLGPSGCGKSTLLRCIAGLSQINGGKISLNDKDLTKL

SPQKRNIGMVFQNYALFPNLNVFENVAFGLKIKKMDKKDIEKRVKKMLKLVELEEYAKTYPHKLSGGQMQ

RVALARSLVTKPDLLLLDEPLSALDAKIRKHLRVQIKEIQKELELTTIFVTHDQEEALELSDRIILMNEG

KIIQNSNANNLYLLPESHFVASFIGNYNILSPKELDSLGLKHDFKKDIALRPETIEISNEGLEAKIKEKS

LLGNIIRYRVRVQEIEFKVDTLNFSTHSTYEAGDKIALKFNLSLAKELK

>ETN90239.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNENLSLKAKIYHYAVLFLVFLFLALPLMATFLYSISTSWGVSVLPDDLTLKWYQELFHDERFLLALWHS

LLVCVGSILLSVILVFPLVFVLNYYFLKLKAFVNILIIMPFAVPPIVSCVGLLQLYADNIGGTAWILIFT

YFTIALPFIYRALDNAMSNVNLNELIASNAMLGGSLMGAIFKLVLPNLRNGILVAVFLSFSFLIGEFLYA

NILVGSAYETLQVYLYNIKNQSGHYSSALVIVYFVLIFITTFIASLIKE

>ETN90238.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEKFLAFLSILPFFIVFTFFMIAPLIWIVFNAFYVEEDEIYSLANFIHIFESKFYLQSIINSLQISFIS

SIFGLLIGLLASYSLFILAPSKICNFLFSLNTMISNFSGVPLAFAFIIVLGSNGVVNVFLKNLGIEPFVS

VYANFGVNIVYVYFQIPLAILLLLPAFKSLENSHLNACKMLGGGNFLYWLKIALPLLAPALFGVFVILFA

NAFGAYATIYALSSGNFNVAPVRIAALIAGDINLDPYMASALSIIITIIMLVVTFMANFLSKKYNFKVL

>ETN90237.1 hypothetical protein X910\_06580 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKVILVVLDGLNCKSASINMGYLNALCKENLGKFYSLECELPSMSRPLYECLLTGVKPVLSGIINNKLS

FSKQTSIFDLCKEQGLKAGGAAYHWVFELYNKKEFIPSLHRHIEDENLTLPYGHFYYEDDYLDSHLFADG

EHLRNKYNLDFTLIHSMNIDDAGHKFGSHSIEYANKTKKVDNLISEYLPTWLEQGINVIITSDHGMTEGK

SHGGLSEDEILVPFFTFGSAFSYENAKIKQDEICGSVCEILGLKHDKRYNDEILKAKK

>ETN90236.1 glycerophosphoryl diester phosphodiesterase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVILTSAMLCSVLFGVQEYEANLAGHIIIDSKSTVKPPKDAPDFFKTYGKFANITREEKIGTFKSKGN

RETDFYLPFKNQPIQGHSGIKYIPKKDVFWVISDNGLGKKYNSYDSMLYAHEFKFDFKNSKYELLKTVFF

KDSDKKYPYPITTETTKERYLSGADFDTESIQVINDEFYIGDEFGPYLLHFDKNGNLKEVFDVYVEGKKL

ISPDNPSLKFSDKPDGENEKFNIKRSKGFEAMASSKDGSKLYLLLEGSIYNNNAYENEKGKEYLRIIEFD

VKNKKFTGKTYKYFLEDKSHSIGDFNMIDDKYGIIIERDQKEGTKDKACKEGEDTKHCFNNVAQFKRIYK

VKLDDKTHEAQKISYIDLLNIKDRNKISKKPLANDKFVFPFETIEGVDIVDDSHIVVENDNNFPYSSSRE

PNKTDDNEFILLEVKDFLKSK

>ETN90235.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKFFLSLGLVALLFSNSQAIDENLIKAAQAEGRVNSLAMPDTWANWKDTWADLKNLYGIEHSDTDMSS

AQEIAKFKAEKKNASGDIGDVGASFGEIAVKQGVAQPFKTSYWDQIPTWAKDKDGNWLLAYTGTIAFIVN

KDVVKDIPKTWQDLLKGNYKITVGDVSVAAQAVSAVLAANYALGGDEKDLSPALAFFNTLAKQGRLVNND

VSIANLEKGEVEVGLVWDFNGLGYRDKVGKDRYEVLIPADGSVISGYTTIINKYAKHPNTAKLAREFILS

DKGQINLAKGYARPIRIDHIILPDDIKAKLLPSEQYKNARAIKDQKAWEKSTKELPQLWQEKVIVDMK

>ETN90234.1 magnesium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLYIYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSAAEIAFISSEFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLVRDLKNNEEDRNLIKLRTEIVTFATAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLNILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLIGTVYGMNFKFMPELELHYAYPIVLGVMVISIILPLVVFKKKGWL

>ETN90233.1 molybdopterin adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKCDLI

VTSGGTGPALRDVTPEATEAVCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIK

ECLEPVFPAIPYCIDLIEGAYIEANDEVIKVFRPKKKCQN

>ETN90232.1 molybdenum cofactor biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFKKKISQKQKEKPKIPINDVILDDRLCKFKNKVQKISKDEASASLLARQLSRLIRANKF

>ETN90231.1 N5-glutamine S-adenosyl-L-methionine-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTIKNALMEAKSSLKGYENEAVFILCEYLKKDKAWLFLNQDIQIDHEPYFELIRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIVLAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIKENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKLTNMRYDKK

>ETN90230.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFHSGLMMTQIFIKMGYLLIFVSVVNFLYE

IYSLIKDEMKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>ETN90229.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLAIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISQSADRLNELSVKMNNAALNDSQKGMLRTEATRIQESINNSFNNATYNGKNVFQTMNFVV

GSGTETTNLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSGINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNDFNANYLKENAAAFVAAQSNMQLQSKIANLLQ

>ETN90228.1 YggS family pyridoxal phosphate enzyme [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLEQILEKTKNVRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKENLDEKKLDIKWHFIGTLQS

NKINLLIKQKPILWHSCNGIKIAKAMDKRLDYKLNTLLEINSANENSKSGLDPNQAVEEYLQIQEECSNL

NLCGVMSIGSHSQDKESIIKSFETTFKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>ETN90227.1 DNA polymerase III subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSQFTHLHLHTEYSLLDGANKLKELALTLKEQGATSVAMTDHGNMFGAIDFYQTMKAQGLKPIIGMEAYL

HNHDELDDKSSRQRFHLCLYAKNEIGYQNLMYLSSQSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGE

VNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFKDDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIA

TNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRHSVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCN

LDLNLGNPTPPNFKFTREYAKDHNIILPEETKEFSFDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRL

EVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGPGRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPE

RVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQVITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPE

ELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARALEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKND

ERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNAIKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLG

IFQIESGGMQSLNARLKPERFEDIIAVLALYRPGPMESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYG

VIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDPEKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFA

GYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALLTSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIRE

FSALEQDGKDAIIYGLGAIKSVGIPAVENLLEARQDGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDE

FGFTRKALFDNMENLSEASRKMAEVRKNAASSLFGEEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIY

VSGHPLDRFYEQINAIDYVKSLDFESLKNNGEILSIGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVF

ESNVEEIENIIKDENLKNNAYGFVLGFKAEGGEKPSFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEE

NHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIARNAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDS

IVEEISNKYA

>ETN90226.1 ArsC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

NLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>ETN90225.1 phospho-2-dehydro-3-deoxyheptonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIVLTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAYYQSATTLNLLRGFAKGGLADLHEVHRWNLGFLKKSELHKQYTDISEKISQALAFM

EACGINTSNTPSLREVSVYTSHEALLLPYEEALTRVDSLSGEIYDCSAHMLWIGERTRALDEAHVHFLRG

VKNPLGVKIGPSASADDIIALANVLNPNNEEGRLNIIIRMGADKIINNLPKIFSKLKSEGLNLVYSIDPM

HGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHLEMTGKDVTECTGGASNVTAQSLEDRYETQ

CDPRLNADQALELAFLIADLVKKARK

>ETN90224.1 hydroxyisourate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEEFTEENGRIGD

LLPYEKAENRAFGIYKLKFFTKDYYTSHKINTFYPFVEVSFELSKDQKHYHVPITLSPFGYSTYRGS

>ETN90223.1 RNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVENFLREYAKLIADYPEQIDTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>ETN90222.1 30S ribosomal protein S16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>ETN90221.1 signal recognition particle [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDVKQNGIGQKQFLNA

IKVNLENILSVNGKNQGFVFASKPPTVVLMAGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKVVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEVLGISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAIIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>ETN90220.1 ribosomal large subunit pseudouridine synthase C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKTLTKIVIQTGRTHQIRVHAKFIKHGVVGDEKYAK

ISSDRMYLHSYEIKIFDYYFKAELDNSFAKVGFEIKNLDF

>ETN90219.1 3-deoxy-D-manno-octulosonic acid transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFFYYFLTWAAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFEYAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKTKIILLNAR

ISDKSYHSYQRFSFFYKKIFSYIDEVFAQSELDKVRLESLGAKNVKIFKNIKANLEIKNNKIYTKPKEKL

IIFASTHKDEEELLLDHFKLEENEKLIIAPRHPERFKEVENLLLNKGLEFEKFSSLKDENKKFAKKILLL

DALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDNVLISGKFIHNQKALFEEVENVYFCENLKDLN

DKIHYLNLKVKISKKENLDLIIQTIQKGIDARKSL

>ETN90218.1 zinc ribbon domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINRTLKDAELKIGKINTDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILENKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>ETN90217.1 hypothetical protein X910\_06460 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLSEIYNFLDQLSPFDIQESWDNSGILLGDRDSEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKTYPRAFIKEMICKNISLISMHTNYDLSHLNIYFTEEILGFKISFKDEFLIYVENSISFEALCDW

VKKKLNLQILRVSNCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>ETN90216.1 glycyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>ETN90215.1 hypothetical protein X910\_06450 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSSAKSQTAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYKLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>ETN90214.1 N5-carboxyaminoimidazole ribonucleotide mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFVSILMGSKSDYETMKEAVKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMSGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRLEKEKKLVSDSKEVEVLL

>ETN90213.1 protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIPEIVAPAGNFTKLKIALAYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSFQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHVFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTSIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFIEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>ETN90212.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTQEELDALMNGDVDLDSETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEVLELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>ETN90211.1 glutamine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNSGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKMVAHLNGKTATFMPKPLYGDNGNGMHVHMSL

WKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFTNPSSNSYKRIVPGFEAPCILTYSCQNRSASC

RVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGIKNKTIPVGPMDENLFDLTLDEIREKGIEQLP

HTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVWPVEARPTAYEFKTCYSC

>ETN90210.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMRSLHTAATGMVAQQTQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTEGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>ETN90209.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIAGFKRIFKETQDELPIENHTRDASRFVNT

TIDGIPQVSQEYTDFSLGFLKATNNPLDLAMTREDAFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

DLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLATVK

>ETN90208.1 cell division protein FtsZ [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKVSGG

YDEEIMAQIETPTFLRRQMD

>ETN90207.1 cell division protein FtsA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHYDK

VVVSISGAYTKSVDSIGVVNIPNHEIGIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDDPL

GMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAICD

MVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLSYAALSQQPNTLIQIPSMGDERKVNEVS

LDIISNVIYARAEETLMILAKILSDNRYANAIGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARKDL

ITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDAESEIKSDFF

DENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>ETN90206.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVITDKLNQIFNIPSKDEELKMLASSYFMQDALSIAKIDYDKKNIKINEEDL

KKLWDEHKEDYKTKKIYEISTYFLSVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDY

ALMQLKNVANAKFLDLKNGKDNFQKDQNISESDVYYPIDLLNKAKNGDVLRPAPYNNGYIIVKLNKVDPI

RNKTFEEAREEVLPMYLSEQARKNLEEKAKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLM

NVFNTDQNSSYVIINDNKAILYKINKQKLDMNSDKFEQYKTMLEQNLRNLKANELKQELVDELKKIYPIK

IYYKGN

>ETN90205.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDFHN

RITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINTYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITKKA

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>ETN90204.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKFKEFSLRFLFKVSEQPVLIRDLLEANALFNDGMLVDPSKLNFNFKILNSYIYFGVFCAVILLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDIFKVYTRKIISKKIIQKAWALHFPYFAYEKYSTMAGEFYKE

ALKEEIPKANLEQYVLDKIIHSK

>ETN90203.1 glycosyl transferase family A, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

NSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDYIIFLDSDDYWELNCIEECVPRMDGVEVV

WFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRMLTFQYSSFWFGWHGMIDFNHLKSIHLKF

LNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTSRDNPSFENTPVYIRKIYKNLNHDAKLVK

EFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSWRNEILSFPEQYLEFMFENTLQRINFLEQ

NSCLHLLKFISMFFLI

>ETN90202.1 alpha-2,3-sialyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTFVKIYKYVFSDLTIIKNNLTKDQIYLNQILENKDKILTTQTNQIYNLNTTLENKNQLLIAKQNLINF

QNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFIILSIVISHKQEQKAYKFKVKKNPNLALPPLE

TYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRLKIKKLKREQ

>ETN90201.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFYIYFILYKLGRLC

IFKHTFRFFKL

>ETN90200.1 hypothetical protein X910\_06715 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTKSILDIIELPLDLKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGG

YIKFWFDLYKLKKEYKNKKGK

>ETN90199.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>ETN90198.1 hypothetical protein X910\_06705 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGVYEQY

>ETN90197.1 hypothetical protein X910\_06700 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEKCPYSHENIIFHKKFIGNINNENTITLAQALK

DNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQVIFEFHGCNPEEQDGVEKRISLLKKLNEYFIP

IHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGLHYRKECGNLQNLDFPVWPSNPEIPLRF

>ETN90196.1 GDP-L-fucose synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGGI

LANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAIA

KISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKFD

SIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGPH

KNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQNI

RQ

>ETN90195.1 GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>ETN90194.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>ETN90193.1 dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>ETN90192.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>ETN90191.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>ETN90190.1 hypothetical protein X910\_06665 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKNKNLSTNYTNLSSAQISKFRN

MW

>ETN90189.1 L-asparaginase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANISGEQIANIDSSNMRDEI

WLKLAKEINKLFAEGVDGVVITHGTDTMEETAYFLNLTIKSDKPVVLVGAMRPSTAISADGPKNLYNAVA

LAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIVDGKVFFYNNVIKAHTKNAPFD

VSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGIVVAGSGAGSIHEDQKNVLKELMKKGLNVVVSSRV

VAGRVAVSDSDEKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>ETN90188.1 recombination protein RecJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIIRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMCKFLELLAIAIVADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLVLTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGMVTPQFVIKEIL

>ETN90187.1 CTP synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>ETN90186.1 FAD-dependent thymidylate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEHCLHKDIE

>ETN90185.1 ribonucleotide-diphosphate reductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFQKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLIKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVAIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIYWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>ETN90184.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLIDDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLSDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>ETN90183.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYIKIKLSNNGKKAFQVLMENLKISINEAQKLIDKKRLFCDGILVEEKNKILNGLVELIVYENNPKGVE

IVFENEDFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKEACVAHRLDKETSGLILIAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEENFIVDKAINLTKNYDDVKTRMQICKEGKQAITEFEILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKQQIESILDEKLNPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>ETN90182.1 fumarylacetoacetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFVNFIQGQKHNLGVLNSSGKIVSFTDLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEIPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATAPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIAYVLEELSAGMLLKAGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKIKNINY

>ETN90181.1 cytochrome B6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIIMILCLSYANIVFAVDMITPIPNSISYDKEKAKLGKSLYMDKSLSKDGKVSCNTCHRLDQHGVDGL

EFSIGVDNQLDKPFNTPTTFNSVFNFVQFWNGRAKDLAEQATVPFFNPKEMGLSPELLLQKVNSNENYVK

TFKKLYGEVTVENIALAIAEFEKTLITPNSPFDRYLSGDQNAISAQAKKGYEDFKANGCISCHQGQNIGG

NMFQKIGIFEEYPNQEDLGRYEITKREADKMVFKVPSLRNIAKTAPYFHDGSIPTLDACVQFMAYYQLGK

FLDQETVDNIVAFLESLTGEYHDK

>ETN90180.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNKKSSFLIKFIILSTLVLAFILVLLGIIFNNYSSSKDNKELINIVQQLEISDEKINSVFQNSFNFINY

DPSVQAIKKMQENFTKLKTFGIDINKAEEIFNAKLIQLNYFKSANSIAVNSKLYLFELAKNYFEELEQNH

ETNKNNYKTMSSMLSVLSTENILQKTTLNQLNNLMKEIKNDTKSENLQLFLKHYNMIVKQISIMQDNSSI

YENNSLMKELKQLNTFTQNTIEQSNLFKFYIALAVFGITLVLFVFFILLTLKKVIMPIHTLEKLSANLAS

KEANLHSRLNIEPKSELGQSAQYINSFISTVQNSIIEAIENAKSSHQNSQKLKNNSMMLENSSNSQHEQI

QGVKEITHVLDDHINLAGNLAQESIENMQDMHILMDKVELTLSELVNLINENNEKEQNIVANMDNLTQSA

DNIIEITNSIKDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVGQLADKTSKSLLNINATVNTIVQQI

NDNKALMDLIHDSMKETSSKTNDLQQELVNSMHKLESSIESTQTMKDKSMEVKDKMLILGTNIDKVNELA

NSVKDLSCEINNISQNVLNGASKLSEKLSSFQ

>ETN90179.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>ETN90178.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MCLAGFLIILLPVGIANLIFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGKYLAALLIMTAVGL

YQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFEAELNGEKFRKYTK

FSFAAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSKEGWNGLWQNISFLGKRDVKAP

DYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVASSKWDVAFLDNNF

SVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQYADFVKGNDKFKGQ

GESLGRGRLDTVRAKFNHVASMTTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSGEFTPKANLKEGKT

LGDLYVTSMTFKDGEIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDGKINILSYQDGANK

LYTLN

>ETN90177.1 7-cyano-7-deazaguanine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>ETN90176.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

RILPFVPEGLRAEFSYILGIREGRNGESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>ETN90175.1 dihydroxy-acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGVDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMVVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGEAVCFNSQDEAIKGI

IKGKVKKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSVGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEEEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>ETN90174.1 non-heme iron protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRQYETYKCQKCGNEVEVQNVGGGKLSCCGEEMKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEG

WHAVARHFREAAENEKWHARAEFKAYHEIVDGKPLEVTTKNLVTAAEGENYEHTTMYPNFAKIAEDEGKK

AIARLFTAIGKVEIEHEREYLALKKMLEEEEFFNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFK

REFLG

>ETN90173.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>ETN90172.1 chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSVKLKVSLIANLIAVVCLIILGVVTFIFVKQAIFHEVVNAEINYVKTAKNSIESFKARNSLALESLAK

SILKHPIEQLDSQDALMHYVGKDLKNFRDAGRFLAVYIAQPNGELVVSDPDSDAKNLDFGTYGKADNYDA

RTREYYIEAVKTNKLYITPSYIDVTTNLPCFTYSIPLYKDGKFIGVLAVDILAADLQAEFENLPGRTFVF

DEENKVFVSTDKALLQKGYDISAIANLAKTKEDLEPFEYTRPKDGNERFAVCTKVSGIYTACVGEPIEQI

EAPVYKIAFIQTAIVIFTSIISVILLYFIVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFG

QISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDVLQARV

GSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLT

TSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAG

EHG

>ETN90171.1 hypothetical protein X910\_07055 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLFILSLGIFYTFTQAKNLEQEQNTSSNLVSVSIAPQAFFC

>ETN90170.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLEKSDIYFTIGLEFEKVFTDKFKQNFSKLQVVNMQKNIALIQTHDTHEHSHEHEHHEHEHFDPHTWL

DPILVQTMALNIYDTLIQKYPQNENLYKENLDKFLAELDSLNLQIASKLEKLKNREFVVYHPSWTYFAKR

YNLTQIPVEILGKEPKSKDLQKLITLMKDKNLKVIFVQNGFPENAAKTLAKECDAKIYKIDHLSYDWENE

LLKTADAFSHNL

>ETN90169.1 cation ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFFEISNLNYAYNNEIILKNINLSYDNKDFLSIIGPNGVGKSTLVKLILGLLKSKNEIHFKALQKKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTASVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEKNCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>ETN90168.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMALVDS

VVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMVLASFLSMIFCVLGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>ETN90167.1 mcrBC 5-methylcytosine restriction system component domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLDEFDSVYKKGLMRSYLSCEENRAFLKGKLLFNEHIKRNLIHKERFFTSNDEFVLDIAPNRLIKSTLN

FLKSKTSLNKFRLIKSMQILDEVEFSKNYEKDFSYKISRHFDYYENLLLWCKIFLKNESFMPYHGKNEAF

ALLFPMEKIFEDYVAYMLKKVNPAQDIKVQNNGKYLISKNDENCFMLKPDLYIENKMILDTKWKIPNDSE

DEKKQGIEQSDLYQMFAYACKFKIYDIKLVYPLCEKTQDLQRKIAEKFFVFKASEHLYFKEQGQKDIKVQ

VCFAPLPF

>ETN90166.1 hypothetical protein X910\_07030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTSNTFSIIEHQAFSKEDLKEIFKEKAEGFYKELEDFAKNNENLLGFKNKNTLKAKNYVGIIQTKSGVL

EILPKCTNLDSYKKEDSSSNHDKEKLKRYYELDNISKNNDFYEQDFKFNPKNLLINMLKTLKNFPFKNHK

FHLCKVLKFLYLKCLSLCF

>ETN90165.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIVLSSDDKKRFKKYLVDFFHNAYNGNKLSSKDEVVNFNFFKKYDFYVDLSYGKGNVAKIPWIIFIRMDT

QEYKASYGVYVYCGIKRENREIVVCIGESEDKTVNYLARNKVDEYNAQFNHQVYNYSNLSNDINLIVDKI

ILNMQWFKELPLNEIQDININTLESKSLEVENNVQQISSKMENKNMPLNQILYGSPGTGKTYHTIDKALE

ILGKNLESRDDKKAKFDEYVKKGQIVFTTFHQSYGYEEFVEGIKPRIDSKENSKEIEYKIKDGIFKELCE

KALDNYENSILNADELNKKIELKEKVENFLNWLLETNEPIGKTKGGNFFVVEIDNKTIVIYSEGVERFDG

IFNLNLSIFMELLKCKDEFNNATEMFKKVFNRDYADRTHTYYFNLVKKFKAYEEKQLAAKIENNKNNDNS

LKPYIIIIDEINRGNLSKIFGELITLIEPSKRIGEKEELKVTLPYSGEKFGVPKNVYIIGTMNTADRSIT

SLDTALRRRFEFVEMMPDVSKLSIDCEGINLQELLKAINTRIEYLLDREKTIGHAFFISVENLESLKKVF

KNRIIPLLQEYFYNDYALIDAVLNKNGMLEISVENKDYLKNMTEFIESDKIVYKFSDSNNWNKDTFIKIY

K

>ETN90164.1 ribosome maturation protein RimP [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>ETN90163.1 ribosome-binding factor A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNPNEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNVHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>ETN90162.1 translation initiation factor IF-2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPEIAAAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENIKEQEKLNESEKKEPKKEEKLKQEVKKEELKIEKENAKEEEKQEIIDAHKPQSLASATLAKRRGL

VIVKKKKDEEEIQVKKEEVKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFL

DEHDFGDISLDDEDEVVLPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPSKKIEK

KEVEEVGSVAISKEIRVYEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEA

DEFDYVKDYEEETDEKDLVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRK

ITFIDTPGHEAFTAMRARGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDM

VKTQLAEMEIMPVEWGGSYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRG

AAATIIVQNGTLTVGSTVVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKE

AREYANKRHEYNRQKELSKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVN

IIHSGVGGITQSDIELASASENSIVLGFNIRPTGEVKERSKDKGVEIKTYNVIYNLLDDVKALLGGMMSP

IISEEQLGQAEIRQVINVPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKG

YECGVGIEGCDDMRVGDYIESYKEVEEQASL

>ETN90161.1 hypothetical protein X910\_07005 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKHIPIRMCIVCKNRFEQNMLFRFKVVLGDIVPKAEHGRSGYLCQNCIEREDKVLQKAFSKICKNLNTK

ITQQGLKEIFLNGKD

>ETN90160.1 homoserine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>ETN90159.1 glycoprotease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNALSKPLMIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVGLST

LSIVKNIPLFAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLD

AI

>ETN90158.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>ETN90157.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKRKGKTYLSVLILVLIAILIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDESSIKNVQIIL

HKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKAEDANLDKVYIETNKGKIFKVTPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYRVSNINLTDKFLDGKIENLANQYAPKDNNLNRYEKFKFVNETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGLDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWVENNIYNVLNDGKKIILGKN

>ETN90156.1 prephenate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIAIIGLGLMGGSLGLCLKENKLISCVYGMDLSKENEKDALRLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNVTIIELGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>ETN90155.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKHLISICALVAIANAATIKDIKFIGLNHLSNTSAINITGLKIGEEINPAKINTAILNLYKQNYFENIA

VENNNGILEIIVTEKPTIAKVTITGIASNDRKQVESILGIKRGTLLDEGSIKEAIERIKAYYEAKSYFDT

IVEYKKKTLENTDGLELEFIVNRGENIIIDNVHLSGAKKFSYSDIEPAVVNKEKEFMGWMWGRNDGKLKV

FELSNDSSRIADEYMKKGYLDVQVSSPYLKTYTDTYQANLTYFIKEGKPYKIKSISIENPLFDDKQNAQT

VKDLRSSAGKTINIEDIRKDVKTIETQSADLGYAFVEVYPDIQKNDQTQEATVVFKVIPHDKVYIRNVII

SGNSRTVDRVIRRELYITEGNLYNRTDLSESKNALKRTSYFDDVNIKEEKVDDTHIDLIVDVKEASTGAI

SGGIGYGSSDGILLNASLSDTNIFGSGIKSSVSVDKSDDTLSGRISLINPRVLDSQYSLGGTLYSNDYEW

DNYSEKNYGFDITVGRQFARYYNVSLTYNLEQSDIYHLSPTLLRTGYELGKSIKSSITPAITFNNTDDYY

LPRSGIIASTSLEYAGLGGDQEFISSSSKFNFYQGLQDYIGYDLIYRYKASFYKVWDEGYLPINQRIYLG

GIRSIRGFESRTVSPKNQWGDEVGGTIAFANSVELSFPLIDRIKLRGSVFFDYGMIGRKNLDEIKRMSTG

IGIEWITPIGPLQLVFAKPLNDKKGDDTNSFEFNLGTRF

>ETN90154.1 inositol monophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KASPKQMILDPLDGSSNFVSKIPFYGTSIALMEKDQAKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFSKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFVLILGKTRIFDTAAALAIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>ETN90153.1 acetyl-CoA carboxylase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFADIFSKIRRQQPSIKEAPNHWVKCQSCHALMYYKEIESCFNVCPKCNYHMRISADERIKLLSDEGSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINSLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSAALKLLSKEKLPYISILTNPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>ETN90152.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>ETN90151.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKHEN

>ETN90150.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKLFLLASFIYIALIFAFAWHLELGSYTLNISTYTFELPIMIWLVIPLFIYMILAVLHIAFYGFLRYL

KFKHFFKDAAKFEAYTQDLLLEKDLKTTFQTKEFRAVAQLFKTIKTHEKIPHSNKINEILDLIDGLNKNE

FFNLSKFKLENNNVLYLQNEKNHLKNDANYAYNKLKNLNEIKDEFEEIAFNTLIEKASYEQIKNVKIPKK

PSEVLTLIKRFKEGNLELSVAEYEVLLSHNTLSEKDYLNAAKLSTKLLNPDAILGIFNKIKNEKSEALRA

HLYLLAEFGLLDELREQIHNDDKKFNDFKAFLVLREKNIKIDLNQLIQ

>ETN90149.1 tRNA-dihydrouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNEMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFISIHGRTRKQLYSGKADYESIASAKASVSIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDEVNRINDAKIMQEKIESFF

>ETN90148.1 hypothetical protein X910\_06940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFK

IHKSTLDEIERFNQHNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLND

GCNQNKEYIVTHIFNAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGS

YSKEALFMSFLKSYSPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQD

GWLDAGIYAMEKGVAWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>ETN90147.1 3-deoxy-manno-octulosonate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDAKMIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKD

HESGTDRINEACKKLALKDDEIIINVQADEPFIECENLLKFKEFASSCLDKKAFMASCYKKITQEEAMDP

NLVKVLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAIE

NGKKIKMLEISTTSMGIDTKEDYERALKIYLEK

>ETN90146.1 threonine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKDEILALFDLKNSDEKVFEARNIKKEILDWMQK

>ETN90145.1 tetraacyldisaccharide 4'-kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>ETN90144.1 NAD synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFALLMPTQISNKANLEDAL

RLCADLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSALKNSLVIGTSNKSELLLGY

GTIYGDLACAFNPIGSLYKSEIYALAKYLNLHENFIKKAPSADLWENQSDEADLGFSYAKIDEGLKALET

NDEKLLRTLDPSLIAMLKNRMQKNAFKGKMPEILEI

>ETN90143.1 beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKKHVKKPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDDFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIVGKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQVHLPSWLRYF

>ETN90142.1 hypothetical protein X910\_06910 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MELDQILLYAFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWTLNFIFLLALLSVFLGWKLKLD

>ETN90141.1 7-alpha-hydroxysteroid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNAQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDVDFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRVNVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>ETN90140.1 dihydrodipicolinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>ETN90139.1 protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELMENLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWSIEDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKTIPKIHTKEPKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKLNLINDYYAYVNDCIDDNLFIFICNCNPNVNAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDSNG

>ETN90138.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAYEMIKPLLFKLNPEHVHTLVEYSLRALSASFPGSLSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKNLRELQNDDFLNTLLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGADGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISEAVGVN

LK

>ETN90137.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLKVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLAVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDALCKLNLKSARIDALTSPLMDMIGSVGVAVVIIVGGREVINGSMSVG

SFISFVSALFAIYTPLKRLSSLYGKLQGAVAASERTFYLLDLEPQIKGGSKELKNIEKISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGTSGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHAKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANACEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLIFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>ETN90136.1 cysteinyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKPRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>ETN90135.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSLVFKNFIINALGILFSRILGLARDVLIALFLGAGLYSDIFFVALKMPAFFRRIFAEGAFGQSFLPNF

VKAKKKGAFCVSVMMQFSLIVFLFCLLVSFFSSFFTKLFAFGFNADTIALAAPLVAINFWYLFFIFLVTF

LGAILNYRQKFFITSFSAALFNLSIVIAAFFVDKNAPQNTLYYFSYATVLSGVAQLILHLLVLKNNPVIR

AMTLSIKFKKAKAKLQGFYGNFFHGVLGSSATQFSSLLDTTIASFLMSGSISYLYYANRVFQLPLALFAI

ALTQVSFPKILKHLKSDQENLALKFMQRALALLSILLIASSIVGSVFALEISKLLFERGNFTHEDSVITA

YVLIAYLIGLLPFGLQKLFSLWLYAKFKQKTAAWIAVKSLIISALCSMAFIFLIKDESLKVIAVALSSSI

SAFYLLGANIKEFGFKKFFALISIKICLLVIVALIVFTILLILIKPYILSFFIGIFTSFKGVF

>ETN90134.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MALDEKIIAYTENPARELLSVASRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNIPLNKTIQITVAQGIDPIESQDESLILAYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVKDAVNSGVGIECEELNVVGSVGSNTQLNAAKMKIE

GTTHSKAKIQAKQAYIKTHRGFVEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDSNYDEEFAILGEQISKLNHKMNKIRQYILSSKNGILSVEKKITEL

KNQGQNVPIQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYEEKDIAWLSASKE

>ETN90133.1 Holliday junction DNA helicase RuvA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDVNSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTKTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLG

>ETN90132.1 D-alanine--D-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFAILFGGNSYEHEISIVSAVVLKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIK

QGGFFSKGFLKENKLECECVINLIHGRDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMVRKGQNSKEKLSFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCMINDEFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEIYLNEINPNPGSLANYLFKDFSTTLNALADQISLEKMIKISYNFLHSINGQKGKL

>ETN90131.1 prevent-host-death protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>ETN90130.1 2-hydroxy-6-oxohepta-2,4-dienoate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAQTQLSYKNKTYQISYEILGDLTLPQILILHGWGANKELMKQSFYPFLKDFCQIYMDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNVCFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLSPMMYETFKNVVDEDFGEIFAKQKAKSLVFWGKSDEATPLYCGEKMHQLL

KNSTFYPLEGDHFFFLKYSAFIAQKIKEI

>ETN90129.1 UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHTPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFTILALRFSFLFNLFSLPFALLSLKIYEFFTNLY

YKKQAKAKLRANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINNNLSQDTQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILS

>ETN90128.1 hypothetical protein X910\_07090, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

LNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFEKIKNDITVE

>ETN90127.1 hypothetical protein X910\_07085 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKQLDGLCDSKKLSEKNAKNFMKSSSKIQT

ISYLLFLQNKSTH

>ETN90126.1 hypothetical protein X910\_07080 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFLAKDFPCYEFEKNKAYGTKAHKEFIAKFGICKLHRKSFKLL

>ETN90125.1 glutamate synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>ETN90124.1 hypothetical protein X910\_07070 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMNNILDDECLRLFSQAEIIFYSFGQTNDSTAFKLGEVTESKDEFKNRIIDDCNKCIKRAGYYDI

NEFISEISEDNYEWGKYFHYLFLTYNNVGIEECMKLIDEKIYAFTIEHIIPQNIINNGLLKNYKFENEDD

FNKLKNTFGNLIPLEKILNSICSDRSLLDKKEYYKKSKLSCNLSFANDENFLNFEKKQIIKRNEDFTKWA

RKFFVDFLKITQNKE

>ETN90123.1 glutamate synthase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

FLNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKNAYIPALLAVSGVHNHL

VRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLDLSYEKAVENFIKASSS

GIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEKELIALHKHAFNDTHKA

LDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRSLMEFDFSEAISIDKVE

SVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKEGVDKNSAIKQVASGRF

GVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPPPHHDIYSIEDLAQLIY

DLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIPHAGIPWELGLAETHQT

LILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCHLNTCPFGIATQDTELR

DRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGKLNLDKILKSLPTYNRT

AVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSSEILKTYGKDALDEDSI

HIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPEENIIAGNACLYGATKG

EVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMSGGVVYIFGRHNEAHVN

TELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYEKMLKMLDLCKNEKDPN

LAAFLKITQ

>ETN90122.1 hypothetical protein X910\_07115 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRIILLSSLAILSLYASDTKDNKNHTNVRIISL

>ETN90121.1 hypothetical protein X910\_07110 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLESTTASNNSSLKSSNETLASVSIDGYKLT

VNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNNNPNDTIGQQEPDIATALLMQTTDEDP

NINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>ETN90120.1 hypothetical protein X910\_07105 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFAN

GVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLL

YFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDL

SKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILS

QIPKITEQQKYSKSLRSSCRCLQ

>ETN90119.1 hypothetical protein X910\_07100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTVLTEAKEASYNTINYNNVQSITDASNT

DKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYNKIIINDTLFGVASDKREGILSIIAGL

SNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNTLYRREFKYI

>ETN90118.1 hypothetical protein X910\_07140 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEVKIPPTRGKTERPRGPLLQLDTAIWIRMCRIGGRL

>ETN90117.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSGNFTNQEFQIGA

SSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSVGTGLGALAEEI

NKSADKTGVRATYDVKTTGVYAIKEGTTSQDFAINGVVIGQINYKDGDNNGQLVSAINAVKDTTGVQASK

DENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAIGMGTTDMISQS

SVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVGSGKNLSVGLSQ

GIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVTTLKGAMAVMDIAETAITNLD

QIRADIGSIQNQVTSTINNITVTQVNVKAAESQIRDVDFASESANYSKANILAQSGSYAMAQANSSQQNV

LRLLQ

>ETN90116.1 50S ribosomal protein L22, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKR

>ETN90115.1 hypothetical protein X910\_07165, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALK

>ETN90114.1 30S ribosomal protein S19 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>ETN90113.1 50S ribosomal protein L2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>ETN90112.1 50S ribosomal protein L23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>ETN90111.1 50S ribosomal protein L4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>ETN90110.1 50S ribosomal protein L3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>ETN90109.1 30S ribosomal protein S10 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>ETN90108.1 ribosomal large subunit pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRINKFISHNTRYSRREADELIKQGLVKINNKIALLSDEVKFDDKVFVKGKRVQKRTQFSVIIYHKQKGE

IVSKKDDRGRKTIYDTLPRQFSTWLSVGRLDYASEGLLLLTDSPVIANALMHSDLEREYYLKVKGTVSKQ

VIEAMQNGLEIKNEKKGAHAKTKITSMSFAPFIDFEIFGSSGGYTKLRVVINEGKNRELRRFFGHFDLEV

MDLKRVAFGALDLGMLKAGKHRYLENGEYEKLRDFLKFNEIRY

>ETN90107.1 ribonuclease J [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKKNR

NLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDAII

VDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGMIS

NKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPIDG

YPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFARTKGRVIMSTFSSNIHRVYQAIT

YGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIVTTGSQGETMSALYRMAT

DEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLTKP

KFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIADD

VVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINVKDEVLNDP

RFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>ETN90106.1 purine nucleoside phosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIVCAGGNENFSFAKAIGIGLVESAFHLGQLCFKEKPSKLIFIGTCGLYDKGEILEIYRSSYAFNVEFSK

ISHAFYTPAKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLNIDAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKYHYI

>ETN90105.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>ETN90104.1 hypothetical protein X910\_07225 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTMLDIFEIVFITAVVIIGFGGIVFVVTKEKK

>ETN90103.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNTIIQKAIHKDLNSILEITKDALNAMKTMNFHQWDENYPNEIVFQEDIQAQELYVFKENDEILGFICI

NEKFEPEFYKQVIFNKNYDDKAFYLHRLAVKQNAKGKGVAQKLLNFCENFALENHKASLRADTHSKNFPM

NSLFKKLDFNFCGNFDIPNYQDPFLAYEKILNQKAF

>ETN90102.1 isopropylmalate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>ETN90101.1 3-isopropylmalate dehydratase large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>ETN90100.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKNEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHITFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALAQGKMTKDLNAKSYLNTDEMGDCILE

ILKENDNG

>ETN90099.1 2-isopropylmalate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>ETN90098.1 hypothetical protein X910\_07170 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQIFEISNSVQQKSKDNTFNLLLQLSL

>ETN90097.1 hypothetical protein X910\_07290 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGLALAKLLIEARVNGGRNYNGPKVAKFLVG

>ETN90096.1 hypothetical protein X910\_07380 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLLKESKHEKSENLKWSDFLSLIKNPALWLVVAITFCTYFFNMSFYYFTPYASNVIGTSAVFAAILAVL

TSYIRPIVSIVGGFVADGFGKAKVMLVGFVTMGLGVVLLMFSAYWGVLYKWWL

>ETN90095.1 DNA ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRFVFLICCACLVFANEILLLSKFDKQDFNSKDFNTYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFTIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFKISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>ETN90094.1 hypothetical protein X910\_07465 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTRILAIFFIFTSLLYADENPFKTDQNITLVAPPEFQKEEVKFNSSARILKSITFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDISVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVYKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHKGYYRLVIYLDGTYNYNIQK

DATGYMINLL

>ETN90093.1 hypothetical protein X910\_07460 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFWAFLVVIGAIYFGNMFFGQYSLDALLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>ETN90092.1 enolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>ETN90091.1 recombinase RecA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>ETN90090.1 succinyl-CoA ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKITIAHSPDADDIFMYMAIKFGWIGNDFAYENTALDIQTLNEFALKNEFDATAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKDTHLKRNFKVALSGANTTNALIFRMKYPEARIIYKNFLDIENVVLSGEVDA

GVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALRRSLPLSDAIKIERDLTNAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIHVNDYLIPSEY

EEARNS

>ETN90089.1 flagellar biosynthesis protein FliQ [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>ETN90088.1 UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>ETN90087.1 hypothetical protein X910\_07430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRYCFILFLSLVLSSNLLANNFSQKKVIKIEKSADSFEVIDLNQNVANPNLNQQKALFDSSTLIEKKSQI

TKDKDIDFAIVLTSRKNFGYFLDGFRVSDKEFSTLFAKNLIQSLKLNWVNSAANGIYQSPKTLSYFSPND

AKLINVSPFLTQEKDKAKMYAKFTDYVVVVNLQDFYVNITNYFITTSKEGVANVNFKIISTSNGKILVAK

NAELNLTLKNQDAKQNYQDIVNQMPKMLASVIDNEIKKLKLTIN

>ETN90086.1 CysQ protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNLDKFLEIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCIMISLVHDNRPVLSLIQNPLKGDIFYAHAKTKVYKNDKPL

QIDQQEYEKNKYKALLSVNHLSKEDEDFAKEHQLEAINIGSGLKFCAILEARAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYNPLNYKSSPFICVSSRNFLQDFL

>ETN90085.1 hypothetical protein X910\_07420 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIRLSIRFFKIIQEDFVEFLISTKILIKFY

>ETN90084.1 type II citrate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYMEMAARIVAKIPTIAATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWIEQKEQESLKIVRPRQLYLGETS

KI

>ETN90083.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIARILRLPLSATEIILGAIIAYFGFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYTLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKRIGFKNMILFGLSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAVIVMSMIKFLSNSKK

>ETN90082.1 biotin synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>ETN90081.1 DNA topoisomerase I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKNAIENALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTIANKDRAKLILEACKNEAYTISDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIAAKFLDKDELKLYTLIYNRFLACQMNPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNFKIGENLKIQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSDVAFNVTEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKSESKNESENTAAKAKANGTGITCP

SCQKGEIVERFSKRGKFYGCSAYPKCNFISKYKPSEEKCEECGETLVIKELKKGIFLECLKCKIKKEMKD

>ETN90080.1 multidrug DMT transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>ETN90079.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>ETN90078.1 hypothetical protein X910\_07385 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVALTLACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAIGIVSTFGYLPEVFAPVLAGDLLDKYQGVKG

FHIYFSIMIAMAIMGANFCLFWIKKYNKKGKKYEENN

>ETN90077.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIYGLWGITSLLTFWPSLMKIIRTLASKQEQARAYGVFEGGRGVVSTIYLAIATAIFGYFQTKALASKG

IEMIIIFYSLAL

>ETN90076.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>ETN90075.1 preprotein translocase subunit SecY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>ETN90074.1 50S ribosomal protein L15 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>ETN90073.1 30S ribosomal protein S5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>ETN90072.1 50S ribosomal protein L18 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>ETN90071.1 50S ribosomal protein L6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>ETN90070.1 30S ribosomal protein S8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>ETN90069.1 30S ribosomal protein S14 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>ETN90068.1 50S ribosomal protein L5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>ETN90067.1 50S ribosomal protein L24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>ETN90066.1 50S ribosomal protein L14 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>ETN90065.1 30S ribosomal protein S17 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>ETN90064.1 50S ribosomal protein L16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>ETN90063.1 30S ribosomal protein S3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>ETN90062.1 50S ribosomal protein L22, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

FKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCRVDAAAVLKRFRPR

ARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKKATAKKES

>ETN90061.1 UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

TLLGIVADINNNLSQDTQIYIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILSTKLEA

LNSKRLEKAFLHSSTQKEGDKLISLYDEKLSLIHSSLEGLEFKVDIENKSYDFKSQILGDFNAQNLCVCI

LCAHYLGIKLEKIQKQVLNINSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYKLCKSYKGRKVLVSPGI

VEVSEEENIKLAKIINECFDLAIISAQINAEIFKKELKIKTIILKEKSQLVQTLAKETKHGDLILFSNDA

PSFM

>ETN90060.1 hypothetical protein X910\_07665 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MITQIIILYFHKVKLIKNSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFSISS

KTSSPNYDISSEFKNSIYTLKYKQADISNNTAYGYSVDKDGYMGSDFNKAAGLPEDFKIHKSTLDEIERK

AENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTETDINSMPKGISELSSD

KTIGIMPKNYDKLTITNYYNTQEQYNEAEQLGMFGHINIGLQPLNFTPQSMQTQNLDKDTAIDTFNPDMS

VYPQNEDGSYSKEALFMSFLKSTGVSPREGSATLNPIAKSYAEAMAKESFDGSLTSLDDIMTGKVDFASL

LKGYAQDGWLDADIYAMEKGVAWQNTSIGYGGAWFDREFNQAKANGWKASNESINSFVNNIMDRLNNLIG

QTRV

>ETN90059.1 signal transduction histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDELEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>ETN90058.1 hypothetical protein X910\_07655 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHKNLSLSKLFDFYSVFEGFEKLNILNFEDDVFTNIERILLDDYLKIKSYFALDETSSYALTLLAKNNRK

RFSINRKIQHFKALSTLKYLLETGIIKLEYSKEAKKIKDKRQKIKKELRSYVVQDKIIFSNHFTRFFFYF

LKPNEKLILQNRYKEVLECIKEKFELYQSFCFEQLSRELLEKKFNINGVQSYWDKNLELDLYYQDENLCF

VGEVKFKNKKICKNILNLLKSKAKSLNLAPNYYIIISKNGFSKEFDKICEQNLLLLDLNDFKILLEE

>ETN90057.1 hypothetical protein X910\_07650 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQISDLKKELILKKGILHFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQTYEQARKDIKKS

LSLDENFALIACGTGSSSAIKKFQELIGIYIPPLVKERYFTQIDKNTLPLVIVGPYEHHSNELSFREGLC

ECIRIPLDKNGEIDFDFLEKTLQKTKKEK

>ETN90056.1 aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVRKFKGIVAFDASSFIPYKNISCQYYDALFISSHKLIGGIGGSGLLAIKKDLCGNKPSFAAGGTVGYVS

RTSQCYLCNEEALEEGGTPGILQLIRASLAFKIKDSIGVKNIEKKEEILKDYFFEKLKTIPNLILYAKNL

KTRLPIFAFNIKGISPFDIAYELSKKYHIETRAGCACAGPYGHDLLGLKDNQKLKTKPGWLRISLHYTHE

KENIDYFFNALNKTIVKLSH

>ETN90055.1 formyltetrahydrofolate deformylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISVLKICTKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMLGQEAL

IELCEKRKKDIVVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGANPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVLPVNHEFTWQDMQQAGRNIEKDVLSKALDLVFEDRIFIHNNKTIIF

>ETN90054.1 multifunctional Cca protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGAQGFGKSFFVCKFKNYDLALARTENKISYGHK

GFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLKDLGAGFLRHIDKQSFQEDSLRVLRAVVFA

SRFNFKITSESLKLMQSMDITDLSKDRINAELCKFFKSPRLDVGYRYLQELGLEKQIFGFESVFMSLEFQ

NLLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEYLKYANQAFYLDDISDFELAKIAFEMPLKE

WLGLWSKKRIEQAKRLGLYENKFESKILAKDFINAGFCGKILGLKLQEARENELKEYIKGLAK

>ETN90053.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELPPMEFVCEELDTPQDLEDKISMAKFEE

EQKIQNNIEISTQENKEFKKEEPFLQSEILNPSVMTEVQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKK

>ETN90052.1 hypothetical protein X910\_07625 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDEE

INEFKRWLIKI

>ETN90051.1 hypothetical protein X910\_07620 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVFLIPLLIIIGVIFGIDYVYFKNQDLKVQVKKEQKELNSSLEKEKKEYIEKLFKTK

>ETN90050.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSYKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGAIETIEKNENAENVRYYGSVFNQFS

>ETN90049.1 hypothetical protein X910\_07610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKFLFILSLFCVLSYAYELKLNANITALKLDKQNLYIGTDKGEILQYNIKDKSLKELLSLPKIKNYYGD

DFAKIYNIDIFKHTLLILSEGDFGAKNLSFYKENLQIKKLEENSIIKAFFINENTYLLISIGSEIELIDK

SLKNIKKFNFSHSSLNDAVLNEDKGRLVAGFESGEVELFDLKNWKMLKNYDKMHKDNIYQVDFKNNIILS

CGTDRRIGVVKNEEQNFLQKDFLIYTCALSPNGEFAVYSDNEAGVSEVFSTSDFKPVKTFNNENLMSEFI

IFLNNKDFIVSGFGDSIMFRSIDE

>ETN90048.1 nitrate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKLVLLGSAAVVFFAACAMNSGVSSEQIGLRKASLENENKVNLVEANFTTLQPGESTRFERSYENAPP

LIPHAIEDLLPITKDNNMCLSCHDKAIAADAGATPLPASHYYDFRHNKATGDMISDSRFNCTQCHVPQSD

AKPLVGNSFKPEFKNEQLKSRSNLIDVINEGVK

>ETN90047.1 quinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKYLIARRIVQLGILALFSFKATDFILQGNLSSSRLFNTIPLSDPFAVLQIILASWSIDLVALIGALIIF

FIYGLLLGRIFCSWVCPVNLITDFAAFVRNKLTLNNKFLILPKNLRYFVLVLVLVLSFVFSLPVFESFSY

IGMIHRGIIFATSSWIFVAFILFCIDTFLSPRAICSHFCPLGAFYAFISRFALLKIKHDSDKCTKCYECI

RICPEKQVLWMVGKESTSVKSGECIRCARCIEVCNDDALNFNIFDLRNK

>ETN90046.1 quinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKGRREFFVSAFKAACLCTGGGFLANLALKADDNYALRPPGAEDEARFLSKCIRCGLCVKACPYDTLKLA

SLLDSPKNGTPFFKAREIPCYLCKDIPCIRECPTDALDKKHLEQGIESLKMGIAIVDSASCVAHWGIQCD

ACYRACPLIDRALKLELKRNERTAKHAFLLPSVDHEVCVGCGLCELACITEKPAIRVLPREYVLGKAGSH

YVKGWDEKDEGRIKNADTSKHFDAKKATNYLNDGEL

>ETN90045.1 nitrate reductase catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNRRDFIKNTAIASAASVAGLSVPSSMLGAQEDWKWDKAVCRFCGTGCGIMIARKDGKIVATKGDPAAPV

NRGLNCIKGYFNAKIMYGEDRLVMPLLRMNEKGEFDKKGKFQQVSWQRAFDEMEKQFKKAYNELGVTGIG

IFGSGQYTIQEGYAALKLAKAGFRTNNIDPNARHCMASAVVGFMQTFGVDEPSGCYDDIELTDTIITWGA

NMAEMHPILWSRVSDRKLSNLDKVKVVNLSTFSNRTSNIADIEIIFKPNTDLAIWNYIAREIVYNHPEAM

DMKFIKDHCVFATGYADIGYGMRNNPNHPKFKESEKDTVEKENVITLDDEEAASLSYLGVKAGDKFEMKH

QGVADKNWEISFEEFKKGLAPYTLEYTAKVAKGDDNESLEDFKKKLQELANLYIEKNRKVVSFWTMGFNQ

HTRGSWVNEQAYMVHFLLGKQAKPGSGAFSLTGQPSACGTAREVGTFSHRLPADMVVANPKHREISEKIW

KVPAKTINPKPGSPYLNIMRDLEDGKIKFAWVQVNNPWQNTANANHWIAAAREMDNFIVVSDCYPGISAK

VADLILPSAMIYEKWGAYGNAERRTQHWKQQVLPVGAAMSDTWQILEFAKRFKLKEVWKEQKVDNKLTLP

SVLEEAKAMGYSEDDTLFDVLFANKEAKSFNPNDAIAKGFDNTDVKGDERKIQGSDGKEFTGYGFFVQKY

LWEEYRKFGLGHGHDLADFDTYHKVRGLRWPVVNGKETQWRFNTKFDYYAKKAAPNSDFAFYGDFNKMLT

NGDLIAPKDEKEHSIKNKAKIFFRPFMKAPERPSKEYPFWLATGRVLEHWHSGTMTMRVPELYRAVPEAL

CYMSEKDGEKLGLNQGDLVWVESRRGKVKARVDMRGRNKPPVGLVYVPWFDENVYINKVTLDATCPLSKQ

TDFKKCAVKIYKA

>ETN90044.1 thiol peroxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSTVNFKGNPVKLKGNSVEVGADAPKVNLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>ETN90043.1 hypothetical protein X910\_07580 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILILSLAAASFLNAEILVYGPGGPAPVLKELALKFEEKTKEKVIVTAGPTPAWIDKAKENADLIFSG

NTSMMDDFAKKIPSLSLENLSVLNVRPSGIIVRPNNPKNIKNFEDILKDGINVMVVDGAGQVGLYEDMAL

KSAKRENLVKLRKNIKIYAKNSKAAVDEWNNNPNIDALIIWSHWAKALGDDKALFIKDKNAVIYRAAEIA

PTKKGLENKKALEFVDFIKSKEAQKVWKKYTWKEVK

>ETN90042.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVAPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIALKQASELKTLLKSVYEKRTFRHLSDIKPYQSSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYVDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDVKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLTFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSSMLALVVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKNVNLQNHQKRNYQLGLFADLEELASETRFKFESEFDAHPILKLSKINDLCARNLE

KIYLFLKKAMEIKHSLTLVNLICENSFYREICEELATKRATNKAGQVDLLRKSENLEKIETKFNVLKELA

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGELTID

>ETN90041.1 hypothetical protein X910\_07570 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKITP

>ETN90040.1 hypothetical protein X910\_07565 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVYVLDGKFLSQYRINLLKDMLSVIQDNAKDYYLSVFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISL

DRLSPYLNNPKELNEHVAREEILERLKLQIKKDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>ETN90039.1 valyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMRTLGITPAWSRL

RFTMDEGLVNAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSDEFLV

VATTRPETFFGDTAVMVHPDDERYTKFVDKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLDFISVFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFIEKIEEHNNQIGYCYRCNNIVEP

YISKQWFVKKEIAQESIEKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSEKDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTELKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNDKKIKDEIKAYMNFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENVDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>ETN90038.1 methionine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQKKSKELRVLRKDIGM

IFQNFALMERKNVFENVAMPLRTHYTQCKFHAKLFNKEYMSEKEIAQKVNSLLEIVGLDHKNKSYPRELS

GGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLVTHEMDVVKDIAQKAL

LLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVITHMARTLNIDFNIVW

GKIEKLNGKALGNLVININENDKDKVLDYIEKSGVLWEVAS

>ETN90037.1 methionine ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNEENISIISAFFGRIFQFFNEFSWQDIKEVSLSSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLAIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGISIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>ETN90036.1 methionine ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKSLFIASILTLSLNANALETITVAATPVPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGVKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDIIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDPKIKALTQVLQSDKIKQFIIEKYNGSVLPAF

>ETN90035.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLFKIIILACILNLSSLFAQNITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKVIDEILRSDKFKAIINEHYKDILIPAF

>ETN90034.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNIKKIFLSVLFTISLSFGADKTIIIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLNSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKKLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFMEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYKGSVIPTF

>ETN90033.1 hypothetical protein X910\_07530 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKTTSLPKDFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKKCIF

>ETN90032.1 flagellar basal body P-ring biosynthesis protein FlgA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSERAIKRGDKLGAFDYKSVLIDFDKVPLNALTLDDVDNLVAKSNINKNAILRANMFKTTALIRRNDPI

IGVLSEANVDVLIELVALQSANMGERIRAKNKEGKVMQGIVVGKNRMIIQ

>ETN90031.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGAKLSFKAENQANLEEICQENFKYTHFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIHAGFADTLLMRAAAVALKERKKLILGVREMPFSTLNLEHMLKLSQ

IGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHNLYEKWQNF

>ETN90030.1 phosphopantetheine adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>ETN90029.1 thymidylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>ETN90028.1 histidyl-tRNA synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINALKGMKDLLDKDAYCYEKVIKTCEEVAKNYGFTFINTPHLELCTLFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLKCMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGVGFAMGIERIIAILEQKEEKVQREGIYLCAMDEIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEAQNESLFYKNLAKKEEKMIKISDLKKVL

>ETN90027.1 hypothetical protein X910\_07500 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDYGIDIWGNENFIIKNGKVCINHEKKPAIIDIVKELRDDGYKGPLLLRFPHLIQKQIENIYGNFNKARK

EFGYKGGFNAVYPLKVNQYPGFVKNLVKLGKDYNYGLEAGSKAELLLAMAYNNEGAPITVNGFKDRELIN

IGFIAAEMGHNITLTIEGLNELEAIIDIAKERFKPKPNIGLRVRLHSAGVGIWAKSGGINSKFGLTSTEL

IEAVNLLKENKLLEQFTMIHFHLGSQITEIHPLKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYSQ

FKNEKSRNYTLREYANDVVFILKNIAEQKRFRA

>ETN90026.1 para-aminobenzoate synthase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKA

>ETN90025.1 para-aminobenzoate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLTDYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFKFHSKMNSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKTKLFEIQSHPTLHQMTSSVQGKLKKNISLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHKLFKDFYNILNQKSSYKEYQNFTLF

KLDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGRYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTFYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>ETN90024.1 thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFPVKLARSIVVCAFLAGISASALSEGKEYVILKNPIANADNSLIEIFSYRCTHCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMGDYGKQANEIFAFAAFKDGVNKADPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMNVSKADFENFLKTPEAAELLKSYEIANPISQNYGTPAFVVNGKYQIVPSAIKSPEALI

EITKELSKQK

>ETN90023.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGMIALIN

PTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPSWFLPI

GECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFIVLFAM

FIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>ETN90022.1 arylsulfate sulfotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKIVCDDDYSKCPGYENDNGGFDFTWTQHTGWRIDSKSNKRYIYIS

VFDNGDARGAEQPAFASQKYSRAVIYKIDQQNKTVEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYS

ATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSVQIQFSGSGTGYQAMPFSVDQAFNPKK

>ETN90021.1 protein-disulfide isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKFFCKFVLALVFYSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLEKLREAFPNLH

FKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRNFSNLDEFYDI

GLKAMNVNKNEVLNFLNTQKAKEILSEFQRANDIAKTYGTPAFVVNGKYQINPSAINSMQDLEDLVKKLS

NMK

>ETN90020.1 hypothetical protein X910\_08250 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNLSIQEKKDLDNCVFQNLGRQDTFALSAIFKNFYLKIKAFIYSK

>ETN90019.1 hypothetical protein X910\_08245 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKKPNKDFKIQDVKLVQFSQENKDCLELLIEAGQVRILNSYN

SCQKLSKDESFQKFLNEDFLKLYKNNGYLINENLQNLKNTMQDIMIYYKLRYSFSKDVKDMSKNKNLDIL

NIDEKDGGTLLYKINNQACVGIELTRHDSRMAMKIYGIENLDKECKLFIQSPSFKDLSYTKKDFKWYYLE

>ETN90018.1 cell division protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNQNNNKTLKNELEDLQYELSIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>ETN90017.1 hypothetical protein X910\_08235 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIYHLSHTDLDGYACQFIVNFYFKNVRFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLELSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKESQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISCFVVEKLSELKENFSIEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>ETN90016.1 flagellar biosynthesis protein FlhA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKNKIVDLVFPFLGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYI

PKPTDLTTFPTLILIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVL

INFMVVTKGSTRVSEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFI

KGDAVAGIIITIINIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDE

ENFAEGTLTQLLSEYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSK

PSAAVASQSGAGGTTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSI

AESLGFLMPKIRIRDNLRLKPNEYSFKLKGVSIASAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDAL

WIDANLKDEATLNGYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIVEGALGVAPVS

LIQKILKDLLKHHIPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSA

SSAVLMENVQFRDGSYHLPLSVAQTGTLVDTLRAEVAAVANGRIKPFILCVEPQLRKFIADICYNFSINI

VVLSFAEIAENTNFNTEGIIRIEL

>ETN90015.1 Rrf2 family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>ETN90014.1 30S ribosomal protein S15 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>ETN90013.1 cell division protein FtsK [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYREFGYI

LEIVYGFFSIILGRTGSGIFALLLLLFSLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVFGGENE

KEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQILDET

IEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIKQIDTN

KNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKKLEEYD

AINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKNINEIV

IEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLDFLANP

KEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLTMALMA

KSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKLPHLLI

AGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALSNMVAE

MERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARASGIHL

IVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRLHAPFA

SEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYLQRRLK

IGYNRSANIIEQLTQNGILSEPDAKGQREIL

>ETN90012.1 lagellar hook-associated protein FlgL [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGAGTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLTQNPDKTK

YLTGDSKWQQLIGQGYVKDNSLDADKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPEDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQADDKTELNNIIQAAQNEGITME

DVTNRVMTAALGNPNNGDITNLNNPVTIQINGQNFEIDLKQTDFIKSKMTDTDGNAANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSYPDPNNP

GQTISFPIMHTNPATGNSGVVTGSNDITYGQINDIIGMFAADKIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIEISLSDSQSGQFPAPPFTTTSTVQNGPNFSFSANNSLTIDEPN

VDIIKDLDSMIDAVLKGNMRADSESENPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIEGVNTRTSF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>ETN90011.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MALIDLIEASKKFGDKIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGTLPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEEPNNKDYLKKIDTLMTLIDSKDAWNIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCILLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRRGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRAALNFNGEKTINRKKMLFELKNISKNINDKNLFKDF

STRILQGERIAIVGRNGCGKSTLLKILLGQIKQDSGEIKRGELKIGYFDQARSLVNSDKSLLEIFCPNGG

DRVEVRGKNMHVYGYLKNFLFPKEFLDKSVALLSGGEKNRVALALLFTKEYDVLILDEPTNDLDIATINI

LEEYLLSFEGAILLVSHDRYFVDKIATKLYAFEGDGYINILHTLYTEYLENEKEIEELDNFALELQTQEQ

NNNQKEKSSKKLSYKENEILKNYPEKIDFLEQKIAKLNQDLSDPNVYQEIGINKLYQELEVMQKELEILE

NEYFLVLEKSENL

>ETN90010.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKFKILIIEDDIDLNELLVLKLKSSGYEVISLADFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLSFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>ETN90009.1 3-phosphoglycerate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKIIVCDAILDKGVDILRKAEDIELIEAAKVPKDELMQMLSDVEVAITRSSTDVDVNFLNHAKKLKAL

VRAGVGVDNVDIPECSKRGVIVMNVPTANTIAAVELTMAHLLTSARSFVNAHNFLKIERKWEREKWYGIE

LMNKTLGVIGFGNIGSRVAIRAKAFGMKILAYDPYISASKITDLDMEQAKNLDEILEKSDFITIHTPKTK

ETNGMIGKQEIAKMKDGIRLINCARGGLYTEEALYEGLKSGKIAWLGIDVFDKEPATNHPLLDFENISVT

SHLGANTLESQDNIAREACEQALSAARGVAYPNALNLPIKTEDLPPFVAPYIELVSKMAFLAVQIDKNPI

KSIKLEAEGIIGEYANSMLTFAAVGALGGILGEKINYVNAEFVAKEKGVELSCETLPNSGYNNKLSVKII

TENSNISVSGTVFNENEQRIVGLNGFKTDFKPKGKMVIFKNKDIPGVIAKISSVLAAKNINIADFRLGRD

GFGYALAVVLIDEKVQKEVLDELKQLEACVFVQYVEI

>ETN90008.1 hypothetical protein X910\_08175 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKYITISILSILLLILLAVVFTLLWQFKANVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PAAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>ETN90007.1 30S ribosomal protein S1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEVNKKVQGGVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQGDN

SKLLFNVGDSIKVAVMGSRGGRSLLSHKKALRKEKVIEFIKNYQENQDDIFTVKVVGKNKGGLIVVDEND

VEFFLPKSQYGFKETNNIIGKTFKVKIIKIDKDEQSIIVSRKKTLDDERRKRKELINNIAQQEDLIEGIV

KKITTYGMFVDVGGVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSIKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPNE

RRLRVSLRNLLSRPFDGFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDDIEAAIVFIDEKKNRIRLSVKNLVRMKEREVLNEINNDDKVTLGDIIKDQLA

>ETN90006.1 4-hydroxy-3-methylbut-2-enyl diphosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIQALSNEKKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEVVIFGDENHPEVKGVKSYVSTKAYVVLDK

KELQNIKLPNKIAVVSQTTKKPEHFMEIVNFLILKTKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIKNFKIN

>ETN90005.1 3-phosphoshikimate 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIYKLQTPVNAILENIAADKSISHRFAIFSLLTQEENKAQNYLLAQDTLNTLEIIKNLGAKIEQKDSCV

KIIPPKEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKYLNNRPMRRISKPLTQIGARIYGRNE

ANLAPLCIEGQKLKAFNFKSEISSAQVKTAMILSAFRADNVCTFSEISLSRNHSENMLKAMKAPIRVSND

DLSLEINPLKKPLKAQNIIIPNDPSSAFYFVLAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMT

ITQNDFETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSSLINAKELRVKESDRIAVMVE

NLKLCGVEARELDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILS

NLGARIDY

>ETN90004.1 phenylalanyl-tRNA synthetase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIITKSWLNDWLELEEISSDKIAKTLNSIGIEVDRVGALKAPDKVVVGYVKEKIKHENSDKLSICQVDIG

SETLQIVCGAANVDAGQFVAVATKDAIMPNGMEIKEAKLRGVDSCGMLCSSLELGFEKINEGIMLLDESI

GKLELGRALNTYEIFNDELIEVELTPNRGDCLSIYGIARDLATALNLNLKEPKPFKESENVLGIGRILRL

AAEKELNGLYNYRAIELKEEIQTNLLLSLRLAQIEGLGKNSIENLLNYATHSTGVLFNAYDLSSFSEKDE

EFTINLSKQVHGETKVSCKDKLLSFSGIFQNNESRCKDDSKIIIIEANYTDPLVIADAKIYHKDQDEKML

YRSFRGSEPKLNLGMDFLLSIFEQIPNLVIYSSSQQILTDKELPIIPISIESIGDIIGQNVDKDEVLKIL

KKLGFELILSGEGLINVKAPLHRPDIKNLSDICEEVVRIIGIDNIASKGLEFIEKNRLNSAYKNYIEFLN

LRKRAVASGYFESLHYVLDNEEELKRLGFDSVKLKLINPITAELNTLRTTLLNHLLNAASLNAKNSKKII

KLFELGAVFNVNNQELNRIAFIHSGLKEEAKISNKAKPESVQFYDFLLDIKNIIGDFKLKSSKYNILSPY

EQADIYLSDIKVGFIGRLHLKIENERDLPKTYICELDLDLIRQDFKIAKPYSKFPAITRDLSVLIPKGFE

YNQIKNCIEELNLEILENFRLVDIYSDENLKEFYSITISFSFRDINKTLEDNQVNECMDKILNTLKNLGL

DLR

>ETN90003.1 phenylalanyl-tRNA synthetase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>ETN90002.1 hypothetical protein X910\_08145 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKTKKENPQALF

>ETN90001.1 4-methyl-5(B-hydroxyethyl)-thiazole monophosphate biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKVLIPLAQGFEEAEFIGIADVLKRARELNPDLEVVIASLNSELLVKGANGISIKADCSIEDVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>ETN90000.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FSLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>ETN89999.1 amino acid carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLDIMLDFANKASDIIANKIVPNTDIIMVVLLIVCGLYYSFLTRFVQFRMLSSVFKILTEKNEGHTKEH

ISPFQALMISTASRVGIGNIAGISLALATGGAGALFWMWVMAFFGGASAFAESTLAQVYKSKDDTGGFKG

GPAYYIKKALGSHFFGAFFAFILIITYAYGFNGLQSQTMTSSFKVYYDMFNPNAAVDFASSSWPMIIGIV

LTIFGAWMFFSHHTKIGKISSLIVPFMALAYVLLAVIAVLMNFDKIPSVVHMILQSAFDFKAIFGGFAGS

ALVIGIKRGLFSNEAGMGSAPNAAAAALTSHPAKQGVIQAFSVLIDVVVCTSSGFLVLFSMAYLGLGESK

IDGGMPLVQEAMREYYGSFGIHFITIAIVLFAITSLIGNYYYAQANVKYLTNSKFAMNLFRITAVAMIFI

GSQMNLKLAWNLADLTMAFMATTNIISLLLLGGIVNKVLKDFNTQQKSGIDPKFNASKLGIKNAECWD

>ETN89998.1 alanine racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>ETN89997.1 hypothetical protein X910\_08110 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKRLALLITLSSLMLHASDLVKIYLNQGLDAVGVAIEKELTQKDFWLSEIGDKNISLGYYDDNVAIVLT

NKTDKILRVYSYEDGKIRKDFEQKEIITGLMGDKKIEGDLKTPVGFYELGRKFNPGDPYYGPFAFATTYP

NLLDKVQGKTGGGIWIHGYPLDGSRLDEFKTRGCIALFNNNLEKFAQVVQDKKVFVMTEEKEKIRAKKDQ

IASLLADLFTWKLAWTNSDTNTYLSFYDEQEFKRFDKMKFEQFASMKKSIFSRKEDKKIKFSDINISPYP

NLENETMYRISFYEDYYTKNYQFRGDKILYVKIDSKGKMKILAEQ

>ETN89996.1 hypothetical protein X910\_08105 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIRNFFIGMSFLGILFLAFYALYDKKKESVFSLNTCQPLTCNLNLQDCVFSFNKKNIEVSAYPKPIKIFN

KTTIKIKNFPHYSNLKIKIYSLNSYIGNIIPKFNIVNGDILINFIGRSITDDSRFRVEFLNNNAPTGFFF

DFDVTMQKNFQTGNTH

>ETN89995.1 hypothetical protein X910\_08100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLLGALFAVNLWAVNDIEVKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSTELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKIIELKNIDSKEF

>ETN89994.1 hypothetical protein X910\_08095 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKIIFILAFAFVIVILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCTYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>ETN89993.1 hypothetical protein X910\_08090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNIILFIVIVAIILGVIFFIKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSL

VGKALKQINNPKAHLLFISLDLNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLN

DSFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>ETN89992.1 cysteine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKVHEKVSELIGNTPIIHLKKFGINVFAKCEFLNPSHSIKDRAAFEMIKDALDSKKINQDTTIVEATSGN

TGISLAMICADLGLKFIAVMPESMSLERRKMITLFGARLELTPANLGMKGAVDKANEILLNTPNSFMVSQ

FENISNKNAHCKNTALEILRDLDNELDIFVAGFGTGGTISGVGEILKEKLEKVHIVGVEPLNSPLLSKGE

AGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGLMVGISSGANVFAASMLAKKFPDKR

ILTMLNDTAERYLSTDLFA

>ETN89991.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>ETN89990.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKVVNVGNTSISVEVEVTAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>ETN89989.1 hypothetical protein X910\_08065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTRGEFFKECLDKKYNSGGLNKC

>ETN89988.1 carbon starvation protein CstA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTQLSTKILWLFVATLGAICFGYLALQNGESVSAIYLVVAAVCIYMIGYRFYGRFVAYKVLELDKNRATP

ALVENDGRDFVPTNKAVLFGHHFAAIAGAGPLVGPILAAQMGYLPSMLWILVGGVLAGAVHDFVVLFIST

RRKGRSLGEMIKDEMGKFTGGVAMVAIFGIMLIIIAILAMVVVKALAESPWGLFTIAMTIPIAIFMGIYM

RFIRPGRVGEASIIGFVLLILAIHYGSVIAADPYWAKIFTLEAPTLAIVMMAYGFIASVLPVWFLLAPRD

YLSTFLKIGVIVVMAVAIVLVAPDLQMPKANTQYFDGTGPVFAGGVFPFLFITIACGAISGFHALISSGT

TPKMLENETHALAVGYGSMLAESAVAIMALICACILHPGLYFAINSSSALIGTDVVNVAQTISSWGFSIT

PEEITTLTANIGEHTILSRTGGAPTFAIGVALILHELFGGVDLMAFWYHFAILFEALFILTAVDAGTRAC

RFMVQDILGNVYKPLGDIHNYPAGLLATALSVAGWGYFLYQGAIDPKGGIYTLWPLFGVSNQMLAGMALL

LATTILVKMGKARYTWVTLVPAVFVLVATLYGGIQKIMPYEEGNKVANAVSHVAAVSIQSQKIKDLEFKL

NNTKDEKEISTIKKEISIATQNKVGNLLNAILCVFFMIATLLVIISCIGICLGKIKIPLKETKYIKIDEF

QKI

>ETN89987.1 ribose-phosphate pyrophosphokinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRGYKIFSGSANVEFARQVSKYLSLPLSDAGVKRFSDGEISVQIDESVRGKDVFIIQSTCAPTNDNLMEL

LILTDALRRSSANSITAIIPYFGYARQDRKANPRVPITAKLVANLIQAAGIDRVATIDLHAGQIQGFFDI

PVDNLYGSIVFNDYIKAKHFKNAIIGSPDIGGVARARSVAKHLGLDIVIVDKRREKANESEVMNIIGDVK

DKEVILVDDIIDTAGTIVKAAEALKEKGAKSVMACCTHAVLSGKAYERIASGALDELVVTDTIPLKEQLP

NIKVLSVTPVFAEVIRRVYHNESVNSLFI

>ETN89986.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENVFNAQNIEFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>ETN89985.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNESVGFVEHLRQILTSWGLYDENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALLIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYAPAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTR

>ETN89984.1 amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>ETN89983.1 chemotaxis protein CheR [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>ETN89982.1 chemotaxis protein B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVASSFKPSVDLLFHSAVSLAKTNKILAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>ETN89981.1 ribose 5-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLREKIYIASDHAGFELKEKICVFLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGVELAIDIIEKFIQTPFEEGRHMQRIQK

IEVKI

>ETN89980.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>ETN89979.1 adenine phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKLTQEEQKYLFDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>ETN89978.1 aminopeptidase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFELNDKKLDAIKADFELVFIQDKNLKNFNKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLSSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLERFIISSEELNGK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVHPPRLIHLSYKAKNAKKCVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDILISREGISIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVIGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>ETN89977.1 GTP-binding protein YchF [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDIEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNDHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYEDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDVMHFRFNV

>ETN89976.1 argininosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNEMWSGRFSSASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIIKGLEQVKSE

IEQGKFVFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEYAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELADFLPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFALDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGIFDSVKTAKDSLIILNAMLKE

IQINKENMLNACKKGHMLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPVFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILEGFIQNL

>ETN89975.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>ETN89974.1 biotin attachment protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFAMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVPFYEKILKEILAAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVDGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGFEEEKILKYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDTNIVELASKQLNLEPTTELAINIADKDE

GKSIAYTKTLLEKEGIETSEENIFIAAACKEKGIAFLKGEAKVNIRKLASMPKPMSVDENKFTVAVNGNK

YHVEVSYGFDKDVNVKSVKKVEENKNIISSNSTSSVDAENEVLAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>ETN89973.1 sodium:alanine symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRTYFSKIGFVLAVAGGAVGLGNAWKFPTLSAENGGFVFVLLYLFFTLTIGFSIFLAEVAMGRLSKSDLA

NAYSNLAIKYGNRWRYGGVFMLGGIFVLSFYLVIMGWVLKYTVVSLYYLPKTLDEAASNFQNLITTNLTS

SVFFFTLSFFLTLLIVSKGLIKGIEKLNVVIMPSLFLMLVFMLFYCMGFKQGFANAFSYLFYPDFSHFKF

SSIAEALGLAFFTLCLGIGCIVTYSSALDKKTNFIKSSVYIVLINLLISFIMGLIVFTFIFEFGADPHTQ

GAGIVFVSLMSLFNQLGALGYIFAFCFFLALFFAGITSAVSMIEPLTFYMINNYQISRVKALFLIGLFVF

VFGICCILSLNLNFFSMFSFFGKDFFTLLDKLTSNFLLPLGAIVCSIFVGFFMNKKQIYKIFSKFISRKI

FLIWLFFIRFISPIAIILVMCYQIFV

>ETN89972.1 sodium:alanine symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMIGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEVSKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGVKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSASLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFEPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>ETN89971.1 F0F1 ATP synthase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>ETN89970.1 hypothetical protein X910\_07955 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTQKDIIKKIKTIFIRSFLYLIIKISKNKKINKRLKVLRYIDLRKGNSITQIINKMIKHLFKNTIIKAY

>ETN89969.1 hypothetical protein X910\_07950 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFGYEKFIAKILLQKNRKDWQKIRKAKNKIRYNKKSALSFHSWRKFSNQG

>ETN89968.1 hypothetical protein X910\_07945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRPIKAIYVKMVLK

AITGE

>ETN89967.1 hypothetical protein X910\_07940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMKDLDYYLNLPYEIIIKKLDEKDGGGYFARYKDFPYIMGDGENEIEALKDLKEAFKGALEVMLEKGDYI

KEPIDNEAKIRINITLPKSLVEAIDTISDNRSKFLADLANSAIKSYKIST

>ETN89966.1 hypothetical protein X910\_07935 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLSTYLVVSFLIFIVLFFSILSFYMVFLKNRNTEKRETKIINKILFLLCFLLLISISILIGVYLGVLTTV

KSVVIAFIALVFILSLFFIAFSVNCAILDSILSLNKRL

>ETN89965.1 hypothetical protein X910\_07930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>ETN89964.1 mating pair stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>ETN89963.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>ETN89962.1 2-acyl-glycerophospho-ethanolamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKKSFLKIYGLIPFLLIVFINAFVDLGHKIIIQNTIYKAYEGSEQLFLNAIVNALILLPFILMLSPSGF

LADKYPKNIVMKISAIFNVILTLIICICYYSGAFWMAFIFTFIMGAQAAIYSPSKYGFIKELVGKDFLAM

GNGVINAVSIVAILAGMALFSLSFESLYSSMYNQTDEILKEVAPLGIVLILFSCIEVFFACRLPKLKQTN

KDLVFNKKDYIRGKLLINNLKLVFKNKTIWFCIIGISFFWAISQLYLVSFPVFAKNELFIENTFYVQISL

AFSGIGVILGSLVAGKFSKNYIELGLIPLGASGMFLMVFLMPCFISLLSYSFLFFFFGFCGALFIIPLNT

LIQFHAKENELGQILAGNNFFQNIAMLGFLLLATLFAKFEINVVYLFYFIALVTFIGSFYILLKLPFSLV

RILLSIAFLQRYRLLVEGFENIPEKGGALLLGNHISFIDWAVVQMAIPRKIYFVMERSIYSKWYIKFFLD

KFGIIPVSSTGSKTSLELIAKHIKEGNLVCLFPEGTLSRHGQLNEFKAGFELACEYLSEDDGKIIPFYIR

GLWGSAFSRSDEEFSARNRTLNKRKIAIAFGKAMPLHSKKDEVKAKVFELSFMAWKSQCEAMHTIARAWI

DTAKKNLNQIAIIDTLAGDISYRKMLTLSLFLNFFIKRKSKELNINPQRGSYAPKEEAIGILLPASFASS

LTNLSVLIAEKIAVNLNFTAGEKALKAAIKNAQISQIYTSKTFLEKLANKGINLNFDTNIHLIYFEDIIE

DFKMQKTKIFSMMLAVSIMPSFILKSIFTPSKNNLAIAAILFSSGSEGSPKGVMLNNRNILSNIAQISDV

LCTRNNDVILSSLPPFHAFGLTVTTFLPLLEGIKSITFADPTDALGVAKAVAKNNITIMCGTSTFLGIYA

RNKKLDALMFESLRIVVSGAEKLKNEVRTAFEMKFKKSIFEGYGATETTPVASVNLPNRFDADYWLIHRA

NKEGSVGMPLPGTAVRIVDPNNYENLKTNEDGLILIGGHQVMVGYLNDKEKTDEVIKEIDGIRWYNTGDK

GHLDKDGFLYIVDRYSRFAKIGGEMISLGAIEEEITKFVDTEVVKFCATSLEDEKKGEQIVLLIECNNEI

FERVCEAIKNSNIPTLFKPRYYFQIEKIPLLGSGKVDLKKVKELAKNLAL

>ETN89961.1 hypothetical protein X910\_07905 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFKKFYKLKIDGIILKDNIDNFPKN

>ETN89960.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLFTQKNKDFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAIATYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIVFLRFLSTFYIELIRGTPLLVQVLLMYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQVFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLILTLPISIFSRYLERKCQK

>ETN89959.1 preprotein translocase subunit SecA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFLNTLKAVFGTKNDREVKKYFKRVTQINALEGKYQNLSDDELKAEFAKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVILSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKVEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPAKPEGDFVVDEKNRNILITEAGI

AKAEKLFGVENLYSLDNAILAHQLDQALKAHNLFEKDVHYVLRNNEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLVKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDVRAKISQNIAEYSANVMNDYILDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNAWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQEEVQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>ETN89958.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKTFLIFFIFIGQLFALELNFNTFSSNFTQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKN

QVTIVEHDLEQVIFSHLDNIPNLNEIFKKASLIDKDKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVI

INLNNQIKNPKINSDVFKAKIPQNYDIVR

>ETN89957.1 helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLDKLEKILAYDNVFLSGGAGVGKSFLTNELIKSYRKQKKLAIALGSSALSAFNIGGVTLHSFFCLGYCD

DMMKLSALDRNQKQKEKLTKLKELLKTIELIIIDEISMVSANVFEMIGFRLKNSQFNGKILVVGDFFQLP

PVIKEKKETLFNHSYYAFSSFFWQDLNFKNIKLSQPKRTQNMEFYNHLSLIRQGFLDEKILSFFESLRID

YKELENLEDDYTLLCGINKKVNNINQEKLSKLETPLVCFKAQVKKEDKRIKDEELDSWIRSLNILEELNI

KIGARIIFCVNNWDKNYYNGEQGIIEDILYEEEKIYISIIKNNGMKILLEPYTFFMEELEQSGKDFVVNI

LASVTQFPIKLAYAITIHKSQGMSIEKLVCDIDHIFENGQLYVALSRATNPNTLKIYSTKKINFGFYFAN

ILKIDSNVIEFYKKHNFLDLEIQEQII

>ETN89956.1 hypothetical protein X910\_07835 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSCLYFTFIVLFLTACSTKNLTSLHHENLEQKNENQHYAKLEYEQNVSILPQFTYNINFDVKRYKKHFF

NPWHDSFKNYKGQNIFWSFPLYLNSKNTYYFFNKQIIPLSWFKNAINNANIQEFGKLNQKALIIQNTIIK

NLPTQRAILKNPFFENEGIPFDYASDGILNTGSPVLISHFSKDKRYAFVLGEAGFGFVESKNLEFFSNDR

AKIYENLNFITPLKEKFAIYSEDGKFLFESRIGAIYPYYKEDKNYFYGKIGSKKYKISKKDVSKFPLQFN

DKNLKNQLSQVLNLPYGWGGYNFERDCSLLTRDIFSAFGLYLPRNSAAQKNSFNHFDISTLSNSQKKDFL

NRFGKAYLSLLYLPGHIMLYAGQITDNNIAIHNIWGLRKDATQRLLISSSVITSLEIGKNEILEDNLLLS

RLKEISFINLNEQEKEQIKSYLENIQNK

>ETN89955.1 apolipoprotein acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIALIQQKFHLNKEQTIKKTCEFIEEASKQGAELVCLGELHQSEYFCQSENVDFFDYANDYEKDVKFWA

NIARKNQIVLIASLFEKRSAGLYHNTAVVFEKDGSIAGKYRKMHIPDDPCFYEKFYFTPGDLGFEPINTS

LGKLGVLICWDQWYPEAARIMALKGAEILIYPTAIGWFDKDKDEEKQRQLNAWLGVQKGHAIANGLYVVA

INRVGFEKDVSGVEEGIRFWGNSFVFGPQGEELCLLDSQNECVKIIEIDKKRSENVRRWWPFLRDRRIEY

FTDLTKRFID

>ETN89954.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLQKKATLVASLCAIVLALVKFIVGLTSGSVAVLSSAIDSLMDFAISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGIFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALVLIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICTLISNNPEIISYHELKTRKTPSCNYLSVHLVFCPIISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>ETN89953.1 agmatine deiminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKVVSEFQKVLLIAPKQSDFENFKDIKNVEF

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEELKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLLELPIPKPLYYEERRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPNHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>ETN89952.1 hypothetical protein X910\_07815 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKMLQIALAATFFAGCASTSLTSSTSKGNNELVQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>ETN89951.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKEA

IEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIADE

SCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELLN

HAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDIS

SQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKKV

ENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQIT

KELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSRM

QENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>ETN89950.1 phosphoribosylaminoimidazolecarboxamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>ETN89949.1 molecular chaperone DnaJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLVLIILVVLVFYWYYKTWGKQDFLNSATRGAKGFAKGFARGVMEERMDEFKRRMNYYVIALLAKIAKS

DGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAFYVAKDFLKEVPLPKNERFNVLRVLVF

MALIDADFNAKKREILEQIAKAFDIAKSELDAFIASLSNLKSTKKELSLDEAFAILELPNNADLNAVKKQ

YRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHLER

>ETN89948.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>ETN89947.1 tRNA modification GTPase TrmE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>ETN89946.1 insertase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNTPNIQNTTTNTPSAA

LVSQDSVISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYVANASNLFVDENGSQVLKLTQNLSGLKIEKDITFYPKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVMDNKETIETYKDGDVEKDESANNVVMTSAFDRYYATFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFLHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKQAEHEK

>ETN89945.1 membrane protein insertion efficiency factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGIEKTRMFQMICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFFSTFFRILRCNPFFK

GGFDYPRVSKNFYPINLCFKPIFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>ETN89944.1 ribonuclease P [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>ETN89943.1 50S ribosomal protein L34 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>ETN89942.1 diadenosine tetraphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEFKIIDLRQEDLDILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>ETN89941.1 family 4 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIRSLYYLKAMGFNFVDTHINHFEQVQNFQELKQLVSSCTLCQFSKTRKFSLMEPKIKNAKLLILDVFGQ

KSENESGILLNSKKGEKLKRYIYQILGLCDEDFYFSYLFKCFCNGKFDDFSLQSCLPFFWNELKLIQPAF

LLCLGEYTFKSLGFKDYHILKGEVFAYKNFFIMPSYDLDFIEKNPSYEKNFIQDLKKIKGFL

>ETN89940.1 hypothetical protein X910\_07750 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFLIFFLSCFLLNAKEQKLVDVKPVENFYPKLSVQECNTNCLFDLLESRLYLSFLSEFTDQNDQFLS

NVYAKLLNSITDFEKNVQKITSVKLAIIIPEKTIKSYSNTIINSSIAYLLRQRAEIKVKVFLTGTEDSDK

IRAALDAAQAQGYQYAIAGFTLKGANELKNYSGNMKIFIPTIHKNNIQISNQNIIFGSIDYDAQIATLLS

KSNANIAIFSDGSALSSNLNSRILAQNNNARIYTIEGEKLDFSRLLRSQGGVNNASIFFNTPLIKTALAS

SQLRIYNIHPYVLLSTQINYNPTFLSLTQQGDRENFIIANSINNHDDNLVYLNEIFNQSIDYNWIAYATS

IGVDYFYTEFLNKKSESLFDEKIKNSQVDYKVRLMQGKQASFEELK

>ETN89939.1 acyl-CoA thioester hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKMRVYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILEVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDTQLKKLFEELF

>ETN89938.1 hypothetical protein X910\_07740 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>ETN89937.1 hypothetical protein X910\_07735 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>ETN89936.1 hypothetical protein X910\_07725 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNFYAGAYNNGEVNYNTLNIELKHPLEIANNFLGYNQHSFYGDFATKGVNHNTINIKNDLTTTDLSQSY

KDALNIVAARTLEGSADYNKVYINNSMSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTV

LTEAKEASYNTINYNNVQSITDASNTDKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYN

KIIINDTLFGVASDKREGILSIIAGLSNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNT

LYRREFKYI

>ETN89935.1 hypothetical protein X910\_07720 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKNKEDFKLSSIDRLKKMNLQKLSYEVRISQDGKSIYAKIK

>ETN89934.1 hypothetical protein X910\_07715 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFAN

GVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLL

YFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDL

SKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILS

QIPKITEQQKNIQKAYDQAVDAYNEAVKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLEST

TASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNN

NPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>ETN89933.1 ferrochelatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>ETN89932.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNRNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSLYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCIASIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFSEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>ETN89931.1 aminotransferase DegT [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFINLQAQYLAYKDEINAEIESVLSSSSFIGGAKLNEFEQNLAHFLGVKHAIGCSSGTSALYLALRALD

IGKDDEVIVPSFTFIATAEVVALVGAKPVFVDINLSNYNLDFEAVQKAITPKTKAVIAVSMFGQMSDLRA

LEEILKNKNITLIEDGAQSFGASFKGEKSCSIAKISCTSFFPSKPLGAYGDGGAIFCHDDEIAKKIRILL

NHGQTQRYKHEFIGINGRLDTLQAAILNVKLKYLEKELDKRQKLAQTYNANLKNCQIPQIDPNAFSAYAQ

YSVLVEDRASVLQKFEKANIPYAIHYPTPLHKQPCFSEFSNLELKNSEYASEHILSLPFSPFLSEEEQEQ

VICIFKD

>ETN89930.1 alanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>ETN89929.1 septum formation protein Maf [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>ETN89928.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILKYIFSFFTLLFIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYAPYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAALGYFHKNLNELSLKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYNLGWISKADYDTAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPNIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYDEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGGKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGTIKDPQIIRQVQDK

TGKTIMEFNSNERKVSDEAQSFLVLDMMRNVVEKGTGRNARVKDIEIAGKTGTTNKSVDAWFCGLTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPNGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>ETN89927.1 molecular chaperone ClpB [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAQFLDLREFQKELESLRAGRKMDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIERLMQILIR

KTKNNPILLGEPGVGKTAIVEALAQRIIKKDVPKSLQNKKVIALDMSALIAGAKYRGEFEDRLKAVVNEV

IKSENIILFIDEIHTIVGAGATEGSMDAANILKPALARGELHTIGATTLKEYRKYFEKDAALQRRFQPVN

VGEPSVNEALAMLRGIKEKLEIHHNVTINDSALVAAAKLSKRYITDRFLPDKAIDLIDEAAAELKMQIES

EPSSLRKVRKDIETLEVENEALKMENDEKNQKRLDEIAKELANLKEKQNALNSQFENEKSVFDGISAKKK

EIDLLKNEASLAKARGEFQKAAELEYGKIPSLEKEVEILEDKWKKMSENGVLLKNQVDEDLVAGILSKWT

GISVQKMLTSEKQKFLEVEKHLKESVIGQDKALSALARAIKRNKAGLNADNKPIGSFLFLGPTGVGKTQS

AKALAKFLFDDEKAMIRFDMSEFMEKHSVSRLLGAPPGYIGHEEGGELTEAVRRKPYSVLLFDEVEKAHK

DVFNVLLGILDDGRATDSKGVTVDFKNTIIILTSNIASSAIMNLSGKEQEDAVKNELKNFFKPEFLNRLD

DIITFNPLGKDEAYEIVKLLFKDLQMSLENKGIKASLSENAALLIAKDGFDPDFGARPLRRAIYDLIEDK

LSDMILADELHENDSIIIDAKDDEIIIKKA

>ETN89926.1 hypothetical protein X910\_08545, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

IHKSTLDEIERKAENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTEADIN

SMPKGYAINGIKSMDFNDPSNRMNITHLRDFSNSLISNVYKTPEQAKEADEIWLDSGCMIKGLSSETLGL

SLEEIKNVSKGEDWQFNPDMSVYPQNEDGSYSKETLFMSFLKSQGGQPVESPKTTLNPKVEAYNRAMAKE

SFSGPAINIDSIMTGKSDFKSFFRYWAERGIAEGDLYMYENNIPKESAMGNWALDAEIKQALANGWKAKP

STINSYADSIMDRLNNLLGQTRV

>ETN89925.1 amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGLIPALKTAKIDLIMSSMTITDERKK

VVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHLYAVKNLKNATINLFDKENAAILEV

IQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQKGNAELKKELDEFIAESKKDGLFDS

LGEKYLKDVKDTFKKNNLEFFF

>ETN89924.1 flagellar biosynthesis protein FliP [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>ETN89923.1 N-acetylglucosamine-1-phosphate uridyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>ETN89922.1 phosphopantothenate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTILLAISGSIAFYKSYELISLFKKEDFRVKVLLSNGLLKFASKMSFEALVDEVLCEENESWQNSNNHI

AFSKDVDLVLFAPASVNSINKLAFGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LIIEPICKVLACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGSTRERIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLNHDFLIMTAAVSDFIPQSVKGKIK

KNEHLQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQKNYFGSD

QNELYFITLNNENKSTLQSKEKLAFELVKWCEKL

>ETN89921.1 hypothetical protein X910\_08520 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSMINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKRPNFK

PFEEGLALIIAILQDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRA

KYLEIYLYFSVFGALKILIDSQGISVFTPFAKVQKFLNEHLDFNVSQENKIEPLFVFKRLFDFKG

>ETN89920.1 UDP pyrophosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNELKHLAVVMDGNRRWARAKGFLAKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDRCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCVNLAISYGARDEIIRA

AKRVIEKKT

>ETN89919.1 di-trans,poly-cis-decaprenylcistransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKKLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRIIKEFR

NRERTFGK

>ETN89918.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCQTCKCHLPISLLINEILGII

LLILAYSLSQNFYDFLFLSLFLFNLFLLSLIDIKLKAVPQILLWSAFLFAFFYAFRESEILHFLIFKEFS

GGFLLNAFSFGGFVFLLKSLVFFLMNFRKKDEILENLGDADIIIMSCIGGILGFEYGFLVLLIASILTLP

FFIFFKIKAIKEQELAMIPFLNIAFVAVLFYKNLGLF

>ETN89917.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMIPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKYENIIMYRPKHKADDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYTTIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILSRY

>ETN89916.1 tRNA pseudouridine synthase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFVN

LEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANEL

LGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMSE

KELKEQIEAKKQYNHFLAPPNGLYLSRICY

>ETN89915.1 threonine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNLSFIHPFEDEFVMAGQ

GTLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMYESFHAKKIKNAKSVR

TIADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAASVATLLHQKINTQNH

KKIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIANANIVKIDYDRFSTK

LDYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>ETN89914.1 hypothetical protein X910\_08485 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLELNKIYKAKQQISGFVNKTPFIYSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSTEQKQHG

VIAASAGNHAQGVAISAKKIWH

>ETN89913.1 CoA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNEKETISYIINTSKNIAIFALSPDKTKASYRVAEFLQRKNYKIFPIYPKEEFILNEKVYRNLDQIEEKI

DTLILFRKGKVALEILPKLVEKNIKNLWLQLGISNETAKKECKKLDINFIQNRCIMLEYPYFKTKEK

>ETN89912.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGVVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>ETN89911.1 tRNA (uracil-5-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>ETN89910.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKFLVLLFLPLVAFANSSEAAANANLFGAFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFFVVMTAIMGREFGSMYKAEVRARTTGQIAPLPKS

GTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAILGFYFNGLSTLEGEELAKASANPLSFETFRAA

FGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVETWIYGWKTMIFTIVLLLFAWSLSSIVKDLGTS

LFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMGILMPLAVPLAHEIAKINGMDANAMHHYMVIN

ISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQIPYALFICGISLIAGYIPVSLGISVWFVLPL

NFILIALLLRLIGKKVP

>ETN89909.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTVFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNAHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMIDTNIKGFLYVAKAVIPILRKQKNAYIFNLGSVAGRN

PYFGGNVYCGTKAFVGQFSLALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKADAVYENTQFISAN

DIAKVVMSIINLPSHINVNEIELMPVTQTWNGFYIERDE

>ETN89908.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLLFTSFCCFASLMASDAINCDNIKNNKTLLNESSNLDYLNCKESLKNQDFTKKLYAISNEIRGGNSSC

NGIAYLPKLQQFNLLLLKIAIDPITYQKTLDTPENLEKKYDILKSYFRYWAYQSIGNFRLYKAFWQEYNN

AIEPLEKYFESNFNFDKGSNIYYTSNALNEFLNWAVGETKIYKDISPLAKIMSNKNYSVSYIQDFIFSNN

PSQDDLTIALQAALLNQREKEILELLIRFGTRIDEGYESAIFYALENYENTNFLIQNGANVNQANAFGKT

PLFYAIEFNRLDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITFCALEHTSKNVLMHAAAYGN

VEILKLLISKGANFNAVDDLGFNALDFALSAGKKENADYLKSLGLKANENLFYGGSLE

>ETN89907.1 bifunctional aconitate hydratase 2/2-methylisocitrate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSFMQEYNKLVEERAALGIPPLPLNANQTRELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKGKISAPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDSAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIKCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQAGSLEK

IKELKKSGREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNALLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVRPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDTVGTGGDSHTRFPI

GISFPAGSGLVAFAAVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIIDINLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTNEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>ETN89906.1 methylated-DNA--protein-cysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKVYYKMPLCYLSLHSDGKFLTRVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLRKFSIPVLIQGADFE

SKVYKALMKIPYGKMVTYKDIAQKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>ETN89905.1 hypothetical protein X910\_08440 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNNKKEITQAVKKGAYAIITENDITIEDKD

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHSLKDANFTLLSRSSFFFTTLICENLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>ETN89904.1 methionyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRFHAIYWPAFLMSVDLPLPEFIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGN

DGDFSENMLINRINAELSNEFGNLLNRIIGMSTKYSQGNISKEGVLKFYNVELNQAKEHLNLAVEFLENL

QCNRYLEELFKALSVANLAISKYEPWNLIKENKHEQANALVALCANILAKTSLLLSPTLPKSCQKVALAL

NFEISSTNYAKIILDNELLDFKANPCEALFPKVEKALLKQEIKEEPKKEKSPKIKIDDFAKIEIKVAKVL

DCQNIKGSEKLLKFQLELDDKEIRQVLSGIAKHYKASDLIGKQVCIISNLKKAKIFGHESDGMILSAKSG

DKLVLITPEQLVQNGSLVG

>ETN89903.1 hypothetical protein X910\_08430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRYITTPIYYVNDVPHLGHAYTTIIADTLARFYRLQGHETRFLTGTDEHGQKIEEAAKLRNSTPQEYADK

ISFEFKKLWDDFEITYDIYARTTDTRHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINDC

SCPDCGKQTRILKEESYFFKLSKYQDKILQWYEEKDPILPKNKKTNL

>ETN89902.1 hypothetical protein X910\_08425 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSDIRDEFEQDMDKKKEILLSCQNSKNLNSCYNCDEIFNCQTRKNYVDAVYNSMSKGKTEGGFDF

>ETN89901.1 fructose-1 6-bisphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>ETN89900.1 molybdopterin-guanine dinucleotide biosynthesis protein B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQLIMAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDFNGKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLAPNFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLTWL

DLNDIQAICRYILKNAKNLQGEL

>ETN89899.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKKILVFLFIFSSLNATQYSIEKLKKEENSLAKDYYIYRLLEKNKISKKDAQDLNSHIFRYIGKIKSEL

EKIIPLKPYINPKYAKCYTYTANTILDANLTCQSVRLNSLVFIASLNSKDRTTLAQTFKNQRPDLTNLLL

AFNTSDPMSYIVQKEDINGFFKLYNYSKKYDLDLNTSLVNKLPNHIGFKDFAQNIIIKKENPKFRHSMLE

INPENVSEDSAFYLGVNALTYDKTELAYDFFKKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKTLSQSSSL

NIYSLYAKELTNTPFPKIESLNPSKKKNNFNMQDPFAWQKINKQIRDANASQLDVLAKEFDTQETLPIYA

YILERKNNFKKHYFIMPYYDNIKDYNKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLANHIGEK

ELKIPNFDQDFMFKPEIAYYFGNYHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGKFEPFLS

MELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>ETN89898.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGNIDLA

PLIIVLALQFLGIFLGNILRSIL

>ETN89897.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>ETN89896.1 metallophosphoesterase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVLFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLAWDFIKLILALIGKRDKKYNLILRLIFELSLIVLSVFLIYISINNALKIPEVKSV

DVEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLKNYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLLRKHTNMKILVNQNLDLGFINIAGLGDLAGLNKGLYAPDLARIKVD

LNTSKASILLTHQPKTALLYDLSDFDLVLSGHTHGGQIFPFMFLVKLQQGFVHGLYNLGEKTKLYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>ETN89895.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSFSKESSRLFGFVAGIKFPKMIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLHIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSIEELLKDSFEKDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSATYTSGALYSVNEKHLERISNLYVKNERVSLKCQNEKGIFWLVFVGAQNVGKMRFNFDASIQTNAK

ISHNFTRKYENLNLKKGEELGNFELGSTIVLISQKGLLTFNLKAGQGIKFGEKIAD

>ETN89894.1 hypothetical protein X910\_08385 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMANKTPKN

>ETN89893.1 hypothetical protein X910\_08380 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINTQLASQIANTQKNDLKVDNSASKDKTNLKDNPKEALAQALKQNLGLSKDASSEEILAKFVQNETGTK

LKELVNKLLDQINAQKNPDSPVLKQGKNLNLAPNFANELKTLSTELAKSDTFTQVLDRLNQILKPASEIK

NNNLAPLFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLSPKDTLKELKN

IINSSKIENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNK

PENLMIKDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENMKEEKLNHNTKNQDEEK

HIKASKEETLTDDTKTDIKQDLKNEENSHAKETDIKEDENLDSDIKTHEEDTQDTKNDIQNNETENKPDN

DIKNFTPNQEKIKDEKQEKSKENIKENPKFYETKTENKTSINTNTNTSNPNTNNTQNLNNSQNIQSNNNQ

TMQNIFKNQEFIKQNIIKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLKELEPYTQNAKLNQAELKNL

EHKLNLSTKDLAQIKPKTEQDIAESLHHDVKSTLLQISNLAKNEGNEAIYNQANRLLAQIEINQLMSLAN

DSINTYLPFSWDDLNDSKIMFRRGKKDKFFAQIKLEFAKLGDLEILISLNNEKYIDINIMAENIEFRKTI

YENAHELKRNINKAGLLSANFFVGDIIRSKFDTRNMKNLDLEMGMDKKV

>ETN89892.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTALFAGMAFLFAGNALMVSSIGVILKENGESSLAVGVVSSCFFVGALVGTISAHKIISRIGHIRSFGLF

GAIFGISAMLHTVSENLIFWAILRFFIGICYYGLLMVIESWLNEKSKNTIRSRILGFYEIVFYLAFGIGV

LIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFIAGMLINGFF

SMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMLIFIFFKLHLY

MQYFLGITLGIGIFCLYALALARANDVLVNKNKGVELGRGVLFCYSLGSLFGPLILGFLMQYFEIKGFIW

FYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>ETN89891.1 hypothetical protein X910\_08370 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFFTLFKLMAYVILVAGFLFLHRQDKLDIFAYICGISSLLVCVFIFILYIKKYESKKNY

>ETN89890.1 hypothetical protein X910\_08365 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEHKKALFCIFAIIHLFFWIIFSSLNHFKLDTFLSYEIASFSVLLIIFTSYLNYKKVIIKKSKNYEKDFN

FISSLFIKKNKIYQKLFILKF

>ETN89889.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNILKEEKNHLENSNSKRQKIIRKTLEAADGLSLGISMVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWG

ISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKNK

>ETN89888.1 glutamate-1-semialdehyde aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>ETN89887.1 hypothetical protein X910\_08350 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLYENPRGISCKECHGADGSEQILGYYMKNGIKTAYKVPSIQNLSFENFKNSLNQSKDAKSIMPNYSLTN

DEIVTLYNYIKQFSKEEK

>ETN89886.1 bifunctional 5,10-methylene-tetrahydrofolate dehydrogenase/ 5,10-methylene-tetrahydrofolate cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>ETN89885.1 signal peptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSGSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKEHFVKRCVGTGGDRIVYANKTLYVRMHEGDEFMKEHYPN

DLVTLGGQIYVKEPYKQKGIHYDPKKDIESDILRFLSIGDFAMSPAYIKELGNHIGFSGGNAYVFDVPEN

EYFMMGDNRDYSYDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDEDK

LS

>ETN89884.1 molybdopterin biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNIFETLKDLENQISCLDESELISLEKAKDRILAKDLYARKNLPSFDNAALDGYAFNYTDINEALEIKG

TIFAGDKNFYTVAKNECYKIMTGAKMPKNADTILMLEDECIEENKLIIKKVPKQYNAYRYKGEELKKGEI

LLQKGTKLNDKHIALLASQGLYKIEVIRKIRIGIFSSGNELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDEFKSTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYRKGENF

VLILPGNPMAAYLSCFIFAKKIINLLSGNLDNPLTFYGKMGMDLKLKSGRNNLILGNLEKGIFTPFNENK

FGSGMILPLIKSEFLLISEENTGELKKGDEITLLKI

>ETN89883.1 UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>ETN89882.1 hypothetical protein X910\_08325 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQINNSLNSLSQYVKVNSNEENQNSKNQEQNALAQDPAVEVNISKEAKEKSNTSNQNNSQAPAQALNAQN

NTQQDSSSNSEDKLTELTQKLAEIQAKIVELTAKMSKANEDQIKSIESQIATLNAQASTIQAQIQELQSQ

QA

>ETN89881.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGVFLVLLGGIFWAISGVLAEYLFKNNYSVDWICFYRLLSTGLILIFLSFKAQKILVFTNLKESLSICMF

GFFGLLLTQFGYFKAIYYTDAGTATMIQYCAPLIIMLYLCFKNKKFPKLIEIFALILIIFALFLLATKGD

IEAVVLNYWGIFWAVIGAFGVAFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYAFNLK

AFFFYGWDCLYRNYRGFLFVFKRSGIYRCSKG

>ETN89880.1 hypothetical protein X910\_08315 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSVILNAKKTKVS

>ETN89879.1 para-aminobenzoate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEIFGGKVSKMQNPMHGKISKLYFKKDPIFKGIKQEIEICLYHSLHISSMPE

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>ETN89878.1 hypothetical protein X910\_08305 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLNGVYRNFLINLGLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>ETN89877.1 peptidoglycan associated lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILFTSIAALAVVISGCSTKSTSVSGDSSVDSNRGSGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>ETN89876.1 hypothetical protein X910\_08595 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDNLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQVKKVLAELSSLVDA

INANYVSKNELNDANLSVKTITPSVVVSTTDSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYKQKIITMLLFIIKKVLL

>ETN89875.1 hypothetical protein X910\_08590 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSTKGDYFPKLLYHTAISLDKTGDTKTANGFYKALKTNYPNSPEAKASPNRK

>ETN89874.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAIEKNSVVSMFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLG

EYDENAVQTLPKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIVDA

RAASEDEILTGIIAGSHSCGCGSGHGHDHHHGHGHGHGGGGCCGGGGCGCH

>ETN89873.1 malonyl CoA-ACP transacylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGKDFYENSIKAKELLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLMAYSVLLEKKPDLSSKF

ALGHSLGEFSALAVNGAFDFLEALSLVNKRGLFMQEDCAKVEAGMMVVLGLDDEKVEELCQKAQKENKQI

FAANYNCDGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASAKLCVELEKVLKPNFKA

VLSNANAKIYTCKEEALELLKAQLISPVLYKQSIKACENEVDYFIEFGASVLKGLNKKITSKETYALTNM

NDIDEFLKVI

>ETN89872.1 S-adenosylhomocysteine nucleosidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFAKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQV

LLFTGVAGAFNPELEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIKL

RAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEFV

INSAKISANFVLKMCEKL

>ETN89871.1 PP-loop family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQAHAPFKFELEAVTLSYGMGED

YSHLHAHCEEHGIKHSVLDSNIYEVSGDTIRENSSFCSYFSRMRRGALYTYALEKGFNKLAIAHHLDDAA

ESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRDNATQNELSVIGNEFCPGMKLSEKNVKFP

HAREEAKQLLANLEKNHPKLFTSLKTAFANLHTESFWLEKE

>ETN89870.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>ETN89869.1 recombinase RecO [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>ETN89868.1 heat-shock protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>ETN89867.1 hypothetical protein X910\_08550 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNDKFTNSSKK

>ETN89866.1 Cj81-040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>ETN89865.1 HrcA family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>ETN89864.1 heat shock protein GrpE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>ETN89863.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>ETN89862.1 DNA methylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>ETN89861.1 hypothetical protein X910\_08660 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNFKDSGIEWLGEIPEHWKLIKCKNFLF

>ETN89860.1 type I restriction endonuclease subunit S [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MWNKTKLLSLTLNGVIERDINNPEGKFPSDFSTYQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYT

IFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLRNTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKN

FIEKKEKLITLLKEQKQAFINKATTKGLDKNVNFKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGN

DKYYKGGQIVWINSGDLNDGFLKDSKRKITQDALDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVN

QACCVLEKSAWYNTFYLFYLFNRYKKELISMGSGGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCK

KIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIGKS

>ETN89859.1 hypothetical protein X910\_08650 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKYTKPCFKGAAFNCPHCGVYSRMEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIF

FPREVAIPPEENMPENVKEIYEEASLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIK

EIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERL

NKLKSAIGEKQ

>ETN89858.1 hypothetical protein X910\_08645 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>ETN89857.1 DEAD/DEAH box helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>ETN89856.1 zn-dependent hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFVSVDFFKTFDISNSERLKAKKVQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFF

KPDLSDFNTPHITWLGHSSLFISFKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITH

SHFDHLDAKSIKALKEKARFFITPLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGD

GKNKTLWASFVMEFLSVDKRVFFSADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKE

AKDLNAKAVMPIHWGRFLAGTHAWNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>ETN89855.1 cupin [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIIQWSRAEFSPKEVKINVLIDNEKGKEIQILLAKDSVMKEHKAPFAIHIQVLSGKIWFEVEKEKFELN

ALDMISLEANVAHSLGGLENSIIRLSLNKSDSIQRVNAVLKKP

>ETN89854.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFDTPQIIKNAAINAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

EGLEENGFKITAEQLKKAITAKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTQITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGECDKDIEKMRQAFEKRRNLALDILKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYATSDELIKKGLERIANFIKNYK

>ETN89853.1 serine acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFWGIIKEDFSQPKAQDPAFNSCIELFFNYPGVWAVVNYRFAHFFYIRNFKRIARMISGISQFLTGVDL

HPGAELGRRVFIDHANGVVIGQTAIIEDDVLIYQGVTLGGTSLEKGTKRHPTIKKGVIIGSGAKVLGNIT

IGENAKIGSNAVVVKDVGANLTAVGIPAYIIEERKNKNIRAIDANCDDKLEKLEKKILELENLILKQLES

QK

>ETN89852.1 hypothetical protein X910\_08615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MHDSIDHLESILTLFDLGYVDLQDRSNAEILTHLITKKAILLLGDKQNPADLLAIQDEVQERYLVNFSLF

QSIPDFWGLEQNFPIMPLDRLDEEPTRSASIWDITCDSDGEISYSKDQPLFLHDVDVEKENYFLGFFLVG

AYQEVLGMKHNLFTHPTEAIISINEKGYEVEGIIEAQSILDALEDLDYDIHAIMDILNERISNSKLVNDK

QKKHILGELYLFLNDNGYLKSIGV

>ETN89851.1 hypothetical protein X910\_08610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYSQFKNEKSRNYTLREYANDVVLS

>ETN89850.1 sugar transferase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

KFPQLKYPSLETCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNF

AKLSPNIIKIISKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYK

KENHPYPSLLDPKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGHGTGEKAFQEMLSRCNVKIL

EKNIWYDNGLDRYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHVPAICLVRDPIKIMTSVYNY

KILKNKDNLTFSNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNINKHIRFTYIARTHLKNLKNI

SHVYYIDVSEISNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIFDIKKPIIYKHYFNNKFIEI

YLYGSYNMINKNFYDITNMFNFKNKELHMNNIFISIKKIIYMKFFVMEIFYMKLN

>ETN89849.1 hypothetical protein X910\_08705 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKKESIKDNDILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKEIKT

>ETN89848.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDISKNNILKLKKLIQHLSNSYY

NCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLVCGDIRELFYMELNNKVAGV

VTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNKCIDAFNIYDHGGLADQSYL

NIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSEFEEAMKNKKIVHFCAAKPW

WNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTIEWILKNGDKNSSNVLYSSY

DIDNIKKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>ETN89847.1 glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTKIVGVVIPIYNVEEYLRECLDSVVNQTYKNLQVVLVNDGSTDENSLNIAKEYTLKDERFILFDKENG

GQSTARNVGIEFFSKEYHFKNITQELKENSLVEFKLSNEDNPYNIYKIYKSSNFFKNKDELLNFRAPDID

YIIFLDSDDYWELNCIEECVPRMDGVEVVWFDFEIFLDGIDGKNVWNYSDHKTDLEYLRYTENQYTNFND

IIARITKEYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQN

SSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINK

YFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKKILFIFNIIKAL

YDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKR

TKR

>ETN89846.1 hypothetical protein X910\_08690 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKRFN

>ETN89845.1 chromosomal replication initiation protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEK

>ETN89844.1 Holliday junction resolvase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILGIDPGSRNCGYAIMEANKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDIFF

AYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPLDI

TDAIAVALTHAANLRVRV

>ETN89843.1 flagellar hook protein FlgE [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>ETN89842.1 O-acetylhomoserine aminocarboxypropyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRLSNPTSDVLGQRLAN

IEGGAFGIPVTSGMAACFYALINLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIAIADIEKISQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GTALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRVIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEAKDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGITKATIRLSIGLENSDDLIADLKQA

IES

>ETN89841.1 homoserine O-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>ETN89840.1 hypothetical protein X910\_08735 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKSIAIIGGSIAGLSAALFFASAKNKELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSDIKELEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>ETN89839.1 7-cyano-7-deazaguanine reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>ETN89838.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>ETN89837.1 hypothetical protein X910\_08720 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALKFNITIEYTKENQKLTRENSKSAGSFRDTKTYINLVVEKNTDSQICEKLLDDVEKYFIGGG

>ETN89836.1 hypothetical protein X910\_08715, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFG

>ETN89835.1 hypothetical protein X910\_08800 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKT

LISPLCLLFLECIII

>ETN89834.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTLLTNPIIISVVLMTLLCLFRFNVLLSLLISALIAGVFSHLELVDTMNILISGMKENLKTALSYILLGA

IAAAISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLSLFNKLKIDRR

AVACALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSASLNDVTNTMYFAAICMIAGLFLALFVFYRK

PREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFVLMVILGGVEFSKVNEVFD

DGLKMMGFIAFVILVAAGYGEVLKESGSVVDLVNSVVPWMEQSKFLAVFFMLLIGLIITMGIGTSFGTIP

IIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFYNG

PLLILGSIIAMFL

>ETN89833.1 molybdopterin containing oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKQNDQKENRRDFLKNIGLGLFGISVLSNFSFENFLGSKALAKELPDFKIEGKKDLIYHGEKPLTAETEI

YALDSDFTKPENFFVRNNGLPPSLETIKERLHKGWTLEIDGESIINKKSYTIEDLKKKFKTYTYALTVEC

GGNGRSEVIPSTKGTQWGYGAVACGRWTGVRLKDILKDCGIKNDAVYIGYYGIDTKLNGEETSPISRGVP

ISKALQDETLIAWAYEGKDIPLVNGYPLRLVCGGYPASTSGKWLYKISVRNKIHDGEKMEGSYKVPVNPV

KPGDFNYKGEMKIIESMPIRSVITNIKNGSEIKANKKFEVRGKAWAGELEVSEVYVSNDYGVTWTKAKVE

KPLNRLAWQKWSAQISIPTKGYYEIWARAIDSQGNSQPMVLAQWNPGGYINNACHRVNVYGV

>ETN89832.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKIILILALFLSASWAQNLEINPDTGLIIDPDSPLVEANCLACHGSNLITNMHASKKAWLAAIRWMQDS

EGLWEIEPEDEEKILNYLEKYYGEKYDTRRRIPLAIFLQNKTH

>ETN89831.1 DNA gyrase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVIDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPIEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEANYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQAHAKDVKHLDV

>ETN89830.1 DNA polymerase III subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNHEDFPNFPNTEGKNQFDIDSSDLSRSLKKILPSIDTNNPKYSLNGAFLDIKTDKINFVGTDTKRLAI

YTLEKANNQEFSFSIPKKAIMEMQKLFYEKIEIFYDQNMLIAKNENFEFFTKLINDKFPDYEKVIPKTFK

QELSFSTEDFIDSLKKISVVTEKMRLHFNKDKIIFEGISLDNMEAKTELEIQTGVSEEFNLTIKIKHLLD

FLTSIEEEKFTLSVNEPNSAFIVKSQGLSMIIMPMIL

>ETN89829.1 hypothetical protein X910\_08770 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKLSINKNTLESAVILCNAYVEKKRLKHHYFSSFFSC

>ETN89828.1 hypothetical protein X910\_08765 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKDHIKEKKENITIDDILSLVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMK

DHTAISHNVKKITEMIENDASLKAKIEELKNKILVKSQS

>ETN89827.1 carbonic anyhydrase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

NYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAPWYV

DGVIDNSGTVLPLLRYIIGRDLEQFDFIFNDPNTLIEMFTKTYWTREDENSPYFFANENYMIRSLLNSSH

LIIQVNVNKNIVLVSYHSSKDEFNTSKDKQTLFLAYKELGYDATLHLIKDESEIDGRFIKDLNHGMRITD

RALFRKELPLMLEKLQKRKSFMQENSISYPCGNKVFTFKDVGDKFVLCIK

>ETN89826.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFQAIKNMIE

QAFI

>ETN89825.1 formyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVEESIDTGAILTQKEIKLDDNFTALSLLDTQHKLAIASFKEALKNLENKIFKIQTLGGGYHKKLALPNE

GYLDLTWDKEKISRFLRAMDCGALIGVPKARLKILGEEKEILFYEINELDLILNLSDNTILKITKE

>ETN89824.1 hypothetical protein X910\_08830 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTYSHIYIIGTGKVTKECQKIASDFFKQEVIFVKILKIALLLVQIILIFSKKNVCKIIPL

>ETN89823.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNSFEKAFYEGFKLSNCYDNFNLIREKILKQELILEKHENNNFFFFNRTDGLLYYFINDLQDYDLKACYI

KILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHEDSKELYSFFRKYFDPYLFYF

SQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVAFALLNHYFAANTQNKFFKL

FVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>ETN89822.1 amino acid adenylation protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFNFIFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLKFNLDLPTLYTQDFESFNIDESLIK

NAKEKHIDTNLLYVLFTSGSTGIPKGVSIAHKSVIDYAFHFCEAFEVDENEIIANQAPLYVDASLPDILA

TIKPSATLHLIPNHLFAFPNKILDYLEQEKITMIFWKPTVLIYFIKDQDNLKNYPLKNLNKILIGGEIMP

IKQLNIWRKHLPNALFANCYGPTEITDVCCYYILDREFSENEILPIGKAYKNTELLVFDENMNFISPKQI

GVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDLLYKTGDIVSYNEFGELLCYGRNDNRIKFMG

HRIELGEIESVINSHSKIILCACIFKEKIICFYESDEELDFKAFLKDKLPSYMIPKHFIKIEKFKLNQNS

KIDRKALHELI

>ETN89821.1 hypothetical protein X910\_08815 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTTHIYDFLEKSLIKFSEKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQAPVLIILPKG

INCLISFLEWHSVEIFIPF

>ETN89820.1 hypothetical protein X910\_08810 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKI

>ETN89819.1 relaxase [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MILNIIRKESKKLENKKSKIDILNNESLELKQKRLDFINLFNQYKKKNNKKYFKLGKELKKLSDDLNKID

LKILSETKEIQKINEKISLLNKELDKYNYQSIVDTKNLKNFVDFMRKNKLATKSDYDLLEKVKLSILKND

VNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKINNINNYIEILKQSNAEVKEYENYLKILEKNKEFLK

DYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCEYLNINDDLKLVSVKSNKINYGGFNKSKDNQKIL

>ETN89818.1 hypothetical protein X910\_08985 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSFSDYWEEIQKIKKASSVIKDNYKRNKVFNSFVNSYSIKHNINNINQTTYSKQAVVKLCSNLSKDGA

KRAMDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVK

ETMDNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHY

HNQVSYEKDLDRKYQKIKSTLYLDDIDTKKI

>ETN89817.1 hypothetical protein X910\_08980 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MFKIFFLSKKATIKTPQNVGIIFFFIFSKKYKKINIEYFIFSLFLKLFYSKNIFLIKNHFLKFIIKSLID

FFFSYYDYLFYH

>ETN89816.1 hypothetical protein X910\_08975 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKSIFQKILTLILISPIFLFGADGGNIASKLANSVNQQITEAGSSVASIINTISIVMGVIWITVMLLMTF

INMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>ETN89815.1 hypothetical protein X910\_08970 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>ETN89814.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>ETN89813.1 hypothetical protein X910\_08960 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>ETN89812.1 hypothetical protein X910\_08955 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>ETN89811.1 hypothetical protein X910\_08950 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>ETN89810.1 hypothetical protein X910\_08945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>ETN89809.1 hypothetical protein X910\_08940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEISNYEKIKKDIEEGIQKRKEEDKKIRK

>ETN89808.1 conjugal transfer protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>ETN89807.1 hypothetical protein X910\_08930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MGTIRVYLNEYEQRQLKKLSIKRNESQSAVIRKLIAIEKYAKTLEILEKNNEINVEYLYHIAQCGNNLNQ

IAYHLNIGIESPSQTQNRLPKLIEELSQILNEHKEHIKNKAIKTSINKKIKRLSPDENFIGEENQ

>ETN89806.1 hypothetical protein X910\_08925 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>ETN89805.1 hypothetical protein X910\_08920 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>ETN89804.1 hypothetical protein X910\_08915 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>ETN89803.1 hypothetical protein X910\_08910 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLGVLAEFIKFLGLNNETNFTKTRTEEKEDELKELIEYENDMPKYYEESEIIDLGNQKIEVIKSIKINPL

GKGKAMKTSQIKEQRIIKF

>ETN89802.1 hypothetical protein X910\_08905 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

PHLIFILGLKSLFLILCMCLRALSYFQFV

>ETN89801.1 hypothetical protein X910\_08900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKIPNWISQVMGVQGLDGGGSGGALDMAKSVG

MATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKMAGDLKGQNSQTNLIDTMQGLTDTITGATA

KAG

>ETN89800.1 DNA topoisomerase I [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>ETN89799.1 hypothetical protein X910\_08890 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>ETN89798.1 single-stranded DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>ETN89797.1 hypothetical protein X910\_08880 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>ETN89796.1 hypothetical protein X910\_08875 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKKHFQ

EYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKEKFF

ELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERLL

>ETN89795.1 hypothetical protein X910\_08870 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>ETN89794.1 hypothetical protein X910\_08865 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>ETN89793.1 hypothetical protein X910\_08860 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>ETN89792.1 hypothetical protein X910\_08855 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNTMYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>ETN89791.1 hypothetical protein X910\_08850, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MVFLCFLSYRKNQKNIEDIGFKIDKEIERQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIE

VSTEDLKKLDTFTN

>ETN89790.1 hypothetical protein X910\_09150 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>ETN89789.1 hypothetical protein X910\_09145 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>ETN89788.1 hypothetical protein X910\_09140 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MDFRSYEFSNDEDEYIVNAFELFSCVFWGMDFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKV

LKELKKCSKK

>ETN89787.1 hypothetical protein X910\_09135 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFYLN

>ETN89786.1 hypothetical protein X910\_09130 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>ETN89785.1 hypothetical protein X910\_09125 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>ETN89784.1 hypothetical protein X910\_09115 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>ETN89783.1 hypothetical protein X910\_09110 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>ETN89782.1 hypothetical protein X910\_09105 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>ETN89781.1 hypothetical protein X910\_09100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>ETN89780.1 PTS mannitol transporter subunit IIABC [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>ETN89779.1 hypothetical protein X910\_09085 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFFVFRKIKNSKEFKEYILKLEDKKSPKLFSDESLKVR

LIY

>ETN89778.1 hypothetical protein X910\_09080 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>ETN89777.1 hypothetical protein X910\_09075 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>ETN89776.1 hypothetical protein X910\_09070 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>ETN89775.1 hypothetical protein X910\_09065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNKDNKQKIEDIKTII

ITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDNDEKGLDFTLKTKQ

CFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKSVLIESKKQNLSKK

YQTMIFL

>ETN89774.1 hypothetical protein X910\_09060 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFLMMID

>ETN89773.1 hypothetical protein X910\_09055 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>ETN89772.1 hypothetical protein X910\_09050 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MRKISLAVIAFSLINVSASAIDLSEFTGDTKLSCEAVLCLASPYKPSECAPALARYFGFSARYWSDVVRM

RTNFLNLCPLGANNTIKSDDKDLEAWRNSLVNLTGTCYIPDLNKKYQRTVLWIETIQKCSHGEGCTTESI

KHYGYRIDPTLDNNCKILSSNKYSDYNLKYTCPTKFYPEEDWNNGYEKKEVNQSEFNSLKEEDRFTADKL

TEVSYSEYKNLPNNKRKISTSGFKTTYYRIDLGYYKKEWINKNCWVNQGK

>ETN89771.1 hypothetical protein X910\_09045 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>ETN89770.1 hypothetical protein X910\_09040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>ETN89769.1 RepE replication protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKNKK

RFYENVVEFALKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTI

LDLRNFCKISNKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYF

KNLEYIKEKDKTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPLQKGKE

>ETN89768.1 hypothetical protein X910\_09030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>ETN89767.1 chromosome partitioning protein ParA [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>ETN89766.1 hypothetical protein X910\_09020 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>ETN89765.1 hypothetical protein X910\_09015 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>ETN89764.1 hypothetical protein X910\_09010 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>ETN89763.1 hypothetical protein X910\_09005 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEEVEG

>ETN89762.1 hypothetical protein X910\_09000 [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>ETN89761.1 hypothetical protein X910\_08995, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW9]

GFKIDKEIERQEIERQEIERHKERNQFIYNDNIRAKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPL

NVIFFCKNDEQHFLFAEVDTGRDYYIKEGAEIIHEEYNIMKNIKFKGKEK

>ETJ84683.1 guanine permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>ETJ84682.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDDTKKLDTIE

IFNIPDLSKYKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDF

YWDINLD

>ETJ84681.1 hypothetical protein X909\_00310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKFISFILIFFAIFAFAKEQNSDDFEQEYQNYQVNDPLSGYNKAMTSFNVALYDYGLRPVLKGYNAIT

PEFIRLGVRNFFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFGGLMDVASKMSLKKHPADLGTV

LAHWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSK

>ETJ84680.1 toluene tolerance protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLILALFFNAFALQLDEISSTMQKNIDASLKLLQDSKEDKKQAADGIFKLFDSIIDYKLMAKLSLS

KNYSKLNPKEQEKFTTAFEASLKKSFTDKLSLYKDQVLKVKNGELKNEKRYFLTTSMVVDGEEKNIIFKF

YNDNNNWLIYDVDVLGVSIVQTYRSQFRDILANQGFDALLQKLESIVIE

>ETJ84679.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFAKLLKFFISRPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDTDLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKAPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

RNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNDLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKSIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKVERIVLETLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSMGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSILSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNEFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVAAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLSGSLFLLPSFLITIYSKKTKFPNQHKEHILKQ

>ETJ84678.1 nucleoside-triphosphate diphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIILATSNKHKVLELKEILKDFEIYAFDEVLMPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFKQSKAYYVAAIAMVGLMGEFSTHGTM

HGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILNKG

>ETJ84677.1 major facilitator transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNNVLPLSFIVGTRFFGLFIVLPVLSLYALKLEGANEFLVGLLVGVYALTQMILQMPFGILSDKIGRKK

TMLIGLIIFIIGSLICSFAENIYTMLLGRMLQGAGAIGAVATAMISDFITEENRGKAMAVMGSFIGLSFA

ASMVISPLMSAKWGLSSLFDLSAALSLLCIILLYTVVPKENKITHENEKTPFFHLIKQKNLALMNLTNFM

QKMLMSIAFLSIPIILVKHLGFASDKLWIVYSASMVAGFIAMGFAGSLGEKRGLAKQILLLGIVFFILSY

LFFAFSNSMDFFITAVVIFFIGFNLHEPIMQSCASKFCKVHEKGAALGLFNAFGYGGSFTGGIIGGIFLH

LDALNLLAIILVILALIWLVALFFLKNPADFKNLYLPLETPLNFSTFGENLGVVDIYKNSKNLVVKFDSK

LTNKEELEGKIKI

>ETJ84676.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQDFVYIKNDVLIPLPDAIEILDQANDKEALICNDKNQKAQIYAPEINFYLKNSQDEILEQSKNVLTLYE

ARASVYDLGLDLEQSKEVQNRLIVADGDAQTVEFLKEHEFKVIALSSAEILAVFGSVGELCAVVKNQGEE

VEIDFDFLLFKAEDLSVVRKDFTRQSGCYNLLNFENLEVLLEFLQSKSPKYHYKTYISYNASVCQYHERR

SEHCAKCAEICPTVAILKDDENKHLEFSQVDCLGCGGCISVCPSGSLDYAPMPRESFFTLCEFYKDKKIL

IIPKKMSLENLNLALPKDVLPFMIEGEKWLSSMHFLTLLQNSGANLVFYTDFVSRGSNEAIVLLNTFFER

KFQKKAIFVAKDEKELQNVLKEQEFIQDLKYDFHNNTLTTRENFAKRMQEMIKNEDFGSMESGEWLRYGK

VEINPNTCTLCLSCVGACNVGALIADKQENALKFNASLCTTCGYCELSCAEKDTLKLFRSGMEFRASYFE

YQTMAKDELFACIECGKEFATKKAVEKIANLMKPKFGNDENKIKTLYCCADCKAKVMIKAMGFAGQN

>ETJ84675.1 hypothetical protein X909\_00280 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKFRTFPQINTLIEDESLKSYPFYIKAFFCKKVVAKLKENFFQDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFFSA

>ETJ84674.1 selenocysteine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALILKTHKSN

FALMGFHSEVNIKDLHELAKEKELLSYYDLGSGWCENLNEKLIKNEPKIRKLVQECDILSFSGDKLFGSV

QAGIILGKKELIEKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIEKKALRVQ

KELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFRTIRENEL

QKLILTINQMENL

>ETJ84673.1 translation elongation factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSVIIGTAGHIDHGKTSLIKALNGFEGDSLKEEQERQITINLSFSNLKLKDKNISFIDVPGHKDLVKTM

VSGAFGFSVCLFVVDINEGLKEQSLEHLEILKILDIKNIILVLSKCDLCENIEQKSVEILEELKNLDYPI

LKVFHTSIKNNQGIEELKNYLYTIENKENDEELIFHYYIDRVFSLKGIGTVVTGSLNEGSITLNEKIICL

DTQKELIVKNIQNHDTNLEQIKACNRVALSLNCDYKELKKGYLLSKKGCFKAFKECDALVKAKNLQNSKM

IFCVGSRQIECKINILKKLENDEFFVHFSFDKNVFLSFDEAFILLQNNRVIGGGKVLNPLSEPLKKEQKN

KFLMFLKNKDFKAAFSFLKDAHKYGFGLLSSYQRFKLSHQKALKLAKELNQVFVDEKNLNVYHLQSLEEI

KNFIKFILEKNPYAMLSAHSLALRITWASENFCELGLKEMSNLLDFQNGIYFKKGIDFEKLQEKNNNQMY

EILKKQGIKPEAPYNLYDFLELDRKSGDNILKKLTQKGLVVRLSHNLFIEKQALEKLMQECLNLLKNQSL

DVQSMKEYFNLSRKYAIAYLEYLDKFPQVSKEAEKRFLTNI

>ETJ84672.1 hypothetical protein X909\_00265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLIDLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKEAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>ETJ84671.1 hypothetical protein X909\_00260 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKFALILSFFIALFMSACTNATFIQSFIQTSNEGIFIRSQKQQSFKISFQNPSQLRTTLDRDLALKLKN

LGLKEVKENADYEILINLVDMKKHSYAQKITTSARFFYDFDPLESDGEWMVENYYTMQVNLQINSKNHNS

QKTSLLARTAYLGNKERCQLSLENKIINQIVSFFIFKKRQSRV

>ETJ84670.1 flavodoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKMNSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTVAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFEASDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>ETJ84669.1 hypothetical protein X909\_00250 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFGFDDKQEFIPQIYRYLNNQELMLTFLTQYNASVDSALKIPLLYAKNTKSLKMIFGNFLHNIMHVSFG

KIQNINIKLNTYAFYFQKRKSLIFNTKISKNVDLLRLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLEIENEIYELLNLIKENNFEKFYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>ETJ84668.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>ETJ84667.1 catalase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIKITADLSA

YTKAKIFQKGEVTPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSFVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKEDKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRALKHFEKISPDYAKGIKKALEK

>ETJ84666.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTTLSLEEEKRFEELCKMAFNFARNNEYENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNGLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>ETJ84665.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDEGQKQQFIKLTYFLGEVLGEQYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELMQNKKYLE

KDFLCDYKALVGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGDILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSIAQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>ETJ84664.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVAFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>ETJ84663.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGIVFSLFSVFLLVFMLYKKINAHMALLLSGLLLLSLAAIFGLSPHIVAKGSLNLGFFDIFQVFNQTMS

STLAGLGLTLMTIAGFSAYMDHVGASYALFKVFEKPLKAVKSPYVLLIVAYFIVQLLVLFIPSHAGLALL

LMVTMYPILVRSGVSKLSALSVIAICQYIDHGPGSGNVIMASKVAEVDPAIYFFHYQLPTTLPIIIAVGI

AIYLCNKFFDKKDNFVFNAQEIEKELNENEGKEKELKKPPRIYAILPIIPLVLILGFSSVLDSILVLMGI

SSAEEVKAAASTAIKMNVPVAMVISTFVAIIFEMIRYKSIVETLNSIMIFFKGMGHLFVITVSLIVCGQV

FASGLLSVGFVDTLIEFCKNAGFGVLAIIIAVSILLAVCAFLMGSGNAAFFSFAPLIPNIAKHFGVETIT

MIAPIQIMTGFGRCVSPIAPAILAISAIAKVSPFAVVKRTAIPMLVAAIVNVIMTYIYL

>ETJ84662.1 cystathionine beta-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRELRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDAHFLITDAIYGPVRTICELFLEKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGANGMITIEFAEGYSKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDWSARGPFVRFHIGLEDTKDLIADLTQAFDSIKK

>ETJ84661.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTGISVFDHRLLADSWSTQEMRAIFCEQNRIQKWLDVEAALAKAQAKLKIIPKKAADEIAKKAHYKFMDM

DFIFAEFKKTKHPLVPTVRGLEKACDNNLGEYVHFGVTTQDIIDTGLVLQFKEAMTLIKSELKAIAKALA

KLAKTHKNTAMMGRTLALQALPITFGHKVAIWLSELERHFERILELEKRLYVGSIVGAVGTKASLSDECN

EVEKLTLENLGLDVPNISWQPARDRFIELGFVLGNINTTFNKIAHEILILSHNEIDEVAEPFGKGQVGSS

TMPHKRNPAVSENAVTVSNAFKANLAILSDIERHEHERDGQVWKMEWKLLPEMFLMLSVVLANMKFALSD

LEVKKDKMLKNLNTLNGFVLAERVMFALSDHYGKQHAHEIVYENAMLGIEKQKTFKEVLLADKRVSKVLK

EKEIDALLDATSYVGYAPKLVDEFLAKIKNSAILK

>ETJ84660.1 2-methylcitrate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFYSEILADFIFNLKYENIPNAVVQRAKELMLDSLGTAIAASKEECVLNAFKAFENLSTEKNTPIWINDQ

KLDPIYAAMLDGIASHALDFDDTHTEAILHASAILTPLCLSYGFHVSKDAKKIIKAFIIGWEIAARVGIA

SKGTFHKRGFHTTAIAGIFGSVSASAILLDLNKEQIINALGLAGSFASGVNEFLSNGSNSKVLHIANAIK

NGIMVAHFAKNNMSGPLSIFEGRDNIFKCFGIEEECDKTELNKALGEIWQTMQVSIKPYPSCHFAHGLID

CAIALKNDGLKADEIKSIHCFVDEVPISFICDPLEAKYTPNSAYEAKFSMPFLMALGFFDGKITLNSYEN

LKREEVLEFAKKISYEKRKSQGFPKYFPGHLEASLQDGHIIQKDVFINKGNFDNPLSFEELKAKFLANAQ

IYLDNAKANKILDQIINLENLNHFSF

>ETJ84659.1 iron transporter FeoB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIKIALVGQPNVGKSLLINALCKANMKVGNFSGVTIEKASAKTFYKNYEFEVIDLPGTYSLDGYSEEE

KITRHFLNQNDYDVIVNVLDATNLERNLILSAELLSLNKKMLLALNMCDEAKKEGIELDTSILSQEFQSQ

VVEISAKTKENLELLLQKIIILFESKFIPRSQFYTPLCEKSPEKEDLLYFINELSKKIITHKKEERNLTK

KIDALLIHKFFGLPIFLFLMWLLFQLTFSLGQNSYGLYRIRL

>ETJ84658.1 iron transporter FeoB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYIESGFNALGEFVKNNISNTFIASALADGIIAGVGAVILFLPNIMILFLGIALLETTGYMSRVAFLLD

GILHKFGLHGKSFIPLITGFGCSVPAFMATRTLKNKRDRLLTLFVINFMSCGARLPVYVLFIGAFFPSEK

AGNYLFGIYILGAILGLCAAKFLRMTAFRGLDEPFVMEMPKYRMPNWYLVWFMVYNKAKMYLKKAGTFIL

LASLLIWFASNFPKSEENLNDFNAQERAIEQSYLGQFGKSIEPIFQPLELDWKLSVSLISGLAAKEVMIS

TMGVLYSLGKDVDETNNDLKGIIAKNIPIPSAVAFILFVMIYNPCFAATIVFSKESGKLKYTLFLFLFTC

TSAYIVAFIGLHIAKILLN

>ETJ84657.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKLSNEELKNILEDRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDTFFL

TIGAQGESGYEILEKLAAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFDDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKTSWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEEQIKILEQ

IDFEFESNIKLILQNIAKNKLGALLVENYKKSFEKNYTFIEQNFDENPMPSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASPYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNITK

ISSLKAS

>ETJ84656.1 enoyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIMKGKKGLIVGVANNKSIAYGIAKACFDQGAELAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKDKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>ETJ84655.1 triosephosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFAANLKCNHTRASFKIYAEILNKTIGVKCDDIIVFPPSVAFLEKENNFIQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEEFIKAKFDFAKEHGYKIVFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQSTDIAKVLEFLASLTKAPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>ETJ84654.1 phosphoglycerate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>ETJ84653.1 glyceraldehyde-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKHGAQIVLECTGAHLTMAKCQEFIDMGVQKVIMSAPAKDDTPTYVLGVNSELYK

GESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGA

AKAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVSKDEINEAFRKAAATNLKGILMVDDDERVS

SDFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYIANKA

>ETJ84652.1 nicotinate-nucleotide adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKN

>ETJ84651.1 hypothetical protein X909\_00160 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQERIDLIVKILDEKKAENIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLENLKKGRV

>ETJ84650.1 hypothetical protein X909\_00155 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILILLTLCAFAFGASECDRKIDRINKEISFSKAHNDTARTLSLELALKQVQNDCTKDPMFYDKKLEA

KKLKEQEVEKIEKELDALKEQKDYMSKVEYKAKKKALKEQKEKIKKEIEEYIDNL

>ETJ84649.1 phospho-sugar mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIK

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKYLDDDIE

ENLEVEKYDILNLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKALNLKAHVMFAEPDGQFPNH

APDPTEEENLSAIREFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKDIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKALPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERAKELESMVFTLFNDIKARFKN

>ETJ84648.1 flagellar basal body protein FliL [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDEELENEETKKKKGGSLVIIIVILLFVLLLSIMGVIAWLISSSSSDESEVKEAPKEEAKADKPKVSAPT

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNSELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>ETJ84647.1 4'-phosphopantetheinyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDEKNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>ETJ84646.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRVRTKIRANFRRRVKRTLKGSLKEKLAGTILLCAIVPLAVLGYLFIVIIGTFFNTARARQGVRALDHF

VNASLFNGYAWESVSSHAWRERNRKKWARIVIKITDFFQKDHCKRANKREQPVVDFILSRNLDKQTIGK

>ETJ84645.1 cytochrome P450 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSECPFFPKPYKNKASTLLTFLLKRRSWLDGLYERSYKMQTGYVKMPNFDLYVINDTKEVKRMMVDEVRE

FPKSAFLHELLSPLLGESIFTTNGEVWKKQRELLRPSFEMTRINKVFNLMSEAVADMMDRFSKYPNHAVI

EVDEAMTFITADVIFRTIMSSKLNEEKGKKILNAFVTFQEQSVHTAMRRMFRFPKWLSYVLGDRKRAKAG

DVIRQVLSDIIKPRYDMADNAEFEDILGSLLLVVDADTNKRFSFEEILDQVAMLFLAGHETTASSLTWTL

YLLSLYPKEQEKAYEEITQVLQGGAIEISHLRQFKYLINIFKESLRLYPPVGFFAREAKKDTQVRDKLIK

KGSGVVIAPWLIHRHEEFWTNPHGFNPSRFEGEYKKDAYLPFGVGERICIGQGFAMQEAILILANILKTY

KLELEEGFVPDVVGRLTVRSANGMRIKFSKREL

>ETJ84644.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDREVFYIAGYDPKSYRFYYDLFKKNLKDYSHTFNIKADLSKIEKNEQFPFFKISCEGVQTKYHFLTWND

IVKKNWSENYKDALADCYSFFRIYTITGLFIKFGKESIYQLITGYYPFFYVLFSLLFSLVLAFGSFAFLQ

NYMHFSLAIIIGCFLGFLLNHFLFKLGKKLAVFWIARICAFCATWQDKKTGTMQERIKLFANTIVDKLKQ

NENKQDYELVLVAHSVGTIVCIEVLECILRQNLDLSLLHKLKILTLGECIPLVSYQKKADEFRKKLEFVS

RFDLKWYDYTSIIDGACFPQVDFFRTSGVNAKFTPPFLSAKFHTLYEKHEYKKIKRDKNKAHFLYLYSIS

VKGDYDFFSFIIMPKFLEEKVKI

>ETJ84643.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFNTKIKKEFSGKNVLLLQGPVGNFFHHLAIRMEKKQTKVFKLNFNGGDFFFYPSGTRCKCDEKDLENF

YRDFFQSKKIDAILMYNDCRIIHAKAIKVAKELGIEIWIFEEGYLRPYCITLEKDGVNANSSLPRDKNFY

LSQNIFTKESIKEIPGGFKFMAFDAFLYWLFAFILAPFFNNKLHHRTLYPFEFLFWFRSLYRKYLYKITE

KKLNEKIYNLEKKYFLAILQVYSDTQIKYHYKKSIEHFIEETILSFANHARAKSYLVFKHHPMDRGYKNY

SKLINDLSQKYHVEGRVLYVHDTHLPVLLRKALGCITINSTVGLSAILEGCPTKVCGNAFYDFEGLSYPK

KLQFFWREAHAYKPNPVLVCNFKKYLLQTNQFNGNFYKNFFLDK

>ETJ84642.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRSKNQDAYIIFKPHPDVLSGNRVGLKDETRILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCKRRTRKLSLEELVAGALIT

YPRYINPKTKTLCEIEVCLDIMLNLQKAYFSKKYIKLAIDFKTFMLRKIRRFYEFLAKK

>ETJ84641.1 adenylylsulfate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>ETJ84640.1 sugar nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNAIILAAGFGSRLMPLTKDQPKCMVEYKNKKIIDYEIEALKSAGINEIAVVGGYLNDVLKNYLNKYDIE

HFFINSKYDKTNMVYTFFCAKDFMLKCIEEKQDLIISYADIIYFQDCVQKLINAKEELAIVVDKSWRKLW

SKRFANPLEDAETLKMTNGYIIELGKKANAHDEIEAQYIGLFKFSYQFLSEVIAFYEMLDRDILYDNKNF

ENMYMTSFLQALIEKYNNAKAVEIDGNWCEIDFMSDLEVQIEK

>ETJ84639.1 glutamine amidotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEICLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>ETJ84638.1 hypothetical protein X909\_00095 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>ETJ84637.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKVVSVEPN

DAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYFSCMWNH

RDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINAWKSVKN

PYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>ETJ84636.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPDLARVSSGTQNVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>ETJ84635.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLETCGDYEQALRYKFHLSYMLGEVLIKADK

TWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKIISKNKQAFLKELPRIQNILKIHQDYQPIL

DNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLDPKKLNDENEKINYKNIPAELAWEMNLPL

PDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYLDNFEHSYDCIHILFLDRNDFNKSFKYIN

LLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIPIQKILDRVQYPFFEQITLEHMLNYWINH

GVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFKLNNIDNLEIMQNIIFGPYRYILPLIINF

SFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSISELDFEYLNNPLIKQINDFQKDFLDVLN

KKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIKQYRPDIVASWKYYQEFEQMCKELDGDIQ

EKDL

>ETJ84634.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGVYSII

>ETJ84633.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>ETJ84632.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>ETJ84631.1 dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>ETJ84630.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>ETJ84629.1 GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>ETJ84628.1 GDP-L-fucose synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGGI

LANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAIA

KISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKFD

SIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGPH

KNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQNI

RQ

>ETJ84627.1 hypothetical protein X909\_00040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEKCPYSHENIIFHKKFIGNINNENTITLAQALK

DNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQVIFEFHGCNPEEQDGVEKRISLLKKLNEYFIP

IHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGLHYRKECGNLQNLDFPVWPSNPEIPLRF

>ETJ84626.1 hypothetical protein X909\_00035 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGGI

>ETJ84625.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>ETJ84624.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEKLFISVRDDGVATRLLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSV

GKVESIFSSNFIKKHYLENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHD

LSLQFHGIESNNQYKNKLKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNL

EGVYHATPLELAAAIIAKNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFM

SNSSKIYGTYSALVLLSSIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFK

NKDTCDTSIKYLKKALIYDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYV

YLNILSDFLNYSQRIYNIKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLD

LKNIVDSHKRNQLIPYNIKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEY

KNKKGK

>ETJ84623.1 glycosyl transferase family A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTKIVGVVIPIYNVEEYLRECLDSVINQTYINLEIILVNDGSTDENSLNIAKEYTLKDKRITLFDKENG

GLSSARNVGIEYFSGEYKLKNKTQHIKENSLIEFQLDGNNPYNIYKAYKSSQAFNNEKDLTNFTYPNIDY

IIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESYKFNHSCIIKQKEWLNRM

LTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVLKTKLYYYRQRANSIMTS

RDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDLPNIKLFEQIFMQKLKSW

RNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFSDLTIIKNNLTKDQIYLNQILENKDKIL

TTQTNQIYNLNTTLENKNQLLIAKQNLINFQNNYGKAKTRIQNHLSYKLGQALIINSKSVLGYLSLPFII

LSIVISHKQEQKAYKFKVKKNPNLALPPLETYPDYNEALKEKECFTYKLGEEFIKASKNWYGGGYIKLRL

KIKKLKREQ

>ETJ84622.1 glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTKIVGVVIPIYNVEEYLRECLDSVVNQTYKNLQVVLVNDGSTDENSLNIAKEYTLKDERFILFDKENG

GQSTARNVGIEFFSKEYHFKNITQELKENSLVEFKLSNEDNPYNIYKIYKSSNFFKNKDELLNFRAPDID

YIIFLDSDDYWELNCIEECVPRMDGVEVVWFDFEIFLDGIDGKNVWNYSDHKTDLEYLRYTENQYTNFND

IIARITKEYIFGFSSATYCMIDFALIELNTLRFINGIYAEDHHFSIILFSLSKMIYIIKSKKYKYRLRQN

SSSNHDGNFNKTSFPLYLDYILKDFNHNYFMAKKYYIYASWIITCNTLLDFLKSKNRCFMDTIIYTFINK

YFNAGLILLKFNSDPMRIKDKFLLNKQSFAFKYPLINASNIIKFSLEYRIGELLCKKKKILFIFNIIKAL

YDIKNQDKFISHYKKFDLKEYIDYHEALKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKR

TKR

>ETJ84621.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLLSYNIVISCDNNYVKYVAVVIASIIKNTKINSQLKEYPYKFYILSNDISKNNILKLKKLIQHLSNSYY

NCELIIHKIDDSKFHRFPKAWHVNHATYYRFEIADIVEGNKCLYLDADVLVCGDIRELFYMELNNKVAGV

VTDSCSRLWTKLYTKDNKTSSYIEFDPLMYFNAGVILIDLNQWKKHDIKNKCIDAFNIYDHGGLADQSYL

NIALKELTYKLPLNWNLIVPEYILLDGYERHYVVNCLDEISEYNLAYTRSEFEEAMKNKKIVHFCAAKPW

WNLYYKNNKVDFNERNVWWEIALNLEEFKEEFYFLKNSLDSKHLNRQLNTIEWILKNGDKNSSNVLYSSY

DIDNIKKIKNHLSYKLGNAIVLSFKYWYKGRLLKLPFELVSIYKKHKRTKR

>ETJ84620.1 sugar transferase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

NFNLIEEWLLSNDFNEKYKKENHPYPSLLDPKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGH

GTGEKAFQEMLSRCNVKILEKNIWYDNGLDRYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHV

PAICLVRDPIKIMTSVYNYKILKNKDNLTFSNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNIN

KHIRFTYIARTHLKNLKNISHVYYIDVSEISNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIF

DIKKPIIYKHYFNNKFIEIYLYGSYNMINKNFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLL

YEIKLNINIFLDKINNMINMFKKESIKDNDILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKE

IKT

>ETJ84619.1 signal transduction histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDELEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>ETJ84618.1 hypothetical protein X909\_00545 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHKNLSLSKLFDFYSVFEGFEKLNILNFEDDVFTNIERILLDDYLKIKSYFALDETSSYALTLLAKNNRK

RFSINRKIQHFKALSTLKYLLETGIIKLEYSKEAKKIKDKRQKIKKELRSYVVQDKIIFSNHFTRFFFYF

LKPNEKLILQNRYKEVLECIKEKFELYQSFCFEQLSRELLEKKFNINGVQSYWDKNLELDLYYQDENLCF

VGEVKFKNKKICKNILNLLKSKAKSLNLAPNYYIIISKNGFSKEFDKICEQNLLLLDLNDFKILLEE

>ETJ84617.1 aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQISDLKKELILKKGILHFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQTYEQARKDIKKS

LSLDENFALIACGTGSSSAIKKFQELIGIYIPPLVKERYFTQIDKNTLPLVIVGPYEHHSNELSFREGLC

ECIRIPLDKNGEIDFDFLEKTLQKNKKRKIIASFSLASNVTGILSDYKRISEMVRKFKGIVAFDASSFIP

YKNISCQYYDALFISSHKLIGGIGGSGLLAIKKDLCGNKPSFAAGGTVGYVSRTSQCYLCNEEALEEGGT

PGILQLIRASLAFKIKDSIGVKNIEKKEEILKDYFFEKLKTIPNLILYAKNLKTRLPIFAFNIKGISPFD

IAYELSKKYHIETRAGCACAGPYGHDLLGLKDNQKLKTKPGWLRISLHYTHEKENIDYFFNALNKTIVKL

SH

>ETJ84616.1 formyltetrahydrofolate deformylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISVLKICTKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMLGQEAL

IELCEKRKKDIVVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGANPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVLPVNHEFTWQDMQQAGRNIEKDVLSKALDLVFEDRIFIHNNKTIIF

>ETJ84615.1 multifunctional Cca protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGAQGFGKSFFVCKFKNYDLALARTENKISYGHK

GFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLKDLGAGFLRHIDKQSFQEDSLRVLRAVVFA

SRFNFKITSESLKLMQSMDITDLSKDRINAELCKFFKSPRLDVGYRYLQELGLEKQIFGFESVFMSLEFQ

NLLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEYLKYANQAFYLDDISDFELAKIAFEMPLKE

WLGLWSKKRIEQAKRLGLYENKFESKILAKDFINAGFCGKILGLKLQEARENELKEYIKGLAK

>ETJ84614.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELPPMEFVCEELDTPQDLEDKISMAKFEE

EQKIQNNIEISTQENKEFKKEEPFLQSEILNPSVMTEVQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKK

>ETJ84613.1 hypothetical protein X909\_00520 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDEE

INEFKRWLIKI

>ETJ84612.1 hypothetical protein X909\_00515 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVFLIPLLIIIGVIFGIDYVYFKNQDLKVQVKKEQKELNSSLEKEKKEYIEKLFKTK

>ETJ84611.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSYKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGAIETIEKNENAENVRYYGSVFNQFS

>ETJ84610.1 hypothetical protein X909\_00505 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKFLFILSLFCVLSYAYELKLNANITALKLDKQNLYIGTDKGEILQYNIKDKSLKELLSLPKIKNYYGD

DFAKIYNIDIFKHTLLILSEGDFGAKNLSFYKENLQIKKLEENSIIKAFFINENTYLLISIGSEIELIDK

SLKNIKKFNFSHSSLNDAVLNEDKGRLVAGFESGEVELFDLKNWKMLKNYDKMHKDNIYQVDFKNNIILS

CGTDRRIGVVKNEEQNFLQKDFLIYTCALSPNGEFAVYSDNEAGVSEVFSTSDFKPVKTFNNENLMSEFI

IFLNNKDFIVSGFGDSIMFRSIDE

>ETJ84609.1 nitrate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKKLVLLGSAAVVFFAACAMNSGVSSEQIGLRKASLENENKVNLVEANFTTLQPGESTRFERSYENAPP

LIPHAIEDLLPITKDNNMCLSCHDKAIAADAGATPLPASHYYDFRHNKATGDMISDSRFNCTQCHVPQSD

AKPLVGNSFKPEFKNEQLKSRSNLIDVINEGVK

>ETJ84608.1 quinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKYLIARRIVQLGILALFSFKATDFILQGNLSSSRLFNTIPLSDPFAVLQIILASWSIDLVALIGALIIF

FIYGLLLGRIFCSWVCPVNLITDFAAFVRNKLTLNNKFLILPKNLRYFVLVLVLVLSFVFSLPVFESFSY

IGMIHRGIIFATSSWIFVAFILFCIDTFLSPRAICSHFCPLGAFYAFISRFALLKIKHDSDKCTKCYECI

RICPEKQVLWMVGKESTSVKSGECIRCARCIEVCNDDALNFNIFDLRNK

>ETJ84607.1 quinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKGRREFFVSAFKAACLCTGGGFLANLALKADDNYALRPPGAEDEARFLSKCIRCGLCVKACPYDTLKLA

SLLDSPKNGTPFFKAREIPCYLCKDIPCIRECPTDALDKKHLEQGIESLKMGIAIVDSASCVAHWGIQCD

ACYRACPLIDRALKLELKRNERTAKHAFLLPSVDHEVCVGCGLCELACITEKPAIRVLPREYVLGKAGSH

YVKGWDEKDEGRIKNADTSKHFDAKKATNYLNDGEL

>ETJ84606.1 nitrate reductase catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNRRDFIKNTAIASAASVAGLSVPSSMLGAQEDWKWDKAVCRFCGTGCGIMIARKDGKIVATKGDPAAPV

NRGLNCIKGYFNAKIMYGEDRLVMPLLRMNEKGEFDKKGKFQQVSWQRAFDEMEKQFKKAYNELGVTGIG

IFGSGQYTIQEGYAALKLAKAGFRTNNIDPNARHCMASAVVGFMQTFGVDEPSGCYDDIELTDTIITWGA

NMAEMHPILWSRVSDRKLSNLDKVKVVNLSTFSNRTSNIADIEIIFKPNTDLAIWNYIAREIVYNHPEAM

DMKFIKDHCVFATGYADIGYGMRNNPNHPKFKESEKDTVEKENVITLDDEEAASLSYLGVKAGDKFEMKH

QGVADKNWEISFEEFKKGLAPYTLEYTAKVAKGDDNESLEDFKKKLQELANLYIEKNRKVVSFWTMGFNQ

HTRGSWVNEQAYMVHFLLGKQAKPGSGAFSLTGQPSACGTAREVGTFSHRLPADMVVANPKHREISEKIW

KVPAKTINPKPGSPYLNIMRDLEDGKIKFAWVQVNNPWQNTANANHWIAAAREMDNFIVVSDCYPGISAK

VADLILPSAMIYEKWGAYGNAERRTQHWKQQVLPVGAAMSDTWQILEFAKRFKLKEVWKEQKVDNKLTLP

SVLEEAKAMGYSEDDTLFDVLFANKEAKSFNPNDAIAKGFDNTDVKGDERKIQGSDGKEFTGYGFFVQKY

LWEEYRKFGLGHGHDLADFDTYHKVRGLRWPVVNGKETQWRFNTKFDYYAKKAAPNSDFAFYGDFNKMLT

NGDLIAPKDEKEHSIKNKAKIFFRPFMKAPERPSKEYPFWLATGRVLEHWHSGTMTMRVPELYRAVPEAL

CYMSEKDGEKLGLNQGDLVWVESRRGKVKARVDMRGRNKPPVGLVYVPWFDENVYINKVTLDATCPLSKQ

TDFKKCAVKIYKA

>ETJ84605.1 thiol peroxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSTVNFKGNPVKLKGNSVEVGADAPKVNLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>ETJ84604.1 hypothetical protein X909\_00475 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILILSLAAASFLNAEILVYGPGGPAPVLKELALKFEEKTKEKVIVTAGPTPAWIDKAKENADLIFSG

NTSMMDDFAKKIPSLSLENLSVLNVRPSGIIVRPNNPKNIKNFEDILKDGINVMVVDGAGQVGLYEDMAL

KSAKRENLVKLRKNIKIYAKNSKAAVDEWNNNPNIDALIIWSHWAKALGDDKALFIKDKNAVIYRAAEIA

PTKKGLENKKALEFVDFIKSKEAQKVWKKYTWKEVK

>ETJ84603.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVAPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIALKQASELKTLLKSVYEKRTFRHLSDIKPYQSSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYVDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDVKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLTFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSSMLALVVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKNVNLQNHQKRNYQLGLFADLEELASETRFKFESEFDAHPILKLSKINDLCARNLE

KIYLFLKKAMEIKHSLTLVNLICENSFYREICEELATKRATNKAGQVDLLRKSENLEKIETKFNVLKELA

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGELTID

>ETJ84602.1 hypothetical protein X909\_00465 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKNYTLNTNTYTEQKSYTNNYDNSYSPSIQTNNSSSDI

NINNNTIQKQETNPLDENQSLNNDTFNTSISENNQSLNNDTNTSNNINTNENKQILDTDKEKLKQENKQA

KIEALKKEISKQQKILERERAVKKELQSNKSNKNKYLNTAREYLSIGKNSRLEPELSTENMKVYVLDGKF

LSQYRINLLKDMLSVIQDNAKDYYLSVFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISLDRLSPYLNNP

KELNEHVAREEILERLKLQIKKDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>ETJ84601.1 valyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMRTLGITPAWSRL

RFTMDEGLVNAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSDEFLV

VATTRPETFFGDTAVMVHPDDERYTKFVDKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLDFISVFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFIEKIEEHNNQIGYCYRCNNIVEP

YISKQWFVKKEIAQESIEKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSEKDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTELKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNDKKIKDEIKAYMNFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENVDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>ETJ84600.1 methionine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQKKSKELRVLRKDIGM

IFQNFALMERKNVFENVAMPLRTHYTQCKFHAKLFNKEYMSEKEIAQKVNSLLEIVGLDHKNKSYPRELS

GGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLVTHEMDVVKDIAQKAL

LLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVITHMARTLNIDFNIVW

GKIEKLNGKALGNLVININENDKDKVLDYIEKSGVLWEVAS

>ETJ84599.1 methionine ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNEENISIISAFFGRIFQFFNEFSWQDIKEVSLSSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLAIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGISIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>ETJ84598.1 methionine ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKSLFIASILTLSLNANALETITVAATPVPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGVKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDIIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDPKIKALTQVLQSDKIKQFIIEKYNGSVLPAF

>ETJ84597.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLFKIIILACILNLSSLFAQNITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKVIDEILRSDKFKAIINEHYKDILIPAF

>ETJ84596.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNIKKIFLSVLFTISLSFGADKTIIIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLNSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKKLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFMEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYKGSVIPTF

>ETJ84595.1 flagellar basal body P-ring biosynthesis protein FlgA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKTTSLPKDFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKNVFFRYFIQANLEVLKSERAIKRGDKLGAFDYKSVLIDFDKVPLNALTLDDVDN

LVAKSNINKNAILRANMFKTTALIRRNDPIIGVLSEANVDVLIELVALQSANMGERIRAKNKEGKVMQGI

VVGKNRMIIQ

>ETJ84594.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGAKLSFKAENQANLEEICQENFKYTHFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIHAGFADTLLMRAAAVALKERKKLILGVREMPFSTLNLEHMLKLSQ

IGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHNLYEKWQNF

>ETJ84593.1 phosphopantetheine adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>ETJ84592.1 thymidylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>ETJ84591.1 histidyl-tRNA synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINALKGMKDLLDKDAYCYEKVIKTCEEVAKNYGFTFINTPHLELCTLFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLKCMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGVGFAMGIERIIAILEQKEEKVQREGIYLCAMDEIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEAQNESLFYKNLAKKEEKMIKISDLKKVL

>ETJ84590.1 arginine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYGIDIWGNENFIIKNGKVCINHEKKPAIIDIVKELRDDGYKGPLLLRFPHLIQKQIENIYGNFNKARK

EFGYKGGFNAVYPLKVNQYPGFVKNLVKLGKDYNYGLEAGSKAELLLAMAYNNEGAPITVNGFKDRELIN

IGFIAAEMGHNITLTIEGLNELEAIIDIAKERFKPKPNIGLRVRLHSAGVGIWAKSGGINSKFGLTSTEL

IEAVNLLKENKLLEQFTMIHFHLGSQITEIHPLKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYSQ

FKNEKSRNYTLREYANDVVFILKNIAEQKKDLEPDIFIESGRFVAANHAVLIAPVLELFSQEYAENKLIL

KKQNPKLIDELYDLYKSIKPSNALEYLHDSIDHLESILTLFDLGYVDLQDRSNAEILTHLITKKAILLLG

DKQNPADLLAIQDEVQERYLVNFSLFQSIPDFWGLEQNFPIMPLDRLDEEPTRSASIWDITCDSDGEISY

SKDQPLFLHDVDVEKENYFLGFFLVGAYQEVLGMKHNLFTHPTEAIISINEKGYEVEGIIEAQSILDALE

DLDYDIHAIMDILNERISNSKLVNDKQKKHILGELYLFLNDNGYLKSIGV

>ETJ84589.1 hypothetical protein X909\_00400 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFWGIIKEDFSQPKAQDPAFNSCIELFF

>ETJ84588.1 serine acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISGISQFLTGVDLHPGAELGRRVFIDHANGVVIGQTAIIEDDVLIYQGVTLGGTSLEKGTKRHPTIKKG

VIIGSGAKVLGNITIGENAKIGSNAVVVKDVGANLTAVGIPAYIIEERKNKNIRAIDANCDDKLEKLEKK

ILELENLILKQLESQK

>ETJ84587.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFDTPQIIKNAAINAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

EGLEENGFKITAEQLKKAITAKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTQITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGECDKDIEKMRQAFEKRRNLALDILKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYATSDELIKKGLERIANFIKNYK

>ETJ84586.1 cupin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIQWSRAEFSPKEVKINVLIDNEKGKEIQILLAKDSVMKEHKAPFAIHIQVLSGKIWFEVEKEKFELN

ALDMISLEANVAHSLGGLENSIIRLSLNKSDSIQRVNAVLKKP

>ETJ84585.1 zn-dependent hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFVSVDFFKTFDISNSERLKAKKVQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFF

KPDLSDFNTPHITWLGHSSLFISFKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITH

SHFDHLDAKSIKALKEKARFFITPLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGD

GKNKTLWASFVMEFLSVDKRVFFSADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKE

AKDLNAKAVMPIHWGRFLAGTHAWNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>ETJ84584.1 DEAD/DEAH box helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>ETJ84583.1 hypothetical protein X909\_00370 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>ETJ84582.1 hypothetical protein X909\_00365 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKYTKPCFKGAAFNCPHCGVYSRMEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIF

FPREVAIPPEENMPENVKEIYEEASLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIK

EIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERL

NKLKSAIGEKQ

>ETJ84581.1 type I restriction endonuclease subunit S [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNFKDSGIEWLGEIPEHWKLIKCKNFFVLKSIPIGDLWNKTKLLSLTLNGVIERDINNPEGKFPSDFST

YQIVKEGDLIFCLFDVAETPRTIGLSKLNGMITSAYTIFEIKNQEKRFLEYFFIDLDNRKNLKFLYRGLR

NTISKEDLLNLKIPLPPLKEQEQIANFLDEKCEQIKNFIEKKEKLITLLKEQKQAFINKATTKGLDKNVN

FKDSGIEYLGEIPQHWKLVRLGLILKTSSGTTPDSGNDKYYKGGQIVWINSGDLNDGFLKDSKRKITQDA

LDDYSVLKIFDKDSLIIAMYGATIGKTAILKVNACVNQACCVLEKSAWYNTFYLFYLFNRYKKELISMGS

GGGQPNISQDIIKNLKIPLPPLKEQEQIANFLDEKCKKIDLLIEKTEKQIKLIKEYKTTLTNQAVCGRIG

KS

>ETJ84580.1 DNA methylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>ETJ84579.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>ETJ84578.1 heat shock protein GrpE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>ETJ84577.1 HrcA family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>ETJ84576.1 Cj81-040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>ETJ84575.1 3-deoxy-manno-octulosonate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDAKMIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKD

HESGTDRINEACKKLALKDDEIIINVQADEPFIECENLLKFKEFASSCLDKKAFMASCYKKITQEEAMDP

NLVKVLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAIE

NGKKIKMLEISTTSMGIDTKEDYERALKIYLEK

>ETJ84574.1 threonine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKEKILALFDLKNSDEKVFEARNIKKEILDWMQK

>ETJ84573.1 tetraacyldisaccharide 4'-kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>ETJ84572.1 NAD synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFALLMPTQISNKANLEDAL

RLCADLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSALKNSLVIGTSNKSELLLGY

GTIYGDLACAFNPIGSLYKSEIYALAKYLNLHENFIKKAPSADLWENQSDEADLGFSYAKIDEGLKALET

NDEKLLRTLDPSLIAMLKNRMQKNAFKGKMPEILEI

>ETJ84571.1 beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKKHVKKPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDDFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIVGKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQVHLPSWLRYF

>ETJ84570.1 hypothetical protein X909\_00630 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MELDQILLYAFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWTLNFIFLLALLSVFLGWKLKLD

>ETJ84569.1 7-alpha-hydroxysteroid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNAQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDVDFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRVNVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>ETJ84568.1 dihydrodipicolinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>ETJ84567.1 protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELMENLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWSIEDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKTIPKIHTKEPKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKLNLINDYYAYVNDCIDDNLFIFICNCNPNVNAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDSNG

>ETJ84566.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYEMIKPLLFKLNPEHVHTLVEYSLRALSASFPGSLSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKNLRELQNDDFLNTLLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGADGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISEAVGVN

LK

>ETJ84565.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLKVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLAVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDALCKLNLKSARIDALTSPLMDMIGSVGVAVVIIVGGREVINGSMSVG

SFISFVSALFAIYTPLKRLSSLYGKLQGAVAASERTFYLLDLEPQIKGGSKELKNIEKISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGTSGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHAKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANACEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLIFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>ETJ84564.1 cysteinyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKPRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>ETJ84563.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSLVFKNFIINALGILFSRILGLARDVLIALFLGAGLYSDIFFVALKMPAFFRRIFAEGAFGQSFLPNF

VKAKKKGAFCVSVMMQFSLIVFLFCLLVSFFSSFFTKLFAFGFNADTIALAAPLVAINFWYLFFIFLVTF

LGAILNYRQKFFITSFSAALFNLSIVIAAFFVDKNAPQNTLYYFSYATVLSGVAQLILHLLVLKNNPVIR

AMTLSIKFKKAKAKLQGFYGNFFHGVLGSSATQFSSLLDTTIASFLMSGSISYLYYANRVFQLPLALFAI

ALTQVSFPKILKHLKSDQENLALKFMQRALALLSILLIASSIVGSVFALEISKLLFERGNFTHEDSVITA

YVLIAYLIGLLPFGLQKLFSLWLYAKFKQKTAAWIAVKSLIISALCSMAFIFLIKDESLKVIAVALSSSI

SAFYLLGANIKEFGFKKFFALISIKICLLVIVALIVFTILLILIKPYILSFFIGIFTSFKGVF

>ETJ84562.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MALDEKIIAYTENPARELLSVASRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNIPLNKTIQITVAQGIDPIESQDESLILAYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVKDAVNSGVGIECEELNVVGSVGSNTQLNAAKMKIE

GTTHSKAKIQAKQAYIKTHRGFVEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDSNYDEEFAILGEQISKLNHKMNKIRQYILSSKNGILSVEKKITEL

KNQGQNVPIQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYEEKDIAWLSASKE

>ETJ84561.1 Holliday junction DNA helicase RuvA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDVNSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTKTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLG

>ETJ84560.1 D-alanine--D-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFAILFGGNSYEHEISIVSAVVLKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIK

QGGFFSKGFLKENKLECECVINLIHGRDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMVRKGQNSKEKLSFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCMINDEFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEIYLNEINPNPGSLANYLFKDFSTTLNALADQISLEKMIKISYNFLHSINGQKGKL

>ETJ84559.1 prevent-host-death protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>ETJ84558.1 2-hydroxy-6-oxohepta-2,4-dienoate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAQTQLSYKNKTYQISYEILGDLTLPQILILHGWGANKELMKQSFYPFLKDFCQIYMDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNVCFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLSPMMYETFKNVVDEDFGEIFAKQKAKSLVFWGKSDEATPLYCGEKMHQLL

KNSTFYPLEGDHFFFLKYSAFIAQKIKEI

>ETJ84557.1 UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHTPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFTILALRFSFLFNLFSLPFALLSLKIYEFFTNLY

YKKQAKAKLRANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINNNLSQDTQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILSTKLEALNSKRLEKAFLHSSTQKEG

DKLISLYDEKLSLIHSSLEGLEFKVDIENKSYDFKSQILGDFNAQNLCVCILCAHYLGIKLEKIQKQVLN

INSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYKLCKSYKGRKVLVSPGIVEVSEEENIKLAKIINECF

DLAIISAQINAEIFKKELKIKTIILKEKSQLVQTLAKETKHGDLILFSNDAPSFM

>ETJ84556.1 hypothetical protein X909\_00560, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FFAGLPEDFXXXKSTLDEIERKAENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTN

KTSFTETDINSMPKGISELSSDKTIGIMPKNYDKLTITNYYNTQEQYNEAEQLGMFGHINIGLQPLNFTP

QSMQTQNLDKDTAIDTFNPDMSVYPQNEDGSYSKEALFMSFLKSTGVSPREGSATLNPIAKSYAEAMAKE

SFDGSLTSLDDIMTGKVDFASLLKGYAQDGWLDADIYAMEKGVAWQNTSIGYGGAWFDREFNQAKANGWK

ASNESINSFVNNIMDRLNNLIGQTRV

>ETJ84555.1 hypothetical protein X909\_00935, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

KKFILLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEAEV

NATLAKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLESR

KISGVLSKMDPKKASELTLLLKNLDNNASN

>ETJ84554.1 competence/damage-inducible domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>ETJ84553.1 carbamoyl phosphate synthase small subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNASFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>ETJ84552.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIDFLAIISVAFLSSFGHCYSMCGGFNLLFINLNSKSNNLFLLTFIYNLFRIFAYIVLGIIFGTFGNIL

AINAKVQSLSFFILGIFMMILGFALIFRGNMLSFIENNVFFDSFVKKIIKKSKNFKGLKSAIFLGFSNGF

VPCGLVYFFIANAMSKQNIFEGILVMMIFGISTLPAILFFSKISQFFSDFLKNLFNYLSYGVIVCYGINL

AYIGFKAFQ

>ETJ84551.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDFFKDQFFKALEKNTIFSRADVQGNLIFVSDKLCQISGYSKKELIGKKHSIFKHPDVEECYIEELLKK

LSYKKPYQVIFKNIDKLGKTFYLETLLIPILDKNNELIEIVAFSHDVSNSFKLNEELALNHAKLRELSIN

LENTVKNHQQEFIQLGKKFEKKMQIALEKNEKDIKIAYEEILKSSLEQMISDIAHQWRQPLNELGIAMFQ

MKQNLKDEKGFAEIYSQSKDMIKNMSETIDVFRTLFNKGVEQCVFIKETLNKALEIAFETIEKNHVNINI

VSKSDYEVLAYENGLIRVFLNLILNSIEAFKNKKRKIITINFSKFGKNYLKITIKDNAGGIDKENLDKIF

QPYFTTKHPSQGIGVGLYISRQIIESFQGKIKVKNGKDGACFEVFLKLKERVE

>ETJ84550.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQECKELIILVVEDEIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSAYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGKEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>ETJ84549.1 cytochrome oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHPGNVLNYDYTVARYFMFATILFGIVGMAIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

LVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVTGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>ETJ84548.1 peptidase S13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETAYAEALTVKKVFNVPYDAENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>ETJ84547.1 cytochrome B561 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEHLSIVFDVIKNLITFDLATVQKHEWEIFQGYGFFALVMFLSIVLYAYLYHLYRTEKKGERNYENYANL

ALKDDIDDSVLESKRSA

>ETJ84546.1 cytochrome CBB3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWAIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTANENLV

AKGKEAYATCAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>ETJ84545.1 hypothetical protein X909\_00885 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENNNRCVFSLSGVTGMLIATVLLLAILAVLTIWGLKAQQEVMQKPYSLKDVQSVKMFGSKEQDHRSIKE

AQ

>ETJ84544.1 hypothetical protein X909\_00880 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKALEYLIVIGLVVAAAITAWSVLTVNHLHIG

>ETJ84543.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILQDGFFLAIFFFVLLPSRVFALDAVLFNENILSQKVSNEINLIGKELYQKSNIFIGVMVGDKTEIE

TLLNKQKELPQSYILLLLSKNSHKVDIVGSKGTLALIDKEAVLSPYPGTGSILPILATNKGDIYNAAILN

GYADIVDRVAKSLGLQLEHSIGNANRDTINILRILIYGFICFALLYYAQRRIKRKKNVRN

>ETJ84542.1 hypothetical protein X909\_00870 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLETKKSFWPYGILLSLLAIIIACIVTIFIASHHPVYEDDFYFDSYQNVENNYNQIQKQQVNFDKFFKVN

FQNDKITFIGKRKIPSYEVDQNSYVANFKISALQNINSNDLKVQVLLTRPFTKNFDQKLEGQVKNGILSI

ALPKLDKGRWELKLKFYANQETVGFFSYELNAQ

>ETJ84541.1 hypothetical protein X909\_00865 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLRIFSSSRQIREYYNQKKQQNALLDSAIHIGEFLDKVCLSNFHKASSYESLLLMQEACLKSKDLEKKL

GISVEFFAFLKNNEYLFSFFKELSLEKKSIEDLKNNDYYATYNEHLEILDEVYKNYLALLEKNSFYDDLS

LPKNYTLNKDFLDEYEAIVYDLQGFLSTFEENLLSEISQIKEVVLSFKTSKFNLEYLLKLDFLKIFDLKI

NTHYEINLSKQEILKEEIFKTKNSKMKLKSFELRALQCAFVMDEISHFVRKGLKPENIAVITPDESFCEF

LRLFDKDNMLNFASGISIKESLFYQKFQALYESASSASFVYKNQEDYFEDTQMIFDYHNTLLHSLKLDFI

EFKKYFDEKCDFEYFEKLLALFLENEKQELIYLIRKELYFIKDLLKNQSLTLKELIHLFFMQISQLSLSD

VGGGKVTVMGLLESRGLCFDGVILVDFNEEFIPKRSVNELFLNNEVRKKAGLISYDRRENLQRFYYESLM

KNALEVSICFVENEEKSKSRFLDELDFDFFYETHIHQKAYLNALKLDYEGIKPNLTPIKAPILKHNPFEF

PLSFSRFNLLENQKRTYYYRYILNLAEPRVLSEESKAKNQGNFIHKMLEIYYKNYANNDFDIKVFANLLD

KEYQKYNISELDLEVFKLKFIQFAKNEKEHFSKGFYVAHTELELNNILKLGTDSIKLKGTIDRIDSSKEG

NLIIDYKSGKVPSNSYQLAFYQALYDENASVGFYDLNSMQILHQKAKSLDELRERLKDLVLMSKEEIEFE

NEQDEYCPYKLIYKKELK

>ETJ84540.1 recombinase RecB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQFEPFLALEASAGSGKTFALSVRFVALILKGARINEILALTFTKKAANEMQKRIIETFLNLEKENKTS

ECNELCKLLGKDKEELISLRDAKKEEFLRTELKISTFDAFFGKILRVFALNLGLSSDFTMSEERLDVREI

FLKLLKKDELKDLAYYINLVDEKENFFNELEKFYENAYFQNRPKILNPTKAYINKAYSELRSYCLGLTHV

KNYKNLCDNFKSEVLDLSVFMQSSFMTKFESTKYLQDLESTNLHFSAKRMELINALNTYAIELENYKIAN

LMNLLNHYSEAKNIFHKDKNTLNFQDVSKKVYELITSEFKDMIYFRLDGFISHLLIDEFQDTSVIQYQIL

RPLIAELVSGEGAKKNRTFFYVGDKKQSIYRFRKGKKELFDLLKQEFSQIKSDSLNTNYRSKELLVDFVN

ETFKEKIKDYKEQFALESKKGGFVRIVESKEQKVKNQAQEIKEKTLETLFEQINFLRSKNISYDDICILC

WKNSDADMVLDFLREQKIPAFTQSNVLLENKASVRLVLEYAKYCIFGDEFYLVFLKELLGFEPRKIALDF

SKNAMENVLFLIKELKLDLNDIALIQFIEYAKTKENFLKLLFEPCALKIVSEQNMGISIMSVHKSKGLEF

DHVILLDSLSKNNSNNEDIMLEYDINQGWQLHIKDKIRELTKEPIYTLFKENITRANYEDDINKLYVAFT

RAKESLIIIKRNEESVNGNYPSYFKGGFLNIHSQERGFLESKEQILSVKKESIQTLQKFEKISPQEVQSE

EKLDSKELYFGNTFHFFMQNLKLPKGENFQILTQRCKSKFRHFLDESDFEKLFKRIEILLKNTQFQNLIG

DGKLLKEQALSFNGEIKQLDLLALKDEEAFIIDYKTGLAMQDKHKEQVRTYKIAISEILKKDKVHAFIVY

CLENEIQILEI

>ETJ84539.1 50S ribosomal protein L13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKITKPNEVKREWIVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFTGANKAE

DKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTAQIAKEG

K

>ETJ84538.1 30S ribosomal protein S9 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>ETJ84537.1 outer membrane fibronectin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLCLGLASVLFSADNNVKFEITPTLNYNYFEGNLDMDNRYAPGIRLGYHFDDFWLDQLEFGLEHYS

DVKYTNTNKTTDITRTYLSAIKGIDVGEKFYFYGLAGGGYEDFSNAAYDNKSGGFGHYGAGVKFRLSDSL

ALRLETRDQINFNHANHNWVSTLGISFGFGGKKEKAVEEVADTRPAPQAKCPVEPREGALLDENGCEKTI

SLEGHFGFDKTTINPTFQEKIKEIAKVLDENERYDTILEGHTDNIGSRAYNQKLSERRAKSVANELEKYG

VEKSRIKTVGYGQDNPRSSNDTKEGRADNRRVDAKFILR

>ETJ84536.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKTILFDLDSTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>ETJ84535.1 Pyruvate-flavodoxin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKIMKTMDGNEAAAYAAYAFTEVAGIYPITPSSPMADYTDMWAAAGKKNLFGVPVKIVEMQSEAGAAGS

VHGSLQAGALTTTYTASQGLLLKIPNMYKIAGQLLPCVIHVAARSLAVQALSIFGDHQDIYAARQIGFAM

LCSHSVQETMDLAGVAHLAAIKGRVPFLHFFDGFRTSHEIQKVEVMDYAHFDRLLNREALLEFRNNALNP

ENPKTRGTAQNDDIYFQTREVSNRFYDALPDVVNEYMQEISKITGREYKPFTYYGHKEPERVIVAMGSVT

QALEEVVDYLNAKGEKVGILKVYLYRPFSLKYFFDVMPKSVKKIAVLDRTKEPGSLGEPLYLDVKSAFYG

RENAPVIVGGRYGLSSKDVDPAQMIAVFENLKLDNPKDGFTVGIVDDVTHTSLSTGEKISLGDESTIECL

FYGLGADGTVGANKNSIKIIGDKTDFYAQAYFAYDSKKSGGYTRSHLRFSKKPIRSTYLVSTPHFIACSV

AAYLEIYDVLAGIRKGGTFLLNSIWNAEETIRQLPDAVKKTLAEKEVNFYIINATKLARDIGLGNRTNTI

MQSAFFKLAKIIPYEDAQKYMKELAYKSYSKKGDAIVEMNYKAIDVGADGLVKVEVDPNWKNLELKEKEQ

TNAYKGTEFVEKIVKPMNAAKGDDLPVSAFLGYEDGSFEHGTTEYEKRGVGVMVPRWIEANCIQCNQCAS

VCPHAVIRPFLINDEEMANAPRGVKDHALEAKGTKGEKLSFKIQVSPLDCTGCELCVHECPTKEKSLVMV

PLQEEMDFGEQENADYLFKEITYKDDILNKETTKGAQFAQPLFEFHGACPGCGETPYITLITRLFGERMI

VANATGCSSIYGGSAPSTPYRKSVKNGHGPAWGNSLFEDNAEFGLGMKIATENTRHRIEHIMNESMQEVP

NALSALFKDWIANKDNGAMSVEIKDKMIPILEQNKNIKAVQDILELKQYLSKKSHWIFGGDGWAYDIGYG

GLDHVLASGENVNILVLDTEVYSNTGGQSSKSSRTGAVAQFAAAGKPIQKKDLGQIAMTYGYIFVAQVNS

TANYAHLIKAITAAEAYDGPSLVICYSPCIAHGIKGGLGYSGEQGELATKCGYWPLYTFDPRLEEQGKNP

LTLTGKEPDWDLYEQFLMNEVRYNSLKKANPEHAAELFERNKKDAQRRYRQLKRIAMADYSNEVES

>ETJ84534.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCFSTLFAQDNFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRHIKITAIMLDKVKIYDRWYKKGDMIDD

AIIYEINTKEIKFQYDNLEIAIQINKNDKININ

>ETJ84533.1 type II protein secretion system D protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIQESLDELAKYCSFSIIVKDKIAKEKLEILQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGINTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEAKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLNENHSSGINWQNFNIGLNSQVNNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>ETJ84532.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDQSFLKEKIEFLI

SQGQSLIILDEVGMYDYAMLESIRIYSDSISFVLSSHKKLNMLKKEHFKSRLSACFKLKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>ETJ84531.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQERIKELELRYKYFLLKKYLKYLLLIILISVIAFCFFVLMQKYNKQKNIYLQAIEHKKHLEQKILQAQI

LQEKNKISREKLYKELEEVKAVQENTHISKIEIDSKILNISDLKKSFYQNPSYEKALNLAKKYFDIKAYQ

KTIFWALKANELDKQKQDSWLIFAQAKRALGEEKEAQSALDAYINYYGLMELDGK

>ETJ84530.1 type II protein secretion system E protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MESRMDKIFQAYIDNEISLDEICTKFNITSWDFFKKLANFCNLHFVDLDEDNDFIYEGIPFSLLLKFKFL

LIKNNDGFMIIRSKPCSLELLEQVKTFMICEKIDTAIADELKIAKILNQIRIQEEIKRLSIKLRLEWQEN

HKRDDQSCISQIFDFLLHEILSFHASDIHIEARNDDALIRFRVDGILREFAIFEKDIYEALVFHVKFLAC

LNLAESRKTQDGSFELDFENERYDFRVSCLPLIYGESVVIRILKHDKEILDLYKLNLGNKNLEILKKILH

RPNGMILLTGPTGSGKSTTLYACLNELKSIEKKIISAEDPIEYKIPLVQQILLNSKVGVEFNSVLRAILR

QDPDIIMIGEIRDEESLDIALKASLTGHLLLSTLHTNDALSTIDRLLDMQAKSYLIASALSLVIAQRLVR

KLCPWCKQKSKKHYIEFEGEFFEPKGCERCHHSGFFGRELIAECLEINEDLACAIRENQDKTILMELAKK

YGFQTMFEQGLKKAKEGLTSIDELLRVVR

>ETJ84529.1 general secretion pathway protein F [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFYEVEFLKNNQNYTKTIKAENLNTAQAKALSKNWKIIDIKEIQKSNFQRLKDENFILFFKELALLCEV

GLSVQEAIRELYFMHSCKIMKKILDNLILAQNLNQAFENANFGLNRAELALIKTAEKTGKISEVFSQISK

LREKSLESQKQLKKAFRYPTLVFLSIIGAFLFLMLFVVPNFKDLFENLGVSLPFITHVMLEIYNFLDDYG

IFCIFLFVIFIVMLILAYKNFHSFAFSCDFLFLKVPLISRLIIYNQNYYFFMVFSLLLKNGISISKAFDL

AIIGLENKFLIFQYKKLFSFIDSGLELSQAFKKIDIFDSLVFSMLSVAMKSGRLEVLSEEIAKYYQQKSE

NLMDRFLVFLEPMMTLFVAFLVLFLALGIFLPMWELSSGVNF

>ETJ84528.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGFEHLDTIYYFILFFVALFAGFIDSIVGGGGLITLPALIACGIPAHLSLATNKLQSVFGSFTATLTYFK

STTLPHLAWGVFFTALGAAIGSYSVLFVKDEQLKLIILIFLTLTFLYTALRPNLGKHESEPKIKNIKIFH

LICGLTLGFYDGFLGPGTGSFWIFACVMLLGFNMRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLM

GVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGATIIKVAWDYFS

>ETJ84527.1 hypothetical protein X909\_00795 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFDLGLFTKIHTKDLLIPLDTHAHKISLTLGLLKRKIYDYKSVLELTQNLKKLDANDPIKYDFALYRLG

QSKERQI

>ETJ84526.1 hypothetical protein X909\_00790 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNFIHLKAKLDFLANQKNTNHSLFETPDPLQIAKIHNDEFIALICALFAYGNAKNIVNFLKKLDFSLLN

LQEKQIKKELKNLKYRFQNEKDIQEIFITLSRLKNEISLYELFYQAYQERENTTDAILAFMQKIKTLNSY

SSYGYDFFFGKIWQNTPTSPLKRYNMYLRWMVRKDEL

>ETJ84525.1 flagellar hook-associated protein FlgK [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGIFGTLYTGVTGLKASEVQIATTGNNISNANATFYTRQRVVQTTNGYITTGGVQVGTGTAIESIVRLHD

EYSYYKLKGASNQLEYTKYMASTLQEIAQRFPDLQNTGILKDLENYNKAWNDFASNPNENATKIALVKAS

QTLTESVNNTFATLDKIQKKVNDDIKNTVDEINRIGEEIATINKQIYGQEALPTEHANELRDRRDELELT

LSKLVSAVASKNEINQDNRLDTTITDPGHQYNLSIEGFSIVDGINFHPLKLDYDDKNKSYSIYYETPDEK

VRDLTAKISGGQLGAQLDLRGRNYSKSEGKYEDGIIQGYMDSLDTFAKTMINETNNLYASSAKSSVTSDY

LSGLKGDIPLVNYDRTIQPGSFDIVIYDDKGDKKLTKTITIDVNTTMNDIMRQINANTDDNNNKNSNDDV

DDHINTSFSYDAKTGDGLFQINAKSGFKVAIEDKGTNFAGAFSIGGFFSGTDASNMKVKDSILNDPSTVR

ASLSGVDSGNDMANKIIQLQYEKVNFYNEDGTIDNLTMEEYYRKLTGKIASDGENNNVVNSSNETLYNSV

YSEYQSKSGVNTNEELAALIQYQSSYGAAAKIVSTVDQMLDTLLGLKS

>ETJ84524.1 hypothetical protein X909\_00780 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKQRLDEVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITAKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINDGTNNAYGDKKTNPESIF

KINV

>ETJ84523.1 hypothetical protein X909\_00775 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINPVQQSYVANTTLNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIDTKATAAAIADSLI

>ETJ84522.1 hypothetical protein X909\_00770 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVDNFLNTYSMNSALLDRAAKARSLESSIKINDNDIVTKTKEDEALKEQTDAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFLKERG

>ETJ84521.1 flagellar P-ring protein FlgI [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>ETJ84520.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMNDEFISVKDFFNHNEKRKKFLQKQEIKPLKEKTKKTKETKLYTNIESGKYKGKKLLLPSLTTTRSTKS

MVKSCVFNVIREDLRSKIFIEAFGGSALIAAEALSNHALKAYAIELDVKAYKIALENAKNIDPNLEVIHA

NTFEILPKLIENSKNEIILYLDPPFDTREGFSDIYEKIYHFLENLDLKTLNLIIFEHHSTIKTPEKIQNF

QKVKEKKFGSTSLSFYAS

>ETJ84519.1 Ornithine carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKISLECKDLIIEKTLELFLKDHLVMKKNCDFIISDEKIYTAKPLFIISKNSPFLSIPFSKEALFESLNE

FDNALKAAALQLALEQKRLLEEKIDAIALEFKKDYENKIDLAIKDLKNKLVKALNDE

>ETJ84518.1 hypothetical protein X909\_00750 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLELRIFRFDKTKDYEAYYKPYIYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTYMVVNKQIIPLFT

PLEKIAKEFDFSLCIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILH

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLKAKFISYENSIKNNGFSLLNLNPTLSY

KIAADIVLDAYDSGADFMVVKEEKDFYLFDTCAKKLMQTSGREFEDFYILSRFEFLALIEGIQAPSLKNH

TLKVSLI

>ETJ84517.1 thiamine monophosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKEDFIIKAFLNEKNGDDGAVIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNAVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINDKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGNLKPNHVFIKPKLRASFFYEVAPLISCAMDISDGLSKDLSRLLALNKCG

ISWFKKLDDYTLYSGEEYEILFAFDEKERQNIKTIAKKHGVKLNIFGKAVKGKYEFRGREHHF

>ETJ84516.1 tRNA pseudouridine synthase D [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>ETJ84515.1 hypothetical protein X909\_00735 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKKYPNHKLYDYTSVRTISDINNPE

GKIKEMKRDLEIDKTPYSNYVFLLNPNDKKTIKL

>ETJ84514.1 peptide chain release factor 2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDNYEFSELLKTLKNKVGNIASIIKPENIQTRLKEIEELENSPSFWSDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDANELFDLANSENDTETLEALFNDASKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANTGEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>ETJ84513.1 ribosomal protein S12 methylthiotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>ETJ84512.1 tRNA(Ile)-lysidine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIKDEILALLKRGKNLLAFSYGSDSSVLFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKHAPKFQSNFEKKARDFRYDFFEKICLEQGYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQECE

KRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLD

EDRKKLYDFENIKEIQGLLICPKNESLIARAVKMKGLLLSTAQRKELLKGDCVLGGKIALAYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPRLLRAYLYNHKIDISSLSF

>ETJ84511.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDILKLAIKDFLSLKFLKFALIPLIFSLILMLFLGVLGFSALLDYFNSLFSVGEDSFWAWFYALHFVQIL

ITIISFLFSGFIVVFASVFLALFITSFLTPFIAKEINQKYYHYDNTNEVSTLKTIFEIFKIFIKFIGILL

LCTLALFLPFINIFVYYLAFYYLFHKLLMIDVTSTILDKESFKNFHSDFSPLEFKFSTLCFYLLSSVPLL

GLFLQVFFVIFLTHLSYQRILKLKAKA

>ETJ84510.1 dUTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>ETJ84509.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>ETJ84508.1 hypothetical protein X909\_00700 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>ETJ84507.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNVIHALFFRELKTRFGKNRYLGYIWVVGEPMSVVLLVTIIGTVIREYHHQVMPEGISIFMFLISGIMP

FFMFRSIVTQLMNGIGANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRLDVFPVHLLG

VLFCIFLLICSAFALGICFAIVWHFVESLRTLLAYFSIVFYWSSGIIFPTWLTPRPLLDIFYYNPLLHIF

ELLRFNFFENYPLQDEYSYFYAIFWILLVLFIGLFIYYYNRQALTAAKKE

>ETJ84506.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>ETJ84505.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGILSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>ETJ84504.1 sugar ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>ETJ84503.1 arabinose 5-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNTLEIAKEVFEKEAQAILDLAKNLDENFNQAVNLMLNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKKNSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMA

SEAEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>ETJ84502.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVMPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDD

QKDYFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSE

KIYKEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFY

TTNFSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYK

NLANLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFL

KQNNINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSK

SQILECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLD

IINDMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKP

CINCANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNK

VYKIDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYR

ILKKFLFHRKEFFRDRKNKNKEKPYV

>ETJ84501.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGVYSII

>ETJ84500.1 chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSVKLKVSLIANLIAVVCLIILGVVTFIFVKQAIFHEVVNAEINYVKTAKNSIESFKARNSLALESLAK

SILKHPIEQLDSQDALMHYVGKDLKNFRDAGRFLAVYIAQPNGELVVSDPDSDAKNLDFGTYGKADNYDA

RTREYYIEAVKTNKLYITPSYIDVTTNLPCFTYSIPLYKDGKFIGVLAVDILAADLQAEFENLPGRTFVF

DEENKVFVSTDKALLQKGYDISAIANLAKTKEDLEPFEYTRPKDGNERFAVCTKVSGIYTACVGEPIEQI

EAPVYKIAFIQTAIVIFTSIISVILLYFIVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFG

QISNAINENILATK

>ETJ84499.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLFILSLGIFYTFTQAKNLEQEQNTSSNLVSVSIAPQAFFVKKIAANTLDVNVILPPNSNEHNFEF

KPSTMKKLEKSDIYFTIGLEFEKVFTDKFKQNFSKLQVVNMQKNIALIQTHDTHEHSHEHEHHEHEHFDP

HTWLDPILVQTMALNIYDTLIQKYPQNENLYKENLDKFLAELDSLNLQIASKLEKLKNREFVVYHPSWTY

FAKRYNLTQIPVEILGKEPKSKDLQKLITLMKDKNLKVIFVQNGFPENAAKTLAKECDAKIYKIDHLSYD

WENELLKTADAFSHNL

>ETJ84498.1 cation ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFFEISNLNYAYNNEIILKNINLSYDNKDFLSIIGPNGVGKSTLVKLILGLLKSKNEIHFKALQKKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTASVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEKNCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>ETJ84497.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMALVDS

VVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMVLASFLSMIFCVLGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>ETJ84496.1 mcrBC 5-methylcytosine restriction system component domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLDEFDSVYKKGLMRSYLSCEENRAFLKGKLLFNEHIKRNLIHKERFFTSNDEFVLDIAPNRLIKSTLN

FLKSKTSLNKFRLIKSMQILDEVEFSKNYEKDFSYKISRHFDYYENLLLWCKIFLKNESFMPYHGKNEAF

ALLFPMEKIFEDYVAYMLKKVNPAQDIKVQNNGKYLISKNDENCFMLKPDLYIENKMILDTKWKIPNDSE

DEKKQGIEQSDLYQMFAYACKFKIYDIKLVYPLCEKTQDLQRKIAEKFFVFKASEHLYFKEQGQKDIKVQ

VCFAPLPF

>ETJ84495.1 hypothetical protein X909\_01030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTSNTFSIIEHQAFSKEDLKEIFKEKAEGFYKELEDFAKNNENLLGFKNKNTLKAKNYVGIIQTKSGVL

EILPKCTNLDSYKKEDSSSNHDKEKLKRYYELDNISKNNDFYEQDFKFNPKNLLINMLKTLKNFPFKNHK

FHLCKVLKFLYLKCLSLCF

>ETJ84494.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIVLSSDDKKRFKKYLVDFFHNAYNGNKLSSKDEVVNFNFFKKYDFYVDLSYGKGNVAKIPWIIFIRMDT

QEYKASYGVYVYCGIKRENREIVVCIGESEDKTVNYLARNKVDEYNAQFNHQVYNYSNLSNDINLIVDKI

ILNMQWFKELPLNEIQDININTLESKSLEVENNVQQISSKMENKNMPLNQILYGSPGTGKTYHTIDKALE

ILGKNLESRDDKKAKFDEYVKKGQIVFTTFHQSYGYEEFVEGIKPRIDSKENSKEIEYKIKDGIFKELCE

KALDNYENSILNADELNKKIELKEKVENFLNWLLETNEPIGKTKGGNFFVVEIDNKTIVIYSEGVERFDG

IFNLNLSIFMELLKCKDEFNNATEMFKKVFNRDYADRTHTYYFNLVKKFKAYEEKQLAAKIENNKNNDNS

LKPYIIIIDEINRGNLSKIFGELITLIEPSKRIGEKEELKVTLPYSGEKFGVPKNVYIIGTMNTADRSIT

SLDTALRRRFEFVEMMPDVSKLSIDCEGINLQELLKAINTRIEYLLDREKTIGHAFFISVENLESLKKVF

KNRIIPLLQEYFYNDYALIDAVLNKNGMLEISVENKDYLKNMTEFIESDKIVYKFSDSNNWNKDTFIKIY

K

>ETJ84493.1 ribosome maturation protein RimP [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>ETJ84492.1 ribosome-binding factor A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNPNEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNVHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>ETJ84491.1 translation initiation factor IF-2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPEIAAAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENIKEQEKLNESEKKEPKKEEKLKQEVKKEELKIEKENAKEEEKQEIIDAHKPQSLASATLAKRRGL

VIVKKKKDEEEIQVKKEEVKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFL

DEHDFGDISLDDEDEVVLPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPSKKIEK

KEVEEVGSVAISKEIRVYEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEA

DEFDYVKDYEEETDEKDLVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRK

ITFIDTPGHEAFTAMRARGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDM

VKTQLAEMEIMPVEWGGSYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRG

AAATIIVQNGTLTVGSTVVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKE

AREYANKRHEYNRQKELSKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVN

IIHSGVGGITQSDIELASASENSIVLGFNIRPTGEVKERSKDKGVEIKTYNVIYNLLDDVKALLGGMMSP

IISEEQLGQAEIRQVINVPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKG

YECGVGIEGCDDMRVGDYIESYKEVEEQASL

>ETJ84490.1 hypothetical protein X909\_01005 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKHIPIRMCIVCKNRFEQNMLFRFKVVLGDIVPKAEHGRSGYLCQNCIEREDKVLQKAFSKICKNLNTK

ITQQGLKEIFLNGKD

>ETJ84489.1 homoserine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>ETJ84488.1 glycoprotease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNALSKPLMIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVGLST

LSIVKNIPLFAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLD

AI

>ETJ84487.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>ETJ84486.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKRKGKTYLSVLILVLIAILIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDESSIKNVQIIL

HKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKAEDANLDKVYIETNKGKIFKVTPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYRVSNINLTDKFLDGKIENLANQYAPKDNNLNRYEKFKFVNETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGLDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWVENNIYNVLNDGKKIILGKN

>ETJ84485.1 prephenate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIAIIGLGLMGGSLGLCLKENKLISCVYGMDLSKENEKDALRLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNVTIIELGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>ETJ84484.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKHLISICALVAIANAATIKDIKFIGLNHLSNTSAINITGLKIGEEINPAKINTAILNLYKQNYFENIA

VENNNGILEIIVTEKPTIAKVTITGIASNDRKQVESILGIKRGTLLDEGSIKEAIERIKAYYEAKSYFDT

IVEYKKKTLENTDGLELEFIVNRGENIIIDNVHLSGAKKFSYSDIEPAVVNKEKEFMGWMWGRNDGKLKV

FELSNDSSRIADEYMKKGYLDVQVSSPYLKTYTDTYQANLTYFIKEGKPYKIKSISIENPLFDDKQNAQT

VKDLRSSAGKTINIEDIRKDVKTIETQSADLGYAFVEVYPDIQKNDQTQEATVVFKVIPHDKVYIRNVII

SGNSRTVDRVIRRELYITEGNLYNRTDLSESKNALKRTSYFDDVNIKEEKVDDTHIDLIVDVKEASTGAI

SGGIGYGSSDGILLNASLSDTNIFGSGIKSSVSVDKSDDTLSGRISLINPRVLDSQYSLGGTLYSNDYEW

DNYSEKNYGFDITVGRQFARYYNVSLTYNLEQSDIYHLSPTLLRTGYELGKSIKSSITPAITFNNTDDYY

LPRSGIIASTSLEYAGLGGDQEFISSSSKFNFYQGLQDYIGYDLIYRYKASFYKVWDEGYLPINQRIYLG

GIRSIRGFESRTVSPKNQWGDEVGGTIAFANSVELSFPLIDRIKLRGSVFFDYGMIGRKNLDEIKRMSTG

IGIEWITPIGPLQLVFAKPLNDKKGDDTNSFEFNLGTRF

>ETJ84483.1 inositol monophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KASPKQMILDPLDGSSNFVSKIPFYGTSIALMEKDQAKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFSKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFVLILGKTRIFDTAAALAIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>ETJ84482.1 acetyl-CoA carboxylase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFADIFSKIRRQQPSIKEAPNHWVKCQSCHALMYYKEIESCFNVCPKCNYHMRISADERIKLLSDEGSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINSLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSAALKLLSKEKLPYISILTNPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>ETJ84481.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>ETJ84480.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKHEN

>ETJ84479.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKLFLLASFIYIALIFAFAWHLELGSYTLNISTYTFELPIMIWLVIPLFIYMILAVLHIAFYGFLRYL

KFKHFFKDAAKFEAYTQDLLLEKDLKTTFQTKEFRAVAQLFKTIKTHEKIPHSNKINEILDLIDGLNKNE

FFNLSKFKLENNNVLYLQNEKNHLKNDANYAYNKLKNLNEIKDEFEEIAFNTLIEKASYEQIKNVKIPKK

PSEVLTLIKRFKEGNLELSVAEYEVLLSHNTLSEKDYLNAAKLSTKLLNPDAILGIFNKIKNEKSEALRA

HLYLLAEFGLLDELREQIHNDDKKFNDFKAFLVLREKNIKIDLNQLIQ

>ETJ84478.1 tRNA-dihydrouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNEMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFISIHGRTRKQLYSGKADYESIASAKASVSIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDEVNRINDAKIMQEKIESFF

>ETJ84477.1 hypothetical protein X909\_00940, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

DNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFS

ISSKTSSPNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFKIHKSTLD

EIERFNQHNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLNDGCNQNKE

YIVTHIFNAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGSYSKEALF

MSFLKSYSPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQDGWLDAGI

YAMEKGVAWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>ETJ84476.1 peptidase S8, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYE

>ETJ84475.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTILEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNIDENLNIFDKTHNVFMYENLEEEINFFYQSILEK

TPRYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSMIDLSEELCSGKIYLVDIKEERVNLQL

RILFDQNDMFLWLNIYEMFINHKFYEKYYYEEILNTDKIIYENINLVIRNLDPDSKISLSCYENFYKNIP

LMLKNIPFKRIIDERKGLFESCIVVCAGPSLQKQIPLLKQYQENFVIFCVDGAYPLLVKNNIIPDYVLNL

DFEEYPLKFFKEVNPENKTLFILSASTHPSVVDYLYKKQIPLSIALNDNLPYQNLHIDEFGYLEFGTHVG

HACYALAIALKFKNIIIIGQDLSYDKQGNSHFDSFDLGSDIDATLNIPTLKTIAYGGLGEVLTHLAWDDY

KRKLEDLFARNLELNFFNATEGGARIEFAKELDFKSCCKKFANLNNKSNKYLPKTLTTNRGAKILNKILA

TFKREKQNTLICLEHAIRLNDVLKIILASDRKFPIDFLKNTYESIAKFEIFLEENSFLNDGVLKGVIFHK

GKLLSEVIVSKIEDEREYLLIYLTFYKQWLEIFICRFQLKCDIYNFLV

>ETJ84474.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIVSKTYEIDSCDDVELGIKRESKLEFKLCFDDEKEIKALVFIIPGLGGDVDENYREHLAEFVAGEFNVA

VASVNYHCIGNRPQTGSTFYLDDIDKLILKVSCEAADIKLPYDVDNIQDYKQMSEIFHFVNNQIIEGKQK

GNFTPNYFLNLHVSLQPAKNEYQNFGIMQAQDLLNVALYLKKNAPFDTMGGGIPVIMIGSSHGGYLAHLA

AKIVPWLIDGVIDNSSYAKFLWHLIGFGKEIDFMQYSEFSTFDFFHHIKTHCSTKTFWTSNSSSNNFFSM

PRRMIRYILEPKHLEIQANYPKPCYTSYHSFYDKEIAPPDEKLELYKYLEQFGFDADLYMIKNPDQVDGR

FIKSLEHGMGMSIKTLISKELPLMLEKIKQNLKKDCKEKYISYPCEDLLYQFSEKDDKILLKIDKI

>ETJ84473.1 hypothetical protein X909\_01200 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKAFTILELVFVIVILGILAAVALPKMSSSKDEAEVSKSLNNLKTLINDISIYTLKNDHLNSIKTMSNV

SGIENIDLSNFNGTKEVNFRVGDDKKCLKLVFINKVDFILMGISSNEASKNAIINAANQSHEDLENVNFT

SSSSNKACVILSKNENFKNLASKTYLLIGGM

>ETJ84472.1 protein kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>ETJ84471.1 hypothetical protein X909\_01190 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIFLTILFFITSIFALDLDFSVGENGKSLDDNNTVLIFGGIQGDEPGGFHAASLLLSDYNITKGKIIVA

PNLAFDSIIKRSRGNNGDLNRKFASISPKDPDYKTVQRIKELILLPEVSMVINLHDGWGFYKPTYIDAMQ

NPKRWGNSSVIDTSEINASKYPDLENIATQTVNSVNSSLADPKHAYHLKNTKTQELGDMEMLKALTYFVI

SNHKAAFANEASKNLPVNLRAYYHLLAIENYLKTAGIEFSRDFELTPQGVDKAINKELEVKLFNDRILLS

LKNPRKVINYVPFPVNKELNYNTSNELTAVIAEGNSFYIQYGNRFQTRLYPEYLEFSDAFNEVTFQVDGN

ETTVPFGTKVKVKENFLIPKIANVRVNIIGFDHGKDESGILVHKKNMQTQYSLDMAGKIYRVEFYELRGA

NLQQLLEANTNSKLIKNAKNLDLNTLKMARSKDKFLGSILVEFE

>ETJ84470.1 1-deoxy-D-xylulose 5-phosphate reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>ETJ84469.1 phosphatidate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSHK

ALLFGILALLLVVGSLVYKKASLKPALIYIYPSLPILALWQVYLDQGMFALFWLIIIVAACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFWLSLLCSFFVAIFAVIGDLLESYFKREAGV

KDSGDLIPGHGGVLDRIDAVIIAAFVMVAFL

>ETJ84468.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNETHEIKEEIKEKAEQ

EEKKKKHNQEAKTSDDEKNEEDESKDPNFKDAQSIHRLDISI

>ETJ84467.1 molybdopterin-guanine dinucleotide biosynthesis protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>ETJ84466.1 phospholipase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKIALFLNLCVFIWASDLQQALEYEKQGDYKKAMEIYKKLALKNSSVLISQEQNNSSQTTQTQNSITIK

KEEKQDFSRLALANYLGENESFNPLGISSYKMNYFLPFAYSFNSLGTNNNKSEAKFQLSVKKRLFENLLG

LDEKYYIAYTQTSWWQIYEHSSPFRETNYQPEFFIDFPLYLKDYEFFNNLRVGILHESNGKGDENLQSRS

WNRIYVSTAILYNKFLFVPRLWYRIPESKKDDDNPAILHYMGNFDVNLAYLGDDYFINLMLRNNLKFHDN

KGAIQVDLGYDIFNNGIYWYLQYFNGYGESLIDYNKHLQRLSTGFLISY

>ETJ84465.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFKHILSLKVLIALLLFFGMISLFIGVISINVKDILNLNSTQLEIITLTRIPRLIAILLTGMSLSICGL

IMQQLTQNKFVSPTTAGTMDCAKFGILISLIFFAGASFFTQAIIASVFALLGSFIFIQILRKIKLKDVIF

VPLIGLMFGGIISAITTFFAYALNYIQNIQGWLQGSMANVMQGNYELLYISLPLFILAYFLAHKITIVGM

GEDIALNLGISYNGILFLGLMIVSIITSLVIVSVGIIPFLGLIIPNLVALYLGDNLRKNLIYIALCGALF

LLVCDIISRLVIFPFEMPLSITTGVLGSLIFIFLLLKRKAYA

>ETJ84464.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKKMLILSFLTLGMIGIFILAGLNGFDEYALKSRFLQIAAIIIVAICIAVSTVIFQTLCNNKILTPAII

GLDSLYMLLQSALIFSFGAANLSVYKNDINFLITLVCMVVFSLGLYKILFSSDRSIYLIMLLGLVFGTLF

STLSSFFEVLIDPDEFMVIQGRMFASFDNIAFDVLILAYIISFLSFIWIFRYMKFLDPLNLGKDLAINLG

INYQKISKQLMIIIAILTSISTALVGPITFLGLLVVNITYELFKTAKHSILLSACILISILALLGGVFFV

SRVFDYNATISVVINFLGGIYFIYLVLKGNKL

>ETJ84463.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLKNITKFYDNKAIISDLSLDFHKGKITSIIGANGAGKSTLLALASRLIKPSSGEIYIDGMNLKDYKE

QILAQKISILKQQNNINLRLKVEELVAFGRFPHSQGRLNANDKIKINEALEYMGLSNLRNEFLDALSGGQ

KQRAFIAMIIAQDTEFIMFDEPLNNLDMKHSVQIMQLMKNLVKDFNKSIAVVLHDINFASIYSDEIIALK

DGKLLKQGSKDEIINQENLKQIYDMDIPVSQIDGKKICIYF

>ETJ84462.1 enterochelin ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILDLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>ETJ84461.1 hypothetical protein X909\_01135 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEFSKETQHFLTNYCKDNNLSEKEVLELALSYLEHKIRIDGYKKDIELYKQGKLKTLDFDETFNDIRK

DLE

>ETJ84460.1 plasmid stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>ETJ84459.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINKNKLFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>ETJ84458.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDEANKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKTTEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGKKVKVMGET

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSVAHDQRTAEYAIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFEDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>ETJ84457.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKTSNLFTIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGPHSQKVKGEPRA

TCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFAQTAINATT

NPHADKSLNCASCHKDVGHKHGI

>ETJ84456.1 polyphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLERYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKICDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKTFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKVLEMIRIETSKKNEGVIVAKMNSLVDSDIIQALYEASMEGVQIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKIIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>ETJ84455.1 histidine phosphotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAHNTAWAARRLNLEEV

TDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPLIVNVPNIISK

>ETJ84454.1 Holliday junction DNA helicase RuvB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDRIVEIEKYSFDETYETSLRPSNFDGYIGQESIKKNLNVFIAAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMSANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASAKSYSALKLNYEKTLFEE

>ETJ84453.1 hypothetical protein X909\_01090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTTCMVLLF

FAPFVYAMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASS

FTKSGAKFLIDMVLICVFYFFANLYGTELVIYLKSIIPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITIFYGYDGILMGVIFAVSSLIPAIGGALIYMPVSLYEFASNNLNSALVIFIYSVIVISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>ETJ84452.1 fumarate hydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEYRVEHDTMGEVKVPNDKYWGAQTERSFENFKIGCEKMPKVLIYAFANLKKSLALVNNKLGKLDDAKKN

AIVQACDEIIAGKFDDNFPLAIWQTGSGTQSNMNMNEVIANRATEIMGGDFRKEKLVHPNDHVNMSQSSN

DTFPTAMSIVAVEQVEKKLIPALDELIATFEKKVKEFDGIIKIGRTHLQDATPLTLAQEFSGYLSMLLHS

KEQIIASLPTLRELAIGGTAVGTGLNAHPELSQKVSEELTQLIGTKFISSPNKFHALTSHDAINFTHGAM

KGLAANLMKIANDIRWLASGPRCGLGELIIPENEPGSSIMPGKVNPTQCEAVTMVAVQVMGNDAAIGFAA

SQGNFELNVFKPVIIYNFLQSLDLLADSMHSFNIHCAVGIEPNRAKIDHNLHNSLMLVTALNPHIGYENA

AKVAKNAHKKGISLKESAMELGLVSEEDFNKFVDPTKMIGPKA

>ETJ84451.1 peptidase S8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKFFCLTLVCKLFALSEFELHHIDKVHKLGYSGDTIIIGVADDAFNQDHISLKDKILKSTYPTDTAGKQ

LIPDLKKSTHGSHVAGIAVGAKIGDSKPYGVAYGAKFYGAGVFPNGSYTQIPDIYNFFKDVSIINNSWGI

NFYPYFNLKASNSGLVDCTQTNQGTSYNICNTPLEYVMKADKVANDMMRLSKDKGVLNVFAAGNEGILSP

ALHAILPSYDESLRAWLAVGALDANEITLESDGTLIIKSQGLADFSNGFKGATNFSLVAAGVNINNVDSS

TNDKFTKKSGTSMAAPMVSGTAALVKQNFPFLDGKQIADILLSTANKNYKAPKFTVKQVTDGTNQPKFLI

VYISQDPPGIEDEIKRDLKQLYNGIQVQVNGQWIDYSDYIWDNRDSAQSQKLNTSTISSINGVVRVEKEE

LFGQGILDAQKALKGLSILDANRLSDQDVLKYEQEPNTAYYTINTAGYDAEFSNDISQRKWDESTHLSSA

INKPTHLANLNIGLSKEGEGILIISGQNTYEGATLIKQGELKLKGKVKNNAYVEQKAILSGNGIVGQNLN

NKGIVRPGNEDLNDLTVQGTYTQEGVDSKLQLDFGNYKNSKLIAKTYDIKSGNLEYIPLPKYYILNKPVK

INLGDLEKSLSSFNHVLIQNTYALNFDFVLSDDLVSINKTLIKPNLKPNAYEIPNTSLGNALRQLRSRAD

LSQTYQEFFASLDNGIDVKTKLNRIEGSGYLSTFSNHNQSNLMQNNMLFTLHPLNINNFAQNNNILLAST

YLPRIFSNEEYFWHLTPSYKYYKDKDFSGQKTGANISLGENFSSGFLAYALSLSSAKFNFNNGSDLKSYN

MDLLLNYNHDLDFIKILSGLGIGVGFNTLNRFVVEQPIEGKYKTLQTSAQLGVTKDIILGQDFIFNPLMY

FTHSFFYQEDFKENKSPFAKNYESLKHHSINANLGFNLAKNIEQDDYQASFSTFVIFEKRIYGRTLENKA

SFVDFPIAFIQKYKLKDNILSQGFNSEFLYKNNVFWQFMLMNRFSHNAYELHLMSSVGKRF

>ETJ84450.1 glucosamine--fructose-6-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCTDFESQGYGFAI

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVVYENDILKSLCFSKLSGDKAYAKKDGFRFFMEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQADEITLCACGTSYHAAMASAYLFERIAKVKAKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYLHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>ETJ84449.1 nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>ETJ84448.1 hypothetical protein X909\_01065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>ETJ84447.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKEKIIKFALFLCAFVSVIVSFAIMLTILIEALKFFQKESVVTFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGIQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACLLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FVITLIINMFSVYLINRFHKRKNL

>ETJ84446.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGFPAFKQTYIFVEANRNSPSYDLLSRAEQR

KIRTGQIAEKSWLLANSEVDQYMKQKYNRLSEKQRTLVDDLVQKGEIELKFNSNFFLNGDSKSPENSGIL

SSVIGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>ETJ84445.1 phosphate ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDEEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>ETJ84444.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIINQIYSIDSCDDVELNIKRGSKLEFRLTYDDSKEIEAIICIIPGGAEDMNSYIYIDDYLTRNYKVAVI

NINYHCIGNRPHLGSSFYLDDIDKFILDTSLKAINLKCINVYGINSYENLNNAFIRIDQEIQKLKLNQQL

HQNYKLKTHVSFLPFKNEYQNFGIMQAMDILNAIFYIKENSPFKLMRGGVLERFCLEIHMVDI

>ETJ84443.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFGNSYGGYLANLCAKIAPWSIDFILDNSSFVNLFGNIFRLIGFGKEIDFTRYHGTYDDTLFKNIFLYLS

DKTYWNNNKFSKNYFSNARKIIREPLNKEHLIIQSLYPNPKYILYHSIFDERSPFKNKENFVHILKELNF

KVEFFAISQVDNKFIKNLNHGMGLSTKLFFKKHLLQILKEPLQDKICKKEVSYKCDELVYTFKEENHQII

LNITN

>ETJ84442.1 multidrug transporter MatE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKQLSLTRLSFPIFWDLLSKYLTVIINTAMVSHYSNFLVGAMGAGNQILDLFITIFSFLSVGCSVLIA

QAIGAKDHVLARKVIHQSLFLNALLGFVCGVLILWHGEYLLYLLKIPQELLKDSEIYLHMLAICLFFDAI

GIVLAAIVRVYNMAYWVMFIGFLMDIVVICGNYYVLHYTKSELFGVGLSNIFARIVAIVALFAILFYKLK

IHLKIKEMIKLEKEVLKKVLNIGGFSAGENLLWIVQYTIAFAFVASLGEASLSVQTIYFQISMLIMLIGQ

ATSIANEIIVGKLVGARYENIAYKHAWRALYFSVIASALVAFLNYLCQDFTMQILGLKEELKNLMIPLFA

LSIFLEISRTFNIVMVNSLRASGDAKFPFFSGLVFMMGVSLPVGYVLCFHFNLGILGVWIGFCADEFLRG

MVNSYRWKSKKWQGKALV

>ETJ84441.1 hypothetical protein X909\_01540 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARQSSSLKSFIYKDECYFYSKKCIKTLRLRLNEKGEFVLSIPYFCTFKSVYEFLDKSSSWMNEAKKRFE

KKALKDDELIFLAKKYQIIFDENVKKTYFNKDKILCQNKAKLDLFLRQNAKKIFTFYLKKWSQKTGLFYT

HLSIKNMKTRWGSCNHNKAYVNLNLKLIQKSLRAIEYVILHEISHLKFPNHSKEFYTFIEHFMSDFRQRE

KEFLS

>ETJ84440.1 hypothetical protein X909\_01535 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLDFDFIYNADNDIFEYLLRFYAKNYNYILSKEENTYHFSIDADEENLKTFCDSLNFMSHSVFLKKFDV

KAGQGFNPCIPEDKEFSRFSYITHLNSNAYQEKKLLNKNEWGVFCECEFSSNLSEFEKINEENFNTFLNL

AFDLLSQEKKIYLKDKNGIYEFSLFKNEFIGDFLLPCDIKAINSVFVCSNENLKLLASLEKPLMKLRLNA

MFRKNHNLDFSDFKIRLARDLFCFALGLKLFENEYKFLSVKKIEEYQKDFYISALDEQVVVLEGFEFINA

KARELIFSKEDKNMARISYLVSRYKEKAFILELSKDYEDILLINKELNLLKLCLPKHSKELYEEIKKDEI

GARLLENFSKEFPLLDESFELQNNFYSLFGLVGRVLNLGKNLQESVSELLKIADESKMPRGVKIDYRLKE

DKSFDYTRTLRSAMSFMLAGVDSVNIAYGAVESLAYFLRDTYDELREKKQSDLALISGSLFEHKSLLKNT

LKHLKNCQLSDVPLRV

>ETJ84439.1 3-hydroxydecanoyl-ACP:CoA transacylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYHLGYKIKISGLVQGVGFRPLVYELALKSKLFGEVRNDGFGIEIILACTQKECENFIENLKNHLPPLAR

IDQLIITQISILNYENFSITPSLENTKSTPMLSDFALCKECKKEFFDEKNPRFLYPFITCTHCGPRFSII

KSLPYDRFNTSMQELLMCEFCKSEYEDPKNRRFHAQPISCPKCKINVFLKNPKGEILAKDQEAFIQSAKF

LKEGKILAIKGMGGFHLMCDAFNEEALKTLRLRKNRPKKPFALMCKDLQSTKELAFIDEKEEALLGGVLA

PIVILKAKKAFSLIAPDVDKIGIMLAYTPLHLLLFEYFKGNLVATSANLSGESIIKDEFNLRQKLDKVFD

FYLDYDREIINASDDSIAQVVNGKTMFLRTSRGLNPFYLERNFNKKGTFLALGAELKNEFVIFYENKLLI

SPYIGDLKSLDVHERFFKLLEFFKQNYDLKFDAILCDKHPHFSYAKEFEERIKISHHYAHFCAAYFEYEE

NFAKDEKALAFICDGTGYGEDGKIWGGEVFVGNLKEYERIAHFENFTLINSDIKNIQNLALSLIFHYDLE

DKAKEFLAKIPKIELENLKKIYSHSNLQTSSLGRIIDAFGSIVFNLEKSSYEAQVGLMCEAFYDKNLDFS

YKLFVEKGQVNFKNLILGALQDEKTKAITGMFNALANFIIDFSKDYDLKVLLSGGVFQNKTLLEILKAKN

FDFFIPLKYPCNDSSIALGQMVHFLKKE

>ETJ84438.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCKDCGCSINSSHTHDHHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEANTLCINLMSSPG

SGKTTLLESTIKALKNELKIAVIEGDLETNNDAIRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDD

VDLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADIVLITKADLAHHFDFDVKEAT

RLIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>ETJ84437.1 hydrogenase formation protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDLGLNEFHR

>ETJ84436.1 hydrogenase formation protein HypD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNLNKNIIFFAIGF

ETTTPMSALLLQKIIEEKINNVFFHINHITVPAPVEAIMNDENVKINAFLGPSHVSVITGYGIYEPLAAK

FKTPIAVSGFEPVDILESVLNIIKQSNEGTFKVYNQYKRAVSKEGNIKAQNLVKKYFRVCDFEFRGLGLI

KDGGLELKEEFSAYDASKKFDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNV

>ETJ84435.1 hydrogenase assembly protein HupF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNISLAHGGGGEEMNELLTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELEKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEIISKKESKNIKAGLSILLSGDIGRHGASVLIKRNELEADVKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>ETJ84434.1 hydrogenase nickel incorporation protein HypA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHELSIVESLIELCEENALNNKAYNVQEIYVKIGRLSGIEADLFKRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVFKCPKCQSIEYKITQGEDLHLMRLVME

>ETJ84433.1 hypothetical protein X909\_01500 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKDIVTTEEELQGFYIVKSILASVSANLEDVSYKDTLSYFSILYQGKVTKWICRLYFNTSKKSISFPDG

ASYNIEKLEDIYQYKADIIKAFESRK

>ETJ84432.1 hypothetical protein X909\_01495 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTFIMPFLKTLGYDVFNPSIVVPEYTADIGTKKGEKVDYAIFKDSKPFILIEAKNHTENLDNHNNQLVRY

FNTNPSIKFAILTNGIEYRFFTDIEQQNLMDKIPFLVVNLEKLKPRDIKDLKRFICTDLNLDEILSIAME

KKYYRSIQEIFKSEIENPSDEFTSFFAKQMTEKRMTSAVLEEFKNYIKKSFKEIINDLAYEKITSIKNNL

QNINDDENDEQIDEKRYCHNRRRITRFLYSKINSC

>ETJ84431.1 DNA polymerase III subunit delta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYRKELQTLLSKDSIPNFFFLYGADNFQSELYAEFIKEKYKPDETLKLFFEEYNFTRASDFLSAGSLFSE

KKLLEIKTSKKNPTKDLKILVELCKNNTNNFFLLELYDENSKQSDIEKIFSPHFARFFKANGAKEGVELL

SIKAKQLGVEITQNALFTLFTSFDENLYLAASELNKFSGLRVDEKTIEQYCYSLNTGSFESFFEKILKKQ

DFKSELEKILDNFNEIALINSLYNSFYRLFKIALYAKVNGKIDFKDLLGYTPPPQVGQNLSSQAFSLKIE

QYKEIFTLLLKCEYELKTNSKLVKKEFLISNLLKLARILKIN

>ETJ84430.1 ribonuclease R [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKSKYYLNNGFAFGVLDISSKGTGFLQCFDESFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKRANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDIQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLAYCFKIALDHENKVIKEELFEGIINSKRRFNYDEVDEILIQKPDLKE

LSWLYELFEITKNLRKMRLKNAFEFRTEELRMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGVFRNHLSADARKIDKLLNELRELGIDVNFKPNLPELIRDIQALSDELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKNDEKLFNYLLLNIESTCESLSTLEREADKVAF

DFMDRKFARWAAKNIGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIVMAKI

YAKITQRLIKEENV

>ETJ84429.1 ketol-acid reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>ETJ84428.1 hypothetical protein X909\_01475 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKKLVQIQRYLIIAILFLLCIALALGILVKYQNSQDVFSVKPDYFIDKQEDLISSNKDHYEIGIFQEN

EFDNNKSVSILEQKIQEIDDLNTSLNEQNLSSVEQNLSLEQNQSLEQNFIPKDTNLTQDQNLTFDEDIHL

NKISKKPKLAIIIDDMANASQVRGLKALNLKLNPSFFPPDKNHSETPKLALKFDFYMVHLPLAAINYNKP

EIDTLNPNDSKERIFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSK

ANKIAKELSMPYIQRDVFLDNEDDVNYVKKQLESAVKLAQKKGFVIAIGHPRKNTFKALEQSKDLLKGVD

LVYLSEIYGK

>ETJ84427.1 DNA processing protein DprA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCVVS

GGALGVDITASIAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYLPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELNKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>ETJ84426.1 Holliday junction resolvase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>ETJ84425.1 hypothetical protein X909\_01460 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLSRIEKLYTKDEMQNILSSFAQEKNVCVFANTLKTSIEELEKEFLKQNLKFKKINAYCYLFDAKDKAIL

SSMKAFNEAHFYIQNYSSYLCALNLEVKAGQSVLDMCAAPGGKSINLANFMQNTGYLACNEMSRDRFFIL

QKNLKNYGVNAKVFMKDGKNIGNLCPLKFDKILLDAPCSTFAKIGFDLEKSYKEIKNIAKTQKKLLHSAL

KALKIGGELVYSTCTFTKEENEEVIENALKSEFKLELLDIDLENVEAKAGQSEEFAEISKCRRILPSLDY

DGFFIAKLRKLC

>ETJ84424.1 methionine sulfoxide reductase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>ETJ84423.1 inorganic pyrophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLSKIKIGDIPNKINAVIEIPYGSSIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLNKIKNFFETY

KILEPNKWVKVQDFKDEKAAIEILEKAIKNYK

>ETJ84422.1 adenylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>ETJ84421.1 aspartyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYFILHKKLYQILAKQKNKNTIILLIILKNLFQGINLRSHYNTDLGISHVGQSVKLCGWVNSYRDHGGV

IFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVLIAEGAIRPRGEGLVNPKLKTGEIEVVVSKLTIE

NESAVPPFTIADESVNEELRLKYRFLDLRNPKLYENFALRSKACIAARNSLANMGFLEVETPILTKATPE

GARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDRYFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEQ

KDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMENYGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIA

KDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGAQGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRC

ELEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLIDPNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMP

KNIDETDLEEISSIAYDVVLNGVELGGGSIRIHKNDIQQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPH

GGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMTDAPSPASNEAMRELGIKLRENIK

>ETJ84420.1 inorganic polyphosphate/ATP-NAD kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>ETJ84419.1 DNA repair protein RecN [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINRIFMKENLGFKKAELEISKGLTVFTGLSGAGKSVLFKGILSAFSLSESEAKIVEIELDDKLDLESFG

IESEEENVFKLLKEKNTKYFINNQSIAKKSLQNLSKTFIKYLSAKENNEFGNEKFLNLLDALEMQENTNF

ISFLEDFKKDFNAYSQISNELNAILEEEKKVEELKELARVQIEKISSINPKIGEYEELLILKKKLSKKDK

LEEAWSKAERIFELEKVVIEALNLSEVDASFFSECLNELRVICENQKMEDLDFDVETLLDRIENLSYLIK

RYESIENALEVLKQKKHELEHYENLSFEKKELEKKFQELKQKLEEKAQILTQTRKKNLKKLEKCLNNYLK

DLYMKDASLTLKENEKISILGKDEMMLDINLAHLKNLSSGELNRLRLAFIATECKILNAGKGILFLDEID

ANLSGKEAMSIAKVLEELSKFYQIFAISHLPQLSSKAHNHFLVEKNGEESKVKKLDQEERIKELARMVSG

ELVSDEAIEFAKTLFKD

>ETJ84418.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIVLTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIVKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVRERFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLVDKASKILSQAKDNGKDRVEVCS

>ETJ84417.1 TatD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLNLDFQDGLRIVDTHCHLDSEAFKDDLDETLNRAFKNGIEKIIIPGADIKDLPYAATIAHKYKNIFFA

AGVHPYEIDNYDEKILRQYLCDEKCVAVGECGLDYFRFKSDLAEEIQKEKENQKKIFIAQLELAIEFKKP

VIIHSREANHDTYEILHGYSKDLVGGVLHCFNASEHLLTLFEEGFYFGIGGVLTFKNAKKLVEILPKIPK

DKLLLETDAPYLTPEPYRGKRNEPLLTQFVANKMCEVLNLSRKELLEICFNNSEKLFFKGY

>ETJ84416.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLCFLICFNFLFAQINTPEFYERQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSMQNFS

KVTPMIRKILAQQEVPDEILYLAMVESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQVIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSASLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIREFNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>ETJ84415.1 RlpA-like lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>ETJ84414.1 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTELIFLDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIKI

LYQGIKDKLACAKEILQKLNLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAV

AQMIEILVEKNHLEEEWNKLWL

>ETJ84413.1 hypothetical protein X909\_01400 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIKIFGILIALFTITFTILSLQDPYSLNLQTNALNFKNIEAKNLKAYESNTSIIKAYYKANSWVRYADR

DEFNDFITLNLDFNLSANRLEFFNKDMSKVLFEGNVTYIGSNNVKIISQEVEYQPKDKILHTNTNFKALI

NGSIINGNTLNYDVKNKILNIQGVNAWLQDK

>ETJ84412.1 organic solvent tolerance protein OstA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNRKPIRY

EAMQNARFKIVLKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDK

>ETJ84411.1 GTP-binding protein YsxC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>ETJ84410.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRRNLSAYKAKFNGAYVFLGFFFLIYQILGSTFIYAPLLYGIFFCYMFCLLEERERTFSKLDFRWYFSLF

FLFFTDITYNFFIFSSWLAFFIFYYLCADWIKTNLKIGKFIPVVFVLCAYGIILFLDMILSYIGDEKIKI

LGWAYIVSVFIECCLAYVFFKGKI

>ETJ84409.1 penicillin-binding protein 2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKIEFLPPVRGQITDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELTNLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLLEGNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSVVKMGVGLSFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKHAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPHFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDKNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>ETJ84408.1 peptidase M24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFALLPLSLQKDLKINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNSELEKKLNLDGFWLKNYDEIIMELEKLANTNLLIEPSKMTALLINSLDKS

VKIIQEINPSTHLKAVKNTKEIAHIQDAMIEDGVALCKFFAWLEEAIENKELISELDIDAKASEFRAQSK

HYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRAPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KVKEGMLTSIEPGIYKVGKWGIRLENLVIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>ETJ84407.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCFNFGAFVAPLICGFLQKEYGWHFGFGAGGIGMLLAVIIFYLKTMPDLKEFDEKVGIDSTWDRPSKKSK

NAFYIIIVSGIVLLGAIFLILGGFIKLDAQVINKNIILTILACAGIYFLYLFAFTSLKIEEKRNLIIFIV

LFLAAALFWSVYEQQYTSFNFFAEKLTDKTILNYEIPTIWFQSLGGLFVILFAPFSTFIWTICAKNNKEI

SSIIKFALGLLGAALAFLIMALASNHAISLNGDANTLRENLENSSQIILVSPWWLVSSFLLMVLGELCLS

PVGLSIMTKIAPNLIKSQVMGLWFVASALGNALAGFIGGKASEENIAYLPNLFYQCMWILLGAVIILLIL

KKPINKILKN

>ETJ84406.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKNVKNLDTSFFGHPKPLLSLSLTELWERFSFYGIRPLLYLFMIASFEKSGMNLKPEEASAIMGIFASC

LYLAALPGGWLADNYLGQKRAILLGALTIAFGHLCIAFSYFNNKMIFVGMVFLVIGTGLFKTCASVMVGM

LYKKMMQGVTLVLLFFICALILVLL

>ETJ84405.1 di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMMTFASQNLINNNGLPISMAWIIISIFFLTLGELCVSPVGLSIMAKVAPDLIKNQIMGLWFVASALGNF

VAGLIGGNVNIKNIDQLPNIFEQCMWMLFVVALLLFIAKKPIYKILNEKNKQLSN

>ETJ84404.1 major facilitator transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKQEIQKLDTNFLGHPKPLFSLSMVELWERFAFYGIRSLLVLFMATTISKGGLGISTEYASAIYGIFAG

CLYLAALPGGWITDNYLGQKKALFLGSFIIALGHISIALSILSTPIFFLGLTFIVIGTGFFKTSASVTVG

MLYKQNDTRCDTGYTIFYIGINIGAFIAPLICGFIQAKWNYHLGFGIGGLGMLISLLILYFKAIPELEEF

HKNCTLRQNWEQPFKKSKNLTLILSISLLSIIGFFLIFINLADINPIILSKKLLIVILLCLVIYFIYLFV

FKTLNKREKQQLTILIVLFFVATFFGALLNKNLPLIIFLRKILQIEIFLIGKFQQTGFNLLIQFLSSYLL

L

>ETJ84403.1 hypothetical protein X909\_01350 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKIEVFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKTLVEHNYLALNEAKIENSHLKEIET

KLTKQIKTEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGNFK

DLLNFIQNLENLPIALKIDKIKLYNTQGLKLKLDLMFKFVNL

>ETJ84402.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKINSLNKINFIKSTDLLYAQRTGISKEDELFNNLTADFKLSKPFDYQIAFFKHNEIYHCFLAPVYKLKK

SRFCFPEPLIFQALFDERFIEESDYCVLNLYDQTLYLYFYQEGKFINLKKIENFNPSNMDLFFKQNRFIE

LLKHYESKLLLYQDLDTIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISFK

IILIFIFSFSLSMMILLFKDFIEYKQNKEIQNKNFIIQEEISKLKQDKQKLLTNIQDLNFTLSNKISSTQ

QQFHILSTITKEINLDKNKAIILNQIISWLNSNELKITNLEFKQTKIILSFIDENHFKRALENLNSAFKI

LDKNEETLNIILEVIHE

>ETJ84401.1 GTPase Era [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>ETJ84400.1 ATP-dependent protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRAENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKALYEILTRPKNSLLKQ

YSQLLKTENLELEFDDEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>ETJ84399.1 peptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>ETJ84398.1 50S ribosomal protein L9 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>ETJ84397.1 argininosuccinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>ETJ84396.1 hypothetical protein X909\_01315 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFQKLIFFAKIAFMRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQK

YKVLAIPSTKSIPKNAQNEYVVKL

>ETJ84395.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFILAKDEIKTMLQIMPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISTIQIKISIKDDKRKYEIYE

>ETJ84394.1 lipopolysaccharide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFMSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDV

TKDPLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSL

SGGERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAY

VIRSGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>ETJ84393.1 RNA polymerase sigma54 factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQDSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKIIECLNEEGYFEYDEEFLKEYSLEEIERVRA

RFKFLDPVGVGAKDYKEAFLFALENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALTVLKRFSTPPF

LEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDALAMRKATLYK

IGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAFALDEEGETS

NVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKLYELEG

>ETJ84392.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFLTSLSEGGQFAIQIIIVLICLFYGAKKGGIALGLLGGIGILMLVFAFHIKPGKPAIDVMLTILAVVV

ASATLQASGGLDVMLQIAERILRRNPKFLTILAPFVTCFLTILCGTGHVVYTIMPIIYDIAIKNGIRPER

PMAAASISSQMGIIASPVSVAVVSLTALLLNANHKLAGFDGYINLLQITIPSTLFGVLCIGIFSWFRGKD

LDKDEVFQEKLKDPEFKKYVYGDSKTLLGVKLPKSNWVAMWIFLGAIALVALLGVFDFLRPNWGQVVKNG

IPQVDALGNPKMDVLSMVSVIQMFMLLAGSLIIIFTKTDAKKIGSNEIFKSGMIALVAVFGISWMADTMF

AVHTPMMKVALGDIVKEHPWTYAVMLLLISKFVNSQAAAISAFVPLALGIGVEPGVIVAFAAACYGYYIL

PTYPSDLATIQFDRSGTTHIGKFVINHSFILPGLIGVITSCIAGYFIAMAAGYL

>ETJ84391.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKGYPMDVIFALLLLLAFGSLWFFIRFCEIQTRTRG

>ETJ84390.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEILITLIIAFILALIFGNYLYKIASCNKTIFDFIFNPIDNLIYKICAIDRKNMTWQKYSLHLIAFNAL

VAIFSFVIFYLQDKLFLNPNSINSMKGDLNLNTVISFITNTNLQHYSGESALSLLSQNTGILLAMFVSSA

SGYSACMAFCRALCGMQMGNFYEDFTRIITRLMLPLSFILAVIFISEGVVQNYHANFSVLTLENKFQSIA

TGPVAALESIKHLGTNGGGFFGANSSMPFENPTSLTNFLQILSMMLIPSACVVAFGLMVYHRKERQGFAL

MGKEGGVIFGAMGIIFIISLLLIYFSEKMSNPNLDSLGLNANLGNLEGKEIRFGTDGSSLFSAVTTAFTT

GSVNNMHDSLNPLSISATLLNMMLNVAFGGEGVGLMNMIIYVLLTVFICALMIGRTPEFLGKKIESAQMK

LIALVILIHPLLILVLSALAVVFAKDSISNPSFHGLAQILYEFSSSAANNGSGLEGLKDDNLFWNLSTAF

AMFCGRYLVLIAQLAIAGSLLAKNTQENTANSLKTDNLTFMFVLVCIIYIFAALTFFPVLTLSSVAEYLS

LWH

>ETJ84389.1 potassium transporter KtrB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKQNKLITKEILNNAIKGAFLKFDPRFMVKNPVMFMVEVGLILTLILSIFPTLFNGNSDERIYNILIT

FILFITLLFANFAESIAEGRGKAQAATLRQSKKDSKARRIKSDGSEEMLNSSELKIGDIVLVKAGELIPN

DGEIIEGAASVDESAITGESAPVMREAGGDFSSVTGGTTVLTDFLKIKILVGAGESFLDKMINLVEGAAR

QKTPNEIALNTLLIVLSLSFLVVVVSLYPFMQFLGVSLPISWLVALLVCLIPTTIGGLLSAIGIAGMDRV

TRFNVIALSGKAVESCGDVDTMILDKTGTITFGNRLANEFYEVQGISKEEMIKACVLSSLKDETPEGKSI

VALAQKMGYELEGNDIKEFIEFSAQNRMSGVDLQDNTKIRKGAFDAIRAYISEMNGKIPSDLETKVMEIS

NLGGTPLVVCKNEKILGVIYLKDTVKPGLKERFDELRKMGIKTLMCTGDNPLTAATIAKEAGLDGFIAEC

KPEDKIEAIKKEQAQGKIVAMTGDGTNDAPALAQADVGIAMNSGTQAAKEAANMIDLDSNPTKILEVVEI

GKGLLITRGSLTTFSMANDIAKYFTILPAMFSVVLPQMQILNIMHLATPQSAILSALIFNAIIIPLLIPI

AMRGVKFKPMKSEHLLLRNLSIYGLGGMIAPFIGIKIIDIPTAWILRILGV

>ETJ84388.1 potassium transporter KtrA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLRTLLSFFVVMLILCTLIYPFALNTVAKFIFPYQSSGSLVDKEGRPTLDISKAVGSKLLGQDFNKPYFL

HSRASVSNYNTSDTNESSVSSGGFNYAMSNPALKERVQKDLQKFLDENPQITKEQIPLDLLSASGSGLDP

HISLQAALVQIPRISQSSKITKEELEKIIQENTESKFLGIFGEEKVNVLAVNIAIAKAMKKE

>ETJ84387.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQRQSPEQILKKLEVKAKEEEKNKLAKLKIFLGYAAGSGKTYAMLSEARTLRDNGVDVVLGYIEPHDRPE

TMALTQGFESIANLEIPYKNIVLKEFDLDATLKRKPALVLVDELAHTNAKGLRNEKRFQDIEELLKAGID

VYTTLNIQHLESLNDLVANISKIEVKERIPDRIFDEADQVELVDIEPNKLLKRMQDGKIYKEKQAKLALE

NFFRQERLIALREIALRRLASRVNLRASEQRLINDDLAYHTGEHILVCINASNAKVIRAAARLALAFHAK

LSALYIKNPNIKEEKALEENIELAKSFDAEIISVYDDIARQIAEYSSLSNVSKIVLGKNKDKKKFKEEIF

EAVAKKAPNIDLYLVNENQISTPKIRSKKGFDFLGFLKITGVLLLATFIAFVFHKFNTQPSNIVMIFILA

VFASSFISDNKIFAFYSSLVSVLIYNFFFLEPIFSLKVHDSGNIITFTTMFIVGFLTAVFTRRLKLQSKE

LTKRAYRTAILLENSEKLARVKSKQELWEQLGNQALKLLNLPIIIYPINKNNILSKPLLFFNDDKQMLKN

CFSADEIAIAQWVATNKERAGVCTNTLPNANAMYLPIEDGEKTKGVIGIVLKEKRPLQDFQYEILSALLN

EVGVRTRDIFLL

>ETJ84386.1 hypothetical protein X909\_01265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNEEDLGEIYRKGKKLEKMPASERAKLVKELRKQMLEAAKALEFEKAAAIRDEINKLRDL

>ETJ84385.1 excinuclease ABC subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNMPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGETRLKQAIKDIKAELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDIPYTLFDYFAIKDRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEFLFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKSQNP

CKKLWIPPMNAANFKWLIIKNTISRQLQSNAILKRV

>ETJ84384.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>ETJ84383.1 hypothetical protein X909\_01250 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>ETJ84382.1 hypothetical protein X909\_01245 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKAFTLLELVFVILILGIFSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDTPIYSDFKSWIKIGKNHYRFALNAKEMVEFIYDSKEGLLKCIGSSR

CKDLI

>ETJ84381.1 primosome assembly protein PriA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLKSKKNLKAIVLKECQKPDFKTIEIKEITKYF

LTPLQLELANFIVYYYASKLGFVLGFFETSPKYECQKMFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLEQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLECFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELSITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNILKCHYCNYTSLIEQNCPSCKGEMLEARKIGTAELLELLQNALPLAKIAKFDSDEITSV

KKLNTILKNFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIENYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQKSAQKLCEKFASQFRNI

KQVELVGYGICGVEMLYGKYRFYLLLRSENHKALVAIENYILQFKNASVDIDPIDFV

>ETJ84380.1 invasion protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNLLLYIKNNLTPTLAQILLQALKNSNNEKFFTFVLENIETICTWLNSNEFRDRYLSTKHPYPPLINPN

FIEIDSSRHCAELAWDLNLPLPKHYKFIYISPHGVGAAAFLRYLNQCCDVTCFASWVLPPDSKERYCINY

MCLNDNTIAQYAINISEINLPYFDKYLSLLDFNSKIICGVRDPIGLLKHSWGRDWSKVLRNYPPEFNLTY

DWRYYINYLTHQNHKIKIDINELQQGVFIISYLLKYFNKDNVYYLDMEEIRQSKAFDTMNLLAINFNFTP

PHKDKLDLFKIKEFRGYIRYLFPITLYANSKDINNTFYLNTPKNNKNFNIDRTSSIPIILDRKHINHEKI

DVIQEIIKNDLCNDMGVYIDKNDFKQLEQNNLLFSTIKHYLYDFLYQIKITIDETESKMMKEKDVIDYFI

KNKSLIYTFFNIFENELNHLKQTHPHIIDSWKYYKEFEKIYKDK

>ETJ84379.1 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>ETJ84378.1 flagellar L-ring protein FlgH [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>ETJ84377.1 phosphate acetyltransferase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQTVKSAYGFTFR

EAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPIAAIINDEDKLI

AQKYFDHALDGRNYVLINENFNFEEVQKLKEYDFITPHRFKYELIKQSIKNKKTVVLPESNDERILKAAE

ILLKSKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKKKX

>ETJ84376.1 hypothetical protein X909\_01720, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEKK

>ETJ84375.1 50S ribosomal protein L19 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>ETJ84374.1 tRNA (guanine-N1)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFSFVSLFPNLMEFYFQDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLMQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLLEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>ETJ84373.1 ribosome maturation protein RimM [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELINLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVIDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>ETJ84372.1 RNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVENFLREYAKLIADYPEQIDTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>ETJ84371.1 30S ribosomal protein S16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>ETJ84370.1 signal recognition particle [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDVKQNGIGQKQFLNA

IKVNLENILSVNGKNQGFVFASKPPTVVLMAGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKVVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEVLGISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAIIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>ETJ84369.1 ribosomal large subunit pseudouridine synthase C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKTLTKIVIQTGRTHQIRVHAKFIKHGVVGDEKYAK

ISSDRMYLHSYEIKIFDYYFKAELDNSFAKVGFEIKNLDF

>ETJ84368.1 3-deoxy-D-manno-octulosonic acid transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFFYYFLTWAAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFEYAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKTKIILLNAR

ISDKSYHSYQRFSFFYKKIFSYIDEVFAQSELDKVRLESLGAKNVKIFKNIKANLEIKNNKIYTKPKEKL

IIFASTHKDEEELLLDHFKLEENEKLIIAPRHPERFKEVENLLLNKGLEFEKFSSLKDENKKFAKKILLL

DALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDNVLISGKFIHNQKALFEEVENVYFCENLKDLN

DKIHYLNLKVKISKKENLDLIIQTIQKGIDARKSL

>ETJ84367.1 zinc ribbon domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINRTLKDAELKIGKINTDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILENKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>ETJ84366.1 hypothetical protein X909\_01670 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLSEIYNFLDQLSPFDIQESWDNSGILLGDRDSEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKTYPRAFIKEMICKNISLISMHTNYDLSHLNIYFTEEILGFKISFKDEFLIYVENSISFEALCDW

VKKKLNLQILRVSNCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>ETJ84365.1 glycyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>ETJ84364.1 hypothetical protein X909\_01660 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSSAKSQTAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYKLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>ETJ84363.1 N5-carboxyaminoimidazole ribonucleotide mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFVSILMGSKSDYETMKEAVKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMSGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRLEKEKKLVSDSKEVEVLL

>ETJ84362.1 protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIPEIVAPAGNFTKLKIALAYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSFQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHVFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTSIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFIEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>ETJ84361.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTQEELDALMNGDVDLDSETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEVLELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>ETJ84360.1 glutamine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNSGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKMVAHLNGKTATFMPKPLYGDNGNGMHVHMSL

WKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFTNPSSNSYKRIVPGFEAPCILTYSCQNRSASC

RVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGIKNKTIPVGPMDENLFDLTLDEIREKGIEQLP

HTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVWPVEARPTAYEFKTCYSC

>ETJ84359.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMRSLHTAATGMVAQQTQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTEGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>ETJ84358.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIAGFKRIFKETQDELPIENHTRDASRFVNT

TIDGIPQVSQEYTDFSLGFLKATNNPLDLAMTREDAFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

DLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLATVK

>ETJ84357.1 cell division protein FtsZ [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKVSGG

YDEEIMAQIETPTFLRRQMD

>ETJ84356.1 cell division protein FtsA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHYDK

VVVSISGAYTKSVDSIGVVNIPNHEIGIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDDPL

GMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAICD

MVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLSYAALSQQPNTLIQIPSMGDERKVNEVS

LDIISNVIYARAEETLMILAKILSDNRYANAIGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARKDL

ITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDAESEIKSDFF

DENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>ETJ84355.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVITDKLNQIFNIPSKDEELKMLASSYFMQDALSIAKIDYDKKNIKINEEDL

KKLWDEHKEDYKTKKIYEISTYFLSVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDY

ALMQLKNVANAKFLDLKNGKDNFQKDQNISESDVYYPIDLLNKAKNGDVLRPAPYNNGYIIVKLNKVDPI

RNKTFEEAREEVLPMYLSEQARKNLEEKAKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLM

NVFNTDQNSSYVIINDNKAILYKINKQKLDMNSDKFEQYKTMLEQNLRNLKANELKQELVDELKKIYPIK

IYYKGN

>ETJ84354.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDFHN

RITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINTYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITKKA

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>ETJ84353.1 hypothetical protein X909\_01605 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEDDFIKERQNIRQKMLKFSRAINQGKPLDDDLRDEISSDDILRRRFKKKTPNKFLEELDEEYESKHTK

KSNIYLKEDLINVKLEEKQSLAKKIFSKMKERRKEENKKTKKNFLFSRKKANEIKKYPNQNTNSNKKQSS

YHSNKTRKKGTYKFYRKNSKNRN

>ETJ84352.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKFKEFSLRFLFKVSEQPVLIRDLLEANALFNDGMLVDPSKLNFNFKILNSYIYFGVFCAVILLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDIFKVYTRKIISKKIIQKAWALHFPYFAYEKYSTMAGEFYKE

ALKEEIPKANLEQYVLDKIIHSK

>ETJ84351.1 restriction endonuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNYYQELKKYLNNNLFTSYSLEIDFPKIYNFNANQKAFRDILTKITKIYNKNKFIKQNEHQFEDEFISKV

LEILGWCFVRQDEKIIQGKLEKPDFLLFSNDKLKSKYENLDKETKKSSNDFTIILESKAYNIEIDNKKVK

DNPHFQILRYLGNLKKNYGFLTNGRFWRFYDNSILNSNKVFYEINLEKIIEDQNIEAFAYFYSVFSAFNF

TEKEDHLEITLQNNKLSKIKIEDDLKSIIYGTNGNESLFEFIGSRIYNKTKADLKLIYENSLYFIFRLLF

IAYFEDKFEIILEKHKYFKSKISLRTLLENLQEDENSSGGFGELENIFNIYNKGKGNFDMPVFNGGLFDE

SKTALLSTPKIFNDKDLKFILNQLLNFKDKNLSFKRDYKTLSVEHLGTIYEGLLSYFFEIANEDIYYVSY

KEKSKEIECYFDNYDFKILEKSKKVEKYTFYKKGQIYLKNTSNSRKASASFYTPQSIANFLIQSALKDKL

NNENILKFKILDNACGSGHFLVGVLNAITHIVLSDFDHFTNLKELYEEEKENILNHIKDFVQDYEVDESD

ILKRLLLKRIIYGVDLNPFSIELTKLSLWIDSFIFTTPLSFIEHHIKCGNALINSNLSDFKDLIKQNSSN

LFTNSITQEFEILQEVFEKLDNLKDTNEEQIKQSKQIYQNEITPKLNKLNLYLNYINTLHFVNKEELQIL

KALSQDDIQNLSQNEQAKAIISKYQKEFNFFNYELEFPEIVENQVFKGFDIIIGNPPWDKTKFSDDDFFP

QYKSDYRSLIASKKKEIQDNLLAKDYIKQNYEKQKAYINDLSEYYKKAYPLNKGSGDGNLFRLFVEKNLS

LLKKDGNLAYVLPSALMFEDGSLTLRKEILENKTLEYFYSFENNKAIFIDVHRSYKFALIQVKNTQANHA

HKIKTMFYKTDMNSLKNKDEILTLSLKDIKKLSPTHLALMELKDKQALEILRKCYNAFQNLSFDYIDFRR

ELDMTNDKDLFIEEFREGLLPLFEGKMIHQFDANFSQATYFLEKAKFDERLKSKELSRAKKTTGKELNPK

LIKYDREFFRLGYRAVARDTDERTLIASLLPKNCGFGHSMFANAPKQYIVKDDEICMDIVPYERILFVLA

LFNSLVVDFIIRNMVQINVSKTYLERIPLPQPSDEEIQNNEIYKTLAKNALLLQLYNDKNHHFDELKQKF

DIKNEEIPKTKKAYDILKTKNDLLVKKLYGLSDDEFSYMISTFKVLNEKQSEYITLIKTI

>ETJ84350.1 hypothetical protein X909\_01590 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIELDFELNKQRISGERMINHAN

SKVKVLVIPTDEELEIARITEELIGKN

>ETJ84349.1 acetate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKKWSIWNLRL

>ETJ84348.1 phosphate acetyltransferase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

SKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKLVQDKTY

FGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVLAFADCAVNPSPTAEQ

LATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELNIDGPMQFDCAYDPKT

AAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDLSRGCLVDDIVDTVIL

SAIQAQ

>ETJ84347.1 ArsC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

NLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>ETJ84346.1 phospho-2-dehydro-3-deoxyheptonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIVLTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAYYQSATTLNLLRGFAKGGLADLHEVHRWNLGFLKKSELHKQYTDISEKISQALAFM

EACGINTSNTPSLREVSVYTSHEALLLPYEEALTRVDSLSGEIYDCSAHMLWIGERTRALDEAHVHFLRG

VKNPLGVKIGPSASADDIIALANVLNPNNEEGRLNIIIRMGADKIINNLPKIFSKLKSEGLNLVYSIDPM

HGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHLEMTGKDVTECTGGASNVTAQSLEDRYETQ

CDPRLNADQALELAFLIADLVKKARK

>ETJ84345.1 hydroxyisourate hydrolase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

IIQGEKMFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEEFTEE

NGRIGDLLPYEKAENRAFGIYKLKFFTKDYYTSHKINTFYPFVEVSFELSKDQKHYHVPITLSPFGYSTY

RGS

>ETJ84344.1 UDP-N-acetylmuramoyl-L-alanyl-D-glutamate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKISLFGYGKTTRAIAENLVDKFGPFDIYDDHFIETKKDTLGNLLLNPNDFDDNLSDIEIPSPGFPPKHK

LIQKAKNLQSEYDFFYDIMPKSVWISGTNGKTTTTQMATHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFDNYVQDKLSVLKRMNECDVAILPKIYANTPTKAHKIS

YEDEKDLAVKFGIDTEKISFKSPFLLDAIMALAIEKILLDTLSYELLNSFVMEKNKLEELKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKNFNIELYAIGISTEKMLDYAKKANLKA

YKCEVLSKAVNEISNHLRVNEVALLSPACASLDQFNSYAERGKVFKECVNKI

>ETJ84343.1 phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFLMPKFITWAKNKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLSCIKFDNIFAISALLCLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLTQIIAGLICI

LPLYFSSELSTELFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>ETJ84342.1 phosphoglyceromutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIENKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVNPKSGLNFIKDLKEFCENLGVHFATLCGRFYAMDRDKRWDRVKECYECLLGKAYKVPNLLE

YLQKSYDENVTDEFIKAVQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKIFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLIPSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQAKGVSKIKDNMGLSNIAASVLKILDLEIPKEMNEA

LF

>ETJ84341.1 3-ketoacyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRLYFSLFAFFIRNLLRLQFLKLNLLRIDNEI

>ETJ84340.1 3-ketoacyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFSGKNVLITGASKGIGASIAKTLAGFGLKVWINYRSKPELADALKDEIIASGGVAAVIKFDASKEDEF

ENGVKIIVESDGELSYLVNNAGVTNDKLALRMKLEDFSGVVDTNLSSAFLGCREALKTMSKKRFGAVVNI

ASIVGEMGNAGQVNYSASKGGMIAMTKSFAKEGASRNLRFNCVTPGFIKSDMTEVLSDEIKQTYQDNIPL

KRFAEPEEVANCVAFLLSDYASYVTGDVLKINGGLYM

>ETJ84339.1 pyridoxamine 5'-phosphate oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLKEIAQFLDDNAPAFLATLGTCGNPRVRPIQSPLLVRDKIYFCTANTKGLFKHIKNYNGIEFCSCAKD

GTFLRLRANAVFEPNLEVKKMMFEKYPYLVNLYETPQNPKFEVFYLDHLSARMQFMNGEFKLFKA

>ETJ84338.1 succinate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGEFSRRDFIKTACISVGALAASSSGVYALDDSSKMDKDTNLPSCDVLVIGSGGAGLRAAAAVRKENPKL

SVVVATKMMPSRNATCMAEGGINGVTDFSNGDSYKLHAYDTIKGGAYLVDQDAALKFCELAGKAIFNMDF

IGTLFSRNEQGGVAQRLMGGASKKRCNYSADKTGHILMHSCLDDAISSGVKFLMDHELLDIGVVDGKCEG

VVLRDIQSGGIYPVLCKALVIATGGYTRIFYNRTSTPFIATGDGVAAALRAGLGFEDPEMIQFHPTGVAN

GGTLITEAARGEGGYLLNNRGERFMKNYHEKMELAPRDVVARAIETEIREGRGYGEGLGAYVLCDVRHLG

KEKILKDLPKIRHTAMLFENIDLVDTPVPIRPTAHYSMGGIEVAKFEDMSTKIAGIYVGGEASCISIHGA

NRLGGNSLADAVVTGHLAGIGATNYAKDASFGKGAKTHELAQKWQARFKEITNNGGNGQEMYELREELGS

QNWDNMGIFRTQEKLDLLAKNLEDIQARYEKIRIPNPNEVMNTAFTDYVELGNLILLSRCACLAARNRLE

SRGAHTREDYPKRDDKNFLKHSIVNLENDELKLSYKDVVVTEFSLDGRRVQ

>ETJ84337.1 (2Fe-2S)-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIIDRFNGKEKYEQSYDIDDKDIQGKTLLSLLLFIKKTKDITLNFTASCQSAICGACAVRVNGHSYLA

CDTKMQDLLKEYDNPSSIRISPLGNFRVISDLIVDWEPSIENLRKIRPAMVAKNEFSAEKGCKQSQEEFD

RISKQWDCILCGSCASECNKLEADSSDYMQPFVFTHAWRAAADSRGKDPMLHVKPSVMNGLWLCVHCQEC

ADRCPKGISSVSDIANLRVMAIKKGLNEGLGPDHAEAFYKDLVEGSGRLNEIYLALRSEGVIGSMGKTDI

AFKLMRAGKMNPMHVFGEDEIEGHKDLVKMIKAAQEAAVKE

>ETJ84336.1 heterodisulfide reductase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKEYAFFPGCVLSQAAKESKISLEAIAPILGWKLNEIKGWSCCGASQAQCVDPIATLVANARNIALAEE

MKMPMLTTCSTCMLTLTKAKNTLDKGAKERINTFLAKGGMKYQGSTPITSLLWELYEDLDNLKSKVKKPL

SNLKVALFYGCHSLRPEDTFGKKESSTNPKSFESVVEVLGAKIVPFEKRLDCCGFHASYPAEKSVKKMSS

QIVNNASENQADCVVTPCPLCQMQLDIYQERFQDYTNSKARLPIIHLSQLVGLALGLSKEMVGLDYNIID

ASKIA

>ETJ84335.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFSNLIKENQKIWNAYLHHDFVKKLEDKSLKQENFLFYLKQDYIYLLNYAKCYARLALNSNTAKELRFA

MKFQNYIVEGEMELHRAILSLGINADELDAKDESLVNIAYSRYMLSVGENGDFLDMLVALSACAIGYAKI

GAEIINRLKNENLKDHPYKEWILTYGSENFQNEAKEFEDFVNSYTSSVSAQKFQKLSEIFHTVTRLEVAF

WEHSLRMELNL

>ETJ84334.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MATFDDVKAVVVEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>ETJ84333.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRVVVTGIGMINALGLDKESSFKAICNGESGVNKITLFDATDFPVQIAAEVKNFDPLEVVDGKEVKKID

RFIQLGIKAAREAMQDAGFNEELDKEEFGIVSAAGIGGLPNIEKNSIICSERGPRKISPFFIPSALVNML

GGLISIEHGLKGPNISCVTACAAGTHAIGEAYKSIALGNAKKMLVIGAEAAICPVGIGGFASMKALSTRN

EDPQHASRPFDKERDGFVMGEGAGALVFEEYEEAKKRGATIYAELIGFGESADAHHITSPTLDGPLRAMK

KALNMAGNPKVDYINAHGTSTPVNDKNETAAIKELFGNNIPLISSTKGQTGHCLGAAGAIEAVVSVMALR

DGVVPPTINQLVKDDECDLDYVPNISRKVDLKVVMSNSFGFGGTNGCVVFKKVD

>ETJ84332.1 acetyl-CoA carboxylase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYALDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKVMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>ETJ84331.1 ligand-gated channel [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTQIKNMKFKKSLLCFLILSGALLKAEEKYQLNDVVVSASGFEQDLVDAPASISIITKEELEKKPIKDIG

EAIGDIPGVDVTMNKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYDNGFSGSESGYLPPLSMIERIEV

IRGPASTLYGSDAVGGVINIITKKNPDKTEANIEFNTLLQQHSNHYGNAGGFNAYVATPLIEDILSISAR

LKYYDKAASDLKWPTPVWNNGNQRPDNYQIASHSPGAFTSLGFGSRLNWTVDDKNNIYFDIERYINEISV

NSTSSRAIKSERQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGKVVLPWNLGQYGNLV

NTFGARIDYEILKNDQASAGSQIRGKNLDQTTVALYGENEYFIADDLIFTTGLRYIYSDLFDSEFTPRVY

LVYHLNDNIALKGGVSKGYKTPAAKQLTNGYYNYANNNAYFGNPDLKPEESINYELGVDFMVFDFAHYSI

TGFITDFTNQISSEDLTGMQNDINCSNGIVCKRPINLGKTQTKGIEFAFNTKTYNGFSLNSSYTFMDNRY

KDGQKNWFGGDRIENLPRHIAMLKLNYERGKFSSYIKTRARLDAIAKAKGGGNGSLPWQKYKPFYIVDLG

INYKINKQSSLSFAVQNLFDKNFFNPQVTRWDGANPAGYANRYQDYTEGRSFWLSYKYDF

>ETJ84330.1 NUDIX hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFKNLKELSFEKSNYIKPKRFAYESNGRLCTWDFIESKDSVSVLLYHKELESFIFVRQFRIPLWYHQMH

DKDYVKDDDMGYTIELCSGLVDKKLSLEEIAKEECIEELGYAPKNLEKIGDFYTGFGSGVSKQSFYFVEV

DEKDKISSGGGVDDEEIEAVYVKVQDFEKKCKNMIRTPLLDFAYMWFLKEKWGKLKII

>ETJ84329.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFGSKINHSDLQKLEEENKNLAHKIEKFQSENLELKNKITSLEQAALESKLKTDLLNVLLTGVLKNITIV

QGDMLENVNKAEVISSYSKTSLAEMDELNHIANSINASLGDITESANKTRDVAGTLHRSVDEITNVINLI

KDVSDQTNLLALNAAIEAARAGEHGRGFAVVADEVRKLAEKTQKATTEVEMNINLLKQNANEMYTQSEQV

EKISIDSNAHIMSFSEKFTHLVNEAHSTNSNAVGIASEAFVSLAKLDHIAFKLNGYKEIFSKSGKQLADH

TSCRLGKWLASTGKERFGQNKSFLKINEPHEKVHENMNNAITIANTEDISKDITQHSIINKCEVAENASL

DLFNVFKEMLDESDH

>ETJ84328.1 hypothetical protein X909\_01980 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHVKDELSQYLANYK

K

>ETJ84327.1 50S ribosomal protein L28 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARVCQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTRKMRIAASTLRTLKKQNSK

>ETJ84326.1 ribulose-phosphate 3-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYVAPSLLSANFLKLEEEVKAIEAAGADLLHIDVMDGHFVPNLTFGPCVIEKISTISKLPLDVHLMVKDV

SKFIDLFIPLKPKFISFHIESEVHPIRLCEYIRSQGIHPAIVLNPHTSIDSIKHMLEFVDMVLLMSVNPG

FGGQKFLPLVHEKIKELRQMIDKKNAKVFIEVDGGVNGLNASDLEESGADILVAGSYIFSSNDYKTAISS

LKLEF

>ETJ84325.1 DNA polymerase III subunit epsilon [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLQQIDQIISILNKQSKPYDWVMQEFAKVEELKNFDLDLETFELLGLGLTLNKDNIFTLKTRTTKIKDE

IFCIVDIESTGGVSKGEILEIGAVKIQNSKEIARFQSFVKVKEIPENITELTGITYEMVENAPSLAKVLS

DFRLFLKDSIFVAHNVRFDYSFISRALNECGFGILLNRRICTIEFAQCCIESPKYKLEVLKEFLGVENTH

HRALDDALAAAEIFKYCLGKLPYHIKTTEELINFTKTARIKQK

>ETJ84324.1 phosphomethylpyrimidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTQMNYAKEGIFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQINA

KDFLDVVYHHAKSGVDFMTIHAGINSRAAHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGIQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVIDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLA

>ETJ84323.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDKSLEEIDLLKLIICALSFISVCTALILFLLLPTLKNYKQANLRENSQLAILKAAKLKFDFSEDKIST

LRSENNKSLEQFEQNFNIGNFDIFLQKYFQNVKIQETKPEKQEKYLKNRLAIKATMNNPRRLYDFIDALK

NYNNLIKLDYPLNLKAGEQGISIDLTLKVYSS

>ETJ84322.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTYSFIQPRKKPIFTLFDKIWLGLFGFSISFILLVYFTYTIKIALINSSINNEKQQVIVLQNQTKQNEML

YEILFDQSQIAKNFNTQNQIVKESLRNLFDIIVKTDNITLESVEQDEYSLKLIGVTPTREMFTLLLETPL

KSIFDQSYTTYYRLDNGWYRFVSISKQIPGVADER

>ETJ84321.1 clan AA aspartic protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFLLKKIFPQLFISIILEDKKNIVKASIYRGNKLISSNEKTFDKSENLLEYVKNLSKHFLFYHTALFLD

AKEQGLIPSTNIQDCEHFNIGKISLQHILFNNALVYTATEHVEYYSELFEEYRGLDFLYSPFALLYYNMQ

KEKQPDDQILLYGFKQGHLLAIIVAKGNTILYGDFKIFEQELGLELELPSEDNQEIENNNDDTEVTLDNF

NEALNNKFDLLDQENNLETLDNNDNFNLDELNQFSNDMELCRYIITSIEKFYNDDKYAGVFINGILLYSE

SDINISAIDFLESETFLEIKTKQINTLDLMIELMQKELK

>ETJ84320.1 hypothetical protein X909\_01940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKSFKIHCLTYIIFILQWLIFLSCKKHYKGEKVDRKAGVILFWHGKLALMPFAFRHYRQKNKKAYVMIS

HHKDGEQIAKIIKLFGLDTVRGSTSRGASSALRAAFKVLEQNDDIVITPDGPRGPYHSISDGSIILAQKK

ELKIRILNYEANRFWEFKSWDKMIMPKPFSRITYSLSEPLDILSLDKEKAKEFLMEQFDKISLADQFKE

>ETJ84319.1 (dimethylallyl)adenosine tRNA methylthiotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGVDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIYKEAQKAIEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEGLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKEW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETVDVLEKVRFEQIFSFKYSKRPLTKAATMPNQIDE

EIASRRLSTLQNRHSEILDKIVKKQENKTFKVLFEELRAGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEIV

>ETJ84318.1 hypothetical protein X909\_01930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MELKLARTLINEKPKNISLEKIEEAIEKEGQKFFYFDKDNTHKQLIALVNHFEKKGVSIYHRTVKYGLDD

NDFMYEVHIL

>ETJ84317.1 transcription elongation factor NusA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKIADIIESIANEKNLNLENVREKVATALINTAKRIYGQEYEFFVDPKNLNLYQKITIVADNDERLQNK

SESFIALSKAKSEAPDVEIGDELTYECSLENLGRTAVNTLHKELEYHIQKLLEQTIFEKYKNKVGQMVFG

TVVRVDNEENTFIEIDELRAFLPRKNRIKGEKFKIGDVVKAVIRRVYTDKGIKIELSRTSPKFLECLLEA

EVPEIKDGYVNIIGCARIPGERAKIILQANGTNIDPVGATVGVKGVRINAVSKELHNENIDCIEFTNESE

ILISRALAPAIVNSVKIEDKKAIVSLNSEQKSKAIGKNGINIRLASMLSGYEIELNELSSSQLNNAISNE

EAMKNLQDLFKI

>ETJ84316.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNYIELLKNNKNIRILASVQFIVYFGAWFSQTGVFTLLVELNAPTWATATSAMLAFLPGVLLAPINGVIV

EKNKPKKLLLSMISIELISIFCLIFVTSLSMLWLLFILIFIRLCVASIYFQAEMSLLAKILTPQELKLAN

EMHSVIWAISYTAGMASAGIFIYFLGVKTTFLFDCILILIGISFLVRLSIPDFHQKTQSRFFTMIKEGFF

YVLNNKIIFHLILLHAFIGLTAYETLVTLLAQHQYKEVLSAALVIGFLNAVRACSLAIGPMVLSKFINDK

NLFYMYLGQGLGIILWALTQFNFYISFLGLIGAGFFTSALWAYTYTMIQKNADKEYHGRVIAYTDMIYLS

FSAIISMLMGFLFEIGLSLELITGLLGMIFIFAAFYWKWFYKKYL

>ETJ84315.1 hypothetical protein X909\_01915 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRLDKKEALDLLHHASLTELGEMAYKRKLELHPEKITTFVVDRNINYTNVCCIDCSFCAFYRHHKEDDA

YILSFEEIGKKIEELEAIGGTQILFQGGVHPKLKIEWYEELVSWIKEHYPNITVHGFSAVEIAYIAKASK

ISITEVLKRLQAKGLFSIPGAGAEVLSDRVRDIIAPNKCDTATWLEVHRQAHKIGMKSTATMMFGTVEND

EEIIDHFEHLRKLQDETGGFRAFILWSFQSDNTALIQKHPEIMKQSSNKYLRLLALARLYLDNFKNLQSS

WVTQGSLIGQLALKFGANDLGSTMMEENVVSAAGASYRMNQDEMIRLIRSLGENPAKRNTAYEILERF

>ETJ84314.1 peptidase M16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQYLESRGIKIPFIFEKNSDFPIVVLKLVFRNCARSYDEIAGLAKMFSRILNEGVDDKFFKDLEFRAINL

EASSGFESLEINLSCLKENFDFALKSLEKLLLKPRIEEKTLQKLKINALGELASKNSDFDYLAKNLLNAQ

IFKCKEFQSPNDGDEKSIETLSLKDLQNFYKNFIHLSDLVVILGGDLEEKQAKEDLLKLLSKLQIGKKNT

PKKYELGKNIKDEILVRPESEQAYIYFATPFFADFKDKDLYLAKIALFVLGQGGFGSRIMEEIRVKRGLA

YSAYAMLDMNMSFSRVFGYLQTKNESAKEAKKIVKELFEDFIKNGMTQNELDQAKNFLIGSTPLRYESLS

KRLSMSFNEFYQGLNLGYYKEELKLMEKVKLETINAYIKKHQELLNISFASIQNEN

>ETJ84313.1 ATP-dependent DNA helicase RecG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKESDFEFFKKLKIRSAIDLALLLPKKIENLNPSKNPKENEICTQKITIKSVSSRKNQLFGLGFCEEW

QENISFVFFHPRAWHFGICKVGKELIFNAKLSHFNHTWQFNNPKILTSFEGFSPKYQILGLKDTKIAAFI

HKYLNYVNLKESGIEDKYIHFLLNLHAYDEKSFFMFENLQNFSKDLKYIEIYNFLKRLKAKKTHFKAHQI

NVFNIANWLKDLPFSLTKDQLNALKDIEKDLHSKEAKRRVIMGDVGCGKTLVLLGAALMVYPKQAILMAP

TSILAYQLYEEAKKFLPDFMNILFIKGGKKEKDLEQNIQKANLVIGTHALIHLESHNAVLVMIDEQHRFG

SAQREKIHSLNKQEFTPHFIQFSATPIPRTLSMIQSELLNFSFIKQMPFEKDITTYCIQNEGFSKLSEKI

KEEIVKNHQIIIIYPLVSASDKIPYLSLEQAKEYWQSHYEKVFVTHGKDKQKDEILERFRDEGNILLSTT

VVEVGISLPRLSMIVIVGAERLGLATLHQLRGRVGRVGLKSTCYLYTKLKEIPSRLKEFASTLDGFKIAE

LDLKNRLSGDLLDGFMQHGNEFKFFDFSKDEEILQKVKKDLAKKLPN

>ETJ84312.1 group III hemoglobin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFETINQESIAKLMEIFYEKVRKDKDLGPIFNNAIGTSDEEWKDHKAKIGNFWAGMLLGEGDYNGQPLK

KHLDLPPFPQEFFEIWLKLFEESLNIVYNEEMKNVILQRAQMIASHFQNMLYKYGGH

>ETJ84311.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDYLELLSSVGKLKKFQKNSILFYEGEEAKKFFILLKGKIRIYKSTASDKEITLHYFNPPNFIAEMPAF

KKLNYPANAIFEEDGEILEIDFINFQNLCSENKEFNFLLISSLFDKIKILEKKLSQNALDLRTRLLKYLL

ENEKNLDTISQKQIAIDLNVRAQSLSRVLKELKISELIDTKKGRIEILNKDMIMKELW

>ETJ84310.1 polar amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFDFILVQAPAFLTAAWLTIKLSFFGIIFSLIIGLFCILMSYFKIKILENICKLYIEFSRNTPLLIQLF

FLYYALPKFNIHLEQIPPLDLICLSVEETLRPSFACAIAGLSFLGGSYMAESLRAGFEAIRKQQFEAGLS

LGFSKFGNLRYVILPQALAISMPSISANIIFLIKETSVVSIIALPDLVNLMKSLNSLTYKTDELLFLLFM

GYLCIILPLSFILLKFEKRLLHA

>ETJ84309.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEFLNTDTLLRLWQGLFVTLEISFISIIITSIGGLFLGILMSFKNTYIYAFCRLGLEFVRVMPLLVWLF

VVYFGFPRWFGWDLSSVSAAIIVFSIWGCFEMMDLVRVSLQSIPKHQYESASSLGLNTVQSFVYIIIPQA

MRRLTPMSMNLLTRMIKSTTFAYLIGAVELVKVGQQIIEFHNRNDFAPFIIYGLIFFIFFILCYPITLYS

RKLEKKWS

>ETJ84308.1 glutamine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSILKIENLQKYYGSHHALKDINLEVKAKEVVVILGPSGCGKSTLLRCINGLEEIASGNIYIDNEKIDKD

FKEWPRMRQKVGMVFQSYELFEHLSVEENILLGPMKVQKRKKDEVLKEAKIWLEKVGLLHKIHAYPRELS

GGQKQRIAIVRSLCMNPELMLFDEVTAALDPEIVREVLEVMLNLAKEGMTMLIVTHEMGFAKAVADKIIF

MDEGKIIEENDPKSFFENPKSERAKKFLNLFDYHK

>ETJ84307.1 elongation factor Tu [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>ETJ84306.1 50S ribosomal protein L33 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTLHKEVKLKS

>ETJ84305.1 preprotein translocase subunit SecE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>ETJ84304.1 transcription antitermination protein NusG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSTHKWYAIQTYAGSEMAVKRAIENLVKDNGIEEQLKEIVVPTEDVIEFKNGKEKISERSLYSGYVFALL

DLNTELWHRIQSLPKVGRFIGESKKPTPLTEKDINLILEKVHNRAAPKPKISFEEGENVRITEGPFANFT

AIVEEYDMVRGLLKLNVSIFGRSTPVEILYSQVEKII

>ETJ84303.1 50S ribosomal protein L11 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>ETJ84302.1 50S ribosomal protein L1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>ETJ84301.1 50S ribosomal protein L10 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKVKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>ETJ84300.1 50S ribosomal protein L7/L12 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAAPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>ETJ84299.1 DNA-directed RNA polymerase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDNKLGNRLRVDFSNISKQIEIPNLLQLQKKSFDYFLNLDNGESGIEKVFKSIFPIHDPQNRLSLEYVS

SEIGKPKYTIRECMERGLTYSVNLKMKIRLTLHEKDEKTGEKVGVKDIKEQEIYIREIPLMTDRVSFIIN

GVERVVVNQLHRSPGVIFKEEESSTVANKLVYTAQIIPDRGSWLYFEYDAKDVLYVRINKRRKVPVTMLF

RALGYKKQDIIKLFYPIQTIHVKKDKFLTEFNPNDFMDRIEYDIKDEKGKIVHQAGKRLTKKKAEQLIKD

GLKWIEYPVEILLNRYLANPIIDKESGEVLFDSLTLLDESKLAKIKEQKSFDIANDLANGVDAAIINSFA

QDGETLKLLKQSENIDDENDLAAIRIYKVMRPGEPVVKDAAKAFVNDLFFNPERYDLTKVGRMKMNHKLG

LEVPEYVTVLTNEDIIKTAKYLIKVKNGKGHIDDRDHLGNRRIRSIGELLANELHLGLAKMQKAIRDKFT

SLNADLDKVMPYDLINPKMITTTIIEFFTGGQLSQFMDQTNPLSEVTHKRRLSALGEGGLVKERAGFEVR

DVHATHYGRICPVETPEGQNIGLINTLSTYAKVNELGFVEAPYRKVVNGKVTNEVVYLTATQEEGLFIAP

ASTKVDAKGNIVEEFVEARQDGETILARREEVQLIDLCSGMVVGVAASLIPFLEHDDANRALMGSNMQRQ

AVPLLTASAPIVGTGMEQIIARDAWEAVKAKRGGVVEKVDNKSIFILGEDDKGPFIDHYTMEKNLRTNQN

TNYIQHPIVKKGDIVKAGQIIADGPSMDQGELAIGKNALIAFMPWNGYNYEDAIVVSERIIREDTFTSVH

IYEKEIEARELKDGIEEITKDIPNVKEEDVAHLDESGIAKIGTHIKPGMILVGKVSPKGEVKPTPEERLL

RAIFGEKAGHVVNKSLYATASLEGVVVDVKIFTKKGYEKDDRAIKSYDKEKMALEKEHHDRLLMMDREEM

LRVCALLSKAPLNSDQKIGDKNYKKGQTADISELEKINRFTLTTLIKAYSKEIQKEYDDLKNHFQNEKKK

LKAEHDEKLEILEKDDILPSGVIKLVKVYIATKRKLKVGDKMAGRHGNKGIVSTIVPEVDMPYLPNGKSV

DIALNPLGVPSRMNIGQILESHLGLIGLRLGDQIQEIFDRRQKDFLKELRAKMLEICSIPRLASEKEFIK

SLSDEELLNYARDWSKGVKFATPVFEGVNIEEFSKLFEMAKIDMDGKTELYDGRTGEKIAERVHVGCMYM

LKLHHLVDEKVHARSTGPYSLVTQQPVGGKALFGGQRFGEMEVWALEAYGAAHTLREMLTIKSDDVEGRF

SAYKALTKGENVPATGIPETFFVLTNELKSLALDVEIFDKDEDNE

>ETJ84298.1 DNA-directed RNA polymerase subunit beta' [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKFKVIEIKEDARPRDFEAFQLRLASPEKIKSWSYGEVKKPETINYRTLKPERDGLFCAKIFGPIRDYE

CLCGKYKKMRFKGVKCEKCGVEVANSKVRRSRMGHIELVTPVAHIWYVNSLPSRIGTLLGVKMKDLERVL

YYEAYIVENPGDAFYDNESTKKVEYCDVLNEEQYQNLMQRYENSGFKARMGGEVVRDLLANLDLVALLNQ

LKEEMAATNSEAKKKTIIKRLKVVENFLNSNLNANTDSDEAVPNRPEWMMITNLPVLPPDLRPLVALDGG

KFAVSDVNDLYRRVINRNTRLKKLMELDAPEIIIRNEKRMLQEAVDALFDNGRRANAVKGANKRPLKSLS

EIIKGKQGRFRQNLLGKRVDFSGRSVIVVGPKLRMDQCGLPKKMALELFKPHLLAKLEEKGYATTVKQAK

KMIENKTNEVWECLEEVVKGHPVMLNRAPTLHKLSIQAFHPVLVEGKAIQLHPLVCAAFNADFDGDQMAV

HVPLSQEAIAECKVLMLSSMNILLPASGKSVTVPSQDMVLGIYYLSLEKAGAKGSHKICTGIDEVMMALE

SKCLDIHASIQTMVDGRKITTTAGRLIIKSILPDFVPENSWNKVLKKKDIAALVDYVYKQGGLEITASFL

DRLKNLGFEYATKAGISISIADIIVPNDKQKAIDEAKKQVREIQNSYNLGLITSGERYNKIIDIWKSTNN

VLSKEMMKLVEKDKEGFNSIYMMADSGARGSAAQISQLAAMRGLMTKPDGSIIETPIISNFREGLNVLEY

FISTHGARKGLADTALKTANAGYLTRKLIDVAQNVKITIEDCGTHEGVEINEITADSSIIETLEERILGR

VLAEDVIDPITNSVLFAEGTLMDEEKAKILGESGIKSVNIRTPITCKAKKGICAKCYGINLGEGKLVKPG

EAVGIVSAQSIGEPGTQLTLRTFHSGGTASTDLQDRQVSAQKEGFIRFYNLKTYKNKEGKNIVANRRNAA

ILLVEPKIKTPFKGVINIENIHEDVIVSIKDKKQEVKYILRKYDLAKPNELAGVSGSIDGKLYLPYQSGM

QVEENESIVEVIKEGWNVLNRIPFASEILVEDGEPVVQNIKAGEKGTLKFYILKGDGLDRVKNVKKGDIV

KEKGFFVVIADENDREAKRHYIPRESKIEFNDSEKIDDANTIIASAPKKERKVIAEWDAYNNTIIAEIDG

VVSFEDIEAGYSADEQIDEATGKRSLVINEYLPSGVRPTLVIAGKGDKAVRYQLEPKTVIFVHDGDKIAQ

ADILAKTPKAAAKSKDITGGLPRVSELFEARKPKNAAVIAEIDGVVRFDKPLRSKERIIIQAEDGTSAEY

LIDKSKHIQVRDGEFIHAGEKLTDGVVSSHDVLKILGEKALHYYLISEIQQVYRGQGVVISDKHIEVIVS

QMLRQVKVVDSGHTKFIEGDLVSRRKFREENERIIRMGGEPAIAEPVLLGVTRAAIGSDSVISAASFQET

TKVLTEASIAGKFDYLEDLKENVILGRMIPVGTGLYGEQNLKLKEQE

>ETJ84297.1 30S ribosomal protein S12 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVRDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>ETJ84296.1 30S ribosomal protein S7 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>ETJ84295.1 elongation factor P [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVPNIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKTVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFDHYDEVPKNVADEIIKKRNG

>ETJ84294.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKIAFFIIFVISFLTAQSPVNFKEDNNITKEQNIFKEQPPKRIKIPTH

>ETJ84293.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDLITLAQLSQGYRYNSDSLILADFILKQGIKGAVFDVGAGCGIIGILLKKNIANLSLSLIDIQKENIK

LIEKNLKSNQIQGDIFYDDFNQFQSIKKFDFIVCNPPFYRQGAYKSEDQHKAISKFQEFLPLHSFLTKAN

SMLKPNGTLYFCYEALALDEICFILKDMKMKITKLCFVHTHQNKKARLVLIQVKKGSKSPCEILPPFFVY

ENEILSKQMQEIHLRFRLKSYDI

>ETJ84292.1 hypothetical protein X909\_01770 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFDKNFSYAFDENACEKCGGKCCTGESGNIFASKEELEALRKHLKLESKEFAEKYLRKVGFKMSFKEVE

FEDGFACIFFDTQKRNCSIYDFRPKQCRTFPFWEYFKTHQKELEKECIGICYLS

>ETJ84291.1 hypothetical protein X909\_01765 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYRYLLFVLAAFFLVACGSSKINVVYPDYTKYKSNDFDLRVMKAYNYEYYKQYKEARDEFLSLYQDYNNT

NFLENAFLLTLANNLDRQAELNNLAKPYLNQNDNLKRLSALYALNSNDINNAQKLMKELLVKKDSDPRNL

ELYGDILVKKNDLKNATKYYRSAYNQVQNEEILFKLIGIYAILNDTLNIKNVLEFSRKTNGCTLKTCVLL

AKIYFDEKNIEALKSIYKELYQLTKNKSFALALVELLNSQGKTEEALKISLQYDLDDDIKFALYQNLKRF

DDAKKMSLALYHKTKNKEYLLRAAVFEFEAANEAKKITPKVIDSVKEKFEQAIDKDSNALYLNYYGYLLI

DYDLDVKKGIELVKLALEKDPQNLYYLDSLAWGYYKLGDCRQAWEILKQTLDDKEFANSDESKAHIKAIK

ACVKP

>ETJ84290.1 indole-3-glycerol-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKATAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPQIP

NSKIIIAESGLENKEFLEHLQNLGVDAFLIGEYFMREEDEGKALKALL

>ETJ84289.1 HIT family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEDLGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>ETJ84288.1 tRNA 2-selenouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLSEVEFAEFQKENFSLLIDARSPREFLHSHLIGALNFYALNDEEYQEIGTIYKKNQALAKARGASYICQ

NTAKHILKITQNFRIGEKVGIYCSRGGLRSKSIAVILSELGFRVVRLKGGFKAYRTFVTHYFENEINFDF

FTLCGNTGCGKTELLEQLPQAINLEKIANHLGSSFGDILGKQPTQKAFEAELFHNMQNLENFAFIESESR

KIGDIILPLKFYEKMQKAFKIYCFCSLENRVKRIQKIYQEKMTPLKFQQCVQKISPYISLNLRQDLLQSY

ERKEWQKLIVMLLEYYDKTYKKPDKIDLELNTDDILKAKEEILRYFKLKNYILI

>ETJ84287.1 hypothetical protein X909\_01745 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAAKALMLKKVTMESLKQNFSIPPPSEVKKLNSWHRCPWKIKLK

>ETJ84286.1 hypothetical protein X909\_02140 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLLKESKHEKSENLKWSDFLSLIKNPALWLVVAITFCTYFFNMSFYYFTPYASNVIGTSAVFAAILAVL

TSYIRPIVSIVGGFVADGFGKAKVMLVGFVTMGLGVVLLMFSAYWGVLYKWWL

>ETJ84285.1 L-asparaginase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANISGEQIANIDSSNMRDEI

WLKLAKEINKLFAEGVDGVVITHGTDTMEETAYFLNLTIKSDKPVVLVGAMRPSTAISADGPKNLYNAVA

LAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIVDGKVFFYNNVIKAHTKNAPFD

VSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGIVVAGSGAGSIHEDQKNVLKELMKKGLNVVVSSRV

VAGRVAVSDSDEKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>ETJ84284.1 recombination protein RecJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIIRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMCKFLELLAIAIVADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLVLTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGMVTPQFVIKEIL

>ETJ84283.1 CTP synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>ETJ84282.1 FAD-dependent thymidylate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEHCLHKDIE

>ETJ84281.1 sodium:dicarboxylate symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKQFFQDFLMLSQAHTITTLAMLCVVFYALKKMRDIKINFSLRMLFALLMGLGFGFALQYLANFPDAKE

ASNILWYSETKHWFAFVSSVFVAFIKMLVVPLVSICIIKVIIEIDKNIKISSLLGISLFWILFSTAIAAT

LGIFLGYSFDLGSNFAIYEGNKQIREIQTFSNIILGLIPSNIIAAINKENIIAIVIFSFFIGISAKKISK

KEEYEQAFKSFHNFILTFYNIMMNMTATVIRFMPYAVVCMMANVLLSNGFEAIKTAGLFIMLIYIAMLIM

FGVHFLLLASQGLNPIKYAKKAFPVWLFAFSSRSSLGTLPMTTSTLQNKFGVNSAIANFVASIGTTTGLN

GCAGYFPALAAVFVAFATHTHIDFTFALMIVLVAVIGSLGIAGVPGSATMAASIMLAGIGFGNNFVMLSL

ILAIDPIIDMARTASNVSGAMTSALCTAKNLKALDKEIYNS

>ETJ84280.1 ribonucleotide-diphosphate reductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFQKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLIKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVAIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIYWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>ETJ84279.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLIDDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLSDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>ETJ84278.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYIKIKLSNNGKKAFQVLMENLKISINEAQKLIDKKRLFCDGILVEEKNKILNGLVELIVYENNPKGVE

IVFENEDFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKEACVAHRLDKETSGLILIAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEENFIVDKAINLTKNYDDVKTRMQICKEGKQAITEFEILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKQQIESILDEKLNPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>ETJ84277.1 fumarylacetoacetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFVNFIQGQKHNLGVLNSSGKIVSFTDLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEIPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATAPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIAYVLEELSAGMLLKAGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKIKNINY

>ETJ84276.1 cytochrome B6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIIMILCLSYANIVFAVDMITPIPNSISYDKEKAKLGKSLYMDKSLSKDGKVSCNTCHRLDQHGVDGL

EFSIGVDNQLDKPFNTPTTFNSVFNFVQFWNGRAKDLAEQATVPFFNPKEMGLSPELLLQKVNSNENYVK

TFKKLYGEVTVENIALAIAEFEKTLITPNSPFDRYLSGDQNAISAQAKKGYEDFKANGCISCHQGQNIGG

NMFQKIGIFEEYPNQEDLGRYEITKREADKMVFKVPSLRNIAKTAPYFHDGSIPTLDACVQFMAYYQLGK

FLDQETVDNIVAFLESLTGEYHDK

>ETJ84275.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNKKSSFLIKFIILSTLVLAFILVLLGIIFNNYSSSKDNKELINIVQQLEISDEKINSVFQNSFNFINY

DPSVQAIKKMQENFTKLKTFGIDINKAEEIFNAKLIQLNYFKSANSIAVNSKLYLFELAKNYFEELEQNH

ETNKNNYKTMSSMLSVLSTENILQKTTLNQLNNLMKEIKNDTKSENLQLFLKHYNMIVKQISIMQDNSSI

YENNSLMKELKQLNTFTQNTIEQSNLFKFYIALAVFGITLVLFVFFILLTLKKVIMPIHTLEKLSANLAS

KEANLHSRLNIEPKSELGQSAQYINSFISTVQNSIIEAIENAKSSHQNSQKLKNNSMMLENSSNSQHEQI

QGVKEITHVLDDHINLAGNLAQESIENMQDMHILMDKVELTLSELVNLINENNEKEQNIVANMDNLTQSA

DNIIEITNSIKDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVGQLADKTSKSLLNINATVNTIVQQI

NDNKALMDLIHDSMKETSSKTNDLQQELVNSMHKLESSIESTQTMKDKSMEVKDKMLILGTNIDKVNELA

NSVKDLSCEINNISQNVLNGASKLSEKLSSFQ

>ETJ84274.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>ETJ84273.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNEINKTKNFYTLMCLAGFLIILLPVGIANLIFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGK

YLAALLIMTAVGLYQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFE

AELNGEKFRKYTKFSFAAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSKEGWNGLWQ

NISFLGKRDVKAPDYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVA

SSKWDVAFLDNNFSVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQY

ADFVKGNDKFKGQGESLGRGRLDTVRAKFNHVASMTTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSG

EFTPKANLKEGKTLGDLYVTSMTFKDGEIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDG

KINILSYQDGANKLYTLN

>ETJ84272.1 7-cyano-7-deazaguanine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>ETJ84271.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

RILPFVPEGLRAEFSYILGIREGRNGESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>ETJ84270.1 dihydroxy-acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGVDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMVVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGEAVCFNSQDEAIKGI

IKGKVKKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSVGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEEEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>ETJ84269.1 non-heme iron protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRQYETYKCQKCGNEVEVQNVGGGKLSCCGEEMKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEG

WHAVARHFREAAENEKWHARAEFKAYHEIVDGKPLEVTTKNLVTAAEGENYEHTTMYPNFAKIAEDEGKK

AIARLFTAIGKVEIEHEREYLALKKMLEEEEFFNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFK

REFLG

>ETJ84268.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>ETJ84267.1 ribonuclease HII [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKQLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDALGLSTCLKKGLKLIKKHFKTENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDRVMNFLAKDFPCYEFEKNKAYGTKAHKEFIAKFGICKLHRKSFKLL

>ETJ84266.1 glutamate synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>ETJ84265.1 hypothetical protein X909\_02420 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKKVKEVLNNSIFFIPNYQRDYAWEEKNLDDLWEDLLEAEQAVSDQMGHFLGTIVVSKNSKNPEIYDII

DGQQRITTIFMLRYALNFRTQNSQRNIVYFCDDNDNFRLQVQDENKLFFNEVLKQAENNKINIELENKAQ

TQGQQKLYKVFKAIWSYVASLESDKALKLFNIIGNMSIMWLEEQDSGKAIRMFQTVNDRGIPLLILDKLK

SLLILYSNKYCKGELDEVINERFGKIFKISMNIKKHKTIHSLGDVQFYQELEARIFNYHSLGVKEIAHYR

NSANIHYNELKRVLKNKDKTKEEFKKWLDDYSKDLLQFFETFLKILEKTQDNIEMFKIFMILKINPYFYS

SLIRLEMNNILDDECLRLFSQAEIIFYSFGQTNDSTAFKLGEVTESKDEFKNRIIDDCNKCIKRAGYYDI

NEFISEISEDNYEWGKYFHYLFLTYNNVGIEECMKLIDEKIYAFTIEHIIPQNIINNGLLKNYKFENEDD

FNKLKNTFGNLIPLEKILNSICSDRSLLDKKEYYKKSKLSCNLSFANDENFLNFEKKQIIKRNEDFTKWA

RKFFVDFLKITQK

>ETJ84264.1 glutamate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLD

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>ETJ84263.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLLTNPIIISVVLMTLLCLFRFNVLLSLLISALIAGVFSHLELVDTMNILISGMKENLKTALSYILLGA

IAAAISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLSLFNKLKIDRR

AVACALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSASLNDVTNTMYFAAICMIAGLFLALFVFYRK

PREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFVLMVILGGVEFSKVNEVFD

DGLKMMGFIAFVILVAAGYGEVLKESGSVVDLVNSVVPWMEQSKFLAVFFMLLIGLIITMGIGTSFGTIP

IIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFYNG

PLLILGSIIAMFL

>ETJ84262.1 molybdopterin containing oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQNDQKENRRDFLKNIGLGLFGISVLSNFSFENFLGSKALAKELPDFKIEGKKDLIYHGEKPLTAETEI

YALDSDFTKPENFFVRNNGLPPSLETIKERLHKGWTLEIDGESIINKKSYTIEDLKKKFKTYTYALTVEC

GGNGRSEVIPSTKGTQWGYGAVACGRWTGVRLKDILKDCGIKNDAVYIGYYGIDTKLNGEETSPISRGVP

ISKALQDETLIAWAYEGKDIPLVNGYPLRLVCGGYPASTSGKWLYKISVRNKIHDGEKMEGSYKVPVNPV

KPGDFNYKGEMKIIESMPIRSVITNIKNGSEIKANKKFEVRGKAWAGELEVSEVYVSNDYGVTWTKAKVE

KPLNRLAWQKWSAQISIPTKGYYEIWARAIDSQGNSQPMVLAQWNPGGYINNACHRVNVYGV

>ETJ84261.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIILILALFLSASWAQNLEINPDTGLIIDPDSPLVEANCLACHGSNLITNMHASKKAWLAAIRWMQDS

EGLWEIEPEDEEKILNYLEKYYGEKYDTRRRIPLAIFLQNKTH

>ETJ84260.1 DNA gyrase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVIDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPIEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEANYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQAHAKDVKHLDV

>ETJ84259.1 DNA polymerase III subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLSINKNTLESAVILCNAYVEKKDSSTITSHLFFHADEDKLLIKASDYEIGINYKIKKIRVESSGFATA

NAKSIADVIKSLNNEEVVLETIDNFLFVRQKNTKYKLPMFNHEDFPNFPNTEGKNQFDIDSSDLSRSLKK

ILPSIDTNNPKYSLNGAFLDIKTDKINFVGTDTKRLAIYTLEKANNQEFSFSIPKKAIMEMQKLFYEKIE

IFYDQNMLIAKNENFEFFTKLINDKFPDYEKVIPKTFKQELSFSTEDFIDSLKKISVVTEKMRLHFNKDK

IIFEGISLDNMEAKTELEIQTGVSEEFNLTIKIKHLLDFLTSIEEEKFTLSVNEPNSAFIVKSQGLSMII

MPMIL

>ETJ84258.1 chromosomal replication initiation protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

ASLKAKIEELKNKILVKSQS

>ETJ84257.1 Holliday junction resolvase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILGIDPGSRNCGYAIMEANKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDIFF

AYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPLDI

TDAIAVALTHAANLRVRV

>ETJ84256.1 flagellar hook protein FlgE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>ETJ84255.1 O-acetylhomoserine aminocarboxypropyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRLSNPTSDVLGQRLAN

IEGGAFGIPVTSGMAACFYALINLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIAIADIEKISQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GTALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRVIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEAKDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGITKATIRLSIGLENSDDLIADLKQA

IES

>ETJ84254.1 homoserine O-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>ETJ84253.1 hypothetical protein X909\_02360 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKSIAIIGGSIAGLSAALFFASAKNKELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSDIKELEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>ETJ84252.1 7-cyano-7-deazaguanine reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>ETJ84251.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>ETJ84250.1 hypothetical protein X909\_02345 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALKFNITIEYTKENQKLTRENSKSAGSFRDTKTYINLVVEKNTDSQICEKLLDDVEKYFIGGG

>ETJ84249.1 hypothetical protein X909\_02340 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQIFEISNSVQQKSKDNTFNLLLQLSL

>ETJ84248.1 2-isopropylmalate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>ETJ84247.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKNEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHITFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALAQGKMTKDLNAKSYLNTDEMGDCILE

ILKENDNG

>ETJ84246.1 3-isopropylmalate dehydratase large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>ETJ84245.1 isopropylmalate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>ETJ84244.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNTIIQKAIHKDLNSILEITKDALNAMKTMNFHQWDENYPNEIVFQEDIQAQELYVFKENDEILGFICI

NEKFEPEFYKQVIFNKNYDDKAFYLHRLAVKQNAKGKGVAQKLLNFCENFALENHKASLRADTHSKNFPM

NSLFKKLDFNFCGNFDIPNYQDPFLAYEKILNQKAF

>ETJ84243.1 hypothetical protein X909\_02285 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTMLDIFEIVFITAVVIIGFGGIVFVVTKEKK

>ETJ84242.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>ETJ84241.1 purine nucleoside phosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIVCAGGNENFSFAKAIGIGLVESAFHLGQLCFKEKPSKLIFIGTCGLYDKGEILEIYRSSYAFNVEFSK

ISHAFYTPAKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLNIDAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKYHYI

>ETJ84240.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKAKKQYGQNFLIDKSVLAKIIQAIPKEMNNIIEIGPGLGDLTQELLKISQVKAYEIDNDLIPILKKKF

QKELECGKFNLIHQDASEAFNPSLDEKPYFLVANLPYYVASHIILKALEDKNCLGLIVMVQKEMAEKFCA

KEGNGEFSSLGVLSAMICERKILFDVDPQCFNPPPKVISAVMSLIKTKDFNELCEIENFKNFLKDCFKAP

RKQLLGNLKTYKAKVLEVLSTLGLKENIRPHEICVDSYLKIYDKLKDKYGRKQRDK

>ETJ84239.1 ribonuclease J [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKKNR

NLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDAII

VDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGMIS

NKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPIDG

YPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFARTKGRVIMSTFSSNIHRVYQAIT

YGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIVTTGSQGETMSALYRMAT

DEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLTKP

KFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIADD

VVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINVKDEVLNDP

RFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>ETJ84238.1 ribosomal large subunit pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRINKFISHNTRYSRREADELIKQGLVKINNKIALLSDEVKFDDKVFVKGKRVQKRTQFSVIIYHKQKGE

IVSKKDDRGRKTIYDTLPRQFSTWLSVGRLDYASEGLLLLTDSPVIANALMHSDLEREYYLKVKGTVSKQ

VIEAMQNGLEIKNEKKGAHAKTKITSMSFAPFIDFEIFGSSGGYTKLRVVINEGKNRELRRFFGHFDLEV

MDLKRVAFGALDLGMLKAGKHRYLENGEYEKLRDFLKFNEIRY

>ETJ84237.1 30S ribosomal protein S10 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>ETJ84236.1 50S ribosomal protein L3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>ETJ84235.1 50S ribosomal protein L4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>ETJ84234.1 50S ribosomal protein L23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>ETJ84233.1 50S ribosomal protein L2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>ETJ84232.1 30S ribosomal protein S19 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>ETJ84231.1 50S ribosomal protein L22 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKRFRPRARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKK

ATAKKES

>ETJ84230.1 30S ribosomal protein S3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>ETJ84229.1 50S ribosomal protein L16 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>ETJ84228.1 50S ribosomal protein L29 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>ETJ84227.1 30S ribosomal protein S17 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>ETJ84226.1 50S ribosomal protein L14 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>ETJ84225.1 50S ribosomal protein L24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>ETJ84224.1 50S ribosomal protein L5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>ETJ84223.1 30S ribosomal protein S14 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>ETJ84222.1 30S ribosomal protein S8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>ETJ84221.1 50S ribosomal protein L6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>ETJ84220.1 50S ribosomal protein L18 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>ETJ84219.1 30S ribosomal protein S5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>ETJ84218.1 50S ribosomal protein L15 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>ETJ84217.1 preprotein translocase subunit SecY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>ETJ84216.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>ETJ84215.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIYGLWGITSLLTFWPSLMKIIRTLASKQEQARAYGVFEGGRGVVSTIYLAIATAIFGYFQTKALASKG

IEMIIIFYSLAL

>ETJ84214.1 hypothetical protein X909\_02135 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVALTLACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAIGIVSTFGYLPEVFAPVLAGDLLDKYQGVKG

FHIYFSIMIAMAIMGANFCLFWIKKYNKKRKKI

>ETJ84213.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>ETJ84212.1 multidrug DMT transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>ETJ84211.1 DNA topoisomerase I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKNAIENALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTIANKDRAKLILEACKNEAYTISDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIAAKFLDKDELKLYTLIYNRFLACQMNPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNFKIGENLKIQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSDVAFNVTEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKSESKNESENTAAKAKANGTGITCP

SCQKGEIVERFSKRGKFYGCSAYPKCNFISKYKPSEEKCEECGETLVIKELKKGIFLECLKCKIKKEMKD

>ETJ84210.1 biotin synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>ETJ84209.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIARILRLPLSATEIILGAIIAYFGFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYTLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKRIGFKNMILFGLSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAVIVMSMIKFLSNSKK

>ETJ84208.1 type II citrate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYMEMAARIVAKIPTIAATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWIEQKEQESLKIVRPRQLYLGETS

KI

>ETJ84207.1 hypothetical protein X909\_02100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIRLSIRFFKIIQEDFVEFLISTKILIKFY

>ETJ84206.1 CysQ protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNLDKFLEIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCIMISLVHDNRPVLSLIQNPLKGDIFYAHAKTKVYKNDKPL

QIDQQEYEKNKYKALLSVNHLSKEDEDFAKEHQLEAINIGSGLKFCAILEARAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYNPLNYKSSPFICVSSRNFLQDFL

>ETJ84205.1 hypothetical protein X909\_02090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRYCFILFLSLVLSSNLLANNFSQKKVIKIEKSADSFEVIDLNQNVANPNLNQQKALFDSSTLIEKKSQI

TKDKDIDFAIVLTSRKNFGYFLDGFRVSDKEFSTLFAKNLIQSLKLNWVNSAANGIYQSPKTLSYFSPND

AKLINVSPFLTQEKDKAKMYAKFTDYVVVVNLQDFYVNITNYFITTSKEGVANVNFKIISTSNGKILVAK

NAELNLTLKNQDAKQNYQDIVNQMPKMLASVIDNEIKKLKLTIN

>ETJ84204.1 UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>ETJ84203.1 flagellar biosynthesis protein FliQ [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>ETJ84202.1 succinyl-CoA ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKITIAHSPDADDIFMYMAIKFGWIGNDFAYENTALDIQTLNEFALKNEFDATAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKDTHLKRNFKVALSGANTTNALIFRMKYPEARIIYKNFLDIENVVLSGEVDA

GVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALRRSLPLSDAIKIERDLTNAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIHVNDYLIPSEY

EEARNS

>ETJ84201.1 recombinase RecA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>ETJ84200.1 enolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALAKKERTAKYNRLLEIELESDEYLGEKL

>ETJ84199.1 hypothetical protein X909\_02675 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDAMGMQILYTRSANFYVKMDAARAVHRFKHDGEHRSRVYVSLGKYF

>ETJ84198.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKILVVLVLLQVFSHAEELNNNKIRELIESSPEANEPQNKNLKNTLKNQKSPVNFKEQNTTNITNSQTD

QNEAKVFVREYVLHIDNKDLTFKKLRISEKEIQDAIAEYRNQELSLQNLKDITNIIAYYCQVSGYPSATA

YIPPQDLSSNKVQINIAFGTLGKVIIKNNSGVRDYALESKLNKNLKGKVITTKNVENEIYKINEIYGIQT

NANLQSGDGYGESDVIIEVNKGDSATLTLYSNNYGTKETGRFRAGMSQSLNNIARQGDNLNFYLQDSDEN

QIDYGINYSTFIGNLKITPFATQGHYVLGGIYRNLGFYGDSMNVGVNFSYPVFLYTEYSLYLVSGFTHKK

IKDYYLDGLVSNEKTSNSVNLGIEGTYKGLENNVLSYTLNFTYGNVENDGDSSGFNGVNLGNFGKMNLNL

SNEYQFQERLTHIFQLNYQKVVGGAVLDSSESVSLGGPYGVRAYLEGEGSADNVVSGTLGIRFQTPLEGL

YLTPFYDIGYSWYENKEY

>ETJ84197.1 hypothetical protein X909\_02665 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEIGEADARSSGLRCIVSDNFKTMNICVNAK

>ETJ84196.1 hypothetical protein X909\_02660 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINEAMVGFLENQGGVVSKDYNNGY

VSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFDTKTWTYTDSKGVVGKDEASEI

TQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMDKIKTGEGYFASFKEELQKYQE

ALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFADLSGNEGFRYKLENEILNSQGFSIE

GKDVDGKVYTGNFNFKGKLASLPEKPNISIYEPDKQGGEDPDKPSVLPPEIPEKVVEAPIKIQTEVDAKK

KKKMMIKWK

>ETJ84195.1 hypothetical protein X909\_02655 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIYAKAGDGVGGWFGNDYNNYEFNAAGGFLGGFLILELEM

>ETJ84194.1 adhesin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKLFLKQGASFSPAFDVSKQGNIINLGKINADNIVLIGNKVEIGVGAELAGQDGQTNAKTAHLIGNYVY

VSVGKDKENKNTIKIDKDGFKGTAIVEGFMQRDMTSFANDKYQFGDFGSIKSQSYDGKNSVDFYRAITIG

GHYYNNGQNINHYMNANEWKLFADGWNSDALNGDIFKDGLTTIRLMSDIDFSYLTSNGKQIAIDPVGANK

YAFSGNFDGGNYTLKNILINAQNTDKGWNTGIFGKVEGKDSNKKAKIYNLNVDGLKFSGKTNSGGAFVGQ

SSNADFSNIHLKNIGDLIFFDPNSKNGTDGFLYGGGFVGYAQSGSSFNRISLDNFSKIALQPEGKFSSAY

IDIYLGGFAGYSEGSNFSNILLNNIGGVTILGSETGGNIFAGGFVGYAGDKSYFSQIDLKNIGSVQADGK

TFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>ETJ84193.1 hemagglutination protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKMSKHIVLSFAVSSLLFSQAYALPQGGKFTHGTSGTIHTSGNTVTITGKGQNHVIQWGGGFNIAQGES

VNFTTSGKNYLNIAYQKDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFF

KARS

>ETJ84192.1 hypothetical protein X909\_02640 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGVENIYTLPLNGAPYISGSVAFDGEAKDNKLILESNTKIDLHNFQYFSDEEGKDIYDERITRLMGAFGI

NSNLQNNKVLIDSANIVLHGPDGEYTARSTFEILGALADVNNLKKYNVSKNSVIIKNLNLDLMVNSQNKI

TFYDAVLFGEIYGGRTLQGNAEKNSIEVYHFNSLDHLDKNIKTHASLNLYGGYSNDGEANGNKIVFRLKK

PLKISDNFYGKNYYNLYGGFATEGANFNIIDIQNDLTYEKVPQNYSDKFTVYAARTLSGKANNNTLSIKD

SVISLPLYAFITSETTLDGIDYIADESNNNEVNFENIKSSKNLSLMINAKNVSNNKINYNLIQSLTEASS

LGKGSKIILKATQNANNNLIKLKDCSSAAVESSCIIKADKESAFNKIIINNTVFSTASDKRQGYVGLIAG

VSANSHDNIMELVNLNIDEYKNQDAIFLAPSGTSDISNFKSYNNTLYLGGELNFFKDVNIDLLSGSVFHE

VNKKGKIITQILPHQEDFSKNNRLIIDTQDVKSEVVNNFENFTFILPNKIKNPILTIEKLINLPSNGSME

ILTKNKPTKGKYILIQSDVGIYDGVNRLLNQQELENLLEKMKNNKNKFNYNKIEKLAKSTLKNVNFSFEV

SDDAKIIYINIL

>ETJ84191.1 hypothetical protein X909\_02635 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRNEMKKYFNIFKIFTNKTNAKFGLGVCSVVLSSSVCFAAVQATSKDGKIFYISEHSFKDNQVYDPQAEI

FKKINGKNFYASKSKYPISNLTMIYNNPKSGNKNLSKLEILTPDTSKEEIITAFSTLGTVSSDTQAVPSS

FIPFIVTAYAQNTNATNNKLILENGELSSVYFCKPSIGDCGVPNNSQKGDRFKYLITAAFTDRRGGGI

>ETJ84190.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILSIALVALVGLFLGACSDSKNKESNASVELKVGTAPNYKPFNYKENSKLTGFDTDLVEEIAKKNGI

KIVWVETNFDGLIPALKAGKIDMIASAMSATDERRQSVDFTKPYYMSKNLYLKLKNNDSLQTKNDLEGKK

IGVQLGTLQENTAKAIKNAQVQSNKDLNIAVLALKNNKIDAIVADQDTAKGFLAENPELVSFYQETDGGE

GFSFAFDKNKQKDIIEIFNKGIDEAKTDGFYNTLIKKYELE

>ETJ84189.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLVLFDLDDTLIQGDSAKLWLKFCVEKGFLPQEYLEKIVFYQKQYQEKKLDMDEFMTFFLQSVKGKNED

RISSLVDEFIKIYIKPYEKAKELIIKYQDQRCIIISATAEFLVRKIASFLGVRESIAIKCERVGDKFSGK

AYGIYSFKEGKVLRLKEYLGKDYEKWMKDSYFFSDSINDLPLLESVSKAFVCNGDEKILKIAKERKYEIL

TF

>ETJ84188.1 spermidine/putrescine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYLKIKNFKKAYGDKIIFEDINFSAKKGEFITLLGPSGCGKSTLLRCIAGLSQINGGKISLNDKDLTKL

SPQKRNIGMVFQNYALFPNLNVFENVAFGLKIKKMDKKDIEKRVKKMLKLVELEEYAKTYPHKLSGGQMQ

RVALARSLVTKPDLLLLDEPLSALDAKIRKHLRVQIKEIQKELELTTIFVTHDQEEALELSDRIILMNEG

KIIQNSNANNLYLLPESHFVASFIGNYNILSPKELDSLGLKHDFKKDIALRPETIEISNEGLEAKIKEKS

LLGNIIRYRVRVQEIEFKVDTLNFSTHSTYEAGDKIALKFNLSLAKELK

>ETJ84187.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNENLSLKAKIYHYAVLFLVFLFLALPLMATFLYSISTSWGVSVLPDDLTLKWYQELFHDERFLLALWHS

LLVCVGSILLSVILVFPLVFVLNYYFLKLKAFVNILIIMPFAVPPIVSCVGLLQLYADNIGGTAWILIFT

YFTIALPFIYRALDNAMSNVNLNELIASNAMLGGSLMGAIFKLVLPNLRNGILVAVFLSFSFLIGEFLYA

NILVGSAYETLQVYLYNIKNQSGHYSSALVIVYFVLIFITTFIASLIKE

>ETJ84186.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEKFLAFLSILPFFIVFTFFMIAPLIWIVFNAFYVEEDEIYSLANFIHIFESKFYLQSIINSLQISFIS

SIFGLLIGLLASYSLFILAPSKICNFLFSLNTMISNFSGVPLAFAFIIVLGSNGVVNVFLKNLGIEPFVS

VYANFGVNIVYVYFQIPLAILLLLPAFKSLENSHLNACKMLGGGNFLYWLKIALPLLAPALFGVFVILFA

NAFGAYATIYALSSGNFNVAPVRIAALIAGDINLDPYMASALSIIITIIMLVVTFMANFLSKKYNFKVL

>ETJ84185.1 hypothetical protein X909\_02605 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKVILVVLDGLNCKSASINMGYLNALCKENLGKFYSLECELPSMSRPLYECLLTGVKPVLSGIINNKLS

FSKQTSIFDLCKEQGLKAGGAAYHWVFELYNKKEFIPSLHRHIEDENLTLPYGHFYYEDDYLDSHLFADG

EHLRNKYNLDFTLIHSMNIDDAGHKFGSHSIEYANKTKKVDNLISEYLPTWLEQGINVIITSDHGMTEGK

SHGGLSEDEILVPFFTFGSAFSYENAKIKQDEICGSVCEILGLKHDKRYNDEILKAKK

>ETJ84184.1 glycerophosphoryl diester phosphodiesterase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVILTSAMLCSVLFGVQEYEANLAGHIIIDSKSTVKPPKDAPDFFKTYGKFANITREEKIGTFKSKGN

RETDFYLPFKNQPIQGHSGIKYIPKKDVFWVISDNGLGKKYNSYDSMLYAHEFKFDFKNSKYELLKTVFF

KDSDKKYPYPITTETTKERYLSGADFDTESIQVINDEFYIGDEFGPYLLHFDKNGNLKEVFDVYVEGKKL

ISPDNPSLKFSDKPDGENEKFNIKRSKGFEAMASSKDGSKLYLLLEGSIYNNNAYENEKGKEYLRIIEFD

VKNKKFTGKTYKYFLEDKSHSIGDFNMIDDKYGIIIERDQKEGTKDKACKEGEDTKHCFNNVAQFKRIYK

VKLDDKTHEAQKISYIDLLNIKDRNKISKKPLANDKFVFPFETIEGVDIVDDSHIVVENDNNFPYSSSRE

PNKTDDNEFILLEVKDFLKSK

>ETJ84183.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKFFLSLGLVALLFSNSQAIDENLIKAAQAEGRVNSLAMPDTWANWKDTWADLKNLYGIEHSDTDMSS

AQEIAKFKAEKKNASGDIGDVGASFGEIAVKQGVAQPFKTSYWDQIPTWAKDKDGNWLLAYTGTIAFIVN

KDVVKDIPKTWQDLLKGNYKITVGDVSVAAQAVSAVLAANYALGGDEKDLSPALAFFNTLAKQGRLVNND

VSIANLEKGEVEVGLVWDFNGLGYRDKVGKDRYEVLIPADGSVISGYTTIINKYAKHPNTAKLAREFILS

DKGQINLAKGYARPIRIDHIILPDDIKAKLLPSEQYKNARAIKDQKAWEKSTKELPQLWQEKVIVDMK

>ETJ84182.1 magnesium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLYIYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSAAEIAFISSEFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLVRDLKNNEEDRNLIKLRTEIVTFATAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLNILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLIGTVYGMNFKFMPELELHYAYPIVLGVMVISIILPLVVFKKKGWL

>ETJ84181.1 hypothetical protein X909\_02585 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKMRFD

CYKRRYRSSTS

>ETJ84180.1 molybdopterin biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIKECLEPVFPAIPYCIDLIEGA

YIEANDEVIKVFRPKKKCQN

>ETJ84179.1 molybdenum cofactor biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFKKKISQKQKEKPKIPINDVILDDRLCKFKNKVQKISKDEASASLLARQLSRLIRANKF

>ETJ84178.1 peptidase M48 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLIAILCLYTALLSWISYAQIRFLEREKDKQAQILSEKDYQNAADIAIENEKFKLFSNFYNLIISIAWI

GFGFLYLKELLILNNTRFENTLFLLSFLIITSILNLPLSIYESFIKDKAHGFSNMTVKLFIKDTMKSLIL

TLIFGFLILYALLFCYDFFGTFWWIAAFIFAFCIIVIINLIYPTLIAPIFNKMEKLDDENLLKKISSLMK

QCGFSANGVYVIDASKRDKRLNAYFGGLFKSKRVVLFDTLLKALNERELLAVLGHELGHFVHKDIIKALF

NGAITMFLLFFVFANLPEFVYLESHLEGVNGGVFALLFIFANIFSFLISPMLNALSRKNEFAADQHGAKV

TSKEDMKNALIALARENKAFIKTSKIYTFFYLSHPSISDRIKALS

>ETJ84177.1 N5-glutamine S-adenosyl-L-methionine-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTIKNALMEAKSSLKGYENEAVFILCEYLKKDKAWLFLNQDIQIDHEPYFELIRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIVLAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIKENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKLTNMRYDKK

>ETJ84176.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFHSGLMMTQIFIKMGYLLIFVSVVNFLYE

IYSLIKDEMKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>ETJ84175.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLAIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISQSADRLNELSVKMNNAALNDSQKGMLRTEATRIQESINNSFNNATYNGKNVFQTMNFVV

GSGTETTNLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSGINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNDFNANYLKENAAAFVAAQSNMQLQSKIANLLQ

>ETJ84174.1 YggS family pyridoxal phosphate enzyme [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLEQILEKTKNVRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKENLDEKKLDIKWHFIGTLQS

NKINLLIKQKPILWHSCNGIKIAKAMDKRLDYKLNTLLEINSANENSKSGLDPNQAVEEYLQIQEECSNL

NLCGVMSIGSHSQDKESIIKSFETTFKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>ETJ84173.1 DNA polymerase III subunit alpha, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

QSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGEVNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFK

DDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIATNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRH

SVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCNLDLNLGNPTPPNFKFTREYAKDHNIILPEETKEFS

FDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRLEVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGP

GRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPERVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQV

ITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPEELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARA

LEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKNDERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNA

IKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLGIFQIESGGMQSLNARLKPERFEDIIAVLALYRPGP

MESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYGVIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDP

EKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFAGYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALL

TSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIREFSALEQDGKDAIIYGLGAIKSVGIPAVENLLEARQ

DGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDEFGFTRKALFDNMENLSEASRKMAEVRKNAASSLFG

EEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIYVSGHPLDRFYEQINAIDYVKSLDFESLKNNGEILS

IGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVFESNVEEIENIIKDENLKNNAYGFVLGFKAEGGEKP

SFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEENHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIAR

NAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDSIVEEISNKYA

>ETJ84172.1 chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLD

VLQARVGSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQT

AVQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAI

EAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQ

TTKDNVEIANES

>ETJ84171.1 zinc transporter ZupT [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQFTFEQIFIAMLLTLFAGFSTAIGSIIAFFSRKDDLRVLSLGLGFSAGVMIYISFMEILPTALKDFKNH

YDSHWAELLGLACFFGGILISLLIDKLIPEDVNPHEPKEDLSELKICPLPQKGQNPPKFHPGEKLHQINT

KALKRTGIFTALAIAIHNFPEGFATFISSLDNLTLGIAIAIAVAIHNIPEGLAVSLPIYHATGDKKKAFI

YSALSGFAEPLGAFVGALILLPFIGDLTLAISFAVIAGIMVFISLDELLPAAKTYDKAHDSLYGLIAGMA

IMALSLNLLGQ

>ETJ84170.1 trimethylamine N-oxide reductase I catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDRRKFLKIGASLSALPLIPSLSAGKTVEASKVSLGLVKNGEVITAAHWGILKLTIKDGKIVKSEPWEK

VTKMDNPLQHYTADMVYKSRVKYPYVRKSYLENPDNPKPELRGKDEFVRVSYDEAIKLIAKELKKTRDSK

GASAIFGGSYGWKSSGNMQNSRILLHRFLNVTGGFVGATGDYSTGASQVIMPYVVGSIEVYEQQTSWENI

LSDSKYVVIWGADPLSTLRIAWTSNEQRGLAYFEKLKNSKIKVICIDPVKTTTAKFLNAKWIAPRPNTDV

ALMMGMASHLIAKKKVNYEFLDTYTTGFDKFKDYLEGKEDGVKKDTKWASKICGIDEKTIKNLAETFYDN

PTMIMSGWGMQRAHHGEQPHWMLVTLCAMLGQIGTKGGGFGLSYHYSNGGVPTCKGGVIGGMTAGSLGIW

KNGKFKGLSKAEASSEGAEWLQNAASYSFPVARIADALLHPGKTIDHNGAKITYPDIDFIYWVGGNPLVH

HQDTNTNVKAWRKPRTVVVNEIYWTPTAKMADIIMPVTSSYERDDITMTGDYSNMHIAPMKQAVEPVGES

KDDYVIFSDICKIYGKDVFNAYTENGKKAKDFIKEYYNSALKQTQSFGEAFATPMPSFEEFWAKNEPITF

EPTAESLEWTRFSEFIEDPILNALGTDSGLIEIYSETIKNYNYDDCKAHPTWFEPIEWLGNASKEAPFHL

LTNHPRDRLHSQLCHTSLRDTYAIKDREPILINSKDAKKLGIKNGDVVRVFNKRGEVLAGAVVSDEIMQG

VVRLCEGAWYDPNENGLCKCGNANVLTMDIPTSKLANGNISHTGLVNIEKFKGELPKLTAFSAPKGAN

>ETJ84169.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFISFVVLATCLWAKNIAYTDEVVSLYLNKDDTKVIGRLLPTNPFEVLKSENNKVLLKIDGYVNPKA

LSVIYFNDSQRIIVAAFSKNTKLNFSQRVAGKDGKWDKVSLEIWADKKEFAKDNKEMLNRAKELFVNNCG

ICHAIHKEKEFTANAWPAIFRSMADRTGIDKKDRWLVIEYLQKNAKDFKTK

>ETJ84168.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHFTIFHIIAFIILLICFALICILIFLKVKQKEMALISYTIATIFTALLIYSIFLTINQFTTQADLSKLT

YTRDLRHESVIVSGKVQNLTKFEIRKCYLMLSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>ETJ84167.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKLREIVLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIAALFIIAFDIIICFLVYIYGYKLID

NEVRTRKTAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKS

REIKDLKKNATQVQRIAFENFNYENNYTIRLVSECF

>ETJ84166.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIILFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSSGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIAAQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSAANMN

>ETJ84165.1 branched-chain amino acid aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISADKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEDHTKRLLESAKITLLNC

PFSQKDLENAQIELLKANNFQSNVYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLKIAHDLGITVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARIIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>ETJ84164.1 tautomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPLVNIKLAKPSLSKEQKAELIADITELLSTKYNKSKERVVVVLEDVENYDIGFGGESVEAIKAKANK

>ETJ84163.1 bacterioferritin comigratory protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSANYDKFGGKNAVIIGIS

PDSVTSHEKFISKFNLKHILLSDSEKEVAKAYRAWGLKKNYGKEYEGIIRSTFVIDETGKIAQIYSNVRV

KDHALKVLESL

>ETJ84162.1 hypothetical protein X909\_03450 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSSVNKQILPASIEARIALYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPVKSHILFYSHFKNAYTRFSLDEESLKQNLKEGFYRS

TKDEMVFVEFWRFNAFFKNKWKNFEDFLKKPLSIQAEVRWRNQVFGAYNLSPVIILEEIFPSRYEVIAKS

EIYHDNQEVLAKI

>ETJ84161.1 3-hydroxyacyl-ACP dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>ETJ84160.1 UDP-N-acetylglucosamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>ETJ84159.1 ATP-dependent protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKELKAYL

DRYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAIC

DATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLK

IIEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEK

IEPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIA

QLALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>ETJ84158.1 rod shape-determining protein Mbl [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGFDKYLSEIVRLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>ETJ84157.1 rod shape-determining protein MreC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNKIFYVLVLAFLVFISFYYGGLIKQNVLRVNDFVIGNFYNIKDYLGKKISEHFNQANQIQQLKARNKE

LEDIAVKVTSFANQLNRILEDQNSTKYLPQVSLTRVISYVQLNDYKKLWLDWSKIPVGKNRGLIYQGYAA

GIAINKNGRAMALLQGDDQCVFSVYIGKSKAPGLIQGEDGRIVVKFIPKWAKINTGDEILTSGLDNIFFS

DIPVGIVNRVNDEDMYQSVEVKPYVKISIPAYLYVVDNL

>ETJ84156.1 carbamoyl phosphate synthase large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGTQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAADEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQVMRNASFAILREIGVDTGGS

NVQFAINSKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFGAKIIGTSARVIDVAEDRKKFAEFITKLGINQPKNSTATSVE

EAVLKASDIGYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKIAAEYV

KLGFKLMATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIR

FKIPYFTNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKS

>ETJ84155.1 Sua5 YciO YrdC YwlC family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYLAQTDTTVGFLSKNLEEINALKGRDKNQPCLITSAKFCELKSLARIPKSFKNLVRRSKKTTFIYPNN

QAIRIVKECKHANFLSKNGYFYSSSANKHGKEFDEEWARSVADIILDEKFFENIPSKILKLSKNKMIKIR

>ETJ84154.1 transaldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>ETJ84153.1 phosphoserine phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLCVFDFDATLMDGETIDILATAHGKGNQTSEITRHAMAGELDFFESLQKRVSLLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGISLGFANYLHHKNDILTGLVGGEMMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLTMFNESGLKIAFCAKEILRSKADICIDIKDLKEIIKVI

>ETJ84152.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>ETJ84151.1 chemotaxis protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLDLLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGNDTAIGMDIEPICARLTAISEGESPVAATDSN

EKSTPQAEPEAPKQETTTPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNTSSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGVEDPATRAANGKPEKGIVQLKAYNEGNHIVVEITDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLVEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>ETJ84150.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDENIVKTGSNEMELVDFRIFKQGHDKVYEGIYGVNVSKVREIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

EKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>ETJ84149.1 UDP-2,3-diacylglucosamine hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGDIFDLLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPIKLNLHTS

KGNNLVLNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITCNFISNKILQNQNKKNLFYQIK

DFENLAKKRYERYENLGFWVCEGHYHQNHQINKENIKYLNLASFAYERSFFVVEYQQEIKFREQKLRGQN

V

>ETJ84148.1 transcription elongation factor GreA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>ETJ84147.1 ipid-A-disaccharide synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTFLVCALEPSANLHLKEVLKAYKKDFGEFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELINLSFAQKINGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDEIKEFKNQEDINHTFSKKDDEKTIAFLPGSRRSEIRRLMPIFKE

LSQKFKGEKILCVPSFNLEKLEIYGDISEFKIESNTPKVLKKADFAFICSGTATLEAALVGTPFVLTYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>ETJ84146.1 ABC transporter ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIITLFGACALAFSMANADVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATWFEKAKKDADIL

FGASDQSALAIASDFGKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSG

TGVWEDMIGRTQDIKTIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLV

VYRTFNVVAKEGASKETQDFIAYLSSKEAKEIFKKYGWRE

>ETJ84145.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRTWSLSGVFIGYMGYYLVRNNITLANWYPKKERGIYTAVWNISHNIGGGIVAPIVSLSGFALAALLGVS

MANFNETYWHMNHFYTPAACAVIISLYALYAVKGNPKNEGLVDITEINEMRGIKTEEIKAIETPNLSSFE

IFYHYVLKNKNAWYVAWMDTFVYMVRFGLISWLPIYLLETKGFNKEQIGIAFWLFEWAAIPSTLLAGYIS

DKIFKGYRMPPAIGAIVIIFFMIIGYFTSNNLYMVIFFAAMAGCLVYIPQFLASMQTMEVVPAFAVESCV

GLHGFMSYVVGASLGTKA

>ETJ84144.1 stationary phase survival protein SurE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKIIQNIFDKGFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAA

ANLDFEDEKNSDIALLKKGYATITPIMLDLTAYERMKKVKKWLKANDE

>ETJ84143.1 MoeB/ThiF family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDRFTRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFQNLTLIDADKFEITNQNRQIHSEN

LGEEKAKVFARIYNVKGIVSKIDNEFLANFDLSEFDLIIDAIDDIPAKVALANLIDFKRQIFISSTGGAR

KLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLAL

RKVLAR

>ETJ84142.1 aspartate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>ETJ84141.1 pantoate--beta-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>ETJ84140.1 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>ETJ84139.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>ETJ84138.1 molybdenum ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>ETJ84137.1 molybdenum-pterin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNILNGKIIELLNEGEIVIVKISIKEHIFKVLMLDLHSLQDLKIGTKIQVLFKEHELGFALPHSILSVEN

SFLARIKSIKKGKILYHIFFDFEGDEISSIIAKEKALELKLEEGQEWLCFVKENDIILKAIYG

>ETJ84136.1 molybdate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLVLIFIVLFLSLNLNAQNLSVFVASSASKAMEEVKNEFLKSHPNDNIDLVFGASGKYYQLLKQGREF

DLFFSADTKYAQAIYEDQNALDKPKVYVLGILALYSLDESLLEGGIEKLKDKANKIHHLSLANPKVAPYG

VAAKEVLENLKLDKLFEDKIVLGENISVPVLHVDSNNADLGIVAYSLVSSINHPKGKAILIDQKYFTPLK

QSYVITRYAKDKKLAFEFSDFISSQKAKEIFKKYGFDTP

>ETJ84135.1 biotin biosynthesis protein BioC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFLKAKDYQKHAKVQDLMGLKLCEILKNLEISHFKKVFEFGCGRGEFSDKLSKIITFDEYLKNDILDYP

DNLNVEIFDMNTLATQILSKQKFDLITSNASLQWLDLKQVLPTLANMLNEKGILLLSTFGKMNLKEIKQS

TGLGLKYFSTKELEQIFKPYFSDIKITEEIVNLEFQNALEVFKHLKLSGVNSLGFYRLNKQFLKEFEEKF

QNKLTYHPIFILCKKDTK

>ETJ84134.1 hypothetical protein X909\_03310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>ETJ84133.1 8-amino-7-oxononanoate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLENILEALEKNHNLRKLTSLKHEGNFVFKEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSS

SSSRSLSGNFTIYEELESFLKSKFKEKEILHFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKL

GGAKFFRFHHNDMNHLENLIQKHYDHYENIIILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSV

GCFDEEGLGLVKALNLEEKVDFIVFTFGKALASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTK

FIFEKMSELKEKREKLQIIGNFFKNQLIEKNHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKE

PTVPKNTARIRFSLHAGLSKEDLKKVIELL

>ETJ84132.1 adenosylmethionine-8-amino-7-oxononanoate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNEILKKLDLEHIWHPCTQMKDHENLPLIPIKRAKGVWLYDFDDKAYMDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGVKKSKF

LSLSNSYHGETLGALSVGDVALYKDTYKPLLLECLSTPVPQSKDYTQELEILKDILEKNASEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHKFGVQVIFDEIAVGFGRTGTLFALHQCKQSPDFICLSKGITGGFMP

LSVVLTRDEIYNAFYDTYESQKAFLHSHSYTGNTLACAAANAVLDIFEDENILVKNQILSEFIKKEFSRL

EKFDFLGNFRTCGMISAFDILSTKYKRVGLFVFQKALEKGLLLRPLANTIYFMPPYIITKEQIVYVLESL

EQIFKEF

>ETJ84131.1 ATP-dependent dethiobiotin synthetase BioD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>ETJ84130.1 quaternary ammonium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEWFYLFLATACEIFGVVIMKELISTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIITCTAGLKFLS

>ETJ84129.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWQYILTAIGVCISFTCFLKACERLEVSITYSVFVGI

GTIGVVLNEMFIFNEAVSIIKLVLIAILLLSIIALKWVSKEA

>ETJ84128.1 50S ribosomal protein L25 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>ETJ84127.1 peptidyl-tRNA hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>ETJ84126.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MWIFFRFISGIYLKNFFIIFFSLLGFYCGIDLLLNFKDLPKAANLDLLYVMFLSFSAVPYVLPISLIFAL

VVSLISMIRANEFVSLYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFAYANDYKRNILKNGTIMNQSG

EVFLKFNNNFVYISKINNGQNSAQNIKIFNINDLNLSSFVSAKNAHFEGESWILRDGNITLLPKNYELAN

DGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNTDTLKINLYKFVFTPFFAPFL

MLIMYYFFPVIARFFNLAIVTFVTFVVTLMIWGVLFLLTRLSENSVIASEIGIVVPIIILGCLSAYMYYK

HR

>ETJ84125.1 diaminopimelate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAGAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIARKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIHEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECESDLYDYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFENQIALEEKFLKA

>ETJ84124.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYVIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLKPCKVAAFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFVDFASMIELARREVRFIAMHETS

IYKKDGRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRKQNSKIDFEDIKIISDDFRGDLLK

AKELGMKTLLVLSGKISDTKGLDTDLLDGVYPSVFEFLKELKCQI

>ETJ84123.1 chloride transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGAIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALANIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFAGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>ETJ84122.1 histidinol-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>ETJ84121.1 flagellar M-ring protein FliF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFKNMLHQIGQLYQNLTRKQRIVIAASIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQVYRQRMFIASEGLIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRVQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

TKKQFATVLRTSAAVTIDGKYQDVVDENGDVKSEYVPLTKEELASVESIVKNTINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAARKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>ETJ84120.1 flagellar motor switch protein FliG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQKLAEQGLVQTGDADEMIE

>ETJ84119.1 flagellar assembly protein FliH [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEENQAITPTQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELENAKEKFAKEGYEKAKEEFQKE

LSDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGELKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>ETJ84118.1 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKEFNPCEIKLGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>ETJ84117.1 peroxide stress regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYTEIKKEYPSISLATVYKNLNTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCAKCGGIEDLSFKDAKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>ETJ84116.1 hypothetical protein X909\_03220 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVYEIQKNFLLSDCTLLGNLKKDNIPFRNSKFETFYTQITSNHSVKFQSFCNEFYKITKFNNSILEQNQE

EKISKKKI

>ETJ84115.1 hypothetical protein X909\_03215 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYEEPKICILKIFFPTLDSSNEFKIPKDFKIQKELHHDLNSKHIVLYGFEYQNFDIEKYFKIIEKNQNFS

LDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLERKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILA

LKFKDITKKTQDILASENSNQDLLLFLSDEKIQDLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKI

ILFRKNILKNFDLELFENSFFELAIFLEYFYRFLEIKNLNKLYEKYCKDRDKNIFSKIINNKNKFCKLLK

KSSKNLKIYKG

>ETJ84114.1 ubiquinone/menaquinone biosynthesis methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>ETJ84113.1 exodeoxyribonuclease VII large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>ETJ84112.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKAAMLYECIDLSNGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQIKTLCEFM

KEFQGKYA

>ETJ84111.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKRFDECDRMSQIIVFDKYFKTAGQVAFEPSGDIKKQTKEALAELDALFEKIGASKGDLIQIQIWLANM

QDFDAMNEIYDAWIKNYPKPVRACVGSALAEGYLVEIQAFGKLREN

>ETJ84110.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>ETJ84109.1 phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEASEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>ETJ84108.1 50S ribosomal protein L32 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>ETJ84107.1 hypothetical protein X909\_03175 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAIMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEVYLSDYFYCINCNN

>ETJ84106.1 nucleoside diphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>ETJ84105.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>ETJ84104.1 peroxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>ETJ84103.1 flagellar biosynthesis protein FlhB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIMIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVTQLAWLRDRAIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVAGADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKETKTFKVL

>ETJ84102.1 flagellar motor protein MotB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QEKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQVALNLPSKVEFERGSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKAP

>ETJ84101.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGKKLKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPRISQFDKG

>ETJ84100.1 DNA polymerase I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMISGFANFIYSLKNEYKSDYIVFALDSKGKTFRSEIDP

NYKQNRTPPPPELLEQIPICIKMIEKMGFISVSQEGYEADDIIASFVKTCENRDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEAACLEKYGVKPNQIRDFLALCGDSSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLVRNERSRNLLLEGKENAFLSKKLASLYDNLEVQNLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLVQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMNENEAFYV

PLTHNYLGVGEQISLQSAKKAIEAIFNHFVIGHNLKYDFKIIQNNFDLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLETPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEILMKKFENEIKNLSEEIYTLCEDRFNLNSPKQMGDILFEKLKLPSGKK

GKTGYSTDEKVLNILLDKHPVIAKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFISLDYSQIELRILAHFSEDEKLLNAFANDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEANLAKSYIEKYFENFTSIKKYFEKVKNEAKQNGFI

VTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADVIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>ETJ84099.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNQQIDGIADKNFNTPEGRKVFKKAVFSCWLGTAMEYADFALYGLAAATIFSEVFFPEQTPVIALFLVL

>ETJ84098.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFGYLGDKHGRKNVMMATIALMGISTTLIGFIPSYAVIGVWAPICLVALRFM

>ETJ84097.1 major facilitator transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGEYAPSKRRGLVSSVIALGSNSGTLLASFVWLLMVQMDEASFKEWGWRVPFMGSILIALFAVYIRFHV

KETPVFEKQKNEMMKLRLNNEKHMKKDERSFWQRSRAFWTMVGLRIGENGPSYLAQGFIVGYVTKILLLD

KSVATTAVMIASLVGFLVIPLAGYLSDKFGRCITYRMFCLLLMIYAFPAFMLLDSKNEIIVILTIIVGMS

LASLGIFGVQAAWGVELFGVKNRYTKMAFAKELGSILSGGTAPMVASALLAYYGTWWPIATYFVLTAGIG

FVTTFFAPETRGRDLNKIEDAI

>ETJ84096.1 nucleoside hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRLILDTDIGNAIAGANTDDGLALALILSSKEIKLEMLSTVCGNVPSLVAYSVAKDLFKRLNLNIPVYLG

ANEALKEPSKAWRQRLDESVKNFKLEYLWENIKSPEILENINPDAIFKMGELVSKNPKEISICAIGPLTN

IAMTMKIFKDFDINLKELFIMGGSFDMPYYTKDTNFGFDPEAASIVLNSRAKITLIPYNATMQTLLTHED

LKELQGKNILCDFIVETLGVWIDYASKTRGTKGTWMHDALTIAYALDSSIADFDECYADVICDSSLARGM

SWRCFKEPKMSMGVDLSTKNCVKILKNVDNAKLLKLIKERFLKGVCYENYESITT

>ETJ84095.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDFLYNDISYLGLFMVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIVATLGNTLGSLSTYALAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSIFAFFTFLPLVGDLFALGLGFAKYSFLKTIFFILLGKLSRYAFI

IFIANSF

>ETJ84094.1 UvrABC system subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVSEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKIIDENLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFMQLSEEQKRL

VLYGNAKTIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAVKVAKKGL

GEILDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQR

IRIASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKA

GKFGGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRTQKEWLELKNVNINNIQDLSVKFPLQNLVAI

TGVSGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGAM

DEIRNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCEGKRYNDATLEI

KYKGKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSD

TGKTLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGIKGGKVIST

GSVEKVAKEHKKTRSYTGYYLDLELKNTQKS

>ETJ84093.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASVSGIISFSNSGVIDSEVIHKGILV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNFINF

>ETJ84092.1 anthranilate synthase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFVKNVNFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKNKICDFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPMKKKQKNDF

EILNSLEDEKNDFLKMCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSAYMFYFPSKYG

VVLGSSPEFLLKIKKREIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQT

RVENLFSIIKNKFVMHIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEITSELEDCDRGIYGGA

VGFLNFNEDITLAILIRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>ETJ84091.1 anthranilate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILLIDNYDSFVFNVKSMLEQLSNDEILVRRNDAISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKNSLIKQCRENELFSNLPSNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALGHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKPQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKDYEILQVAALLILITEKSLNEKSLSAFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNITTPNTLESVLKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYDNAKDLKDILSGRMQGAKFDLVVLN

AMFALYTANKASSPLVAKDMILEAIYSGKVIEYFKEYQAYAKA

>ETJ84090.1 N-(5'-phosphoribosyl)anthranilate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKLKICGIKDEKNAKDLAFLNIDFFGLIFAKSPRRVSLEQARNLSAIFHEKDKKVVGVFVDENLEQILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVENSLDLKSEIFANLVLFDAKGILKGGNGISFDW

TLLGSYTKDFALAGGIGLDNIHKAVQTGAKILDLNSKLEDEKGLKDINKIKQILKELKK

>ETJ84089.1 tryptophan synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVVNLSGRGDKDMQMIRDYKKGVIYG

>ETJ84088.1 tryptophan synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>ETJ84087.1 hypothetical protein X909\_03075 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKILEYSITHFCEHILRLRIEAAQDISGELYGASIPIMGKSEGECNFYLFFPKEFLKKIAEILINDEKF

KEDDWCDLTKECANQIIGYAKNLLNDAKGDDEYKLGIPEYLGKVDFSEIVLDEALTYKFENCYFRIGYCK

>ETJ84086.1 flagellar motor switch protein FliN [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>ETJ84085.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRLLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKEL

NSQLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVPTTTANNSQELMPKP

KSTSLEGYDYTNYILVMLILVILLIVLWWFKKTMVYKNNNVSRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLIEQRQKGKKS

>ETJ84084.1 guanosine polyphosphate pyrophosphohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKTAVVDLGSNSIRMVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCA

LKHKCKKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGG

GSSELCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAIS

NSIMQKNSYPLKNLHDFRYMLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKEGIFIFLKIAEKIKAKQ

VITSGVGIREGVYLQDLLRPKITFPPNFNPSLKCLQDKFLQSKQKNKTPHFALQIFTTLKNLHKLNDNYK

HTLLNAAKLCHIGEYLNFYFANEHSAHFVLGGLNYGFSHKEKALIASIIKLNGKKVNPYNLEPYKQLLPN

IHTISWLNFILCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>ETJ84083.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLLITKDCVCCDACREECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>ETJ84082.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTIKHKS

PRTSVMIMSSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIEDLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>ETJ84081.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPNLTNLNIKIFKPHIIKNATVGVKLKKKY

>ETJ84080.1 glycerol-3-phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>ETJ84079.1 cytochrome C biogenesis protein CcsA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVKSLLIASLVAFSSLNAASLIDEAKNSGLVALPKDQKGVDEILKQNGVKASEFTLEKAELGKKLYFEP

RLSKSGIISCNTCHNVGLGGTDGISTAIGHKWTANPHHLNSPTVYNAVLNNTQFWDGRAGTLADQAKGPI

QADPEMATPAKLAVEKISSLPEYVSEFKKIYGKSGVNFDNIADAIANFERTLITPSRFDKFLEGDEKALT

KEEQKGLKLFIDKGCVACHNGVNLGGNMQAFEVAGKYKFANLGDFKGDANGMVKTPTLRNVAETAPYFHN

GAIWNLKDAIKEMGSVQLGIKISDKEAKSIETFLKSLTGTKPAIVYPQLPISTEKTPKPEL

>ETJ84078.1 hypothetical protein X909\_03030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTFLAKFKDNYNKAKIKKFKQALKIELVWNLIVQV

>ETJ84077.1 phosphoglucosamine mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIAALQFS

ALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>ETJ84076.1 peptidase A8 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>ETJ84075.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEIVKIQERKLYFYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>ETJ84074.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLFQNLALKYSHTMMEKSLQKGFNVELLKQPEEKIPKQDKSYMLYAHVPFCHTFCPYCSFHKYYYDENL

AKVYFQNLREEIKIMKDKGFDFTSMYVGGGTTLINEEELLKTLELCKKLFNIKEISCESDPNHIDPNKLS

MFKGIIDRLSCGIQSFDDETLKKVARYNKFGSSKELQEKISKALGILPIFSIDLIFNLPGQSEKQLLNDL

EIAKNLAPQQITTYPLMKSNLTKDNIAKSLGVSIKDNEFAYYQIICEFFKDYTQNNGWSFSLEKNKLNDE

YVSSHHEYLGVGSGAFSFLDGELLINAFNLNDYAKFIQEKQNANIAKACFDKKEIIKYVFLTEIFSGKIE

IDKFNKTLNCNLEKELFIELLGLKTSGAIIKDQNALIATEFGQYLFVVLMKDFYTGMDLVRAVFRDDKRL

KNKDYIDIMKENIDPLNSASMEFKAETN

>ETJ84073.1 chain-length determining protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKAKIVQNLNALFKQRAEFYSYFDENIAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>ETJ84072.1 outer membrane channel protein CmeC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKENNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>ETJ84071.1 RND transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGAIFYLYKAVPNSLVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLFT

SSLKENAAAMFIGLQDWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSGK

SYDEIQKDVNKLVAAANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVND

FSMLGKNFQVNIRAKGDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQP

APGYTSGQAIEAIAQVAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLA

VVTAVPFAVFGSFLLVYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKL

RFRPIIMTSLAFTFGVLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKR

GKVHE

>ETJ84070.1 hypothetical protein X909\_02990 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFLIGVPLYLAQE

>ETJ84069.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLFQKNTILALGVVLLLAACSKEEAPKIQMPPQPVTTMSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQALMAKATFENASKDFNRSKALFSKSAISQKEYD

SSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSASTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>ETJ84068.1 TetR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>ETJ84067.1 4Fe-4S ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQGHITNYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFLTQEFYLMPFVLIFLFL

FIFFITTLGGRIWCAWSCPQTIFRVIYRDIIQTKFLKIRKNINNKQKEYEGQYFKKFLGVIIFYFISLVA

VSNLLWYFIPPEDFFNYIQNPGEHLLLLGILFCASLLFTLDITYLQEKFCVYICPYARIQSVMFDHDTMQ

VIYDEKRGGLIYDGHTKLHKKPPEGECIGCEACVSICPTHIDIRKGMQLECINCLECADACSKVQSKFNR

PSLINWTSAKAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELV

ISNAYTFLFQNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIRATKNLANNDKKDVI

FPLHIKAYAKDNEKISVFRKSIFVYPKSTLIKDKNELK

>ETJ84066.1 30S ribosomal protein S21 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>ETJ84065.1 colicin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDFFDFFHKFILKTENLNLEILTKNNKYFLIPNEVCRYKKSPFGLLG

>ETJ84064.1 hypothetical protein X909\_02960 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>ETJ84063.1 glutathionylspermidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANAYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLIPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANISIIKDGKTLHENVGPYGNNKAIYQEYVEFNSCE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>ETJ84062.1 2-hydroxyacid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKNLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFMFAFLNQVLYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVVKISKAFGAEIYYYSTSGANKNADFVHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEALNALMDIVYNNLKEWIENGK

>ETJ84061.1 hypothetical protein X909\_02945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>ETJ84060.1 hypothetical protein X909\_02940 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKHCLALCFIFFLCACSAKNQNFSSQSLMVLIASPMIKINDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKQVFNQKFFKNVYYDDILNDILKANPLWQGRNLEKTDCGFEQNLKAKNYEIFYYVCDNKV

SFFDKISHTKIILTHIQN

>ETJ84059.1 hypothetical protein X909\_02935 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFFLLVFCFVNLALAQVYKGELYFYHLQDKEIFAIVYDNTPMTPLFDRDKNQTSSSFLIVDDINGNLEI

PLFKTNDFWQDEHKKYKINSSKMLTYDNKNFQGENLGTTTLELVETQDGIRIKRSLDFIGFKDDFKEFHP

VHKGVFSFEQIRQKPIFLQDGKISFEEWYYFYEDGMSRAILELNNFVYDINAHAFVKLNDLYNTKNQKFQ

NLLHEKLKNTCDECFEDLQNLQFNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>ETJ84058.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLENNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FARIQLYERLSFIQKSAYNSEIKNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSTDINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFQKPDF

KDRLKIWEKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSKDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>ETJ84057.1 ferric reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTKYFKFLAYFSFIISLIYGFYHIIKAFDFVKEAYIYTGIFALIFLNLSLLFSLLKFKKTKNYPKILGI

FAAFWAILHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCL

VLASYHYFLTPKIPMFWEWSALIIALFYFIVRYTKTLKKLKSNNLTFIKT

>ETJ84056.1 sulfoxide reductase catalytic subunit YedY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIITPENLYKKRRDFLKLGAGALISSSVLASKLSALNFTSDTNPNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSMEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEMAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>ETJ84055.1 orotidine 5'-phosphate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>ETJ84054.1 transcription antitermination protein NusB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTDTPSAIVINEAIELAKELANDNSPKFINGVLDALIKAKK

>ETJ84053.1 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>ETJ84052.1 2-dehydro-3-deoxyphosphooctonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKNGVFVAERGSSFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLNLTRLKNCVNTLLEIQNIIKENK

>ETJ84051.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFFIVYLLKRSKAHKEGGHFWL

LVFRGVVGTLSLYMFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQ

PWAHNLNHSGFDLKNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQ

HLDSLHLDFILAPFVMPSLTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIIL

GDSLPSAMVFLGIIGIIFGGLILVKNKGKK

>ETJ84050.1 GTP-binding protein Der [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>ETJ84049.1 shikimate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKVSEIFEQKGENFFREQEQKMSDFFS

SCEKTCIATGGGFVNVSNLEKAGFCIYLKASFEYLKKRLDKDEISKRPLFYDEIKAKKLYNERLSKYEQK

ANFILNIENKNIDELLSEIKKVIK

>ETJ84048.1 tryptophanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRVLTGLQPSGDLHIGNYFGAIKQMVDAQEKSQMFMFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

PQKSVFWLQSDVKEVMELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMAADILLFDTQIV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEAKVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDFKNCNVFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELANAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>ETJ84047.1 seryl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>ETJ84046.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEQEDIILEKPEDGLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPQENSESGFKFTRESAPEDVST

FEEVESQEPTPWYKDRKFMSLVGLSLGIICILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDMEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLARLQNSYDNDKDRYKILDAYKIQVRLNKDLFNIAVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQAALYIKKANVTDFVDDSADAGVYLNTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDETKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPNIAREFYVNLMHIAGLLNLERQKIKEL

INVSGAKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAIGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>ETJ84045.1 hydrogenase-4 component G [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQVNTFSNIASMAQTQVSNKKADDAKENTKDKNVQSANSSKDVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNAVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSGKNPLDMNTDELQQLVSEDGFFGVENTA

NRIADFVIKGGGDDVEKLKKGLEGMKKGFEQAEKMWGGELPQISQNTIDAALKKVSDRIDELGGKTLDLQ

A

>ETJ84044.1 pyruvate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKNLDTIRKVAKELHIRIGILQDISG

PKIRTGELKEPFELKKGDRLDFYRETILGEKIAQNHYKISINQKSILDMLKIDEYIYLYDGSIRAKVVNI

DDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFVQNAHDIDEVREIL

AQNNAKISIFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQKANNASKPVITAT

QMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVGIMCQTIIETEKRYPYNKFNDFN

DLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLNSLSIVWGVNPAIL

VNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGTSNLIRILNKEQIAYYLQ

>ETJ84043.1 malate:quinone oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGLMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYVKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIIHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

VDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLVCNYLGMEFNEDKFSSELL

>ETJ84042.1 pantothenate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLLCDIGNSNANFLDDNKYFTLSIDQFLEFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYGVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>ETJ84041.1 conjugal transfer protein TraM [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYTGKTKFLMKDALFLENLAQQININNKYFFSMTSLCSKAKNHLEMKGFNIYAAL

>ETJ84040.1 hypothetical protein X909\_02840 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLAYQDGEYFTADNNGNLKIFDNSYNEIYNFQFDASVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQIIKDVVISAENFFNNAIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFVKSNIYN

NYLYIFEKTGYLIKMNLNLDNTQVFKLSEAVDKISFMGNGKFYYGNKILDLL

>ETJ84039.1 hypothetical protein X909\_02835 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPSNKNLLEQLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNTQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKFLEQNKIEEANVLLSQIKENSSLNQITKNLKHYQGITQ

>ETJ84038.1 glutamyl-tRNA amidotransferase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFVVPKIIE

>ETJ84037.1 colicin V synthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQAAEFIQSTFYKIENQSLAGFA

GFLAILIIFWIVCLLAGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFA

KNSYTLNLLKETGSFIMNQPLTENSLDHANEKLQDIVSDLNNTQKGE

>ETJ84036.1 Fur family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>ETJ84035.1 lysyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>ETJ84034.1 serine hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>ETJ84033.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALNEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHM

>ETJ84032.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLINGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTASSSNNNDSTNFAMPDQEVPAEPTAATSENT

APQASAPKQEVKQTVKPKEEAKKQTAVKKEKESTKQTPKKEQNANDLFKNVDAKPVHPSGLASGIYVQIF

SVSNLDQKSKELASVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>ETJ84031.1 shikimate 5-dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDKIYAYNTDALGFLEVIKDFDNIKKALILGAGGTALALAYVLKQKGVEVH

IANRSKERFKDFLAYRAYLYKDLQDFDFDLVVNSTSAGLKDENLPCDRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>ETJ84030.1 hypothetical protein X909\_02790 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVEPIDSGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEEQIKTIARLKGYKIVTANPDYTLKNSISIYTEEKNAQKTSNFMSGDYIKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSGFNSFDGDATFEESLPQTNSNQNNTIESTPTQNIPTNP

SSINQNNKSKNQDGVEIFE

>ETJ84029.1 prolipoprotein diacylglyceryl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>ETJ84028.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQTTAMIKNYNGANYEYTI

>ETJ84027.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNIQYSDALVIGGGLAGLRAAIEVAKSGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRMEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGPKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>ETJ84026.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>ETJ84025.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVNKDNYERYFLLKEFQELCKKIDLRVDIFSMQ

NAQICILNLFKSGFISKQDLLKALKILEKISKNTEIFDFILQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKSRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLKNNISIVDTPGLDDVVVQREIVTNEYLRESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIVLTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQEFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLKEAQDEISNSIAKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNLSRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGISKNIDSIFQSEKFALLRLKIEKLSNL

KSDLYELETNLDTVIFDTFKEFKMSEILNSLNINGAFFEFLNDKLKHYEKNQKSKLESLEKVLQSLKNQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>ETJ84024.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQINLLNDFIKAYENTYSVSFDDSFKGRIQELCKELNEPFMHASYALENELKELVFSLDKNVNIAIIGQF

SSGKSSLLNLILGRDCLPTGVVPVTFKPTFLRYAKEYFLRVEFEDGSDIITNIEKLAFYTDQRNEVKQAK

SLHIFAPIPLLEKITLVDTPGLNANENDTLTTLDELKNIHGAIWLSLIDNAGKKSEEDAIKANLELLGEN

SICVLNQKDKLSAEELDNVLNYAKSVFLKYFNELIAISCKEAKDEQSYEKSNFQSLLDFLTQLDTTVLKE

KFVKRKILNLCEILEDENQLFVGIFDRLLNQFQSYEKHLLLAYENFLKEIEILNHQILEQLKSISERISS

EIFASVKEKDAYFYKESKGFLKKDLYTRYDYKAPYISSDDAFLAMFYNSDVMSKEFKKIKNELYKSFEEI

KMKLKDFINILEREILLFKAEFSNIQKDHIFQSDKNFSELRAFCNASDEYFLKDFKELLFKSILELDLFF

EKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEFVLFYPKKSEIYERVLNELNVYEFETLLINK

PILTKIAKNFLEQSQNLIQEKNKFLDLKKAELQKRRAQILNVRESIKED

>ETJ84023.1 hypothetical protein X909\_02755 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIFLTLFLFFNSLFALSELEEGLKLYEANKFDKAYEIFKSLCEKDISKACFSLAFMHESARGVSKDLNQ

AYKFYDKACKLGLANACSNMALLLQNQGYENEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASVKSALAFYSKSCTLGFGDACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>ETJ84022.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQDNIIDRRSFFKLGLLGGSVVAASTIGGGAVLKAAELTHSHQASQGKSNKIRGRMFFQTQTEFDTLSAA

CERIYPKDEQGEGAIGLGVPYFIDNQLASAYGYNDREYMQGPFMEGKAEQGYQTPMQRKDIFLEGVHALE

ENAQKRYKKSFSLLKGGDQDKILSDFEKGKIQTTGFKSSYFFTLLRDMTVAGVLADPIYGGNDNKNGWRM

MQYPGAQMSYVDKIASDEFFNIEPMGLADMES

>ETJ84021.1 GMC family oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEVLKKVDVVTVGAGWTGGIVAAELTKAGLNVLSLERGHMQSTENFNYIHDEWRYGINYGLMQDCSKDT

VTFRHDPSGLALPYRKMGSFLLGNNVGGAGVHWNGWTFRFMPYDFEIQTLSKQRYGNKLGNDYTLQDWGV

TYKDMEPYYDRFEKTCGVSGEPNPLAEKMGAFRSSPYPQEPLENTKMLKRFESAAKSSNLHTYRLPASNS

KGGYTNPDGQDLAPCQYCAYCERFGCEYGAKASPLNTVIPKAMSTGKYTIRTYSNVTQILKKDGKVTGVK

FVDTRTMKEYIQPADIVVLTSYMFNNAKLLMVSSIGEQYDPKTGKGTLGRNYCYQMNMGTTAFFDEQFNT

FMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGTRPIQSAPLPAGAPTWGAEFKKALNYNFTRAI

TVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTDQDRALHKFITDKTAEVAKRMQGVKSIKKGAY

LKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDADNLFVVGAGNFQHNSGYNPTDTVGALAYRCAE

GILKYHKSGKSLA

>ETJ84020.1 hypothetical protein X909\_02740 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MITLSSFNRYFGNNPLQTLTKIRDESIENAKI

>ETJ84019.1 hypothetical protein X909\_02735 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNILHANSSHRFHKCMPKEVHQIYDTLKLMEQQEGTKKVEAKKEEQSNSTNTDKVDNKKINF

>ETJ84018.1 hypothetical protein X909\_02730 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>ETJ84017.1 histidine triad (HIT) protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREAIKLDLPKFEEFVKFLNSKIF

>ETJ84016.1 hypothetical protein X909\_02720 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>ETJ84015.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLGYKLFFVRFNFDI

>ETJ84014.1 hypothetical protein X909\_02710 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILKNLIKTFQILDFNKSDNCIEKNLKAGFIYFNYEILDYQSQLFSSFF

>ETJ84013.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSTLQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFAGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIAHAISPDTGSMHLGATIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIALGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>ETJ84012.1 hypothetical protein X909\_02700 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLSD

KEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>ETJ84011.1 hypothetical protein X909\_02695 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQVNYRTISSYEYDAISGQYKQVDKQVEDYSSSGKSDFMDILNKADEKSSGDALNSSNSFQSNAQNSNSN

LSNYAQMSNVYAYRFRQNEGELSMRAQSASVHNDLVQQGANEQSKNNTLLNDLLNAI

>ETJ84010.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTINQIFQTQIDIKKSIFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLARAYSDAANAVINNSSLLSFELKKNISIAIDLK

NLNRFEYFLKTYSFNFTKDFKDCKAILHIKLNEKEDQEFEIFCKNFAPFEIEKL

>ETJ84009.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFSHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGASISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYHLTFQKYKNLLWFLMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIFLIFCYFLIVANQLLYYFINNSNRHFANNYHFAKELALELKKQDVL

ELATAPSLQKRLRFYGIKNSNKFYLKALKQADKHDMDKKIVKVKLGKYEKVYQILNYD

>ETJ84008.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKAFSLLEFVFIILILGIVFNLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNLTKRFGIEKVEFKGSCSGFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYVYIPDFKTLKSQFVNIKNKNYECSKI

>ETJ84007.1 PseE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFLKKNLEAMQGSTYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLKLYQ

EQYTNYPFLFFYGLGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLDYNN

NIAELIFGLTEISLFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQAIWN

LPEMFKHYSYKELLDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPDYVL

SLERIPLTSEFFNNDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYIGGG

MSVAHSAYELAILLKCENIILIGQDLAYSKEGKSHTDDYINLALHEKDFERNKGHFTTIAYGGEGEVESS

EVWTLFRKIFENYAINNQKYIKTYNCTEGGARIKGTIEKPFAEICKEILTKDIKKPLKKLKKKTKKEQFD

KMLKSYRKIKTNIQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEILGP

TLHHEESLIAPIYTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRSLI

>ETJ84006.1 PseD protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFNLNQKELFNKNIEALDNIPLKESLKEIKSSKFKLILGKDNLDINLQNTSDNTFLYENVIDELNTMLN

TYNDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWTMFHILDFSNELQKNNLIIINTNI

LSEFDLLNFYKKANSIFLQFSRIYFLELISNYYERYNEEILKLNDTILSTIKISIIQYGNDSIDNLMGIK

HFIYNLSKLLTHPHSEIFLKKRYKLSDTAIIVSTGPSLTKQLPLLKQYANKATIFCADSAYPILAKHNIK

PDYVCMLERDDIVSKCFDNDFKEFDKGILFILASVVHKEVIEFLERNNREYMLVPRAYDFFYYLNLAKYF

QPIDGMVSVAHMNYWLAKFLSHKNIIFIGQDLAYSKDQSSHAKDFIHEKLHEGHFQKDENLFTSIAYGGK

GEVESSYFWKLFREIFEKWISHDNNFINIYNCTEGGARIKGTIEKPFLWACENLLGKDLNKPFPKLNPLN

INKQNELMLKAYNKIYKSIYHCKDFNKKLLQEYNEIKELYLTLENLQIEESKELLNFIIQKIDTIKYQID

DAKNMQDLYEILGPLLVQFELNLARIYVLNPKTPEDSFNKSLIWIKEHLEWIEMIYGHIQAQENALFENI

IPLEQKLKERKMQKYLRRIKNANK

>ETJ84005.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKDLFLKNTQALFEVDQILAYKLRALEKNDFKILQNENGINFIKDDIMLYKNPEQELLENLTLFQNKYK

KYPVLFFYGFGNGMFYKTLCENKNHKHIIVFEDELEILALALHLFDFSKELKNEKLILFHTPNITTAQLT

TLFMYEHIQKSVKIFNLFIHSDFYLKFYSHQIQELNKKLIENIRFIVLAKGNDPYDSIIGIKHMLNNLPK

LLNHGVFQNFLKARKQKVKNAIIVSTGPSLTKQLPLLKKYANKATIFCADSAYPILAKHNIKPDYVCMLE

RDDIVSKCFDNDFKEFDQGILFIISSVVHQEVIDFLEKNSRKYILVHRPLHFAVSLNLKEFGYIGVGASV

ANMAYELAASLRHENIIFIGQDLAYAKDGSSHPREHIYGNQGEKLRGEIYTLAYGGEKQVRTQLTWNLFR

QAFEKDIFWAKEKLKINTYNCTEGGARIEGAIEKPFQEVCETLLKENLKKPFDKPKILEKNKIKNKFLQT

QKLLIKNVKQSEEFIKKCQNELKKLDFELSKSQLNSQTLIKIKKNLLFFFNEFKRLKLFNELTQAIYYHN

ECEIMYYEVLNDLEQDKKIEDFLTNQKKWWLQSFEYLNTQNQIIKETLKKYKNDDI

>ETJ84004.1 N-acetylneuraminate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIGNFNTDKKVFIIAELSANHAGSLEMALKSIKAAKKAGADAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDIEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTIVSTGIATEEELFKICEIFKEEKNPDLIFLKCTSAYPTAIEDMNLKGIVSLKEKFNVEVGLSD

HSFGFLAPVMAVALGARVIEKHFMLDKSIESEDSKFSLDFDEFKAMVDAVRQAESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKESDFR

>ETJ84003.1 pseudaminic acid biosynthesis PseA protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNQNINWQEREKEFFELIKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLDNLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELQRVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLEFSGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>ETJ84002.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCFKMIALIDYKAGNLNSVAKAFEKIGAINFIAKNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALK

EQVLVQKKPILGICLGMQLFLERGYEGGVCEGLGFIEGEVVKFEEDLNLKIPHMGWNELEILKQDPLYQG

INNKSDFYFVHSFYVKCKDEFVSAKAQYGHKFVASLQKDRIFATQFHPEKSQNLGLKLLENFARL

>ETJ84001.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKTRIIPCVLLKNGQLVKSIEFKDFRTIGHLTSTMRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGRAKGYDLELLKIFQNKLKIPLIINGGLSNPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELARQGFAVRLL

>ETJ84000.1 N-acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLKNFTELNSQEIELIFKWRNHPDINQFMKTKYIDFEEHLRFLKKLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAKPNLKGVGQILMNEIIKYAFENLKVNTLKAYVFKDNRKALKLYQQNHFTIYDEDK

DFYHICLKQSDCKALPS

>ETJ83999.1 nucleotidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVLFRSDSSSQIGFGHIKRDLVLAKQYSDVSFACLPLEGSLIDEIPYPVYELDSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNPNLKKLQKFAKLHNNI

RLFIDHENIAKLMNESNKLIISASSLVNEALLLKANFKAICYVKNQESTATWLAKKGYEVEYKY

>ETJ83998.1 CMP-N-acetylneuraminic acid synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEIVLSSDDEEIIEVALKYGAKAPFVR

DKNLSDDYASSTAAVQNAIEILQSQNQIYDHVCCLYATAPLLNKNILKQAYEKFIQNQSKFLFAATEFEY

PIQRAFYLNENNQVYMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFIFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKVNHESAF

>ETJ83997.1 hypothetical protein X909\_04170 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFWAFLVVIGAIYFGNMFFGQYSLDALLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>ETJ83996.1 hypothetical protein X909\_04165 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTRILAIFFIFTSLLYADENPFKTDQNITLVAPPEFQKEEVKFNSSARILKSITFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDISVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVYKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHKGYYRLVIYLDGTYNYNIQK

DATGYMINLL

>ETJ83995.1 DNA ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFVFLICCACLVFANEILLLSKFDKQDFNSKDFNTYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFTIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFKISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>ETJ83994.1 hypothetical protein X909\_04130 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLASALAALVALNVSAFADLIVINKKI

>ETJ83993.1 hypothetical protein X909\_04120 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIILTILFLLTLTQAKEIQVYESPTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYSEKYPVILMKKDGSYELYGYFI

GDKKL

>ETJ83992.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGIFRIQAYFFALIIALFFVACDSGENFKALNSDKTYNFAYNGFEKSLKLNDKAQNFALIFFTKDCGVCK

EQIPILQNLAKNYDFNIFVVLGDANDANDAKAWADEKGLSNLAMFYEKRAAKYLSSAIGEIYGVPVLSFF

KEGKMDEKFIGLTPYSILEKEIKKVKS

>ETJ83991.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVVKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>ETJ83990.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENLE

QMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQLS

GGEQQRVCIARALINNPELLLADEPTGNLDEANEQIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLIL

QHGVLK

>ETJ83989.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVDKFFLNELFKSISFSYQRLFIIVLSVFIGALTCSAFLNIYFDIDTKLSKELKAYGANVMISPKRDENF

ISNAEYEKIKEILKARALTPFLYDFLNLGSTSGVVLGTDFRALKITKPFLEVKEGSFSLNDFDENSAFLG

VNLAKQLGLKTGNELQIYNPNNGKSIKLTIKGILSSNDEFDSIVLAPLSVVQNLSDRAGINYANAVVYGN

FDEVKAKTQAINNEFIDAKPISSVSLSEGLVLGKIKALMFLIILVVLIIVTTSVNTTLSSIIFSRKKEIA

LRLALGAKKSEIFKLFASECFIVSFFASLIGAFCGIFLANVFGYLIFNSSIDFRFIAVFIALIISLIFAF

LAAFFPIKRALKINVCENLKGE

>ETJ83988.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLSIEIG

NELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDFI

TGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSNK

IIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRMGEEKLDQLEYDKWYCSAYVGSIASQISDGL

PGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQIY

LIFAGENLIVALFAALFGFIFGTAFSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQL

SAAGVLYGR

>ETJ83987.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIYFVHFLISVLPLSILMAFIASDKKYIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFMLFLLLILIESDKALANILLTLMRNSIIETHTFLVSFVGKSNYFGVFGIYIYLIFI

AFLAFLSLKIRKKNISKKQILDINYRKNEAKTSLINRYFSSVFISCVISFCIILYFFMVSSKPLTIDEPK

EILPDKNGKFIFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDRDSPVAVFDACMICGDMGYIKKDGQ

LICISCNVRIFLPSVGKSGGCNPIPLKYEYDGKKITIDVKDVIAGSNYFSQIKEIEVQDPVSKTKVINTQ

APFSYSYKGITYYFSNQNNYEEFKKDPTKYVEENEAQFLIQRRNDVG

>ETJ83986.1 iron transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>ETJ83985.1 iron permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIFKIIFLIISIFLSSSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQINALIDSLYYDLDEVAPILQNGYRLKAEASDTNYDKAKA

EKSSLEANAKREADAEALIAQMMGVDKKDLAQSSLTTQASTPANNDTSKLTDDNAGTDLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNYQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKGLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALSIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGIAMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSAKTLWITVFLAVY

REGAETVLFYQALLFDAKTSTDFGAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLTMLIIGILITKQISKKGVKS

>ETJ83984.1 hypothetical protein X909\_04075 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILVTPCGVMDTTNFGKSEVNKRTIDFSLKFQEKKEKVEAKAEKEEANKDNSNSTNTDTNKKDKLLDISA

>ETJ83983.1 hypothetical protein X909\_04070 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVSDVSMGNANLMTAVNTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>ETJ83982.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>ETJ83981.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>ETJ83980.1 hypothetical protein X909\_04055 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRHIFFIIAIIFFISGCSFYQNLNYTRPIYNTNKETKLKTIANEWKKTPYVLGGTTKKGADCSGFTQSAL

AQLNIRIPRTTKTQLGSGRKVSKSKLQTGDLVFFKTGRGPNGMHVGIYMSKGKFIHLSTKGGVKEVELNS

SYWKARYIGARRY

>ETJ83979.1 glutamate racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQIDMLIIAC

NTASAYALDALRTKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLSQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGCSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>ETJ83978.1 methionine aminopeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGAICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIRDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGASAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDAGSIDGLNAAHYEHCVAVINGRAEILSMI

>ETJ83977.1 hypothetical protein X909\_04040 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSDLDIFKKHLGEIQGVNEFKANQICSQINDANDFIGALQVLDMSLKKIEKSILERIDENSDDMQKRTL

DATASQLIQNCSFMGTALFGNIFNVYVGKKLFEFEIANPLLILQTSNYEGVLAYIQDKRDEIKIILSELA

TAITLGETMDNAGIYNSTMDFKNLFK

>ETJ83976.1 hypothetical protein X909\_04035 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKQLFYILTFIFMLCGCSLRHETINKNENIILKDEGIDSNIFFKKTGKILKIRNANAPLYLNSRAIVYI

DNGFSNKYAHYFWGDLPSNLYSFLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>ETJ83975.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENRANYFFVGLFVFGVFFASLGFILWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIQGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEILLQNLAELSANLNANSKNLSLNLSNASLKIGKMAN

NISLSAQNFNSSLKDIKESTMILKKFIKKADEKLNTYDDIKASLMQNLELFKRVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>ETJ83974.1 sulfate ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALTLRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDEDSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPYSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>ETJ83973.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNANFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKAIDTAGVRFFLALENDLKDKNI

KITKEGLNSSFQTLFELCEKNYQRLSKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLAKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>ETJ83972.1 transketolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLQEQANTLRFLSADMVQKANSGHPGAPLGLADILSVLSYHLKHNPKNPTWLNRDRLVFSGGHASALLYS

FLHLSGYDLSLEDLKNFRQLHSKTPGHPEISTLGVEIATGPLGQGVANAVGFAMAAKKAQNLLGSDLIDH

KIYCLCGDGDLQEGISYEACSLAGLHKLDNFILIYDSNNISIEGDVGLAFNENVKMRFEAQGFEVLSING

HDYEEINKALEQAKKSTKPCLIIAKTTIAKGAGELEGSHKSHGAPLGEEVIKKAKEQAGFDPNISFHIPQ

ASKIRFESAVELGDLEEAKWKDKLEKSGKKELLERLLNPDFSKIAYPDFKGKDFATRDSNGEILNVLAKN

LEGFLGGSADLGPSNKTELHGMGDFIEGKNIHFGIREHAMAAINNAFARYGIFLPFSATFFIFSEYLKPA

ARIAALMKIKHFFIFTHDSIGVGEDGPTHQPIEQLSTFRAMPNFLTFRPADGVENVKAWQIALNADIPST

FVLSRQKLKALNEPIFGDVKNGAYLLKESKDAKFTLLASGSEVWLCLESANELEKQGFACNVVSMPCFEL

FEKQDKAYQERLLKGEVIGVEAAHSNELYKFCHKVYGVESFGESGKDKDVFEHFGFSVSKLVNFILSK

>ETJ83971.1 geranyltranstransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKKLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPTNNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNKKLAQMIQNLIIQY

L

>ETJ83970.1 peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILIICMLFTLSFGIERPKFEDFLAGYERNKASMLNYEGMPAFALSENLLAVLKQPNTKLNKYVKYDP

FLNLYLVRTDFSLIPTPMGDEEKLTRNDWVGIWDPNKPYIGHIKYLAQNIDEKDQLDFNSKIGLLGTPCC

EMMGIALNNSSFIGNRYLKHFMKYNDVYWGDIGVDFVVRENKIYVNNVRKNPQFLINDQVISVDGLPAND

LRKLNEKILFADRGSTLYFQVLRDNMDLNISTEVFAKDLSKFNLPDSKPKPKITNFTSNLGLTVNTSLVV

TKIDPKSKASNAGFMVGDKILRVNNIILNNFKELQNILSAGNDFSILIERKSTKLPLSNFNNELGGNANS

GGDGKFQFFIRLTK

>ETJ83969.1 hypothetical protein X909\_04000 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMVAQNRSSMANDVLGGFGGMKL

>ETJ83968.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNYKKLGIEHFYKKDFKTAKMYFSMAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILSTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIINSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>ETJ83967.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>ETJ83966.1 DNA primase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MITKESIENLSQRLNIVDIIENYIEVKKQGSSFVCICPFHADKNPSMHINPTKGFYHCFACKAGGDAFKF

VMDYEKLSFADAVEKVASLSNFTLSYTKEKQENKKELKSILPSLNAYFKDNLKHHKEVLTYLYQRALNDK

DIAKFELGFAGASEDSIRLLRNQKIPLEDAMSVGALKKDENNEFYASFIWRITFPIYDHKDLLVGFGGRT

LNPNVPAKYVNSPQNILFDKSRIFYAFNIAKENIAKKKEIIVCEGYMDAIAFHKAGFNNAVAVLGTALTE

HHLPLIRRYDAKVILCFDNDEAGLKAATRSAFLLSTNKIDGKVAILQGGKDPAELVAKNESTKLHDILDE

GIELGEFYIRRLISTHSIISALDKQKALETIQKFTFNLEPLVANSYTSLVSNLLKVDEKFIVLSQNSKKT

IHTPLISQNKYNFPKEKIHIAELELIAFLKQHPDICNDFKQISDSVCFKHKILLDKILEKKGYEDSDIRE

FENKNIRKNLNYSEFLLGICKVNLAFLNNVKIKNSTLALKKQLFTLIDKNLNLLIKNLNTEELNNFLKEY

LSFLKYEKNEEILQQSFRNLNGIFSNKNFTAYDLGFSTQDNDEPF

>ETJ83965.1 hypothetical protein X909\_03975 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFFFVEYRDPLVGLIILTILVFVVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIALEKCKDKQEREFIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIEDNPMLG

RLVFEKYHMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>ETJ83964.1 ribonuclease H [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>ETJ83963.1 ribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNIEKLERSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFAKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLIE

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGAL

>ETJ83962.1 chorismate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>ETJ83961.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKALALFSGGLDSMLAMKLITAQGIEVKALNINIGFGSTSDKSEIMKKRAAMVGADFEMIDVRNSYLQEV

LFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRPMSQRSDAMAKVKKLALDEEDLI

LRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAVKFGLEDFESPGGGCLLTLDSFAKKIRDFI

EFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKYEVIELGDLIGAYSLVDEKISEK

DLELALKIALTYTKHEVGKSYELKFKNQAYTSIAFENKADINQFFIS

>ETJ83960.1 hypothetical protein X909\_03950 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKIILVLSILSSFAFANSCANYEQELKKCNSLKNSHERKMCRLGLFAKCKKG

>ETJ83959.1 hypothetical protein X909\_03945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIDTSTSLTHSLTNDVDKKELSVLKKEDQDKIPVQDLSSLNSDSVKVVFENKQGELIALNLSNENYSSL

QKNFSSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGSLNSNLNNKQQSVKLNFNTSTLQQSMQNLG

FKTSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPTMREILSDIKEASGGGANAMKTIDPQKINK

KDDRENNIKEKEDEDLLQKAQEKGLSALSADEQAKLEASNPEEFEKLKQKSLQELSQNLSKDFKDKIENQ

EAQIVDKRV

>ETJ83958.1 cell envelope biogenesis protein TonB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTLFLNHKYQASYITFIVFIPLLFVIFHSNDFFKMEIKNEDSFSLAIKQFTQTNPTNETKPTESIIEPI

KPKPQPKVIKKTPEKIQKKVKKIPPHPIPNKTPIAPTQEVKTFAKTTDTNVKPKITQLTQGKDNHPVLKE

IQKAIQQAQFYPRQAKKMRMQGTVKVEFLWKENKTLADLKIIESSGYDLLDKSALESIRKASLNFPHYNG

DLRITLPIIYDFKILRG

>ETJ83957.1 biopolymer transporter ExbB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFLKDYIDLIIFLILGIMAFIAFWCVIERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKVSLLSNAYKANKN

A

>ETJ83956.1 hypothetical protein X909\_03925 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTIDLNHNFTSFVLLDEVDFDFLELKSILEDKFNIKITDENFTKEGVIFSYENMLITLNLIKNPIPNHEA

EYYANFNFMWKDALEQTKKHKAHLLIAVLSQDQSKLEQAKMFTKIAALCLDNKHALGFYTGAVVLEPSFY

IENAKMLDDNRLPVYNWIYVSVYPSENGVNAYTYGLRNFDKLELEVCDLNIEEKELFFCIYDIVLHILTY

DINLKDKDILKFEDGKEIKFIKSQGISVENESLKIIF

>ETJ83955.1 hypothetical protein X909\_03920 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAKLTLLALLGATVLLAKDMVVPASELPNNAKEFISKNFKTAQIGLVKKDIDSYDVILNDGTEIDFMIN

GDWKEVDGKYKALPHTILPSVMKKVSATQPNAQILEIDKEINGYKFKFNNNMKVYTDMQGNVLGQKLD

>ETJ83954.1 serine/threonine transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNTPKWTSHDTRWVLSLFGTAIGAGVLLLPISAGLGGLIPLLVILVLAFPMTYLAHRNLCRFVLSSSNPK

DDITFVAESYFGKGGGFLITLLYFFAILPILLVYSANLTTTLLEFLINQFNFNADLTHAARWWVSFLIVG

VLVLISILGENVVTKAMSFLVFPFIIFLFIFSLLLIPQWNSSLFTNVDFSVISTSNFWVTLWLVIPVMVF

SFNHSPIISSLACYCKKEYGDYAEPRARKIISLAIILMVFVVMFFVFSCALTFTPEDFASAKDQNINILT

FIANKFPEVSLLAYVGPIVALVAISKSFLGHYLGSQEGLNGILYKASNGKIQGKFAQTLTAIITFAIAWL

VAYKNPSVIGIIEAIGGPVLAILLFLMPLYCIYRFDILARFRNKFLDLFILVMGIVAISAAIHDLL

>ETJ83953.1 serine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNLSIFKIGVGPSSSHTLGPMLAGNLFCKKVAKKLDEIDRVEVTLYGSLSLTGKGHLSDKAVIWGLNGL

EAKNLSAAIQDEVNKNAIENAQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGGLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNKKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANAFKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMVSL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>ETJ83952.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFMNFSGFFYARNDLRLFKIEKKNELKSFFYKDYTLSSYKDALNLNNEIFFYQSLKEGLFKENDEILVS

NLGKKIILFRNFTQNCDNFNEAKLKQILLLFFLLLASVFFASLAMINEFGAIDLVFLMICLLLLVMGAIN

LGLLFKQIRILKSFSKEEMKEFLSQRMKKYTKV

>ETJ83951.1 riboflavin deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFYMNLALNEAWKYQFLTYPNPAVGCVILDKNGKILAIKAHEKAGLAHAELNAITHAFKSLRPEISLP

KEANALHEFICKNHQGVFKDSIAFVTLEPCSHQGKTPPCAKLFSELGFKKIFISVKDGNKIASGGAEFLK

KQGIEVEFDILKEEGKKLLKPFLKWQKGQFKLFKLALSMNGSPFGKIVSNELSRTYAHKIRAVIDLLVVG

GETIRKDHPILDARLCKAKAPNLCILSRQNIDNFDKNIPLFKVPNRQIYTQIPSEAKFLMYEGGENFLKT

FKDGIDMFLIFQSSSLNDEKNVTIPLNFKPLYRNFLGSDTYGIYEL

>ETJ83950.1 hypothetical protein X909\_03890 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNNTSVLLFLLYPKKLRKTITNITKNKKYKWKI

>ETJ83949.1 hypothetical protein X909\_03865 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLAFFKGLGIGFLCLLLFVAGVVFNVEFLGKKDSNHDLYFSRNIEVSNTLKPDILYANINFWANENLSSK

ITLDNSEKAEITNTFNQILERSKKENFCSGGSFSLEPNFSYKDGIQTPKGQRFDANLECEFKENQLADFN

KLLNDINSIIAKNNFISVSTPAIQTKFSKDTLNNNKENLYKELLKTSYEYEKTYSLDLNKTCVLKNLQVN

TNANITPRMLNAKSDNIELSSPIISEKEQILSAKALFICK

>ETJ83948.1 adenine glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFEAKLPKEVEDLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNLNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFHTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDKLYKGMYNFPFFKEGEYKLSK

DMGFVGEFKHSYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>ETJ83947.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRILFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENTGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIATLCLPKKSELN

>ETJ83946.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFKKIYIELSDICGLKCDFCPSRKGIRGVMSEEKFQNLAHEISNKAELFTFHLLGDPLLLPNLENYLKI

AKSEAMKLEITTSGFYLNSKNQALLLGYENIHQINISLMSFLSQSKISLEQYFKPILELCKKHLEQKSLS

FINLRLWNLDANFKAPKSNLKIYEFLAKEFEVKIDTNLSKNRLQRHILLHQNKLFKWPNLKDEPLYKKGK

CHALKEQIGILSDGSLVPCCLDTKADINLGNVFENNFDKLFKSPRIKMMKKAFEEDKRIEKLCQTCEFFK

ARLGD

>ETJ83945.1 hemin transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMLKAEDQIVGIATLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKAERLEDITKNITTLGQITKKEKEAELLKQEFTQ

NLKKLSDKPLNKSVIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GINAKNNLLDTNALLKNTKAVKTGSIYFNKDTHILLRLSPKIIDRIQEFKTKLENNNF

>ETJ83944.1 heme ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLSPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKEFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKLVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYKNSKPYILALKEKK

>ETJ83943.1 iron ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNLNTHSKILVIIGLLVAYIIASFTALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIG

MLLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKAS

IATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNEL

NILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCT

AFGGLFLLICDTLARTLLAPVQIPIGILTAFFGAPIFLYLALSARRFL

>ETJ83942.1 ligand-gated channel [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHPNKKAFKLSLFALLLITNLNAQESNKAINLQKVVVSTTGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGHAINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGGLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWEFNLEAFWQNQKINYLKDEISMKGTTAYQNGSGFEDTLTGISLKNKLNYANNSYFIFGY

EFANHDAKRTSIIHYDVNAGRFQMSHTMTTLMDMDKQSHSIFALDSHEFNDIFSISGGARYEYSLYDTNR

NYTSNMIIPGRPNIKTELFSTDDTSHNFAFEITPNFKYSDTGKLYIKYERGFVSPSPAQFVNKDKNLQKY

YSANLNPEIFDTFELGIDDFWWDFYGFNLTLFYTLSKDEISYLGNPHSTSGSWWKYYNIDQTRRLGVELS

LSQNFLDDDLIFRESLTYLDAKISKGVNDGMRIPYVSKIKATAGFEYAWNKNFSNFIDLTYFSRAKDGGA

IDENTGKMSKNSWIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLVGNGRNYYVEFKY

AF

>ETJ83941.1 hypothetical protein X909\_03825 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFESIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNTNGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KVNPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVTHVGASGNPHKFPHKH

>ETJ83940.1 peptide chain release factor 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>ETJ83939.1 30S ribosomal protein S20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>ETJ83938.1 phosphatidylglycerophosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKLFLTFFYSGSIKKASGTFGTIAALIPAFFILKYLGINTLFLLSILIFVASIRVIDDYEKKTGIHDDK

HIVIDEVAGVFLACAIAASVENSIVNFVLAFVLFRFFDITKPSIIGKIDKKVKGGLGVMLDDMLAGLFAG

LLSAVIYGFLLKFNLVFWDINLKDLF

>ETJ83937.1 sulfate adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSARKNKNITIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLMLDEKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIEKIKENFQ

QIKNNLNAQKITAIVSSFDPLHRAHERMFRWTIDKADLVVIFLVESFDVNGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIYQMSYMV

>ETJ83936.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVLIIENEIYLAQSISIKLSDAGYSCEIINSFNEYNGEKYYDIVLLSTNTNNFLKAVGQFKHSIIILLI

SYISTDTVSNPLKLGASDYIQKPFMIEELIRKIKHYQDFRKLSILNKAYQSYIKSRLETIKIPEYNYKKL

KLPLILKSNKQSSADAFVFNYANECDITLSFIDLTSTNSVEKVMKLPTENNLLFLSNFQALKAAEKEKLL

DFIQNKNVILHTNSNTDDLKINCINLNDNEKNIDSNEILTIDEYVKYVIINYQNIFPDTDLSKKLGISRK

SLWEKRKKYEISKKK

>ETJ83935.1 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>ETJ83934.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDDGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISMAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSRRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>ETJ83933.1 2,3,4,5-tetrahydropyridine-2,6-carboxylate N-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDDEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLSH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISVGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>ETJ83932.1 phosphoribosyl-AMP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNFKELNEKIAWQKVDHLLPVIIQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDISCFEKISKNADFVFLARLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>ETJ83931.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKYSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKVPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>ETJ83930.1 HrgA protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSSKLSYKELTLEILKQSDRPLSVNEIWQKALEQGLDKKLSSIRQTPIATLGARIYVDIKELQHNSLFIK

ASQKPTTFWLKERENELLKLDNKNEITNEKQEKNKFHERDLHPLLVKFLYENLDFNLNCKTIYHEQSKKG

KGGEDKWNYPDIVGVYFPYDDYEKETITLLENIKQNSYKLFSFELKIALNFSNLKECYFQALSNSSWANE

GYLVVLQEIDSEVLSELRRLNQSFGIGVIKLDIQTLNMLINKNPNFKEFIDDINKQIKVGKEAKIQANFD

EIKSDEEMEKYLKEKCILEK

>ETJ83929.1 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTQIIPALDLIDGEVVRLVKGDYEQKKVYKYNPLEKFKEYEKAGAKELHLVDLTGAKDPSKRQLALIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKNATLCLEILKEFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPNICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSIEEGIRCLAN

>ETJ83928.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHMGWNQVHSSHALFKGLEGAYFYFVH

SYCAGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGENLISNFIKDIG

>ETJ83927.1 imidazoleglycerol-phosphate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>ETJ83926.1 bifunctional histidinal dehydrogenase/ histidinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIVKEVQEKGDEALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQDAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCEKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGATIDMQAGPSEVLVIADDLANEKFVASDLLSQAEHGADSQVILVCLSQDFAQKASN

EVQSQLELLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>ETJ83925.1 ATP phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQENTRLRIAIQKSGRLSKESIELLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELERQSLGENPSYKLLKKLDFGYCRLSLALPQEKKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSVEVAPRANLADAICDLVSSGATLQANNLKEVKVIYESRACLIQKENALSKEKQTLV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>ETJ83924.1 50S ribosomal protein L17 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>ETJ83923.1 DNA-directed RNA polymerase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>ETJ83922.1 30S ribosomal protein S4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>ETJ83921.1 30S ribosomal protein S11 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>ETJ83920.1 30S ribosomal protein S13 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>ETJ83919.1 50S ribosomal protein L36 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>ETJ83918.1 translation initiation factor IF-1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>ETJ83917.1 metallo-beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNFITTLLKTNLYFLEEKTTSKSSNQTHIISLKQSDDEFLNLLFSFLVPQSDEDKNFIGKTRTKIKRNE

HNIALIKNPNFNALIDTGFLDTIDTLKEKLHIHKTDFKDITHIILTHAHPDHIGALMSEENLFPKAQILI

DKKEYDFWIKSDRQEIKNTLLKLKNIEFINHSKDLIFQNSGIKAIPAYGHTPGQNAIIIDDKIVFWGDLL

HLYDIQIPKPKIAIKFDIDQNEAIQTREKLLKQFKERKLKVIGTHVPFIEPKFLD

>ETJ83916.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKSKFGTKEIKILGLSSLGGTLEFYDFIIFVFFAEYIANVFFPKDMSEFWALLNTYGAFAAGYLARPLG

GIVMAHFGDKFGRNNMFMLSILLMVLPTFVLAFIPGYETLGFLAPVLLILIRIFQGIAIGGELPGAWVFV

REHCQEKQKAFFLSCLNSAMALGILLGSIVFLIINAFFSIEEIAAYAWRIAFFVGGIFGIISIYLRRFLQ

ETPVFKQMKKESSLSSFPLRDLFKEKDIVKNLFSSMMMTWVLTGCVIVLVLLMPKFMPSILNLSGVEGSY

LQVLGILGIALGGAFMGYLVDKFGLFKICIFFSLTFVFFSFLYFYALYELKNLVLVCILYSIVCFLGGIN

VFAPILMSEVFRAKIRFSGISFSYNIAYAISGGITPQLVFWLNTLASKNENPFLYGMSIYMIFLALLAIC

AVFIVKDKIKF

>ETJ83915.1 multidrug ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPFIIELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVTLLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDTLIDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>ETJ83914.1 globin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKEQIQIIKDCVPILQKNGEDLTNEFYKIMFNDYPEVKPMFNMEKQISGEQPKALAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEHYPIVGACLLKAIKNLLNPDEATLKAWEVAYGKIAEFYIDIEKKLYDK

>ETJ83913.1 cytoplasmic chaperone [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKLAIDIFINFLQNPPNHFLLEKLKKEEFWQNWFLKNNSKLQCTALKLLSSSNEDDKLIASDFTSLFLS

DVDYVKAPPFASFYLDENKEIYSDNSDKVKQIFAQNNFFSFFNEEPADSLINELLFISFLIKKQDDITLQ

KFLKEEFFIWFNMWSFDVINKAKTHFYKALTMLMQDFFNQLNTKF

>ETJ83912.1 Cj81-083 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>ETJ83911.1 dimethyl sulfoxide reductase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>ETJ83910.1 peptide ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>ETJ83909.1 peptide ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKRLVFSIVVAFFSTFLCFVLLYFSKGSIAYTNGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGVSFLSGESVLKLIKERIFNTFILGFNALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKILPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSPIVAYFGGSALSFMMGTYVVESVFAYEGLGSLLFKSIIFKDYPVVL

ALIFFSVLLAAFFTFLSDIVARILNPRLRRLDFV

>ETJ83908.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVRNLNISLKNNLLLKDINLDIKTGKTLMILGQSGVGKSLLGKVLVRLLDSNFTISFDELSFHNSCIFN

FNKEELRNFRSKVALVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWH

SYANELSLGMARRVSLALALLNQPQILICDEITASLDKENASKIISILKELKNTTALVCITHDLNLVNSL

ADEILMLEKNSSNLYSLDEFLRYYNA

>ETJ83907.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLIILGKSGAGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKSYELSGGEATRVGLIRALVLNPKLLILDEITSAFDIKISKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>ETJ83906.1 NADH dehydrogenase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSHIDASHPYFGIFLMLVLASVIFFGLVFLASKIGNNFAAKNRKKLGLGIYECGPIPVKQANKINSQFFI

IALIFILLDIEVVFLFPWALIFKDLGWFGFLEVFVFIVLLGVGFLYAYKKGAFAWQSIK

>ETJ83905.1 NADH dehydrogenase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>ETJ83904.1 NADH dehydrogenase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKYSDKKNAQTQNYYKDRFYHAPHTVKSDVNESVFKEDFEVLKTQVEILNSFVELDFWVIEIKKEDNVK

TLQMLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRIKTFVGVKERLQSVAHVFKGANWSER

EIYDMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFAD

DKDTLNFARLYHEVPKGGQKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>ETJ83903.1 NADH dehydrogenase subunit D [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>ETJ83902.1 NADH-ubiquinone oxidoreductase chain E [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRRVDLRKSKELFEDLAQIIKEAKQGEVLVVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVI

KKERV

>ETJ83901.1 NADH dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYDNALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEVKYLIIDKNIHSYKDSENIKYFLNFLSVKYGLKILDSDEEECDFK

KAKLNTLKELDNYDGLVLFRANLQDKNLHCSRQFLQIAKCKDQSEVEILAKDFSFKTKLCLDENLQGTIA

FLNYENNGFDFTPIRIKEAK

>ETJ83900.1 NADH dehydrogenase subunit G [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTVKINGIDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKHWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKESMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISNQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGMLLRYDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFIPHIHKNGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESINEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIIEVQRSVFAKNLGIDEDKLEDLLLKKANFTLVVGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDNNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINKGFSPIDFDHLDNFYTNAGDCKRGYELNLECFKQV

AKKEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASAINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>ETJ83899.1 NADH:ubiquinone oxidoreductase subunit H [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>ETJ83898.1 NADH dehydrogenase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>ETJ83897.1 NADH:ubiquinone oxidoreductase subunit J [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALAGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSTILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAIVLTHKELTKEKQ

>ETJ83896.1 NADH-quinone oxidoreductase subunit K [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIEKYFFVAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>ETJ83895.1 NADH:ubiquinone oxidoreductase subunit L [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNLALISLFSPFVAFLFASCFALSEKKQFVGIICSLLVALSAFCSLYLLFCNEAFNVSLFEWFAGVNFG

FDIDAISLTMMSVVGIVATCVHFYSIFYMAHDEGFNKFFAYLGLFVFSMLFLVMSDNFLGLFVGWEGVGL

CSWLLIGFWYKNDTYSFAANEAFIMNRIADLGMLLGIFWLYLQAGTLKYDEVFSMAQSLDHNALILIATC

LFIGAMGKSAQFPFHTWLADAMAGPTPVSALIHAATMVTAGVYLVIRASTLYDLVPEVSYIIALLGAFVA

IFAASMALVVRDLKRIIAYSTLSQLGYMFVAAGLGAYGIALFHLATHAFFKSLLFLGAGNVMHAMNDKLD

IKKMGGLFKPLKITAILMCIGSLALAGIYPFAGFFSKDLILGYSFISFHHGIFLVLLIAAFLTAFYSFRL

LMLVFFTPARHDEHPHEASKIALLAMSPLMVLAIIAGFFEHSFFEYLSTKLVFIDAQNQIVMICASVAAI

LGAILAIFAYKNSWFKESIEENKIHKLLSNDYFIPQFYHQFIVSKYESLCAILKHCDLYIFDRIVEKIAL

YSQNISQKMIMPNSLNLMLRFLVAAFVILLILVWMV

>ETJ83894.1 NADH-quinone oxidoreductase subunit M [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGVSFDYNLSFKILKFFSFHVGV

DSIALVLILLSSLMIFLSFLFLKLEQKALISCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFRAGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNASAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPILVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYRAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYMFAVFRKIF

FMQKQSFIEGFSLLFREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>ETJ83893.1 NADH-quinone oxidoreductase subunit N [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNNFLNLELLNISLSYPFLFLITTAIVLLLCSGFWKFHRSFYIGISSLSLIVSAFLILNNANAQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMVSSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGAGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFAALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFMKNDRVHNIKFSFIQNFILAFCVCVSTFVILLML

>ETJ83892.1 paralysed flagellum protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQKFITEAKVHFECDIVGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKIQARMFDTSQNIYIDKELSSSSSHKSKAFTFIFTPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVVIDAQNAINRYRGSIFTSEFI

LYKLRAQNKLYTQDPSMRDQQILEKMIDDAKNWTRTFTSDKNFSEVLHIMLRTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENTYFNTKNLDLAARAAMSLAKNLLSNEQVNKAIEY

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISASIYEDAFAKMSKLDPSYEETLKDLALVLSHANRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAINDLKNAIKADNCINAANIFMRFSAYDIGQKIENKK

QMLACLIRTSNVEQALDYIDKNYNEDSIFYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMVEAYDALLSYANDHNMQTTILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALTKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

SASNWQNLCKSKNQILNQ

>ETJ83891.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

VRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISST

VSDIANNILEDVKKKRF

>ETJ83890.1 hypothetical protein X909\_05530 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASFKKIFWIIVIIVAFNLRAPNYCSGAYY

>ETJ83889.1 hypothetical protein X909\_05265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNFFGIKEKYGRKFNFNFIVTSCSVICNFLFLGDQTATKTSKST

>ETJ83888.1 hypothetical protein X909\_04540 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGLSLVSLGALSFDELIYKDEVKPSFDCSKVKDDGKSDDELMICNEIGVRNEFENKKLALVDNIYSSLY

>ETJ83887.1 hypothetical protein X909\_04200 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTYSHIYIIGTGKVTKECQKIASDFFKQEVIFVKILKIALLLVQIILIFSKKNVCKIIPL

>ETJ83886.1 hypothetical protein X909\_04195 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVEESIDTGAILTQKEIKLDDNFTALSLLDTQHKLAIASFKEALKNLENKIFKIQTLGGGITKNWLCQMR

VI

>ETJ83885.1 formyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPNEGYLDLTWDKEKISRFLRAMDCGALIGVPKARLKILGEEKEILFYEINELDLILNLSDNTILKITKE

>ETJ83884.1 hypothetical protein X909\_05870, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

TPSDSFVSVLFYGDNYGIKESGRYRGGASMSFNNIAHQGDSLNAYLQRSDEAQTNYGISYTTFLGNLKIT

PSYSKGNYALGGIWREFDFIGTSENLGVDLKYPLWITTYNSFYLTSSYYHKKLSDSKFDILTFDKSSDTI

SFGIEGVYNGISNDSFSYSANVSYGNVKDEGMTIVGIGTSKVGGVEFGKFAKLNVNLNNAYFFNDTFTHL

FSLNYQQVINGATLDSSETISLGGPYGVRAYNNGDGEGDNAVVASFGLRMATPLKDFYITPFYDIGYSWY

ENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKKYKLDDDYSSKAYVSFGKYF

>ETJ83883.1 tRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQENLLEKQFLNHPLYTKIQELKALNLTCNFSLDDSVNLSTNSQAKDEILAITKELKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMNEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPSYSLKFDVIFCLGVIYHRSDPVKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>ETJ83882.1 Hot dog fold protein HP0420 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKDNFEEYAQLEEYASAEDISRVRAELLTCPELNTSLAGTIIEIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFFYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>ETJ83881.1 hypothetical protein X909\_05855 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYTLMILLALGISGCFVNERGISNRFYDDCKEYYDGSGTYHKDCPKNWVDIKMTP

>ETJ83880.1 nuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRINYKKIFNLRKLLSDPKKLFSVLIFTLVVVFIQNYIAQNSSFEGKVVRIIDGDTIEVNHENKLARIRF

FGIDAPELKQSFGKQSKEALSRILSGKQVEIIYKNKDTYGRIVAIVKLNDVDINRFLVSKGYAWADTYYS

NAYIKEQENAKKNHLGLWKESNPIEPYKWRKHNKF

>ETJ83879.1 aminoacyl-histidine dipeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNVIENFKQLCKIPHCSYETEQMKEFLSSYAKDKGFKVSVDKAGNIHAIKGKPKICLQSHYDMVCMGDA

PNLEVYEENGFLRAKNSSLGADNGIGIAIMMSAMAEFENLECLFTNDEEVGLMGVNSLEHTLESKMLLNL

DHESDDEIMIGCAGGVDIEASLSFNTLRKKGKIYELCAQNFKGGHSGINIIRNEKSSIKEMAKFIQENEG

EIISFEGGERINSIPKHAKALVHFKNEVKSNNWIKCEFKEEGEFEICDQSKKLLSLINSFTHGVRAYDEN

LGMVQTSINLATLRMENQQIKFALFARSNILDGLKQVEFETLEFFKAFDFKVRSFNFYPPWEGKPNTLSD

MVFKALKKVSPNAKVSAIHAGLECGIIEKKQELLCASIGPNIHNPHSTDEHCEIASVEKISKVVFEVLKD

NA

>ETJ83878.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKYKNIIYASLGGILEFYDFVLFAFFLDIFAKVFFPQNDAFWMQINAYIAFGAAYLARPFGSIVMAHF

ADRYGRKNIFYISMLLMVLPSFALAFLPSYESIGIFATLILFTIRILQGLAVGTEVSGAWIYVSEFVKGR

QIPLALGFISATLTIGLLLGNIATLGIRSYFTPEEVQSYAWRIPFIIGGFFGILALFLRNKLSETPEFIK

VQNEKKILNFPLFEALKTHKMSMLVCFLMTMVLTSGVATLMILPKYFESLLAMSKTSALWVQNFAILAVI

FGALFQGFLASKWGSYKICSIFSIAFIIFGMFFSFYDENFLFYFLLACFAQGIITFAPVFMTQIFKSELK

FSGLSFAYNISYAILGFLTPFIVNAFYKEYLGIYLAIVGFCSLLCVFLLKRVFARSKIKELSIVF

>ETJ83877.1 glutamine ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLSVLTTFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIALAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTQTPERAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQDYPNIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>ETJ83876.1 hypothetical protein X909\_05830 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKGIFLSIGIAVLFSACGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNADGDFIACL

SPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGETNTSISIKEYYNDLFKNQKSIQSNLVFEDFKLGEK

VVSDINASLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLNINLKEDL

LNYLDSKGIKFNTQTLAMDEQAINELLNMVNYEQASDFSNTIQKYIILNNFKIDSTLKTEGVFSSYIATA

KENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKLSINNQDA

TEALKIILPFIMFSMLMGGASF

>ETJ83875.1 hypothetical protein X909\_05825 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILFSPSESKNENCVKNPINENSFIFKELFPYRIKALKHYEEFIKNASLQNLQELFGIKNENEIDKFKH

DLKQAPTQEAILLYTGVSYEYLNFKALDKKSQAYILENTLIFSNLFGVVRANDTLPFYKFKQGAKIGNFA

IEKFYKEHFSKALDAYLENEEILDLRAGFYDKFYTPKKKFYTYKFVKNGKVISHFAKAYRGILLSISAKN

QVKNNKELLANLPSNLKLKEIQIKGLKEEIVLEILD

>ETJ83874.1 peptidase M20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLIPEILDLQGEFEKIRHQIHENPELGFDELYTAKLVAQKLKEFGYEVYEEIGKTGVVGVLKKGNSNKK

IGLRADMDALPLQECTNLPYKSKKENVMHACGHDGHATSLLLAAKYLASQNFNGTLNLYFQPAEEGLGGA

KAMIEDGLFEKFDSDYVFGWHNMPFGSDKKFYLKKGAMMASSDSYSIEVIGRGGHGSAPEKAKDPIYAAS

LLVVALQSIVSRNVDPQNSAVVSIGAFNAGHAFNIIPDIATIKMSVRALDNETRKLTEEKIYKICKGIAQ

ANDIEIKINKNVVAPVTMNNDEAVDFASEVAKELFGEKNCEFNHRPLMASEDFGFFCEMKKCAYAFLENE

NDIYLHNSSYVFNDKLLARAASYYAKLVLKYLK

>ETJ83873.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHFVISFNITSNLVGITLGLILAESISNYFGNWRDSLSFYAWINLILLILWLFVGKDENKKEEKKNNAKD

LIYALKSRVTWGMIIFYIGPILFLNSLFTFLPTFYAQYAGFSKELADFAKKEIPALANFAIIFGPYLGLF

FKRKNISFKIMLLSGGACIFICGFCMLFLQNLVLIQIFAVLSGIFYSMWFPFFFNLPSELKNSNPNQTAY

IMSAFWSITFVILSFNLWVVSWSVDKTHSFTLGFVYIFALIFISAILAQFVLPRRENFIQGEK

>ETJ83872.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKSLLFHFRRIGVEFIIFSVYAVFSISWAATGSLMPLISNDLALNTQQATLITSMIVVAKIFGASFTAF

LVYKFGLKKGYFLGCILMSSGIFLSFVDSYSGILVIRFLTGLGSACALVCLVPIAQQWFEKKLCIL

>ETJ83871.1 hypothetical protein X909\_05805 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFLAFIFLIIIFLFVVFIIVTRYEKKIKLLNQNIQNMKEDIADLKETTQKNRSLIEKNRSNIENIIK

>ETJ83870.1 hypothetical protein X909\_05800 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIVFKGKSSEYEIQRSCFCVDAFVIKDKIEERDGVDFITSNVDLLEFSDDSFTFEEIVKHFNICDTEDM

IIVEDFDMKSNKDNQNQEDDIEHNILKSEKIMHENTKQTSMQFKNLKFFSRIFKNENFLSDFKESKQEVV

TIKKHEKLEIFKNLSQEDQEISFVKIEILNYDSNEDSLIFNLDIFPSGMSYKYGILKGSMHIILQGKTSS

TMLFPFLKSMIYKNKSENSSEKIFTLMINQKKHYKLIANLS

>ETJ83869.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFSQISDACVKCGKCIPVCTIHEENRDEITSPRGFLDLLAAYKEGSLELDKEAKKVFESCFLCTNCVEV

CPSKLRVDNAIEEVRYDIAKKFGIAWYKKLIFFFLRRRKILDLVAKLGYVFQSCAFKIQNENENTGMKAR

FSMPFVKKGRLLTSFNKKSFLNSNPKFINNDGEKTIGFFVGCLANYFYIDTANAVLKIAKELKINVDLMK

EQVCCGAPQFFTGDFKSVEVLAKKNIEYFEKKLEKLDAIIVPEATCSAMLKIDYEHFFIMQNDLDWAKRA

KCVSSKIYMASEYFYKFTSLEEILKTKNKFNYSITYHDPCHARKMQGVFKEPRELLKTNYHFVEMSNSNT

CCGFGGVSMQTDYYDRALSVGLKKAQMIDESKASVVSAECSACRMQISNALEQNSSKVVFVSPLELIVKA

L

>ETJ83868.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRDYKAFVKYSKAGPRYTSYPTAVEFNANFKYEEYIEILKKQDRSLSLYFHLPFCRSACYFCGCNVIYTA

KEESKERYLTYIFKELDILSTILDTKREVVQMHFGGGTPTFFSAKQLQNLILKIRSVFGNFSKDAEISCE

IDPRFLNGEQATVLTQNGFNRISFGVQDFDEKVQKEIHRIQPFELTQNALNLVRSKGIKSVNMDLIYGLP

YQNLQSFTQTLEKVMLLNPDRLAIFNYAHVPWLKKNMRKFDENTLPSPDVKLEILEFCEKFLSKNGYKMI

GMDHFAKENDELFKALENGTLHRNFQGYTTKGGADLVGVGLTSIGEGQRHYAQNFKDMSSYEAALDRGVL

PFERGVALSDDDELRKAVIMELMANFKLDIKSIEKEFCIDFQEYFKEDLKALEEYKDFINFDENFIKVNE

TGVLLIRNIAMCFDAYMKNISEDKKVFSKTV

>ETJ83867.1 hypothetical protein X909\_05785 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELEKYNTCLKRIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFDSPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIERVNQNERL

>ETJ83866.1 delta-aminolevulinic acid dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKRFRRLRLNENLRAMVRENSLSVNDLIYPLFVVNGTGIKKEISSMPDVFQMSLDEILKECQNVVNLGI

KAIILFGVLENEKKDSCGSDALDDEGLVARSIREIKKNFPDLFIISDLCFCEYTDHGHCGIIDPKTKSVD

NDVTLEISAKQALVHARAGVDMIAPSGMMDGIITTLRKALDKEGFENLPIMAYSTKFASSYYGPFRDVAE

SAPSYGDRKSYQMDFANGKEALEESLEDEAQGADILMVKPALAYLDVVKEISLHSNLPLCVYNVSGEYAM

LKAAKNAGVIDYEKVLYETMIAFKRAGAKLIITYHAKELAKMLKGEK

>ETJ83865.1 GTP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKISEIANLPSKWGNFQIQSFKENDKEHLCIFKNTPKDTLNLRIHSECLTGDALGSLKCDCGEQLEFS

LKYIEKNGGMVIYLRQEGRGIGLFNKVNAYALQDKGFDTIKANHQLGFKADERTYEIVEFILKHYEISKV

NLLTNNPEKLDSIKEKIITRIPILIEPNRFNVEYLNIKQTQMGHLK

>ETJ83864.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFKDYDFLQNYDLKNFEEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKAAFLRTLKIECELPNLHIYKEKVQEYKNTFKADIITSRALMDVK

PLLEICKNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRRYCILK

>ETJ83863.1 hypothetical protein X909\_05760 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILVSVLSSCLLASALSAVSFKEDSLKVSFEGYKTKDMIGTKGEFKNVEYNFSKNIKDLASYLKGAKA

TIKPSNAFMGEGNDIITNNITKVFFPALLGDTDIKVVFQDVIAGENKGVISAKITMDKKSTIVPLTYTIK

DNKFEAKGQLDLHTFKNGSKALKALSDVAAGHGGISWPLVDISFNANLAE

>ETJ83862.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTSFLAHSVAIVRSNFKGLLFTACIVIFAMYLSSVQSIKDTTHLAATAFAIIVGVLLSPWFFKYQHHFQ

AGVHFSAKKLLRLGIVLYGFNITLTELLSVGLKGFLLSAIVIFFVFIIALFVGMKIFKLDKETSMLVGAG

SAICGAAAVLALESSLKSDPFKGILAVGTVVIFGLVFMFLYPIAFSLNLFPFFDQNAMGVFMGATLHEVA

NVAGAAEMAKDMAGFEQGASNVAVIIKMMRVILLVPFLLIVTYFFAKNQHSSSGKTAKSITIPYFAFAFL

GMIVLNTYLASKESILGIATSDIISLGKTLCTLCIVFAMAALGLQIDFKKFLKSGSRVFGLAFVLGLVLI

FGGYFLTLAFKGILW

>ETJ83861.1 LysR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKDMEIFLDLLNTQSPTHTANNFSITQPNVSIVIKNLENKFDGILFERLGKKLLPTPKALELGKNWLK

IIQAYYQSLEKLNDESMLLGEIKIASTQSISEHFLAPILFDFKAEFKNIEIRSQTQNSKECLNLLKNGNI

EFAIIEAELDPALVEYENLEINFWQDDELIVATSDKKLNEKEFYIDELLEQKWILREVGSGLRDKFLNEI

GASSKKLNIFLELDRMAAIKELVLQKKAISIFSKKSIEKELKNSTLYEIKLKNIDLKRKFYTLKRKNYNF

NRALEKFEKIFKS

>ETJ83860.1 RNA polymerase sigma factor RpoD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNAKTQEAELEELFQENAKDYITYEKLVKYLTKQPSASTAKKVQALMKKHKVQLFSAAEIAQMKNIEDAK

RLQEEKQKLQDTSLENEFDLANENDLLEWSRSDSPVRMYLREMGQIALLNKDEEIEISKKIELGEDIIID

AFCSVPYLIDFILDYKEPLINRERRVKELFKSFDDEEKSDDKLDELDIDEDEENETELESDEENTKKNSK

KEDERTLKVIEKFKALEKAKKDWLKTSKDKESGDELLDKLSIAFKKNILKEKLMDLGPTSKLISEIVKSM

ETALKSDEEFDKELKRLEYRLPMFSDELKKRHADILKDITKLSKEEITERALETTMVSTYMEIKKLFQTK

EASEKSFDLEKSRLKEILEQIKRGKKISDEAKGRMAKSNLRLVVSIAKRYTNRGLPFLDLIQEGNIGLMK

AVDKFEYKRGYKFSTYATWWIRQAISRAIADQARTIRIPIHMIETINQINKIIREHLQKDGKEPDVSVIA

KEVGLSVDKVKQVIKITKEPISLEAPIGNEDDGKFGDFVEDRNSLSPMDHILKDDLKEQIDEVLDQLNDR

EKAVIRMRFGLMDDESDRTLEEIGKELNVTRERVRQIESSAIKKLKHPKVGRKLKNYIEGWK

>ETJ83859.1 phosphoglycerate mutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIYIIRHAKASKSGDIDDFERKLTKSGKEDLKKLFKNLALHEIHPDLVLSSPAVRTAKTAKKIAKFYN

FDKNKICFDERLYLCNVENLLKILQDIDDEFNEVFLVGHNPGLMELGELLSSLCLASFPTSSILCLEFDI

KEFKNLKKHSGKLVFFEHVRKLKEEKDLGF

>ETJ83858.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLTIFLIFLNILCYFLISYDYYNILGLNILFFNGAYWQLLSSMFLHGNLTHLILNMIVLFQFGRILETYL

GALRFIFIYFIGGLLCSLLSVFYVYFDFKYFGENINVIGASGAICVLMGFYAVLDKNSTKGLIVAILLMS

FAPLLMGVNVAWYGHIFGFMCGYILAKIKEVK

>ETJ83857.1 hypothetical protein X909\_05730 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKFLSIITILSLSLNADIIISADNLPSVSKEFLQHNFKAPIGIVQKDKNSYEVYLSDGTELEFDIDGT

WKEIENKAFPFDLDFLPQNLANIIKNEFPNIKAREIERKINHYKIKLDNDVKILIDFNGTILHKEIDD

>ETJ83856.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNKKIILASFMVLCMLLGILYFKNEPKYIDENLYQSLLSQNLIQKAVIDKDEIWLKAEGENYIIIKDGI

DIKTLLSKVPVEVKKDNTLWVFFVLLIFIIALFISLGYFARKKELAKYPISNKNQNHTQAQNSNINLESS

HIKPVISNITFNDVAGVDEVKMELSELVDFLQNPKKYKEFGVKMPKGVLMVGPPGVGKTLIAKAVAGEAG

VPFFYQSGSSFVEIYVGMGAKRVRELFSKAKMMAPSIVFIDEIDAVGKARGEMSNVERDSTLNQLLTQMD

GFEDNSGVIVIAATNKIELMDPALLRSGRFDRRIFLSLPDFKDRLKILEIYMKDKNNNVNLNKIAKASVG

FSGAGLETLVNEAAINALRRNSALVEESDFYAVLNKVLLGKKKILSFNDEEKKIQATYQAAKALSAYYFD

IGFDKITLIEDRFKEYEHNIKSKSELINRIKVYLAGSRAMRLIYNESYTNSQDDFLKIKELLDYMLSFDM

LKEPNLNEQKKEMDEFLNSMKDKILKLSELLLEKEKIEHDDVKNIMQV

>ETJ83855.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEKVFFKTFGCRTNIYDTELLKSYVKDYEIINDENKAQIIVVNSCTVTNGADSGIKSYVNTMQKKGIKV

ILTGCGAVSKGKELLDKKQVFGVLGASNKDKINEFLGAKTSFYELGNLNFIDKDIVCEYENHTKAFVKIQ

EGCDFACSYCIIPSVRGKSRSVDEKALLKQVEILGANGYSEIVLTGTNIGSYGLKNGTSLGKLLQKMGQI

SGIKRIRLGSLEPAQLDESFLEILDEAWLERHLHIALQHTSEKMLRIMRRRSHTDNDLKLFNTIASKGYA

LGTDFIVAHPGESEELWQEALRNFKEFPLTHIHAFIFSPRNNTHSATMKDVINGTLAKERLNTLKSIVEK

NNYEFRKKNQVSLEVLVENQKDGFFEGYDQFFNKIKIKSNKDIAKEWIVISEYEVQEKSNFVNLKG

>ETJ83854.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIIILTFFVVFAFGDVNRTIINNINEKINTLNTVISASIWNIRYENFIKYQDINDELIILNLNLKKTS

DIHQQEELKRKIANLEEQLSLLKEYKDLNFAQSLSAPDNIETLSKLTNPLAIIGAFSHIKKLKGEKEEYI

FKFNDFKNLVDKIREKNSELKELVELKPSVENIEALKASDKKLEEFEQALNFASVSYSVYEKKIDEELSR

VSAEIKVQSLRAVNILVAIVIVIAIAFMLKFIAKKYIKDSERYYTATKIINFININIIFLILLFAYIENI

TYLVTILGFASAGLAIAMKDMFMSMLGWCVIIFGGSFRVGDRVKVFQNDTTYIGDIIDISFLRITLYEEL

TLETYNKNRRSGRIIFIPNNYVFTNLLANYTHHGMKTVLDGIDISVTFDSNLDKAQEIVENIVTRHAKGY

TELARKNIARLQHEYSIKNPKVEPRFFMFFEHWGMRISAWYMTNAYAALVLRSTISKEIIKEFNKHKDIK

IAYPSQNLYLGNLNQNHFEQHHENMHFHARNKD

>ETJ83853.1 3-dehydroquinate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDSILDFIEKIDEKSFLNATCENEIFTQI

IARSIELKSRVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQKIKDILLKFGLPISYKINNVDEFYEAFFMDKKSSNKKINFVLASPLGKGFIKGDISKEDIIATLREF

Q

>ETJ83852.1 potassium transporter TrkA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRGKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGVMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGEASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNTTDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGRNLSTNLNRHYYKMRQNYQLFIPVE

>ETJ83851.1 queuine tRNA-ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>ETJ83850.1 magnesium transporter CorA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFNDEKIYKLQNEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQNLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSISILSKNTKEHLARVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQTK

>ETJ83849.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSHIFLVIFCAALALLLFLGMIAYLITSDGKKTIKKQKTSQKQHVTEKTKKFDTDLDKMIIAASDVKLTD

IELKELAKLYVQTHKLGSKTSKELDEATKKKLEFVSALAANINASAQTVSYLNKELKKISGSYKKEIDAY

EHMGLAKRKIKEDK

>ETJ83848.1 amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIVKDLHVYYGLIEAVKGIDFKVETGHIVSLIGSNGAGKTSTLNALLNSVKRTGEVNFLGYDTKRHLTH

TLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLTSKKHALAGTLSGGEAQML

AISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRIV

MENEAKNLIGDDEIRKKYLGL

>ETJ83847.1 branched-chain amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILELKHISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYAILEELGI

AEFAYEKAASLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>ETJ83846.1 branched-chain amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVRIKVSHLIFLIASIVFIFVSPYIFGDYGLNIVNQIAIFIILAVSYNLINGVTGQFSLEPNGFVAIGAY

AAALVLLSADAKNDQFFLDGPSSFILAIHSNSFILALIVAGICSSLLALILAFAVFRVRGDYLAIVTLGF

GIIIKIAAINFPSITNGSRGLVDIPQFSTIYWTGGIAIVAVILILNIVYSKYGRAMKAIRDDEDAASAMG

INTFWIKTLAFSTSAFLEGVGGGLLACLLTTVSPTQFDFLLTFQLLIIIVLGGLGSTTGAIIGAILVIGG

SEWLRFLDELNIKIDSLNLDIQSMPGLRMVVFSIVLILVMLFARKGIMGYYELSDVIRGIKKRFKRSEK

>ETJ83845.1 branched-chain amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDSTLFLQQLVNGLSLGSMYALIAVGYTMVYGVLRLINFAHGDIMMVGAYAALFCMTNLNVPFLGALSLA

MIFAACVGIATDRIAYKPLRQAPRISLLITAIGISFFLQNLFNILFTSTPRTFTPPSYFEESVNFGGVIT

TYGSLMVPALTFVILIAVLWILYKSKYGIAIRALAFDIQTVNLMGIDANRIIAIVFALGSALAAVGGVFW

AANYYSVEPTMGTLIGLKAFAAAVLGGIGSVVGAVLGGLIIGFTEVVVVAFFPDLSGFKDAFAFIFLVFI

LLFRPTGILGINFEKSRF

>ETJ83844.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>ETJ83843.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDVIKLITIDTKG

DKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLKSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYSNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQDQKQNYKTIINP

>ETJ83842.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDMS

PEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHNI

FLK

>ETJ83841.1 hypothetical protein X909\_05640 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKTHRYQNKTQTEITIK

>ETJ83840.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>ETJ83839.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDAFNLKRVDVSTYQAASGAGKEGMQELVEAMQSFFAFKLDEFKSQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEIDVKKAKEILEKAPSVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>ETJ83838.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLVIVEDDINMRKSLEIALAEYEEFNIKSYKSATEALKKIDDNTDLIITDINMPGIDGIEFVKACENKY

DFIIMTGNATLSRAIEAVRLGVKDFLTKPFDVDTLVEAIKRAKIIREKTANKKSKKNEKKEENKDFFSTS

PNLEKTLNLSQKAAKTDASVMFFGESGVGKEVFSRYIHTHSKRSNKPFVAINMAAIPANLIESELFGFEK

GAFTDANATKIGLFEMANEGTLFLDEIGEMPYEIQAKLLRALQEKEITRLGSTKSIKIDVRIISATNANL

DEKIKNGEFRSDLYYRLNTVPVNIPPLRERKEEILGIAQKVLEDTCKEYDFKEKQLSQEAKNALLEYDFP

GNIRELISVVQRACILSENDEISSEDLFLEARSIKKDVKNLEKELICEVLLSVDYDKDQASQILGMDIKI

LNEKIKKYQIKDR

>ETJ83837.1 hypothetical protein X909\_05615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MERIVCLLIFLSFKLFAQDEFIFWAELSSKNFILFHQNQNLSLAMTQSENVEEQWVCEISYSDQDLKVLP

RTSLALIDDNMPKTIKFNFLNSHKDELSDCFIGARISVKDIVNTDLLHAQSETYVKILPLRFTVEFGEQN

AIIYYLKKK

>ETJ83836.1 hypothetical protein X909\_05610 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIYFMLAIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>ETJ83835.1 DNA gyrase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDSKDASLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARARAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSVGVRAINLDENDELVTAIIVQRDEDEIFATGGEENLENQEIENLDDENLENEESVSTQGKMLFAV

TKKGMCIKFPLAKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSISAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>ETJ83834.1 phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRCINCGAFALLCFCELCELELSEFSLNVRKLDNNFKVYSFYKYHEIQHLLHSKHYFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVIALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>ETJ83833.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPGGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEEQKVLNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDAIGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>ETJ83832.1 elongation factor 4 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>ETJ83831.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEKYLKSAIFLALYPLAMLASNLHEFIALSQNNESYLIKQMQSEQANLDKEQAFRNYLPSLSLNSAYVA

NNKDRFIIDPQESLFAKVSLNFLLFDGGAREANLRALESREKLSFLDKEQNKNYLALNAITLYFNTLSLE

KILLANQQKVSFLKSTFKRLQKFYDAGLSSKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSDTDF

KVQGNAFLENPQQEKSQNYEVMIAKEQINLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFANL

ADQFLEKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARFSERKNKEELNYLDKSLKVLQEQ

ILALNLSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNS

KVKE

>ETJ83830.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILFLLLVFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVSKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSRMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYNNIMAKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVRLGDDFFYKIDQNGTELKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>ETJ83829.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKLAINRPITVLMFFLALMIFGLISAFSMSVNLFPNVSIPLIKITSKINGDLNFVESKVTKEIENALSE

IDGVKTITSAAYDNFSVSVVEFKLGKNLEVAANDVRDKIGTLSLPSKPEIEKISSDSGSAISLFLYSKDK

IQLMREINDKIKPFLQRVEGVGKIEAKGFLEPQIRIELKPNELRKYNLNALDVANIIKSQNFKQALGELN

NNQDNYIIKGYFEATNLEELSNLRIKTGVFLSDIANISSLYEDEKQSALYEGKEGVLLELGKITNYNTLE

MIKNVKNALPILEKQIPKDISINMLYDKSLNIHKHLSQVIFDMVLGIFLTLVIVFLFLRNLSATLIACIA

IPTSIISTFFIIDLLGYDLNRLTFIALTLSIGIFIDDAIVVIENIAKKLKTYPPLQAAFLGINEIGFSVL

SISIVLLCVFIPISYMNSISGLFFNALGISVASGIVISFLVSVFLIPSIGARFLNPKENKFYEKTEAFFE

KIEQKYENLLYKILQNKVKFILATLVFIGLSFALATRIGLDFLPMEDDSEIQVLLESKKDLSLEAMKEKS

LNLLEKIKNDSNVKYAFLLVGYDDAKDATKAKIYVKLKNLDERNLRQTAIVSLYRQKFQDESLKIKILEL

PKIEGAGIDDPVQFLILGDDLNTLKEAASQAKEILGTNARIVDISDNANATKDEVALHINKEKAKLLDVN

PQYIAGVLGYSFSQLSVGSMDRGNSKDDIILSFAPEFKKDIEALKRISIKNNQGINLELSSVVDFIYSKD

LKTINRYNKNRSVKITAGVNDLSLGAVQKLLLDNMDKILNNNPSLSYAFSGFINLLGETVQGFAMAVALA

FVLIYLVLAALYESFILPLIIMITMPLAFGGASIGLFITGHNFSLFVLIAIILLFGMVGKNAILLVDVAN

KKCHEGLDPDKALLIAGKSRLRAILMTTFAMIFAMLPLALSRGAGYEANSPMAIAIIFGLISSTLLTLLV

VPALFKFCFKLDSKLRKIYEREKLN

>ETJ83828.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLIFEQNNMLKPMLFIKIDFVAGRILMKLSSNEKLFITYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>ETJ83827.1 arginyl-tRNA-protein transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>ETJ83826.1 hypothetical protein X909\_05560 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFLDSLKSIKKEMQANTNTSKLAKKSSKSGASVKNLEKLAKDIREKNQETNIDKEMQEIFLKQEKLQDE

FSEFIKNTDIKKI

>ETJ83825.1 acetyl-CoA carboxylase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVARIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIHKMGNKNIARKLMAKNGIPIVPGTEKLNS

YSMEEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKVIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>ETJ83824.1 cell division protein FtsW [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVADKRLFYLSCILITIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNTEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGVICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>ETJ83823.1 UDP-diphospho-muramoylpentapeptide beta-N- acetylglucosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>ETJ83822.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLIIDIIKDKYYLNSTVAGILTSLPLIAFGSISFIVGYFSPIRAIVFGIFLIFLGEIIRSYFGIYGLFL

GMLAMGCGIAIANVLLPSFIKEKFPKKMASIMGIYSLVLSISSIMGIALAIPLLSVFDLAGAMFFWVIFS

FVALVVYYPQAKNGRFFRI

>ETJ83821.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYVLSLALLGSLLGASELKYQEFDGFKSPESIFVDKNYVYISNVGEKLEPLAKDNDGFISKLDKNGKV

LEHKFLTHLNAPKGMMEIGKTLYVVDIDVLRGFDLKTKKEIFNLPIKGAIFLNDIEKLDDNTLLVSDTGT

GLILKVDLKTKQYDELLKLDLAKFGGPNGLYLDRKKHKLFIAGYHPDGVSGGVVMAYDLNTKELSIIKNE

KESYDGIVPYKDGLLVSSWGNNLNGYIYNLDNVKSVKLELPLMKGPADIFIEGNILWIPKMAEGKIFKVE

LNK

>ETJ83820.1 AraC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKILSLPEDLKQLKGVNYKKIKSCTFAKYTQTDTSHSTFVNVGSHLLTFVRKGYKILHTASKDYKINSY

ETLFLKAGSYTLSNVGLSKGVYEAYLFFFDNAFLIELIYKYKDFFKLDQKFQNYEIFWVKNDKILQGILE

SFSPHFEENTQILDPIVSLKFEEIFLHLLLNKNIYFISFLSGILKEFRLDLSQLFEYCGREFLSVNEMSN

FAKLDLATFSKEFKKCFGQSPKKWLDEKRLQKAKILLKFSKKNINEIANECAFSSVAWFIERFKEKYEQT

PKQYQKTKNLYFLSKN

>ETJ83819.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MWDKKIIAISDRKCVQIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLTKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKMGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINVVGVCMREILMKEKDLKKYLLECRQNLR

>ETJ83818.1 thiamine biosynthesis protein ThiH [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQDYMQYLPHMQEIKSEILNKVLSQVQSYDESQFSAKDVENALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLNEAEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEDEYKILHEKGCDYVTVFQETYNPLKYSKIHLAGEK

RIFPYRFNAQERALKAGMRGVAFAALLGIDDFRKDALATALHAHFLQQAYSHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDEQF

EISDDRSVDEILAMLKRSNLQAVMSDSIYVG

>ETJ83817.1 thiazole synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>ETJ83816.1 thiamine biosynthesis protein ThiF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNENDELFCIEKNTLPPKDALDAMMR

ARHTPKLHDKLKNGRVAVCGLGGLGSHIAINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTEA

LKEQISEINPYISVEICTLKIDEDSLKSLFKDIDIVCEAFDSAIAKAMIAQNFHRFYKDSVLICASGLAG

YGDSNSIQTRKIAKNFYVCGDLVNGAKLGNGLMAPRVNICAGHQSNLVLELLANKE

>ETJ83815.1 thiamine biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIINGQKLELKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>ETJ83814.1 succinyl-diaminopimelate desuccinylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>ETJ83813.1 lysine transporter LysE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDSFLSGVFLGFGVSVPFGPVNILILTYALKAFKNSIAVGLGAFSIDMLYLFLLQFGLLNFLGNVIFMR

SLAIFGFCFLTYMAYLMLRKKKESLNLEHKEFKESLLKSYIKGAFLNGSNPFVIGFWLSAASVVLSSDYA

YLMTLGLVVAILFWVSALAFVVARYSHVFSAKVVFIINIISAIIIEYFALNLLYKTFLG

>ETJ83812.1 NAD-dependent deacetylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNIMILSGAGLSAPSGLKTFRDNDGLWEEYDVMEVCSATGFRKNPKKVLDFYDARRAQLQNVKPNHAHE

KIAQLKEKWGKNLFVITQNVDDLLERAGCKDVVHLHGFLPELRCLKCEGIFNIGYEKIIDKQCPKCKSKD

LRHNIVMFEEQAPAYATLYSLLNQTSLFISVGTSGAVLPVGRYASMCEKSILNIYEKDANLERYFDKIYT

EDIISAIDKIALDIENFMKDGNV

>ETJ83811.1 DNA strand exchange inhibitor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDTKEELISKLDLNSYLEEFKALFARDKEIFLQGDSNLHFKRIHELCEVEFPTMPELSNLDKALVHLSK

QGILHLDEIFEFVKIFRYFEKLKKLKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDERLVDLNA

ALRLKNENIIVEFKKFCHTKALMPYLIDTQIHLISNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLSV

ENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQST

DLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGAFK

EFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLITNNLKII

ITTHHKHLVMLLAKNEQVELIAALYDEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGDD

KENLEELVGKNINLELELKAKLENVEKKEQKVDEILLSLKDQKEKNEQEFRTSLRNLEFKFHKAIEEAKK

TIQLKDTKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRVP

LKLLKKSTPTPKISPKTSISVAKPTNLSVSLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTGK

LAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>ETJ83810.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSRVFLYFLIILILALITFALREKLGKKTKPFFGILLVIFIVLAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>ETJ83809.1 UDP-N-acetylmuramate--alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIETI

RTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLATN

LKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>ETJ83808.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKILLQIFIFSVLFIVTFAINRILMQNSFIPTGLISDKNEIFLMYLLGVFHDIRFLSAAFLPFLLCGFL

SLIFSNIKINNKLVIYSKNFYFIFSSVYIIVLSCLCIGFSYVKYYYYEIYKTKFDIFMFTLKDDNTKTIL

SIIYHDYPILKILALMLIFGVFVFFLNLKILNLKLKPVNLRLFPLIALNLILIIVYVIALRGPFKHVAIN

VQNYSFSEYSVVNDTMLNPIMAFSWALKQYKEEAALKVITPLKAQELKEKLFDYLHQSPINLKAEKNHPS

VFVNLMESFGLNLADFTNTEHNFLGSLDKHFKQDFLFKRFLSSSNGTIPSFANLFFVSPFSNISTSKFQK

TYLDLTPIAVYKKAGYKVIFVSAGNGSWQNIKNYLSILGVDEIIDENILMKEYNGAKDSENGYGIADEFL

YKKVYDLLQKNPHKTLIIALTISNHPPYKIPQNDLPKLQNIPQTLLNMLPYEKDKQDNIIKAYTYANNEF

GKFLDKVKQSPFKNSVIIAATGDHRVREMSMDLNSQKAFAYSVPFYLYIPKDLQDNIYYDKDRVGSHKDI

FPTLYALSLNNVKYLSVGGRNMLARPSDEKLEFGINDAVWIDKKGIYSGGKGYYFESNDTLKDMNKAFNL

DGYTKDFDKFYRELNLYQLAERLGISK

>ETJ83807.1 carbon-nitrogen hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVSVEAKSYKKLCLKVTPNGVKSYEQQILMPYEHWNEEKFFSNKTPSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMAKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>ETJ83806.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>ETJ83805.1 inosine 5'-monophosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVVVLDSAHGHSKGIIDTVKAIKAKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGVGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>ETJ83804.1 aspartyl/glutamyl-tRNA amidotransferase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>ETJ83803.1 hypothetical protein X909\_05435 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLENPIPNSIIITTIAVVLAFSALAVFLIKKTKENK

>ETJ83802.1 isoleucyl-tRNA synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYKETLFLPSTTFAMRANLAELEPQRFKKWFEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKDLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDVKACEKLGVSKASAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

SGCYDETLRAKGLLPSHLLEEFIGLHIFKANEKILELLGEKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIGSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFDFVAAIFEKHGADAWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNAVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIASEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVKEFSFIDKWILSRATKVF

KASKEAFFAYEFAKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALMAKELLNLLAPN

LSYSVDEALEHANVLIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDILKKDKIIKSTLELN

LNISFNKFPNEELADWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKLQSKNEETPCLRCEE

VLKGVQC

>ETJ83801.1 competence damage-inducible protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKHLLYLIGDELTINEKFKNYIYRTYEEKFKEINEIRIQNKTDKDLPFLLENLLNQYDFITLFTSPLHYA

TVAKILATLNDDNLILKDDTLVPDKAEFSKNSFVCNFSNSKINVVKINPSEKLPDLLGHIKLNFAYFCIF

GMDDESAILLLQTLTKSYEISIKSTKFLDNLVLIKATCANFGKLDGFLNSVKNLFGQKVFLGKDPIHFIS

SKLLEKKLKISFAESCTGGLCASTLTKISGVSEIFEGSIVSYSNRIKHEWLGISESVLENNGEYSERCVY

FMLKGIFKTANPDFALAISGVVGEKDEGKIKSGTIYIGAMFRDGTFIQETLYLDGDREFMQEQAVLATFC

LLLKLKPEIFEI

>ETJ83800.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEIKLKEDLEKIYPLIKQLRNNLSLKDFLDKIQLATQTQHYKLFAYENEGSYKAACGVMPFNVLYHNHC

LYICDFVVDEALRGKGIGQAFLKKIQIWAKDQGYEELELSSSFFRTQAHEFYIQKMGFEKSGFVFKKNIK

L

>ETJ83799.1 NAD(P)H-flavin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFKELISKRRACKLFNDKKINEKDLHFILESGVLAPSSHGFEPWKFVVLEQKEHNLKLSTLCYNQQNVA

SASHNIIFLARKDLQSKDEFAQKQVRRFSGSSEENFQKILEIYTHKTNAMNDNELYHYAQLQCYLAMMQM

SLAAMSLGIDSCMIGGFEKARVDNFLNLTYPFETAVILSLGYKAHEPKYSTQRLNFNEVVEFYKEK

>ETJ83798.1 nitroreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKELEIFSTRYSCRNFKNEKLKKEDLNSILEIARLSPSSLGLEPWKFIVVQDEKRKEELSKICNQQKHV

KDCAALIIIISRLDFLDYFEEKLRKRDMSETEMQKRLDTYMPFLKSLNQEQKISYAREQAHIALASILYS

ANALNIASCTIGGFDKEKLDSYLSLDIQKERSSLVVALGYCNDKKNPQKNRFSFDEVVKFI

>ETJ83797.1 CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLPNILAIFRMVLAPLLFFLLIHKFENIHQSWINYFAALTFSLAALSDFFDGYIARTWKQTTKLGGILD

PLADKMLVLAAFLGLLLTGKANEWVIYIILVREFFITGFRVVMISENLNVNASFAGKLKTAFQMTAIGFL

IMEWIGGEILLYIALILTLYSGFEYIYTYIKAQKKGEK

>ETJ83796.1 zinc metalloprotease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRSLLLLIVILILGIKFYSIEFLATVLVISFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIGNIAPNSAAQEIGLQKNDTILEINGVKIQSFDEISKHLSLEPLKILIDREGKNLEFTLTPKIGQG

YNDFGQIVEKPQLGVSPNGTSTLVKHQGLESFKYAIQESFQASTLIIKGIIKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRRKVPQRAFEYLSYAGMAIL

LSLMLFATYNDISRIAGE

>ETJ83795.1 hypothetical protein X909\_05395 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKKFSYPIPNFTDRRKSIIFWRYLRFQARKILYFPQVRLLEKTLNEEKNKHLKDFFSQRPYACYNAIRR

FCDKSFKANERVKTLIYDVDKGLTCFKFLPEEQMIFSFDEDFELFLGYNHNVYEEGFWAFSLKFKKYTIS

QCNFCFTLENNLLLSCIQGYKYKDFNILEINKILTKKCHGLRPVALLIECSKMLCEILKLQATLGVHEKN

QIRSQKGKEKGYFVDYQKIWLENGGELIKIDKHKYYKLHHSQKNLEEIPSQKRSMYKKRFAMLEEIKVNL

DKTLDIQD

>ETJ83794.1 30S ribosomal protein S6 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>ETJ83793.1 single-stranded DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNAPQQGGFGNNSFSNNNYSGNYENQSYDPYMSE

NQNFNKAKANPAPQRNQNPQHEEKLKEIDIDAYDSDDTNLPF

>ETJ83792.1 30S ribosomal protein S18 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>ETJ83791.1 Lon protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQIEEIQNYPANLPVLVEDELFLYPFMITPIFINDSSNMKALDLAIKNDSMLFVAPSKLENGRNFDEIYN

CGVIGTIMRKVPLPDGRVKILFQGYAKGKIIEQISNKPLEAKIELIKEDFLEGTKKEALLEVLKEKVKNL

ANISHYFSPDLLRTIEEGFDASRICDLILNTVRIKKQVAYEFFVLTDLEQKLVKLIDLIAQEIEANKIQK

EIKNKVHSRIDKVNKEYFLKEQLRQIQKELGSDTQKEDEVREYQKRLELKKKFMHEDAYKEIKKQIEKFE

RIHQDNSEASMIQTYIETALDVPFEKISKKKLDIKEVSKQLNHDHYALNKPKERIEEYFAVRELLEKRKI

AEKDGAKVILCLYGPPGVGKTSLANSVSKALKRELIRIALGGLEDVNELRGHRRTYIGAMPGRITQGLIE

AKQINPVIVLDEIDKLNRSFRGDPSAVLLEILDPEQNSKFRDYYLNFNIDLSKVIFIATANDISNIPAPL

RDRMEFIELSSYTPSEKFHIMKKYLIPDELKKHGLKSNELFIDDETIELIISDYTRESGVRNLRRKVAEL

CRKSAKKLLLENIKKVIINTKNLNEFLDKKVFEIEKNNGENQVGQVNGLAWTSVGGDVLKVEAVKIKGKG

ELTLTGSLGDVMKESARIAFSMIKVLIDEGKIKIPKKIIIDPKVNVYDSYNIHIHVPDGATPKDGPSAGI

TISTAIASIFSDKKVKADVAMTGEIDLKGKVLPIGGLKEKLIAAYKADIKTALIPRKNYERDLKDIPSEV

RDNMEIIAVDTFSDVLEYTLV

>ETJ83790.1 hypothetical protein X909\_05370 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKGIFLLVFLSVFFSACSTKNDEGLYNLSASEWYKQIIKDLQDKDLEKADDHYNGMASEHVADPLLETT

LIILAQAHMDEEEYKLAEFYLDEYNKKFGNSRNADYIRYLKIKAKFDAFAVPNRNQALMLESQKEIDTFL

KDYPYTEYEPLVQTMLTKFNLAVFYLNSTIENLYQRIGHDESAQIYKQRLQESEFYQQSIIKPELPWYRS

IFERF

>ETJ83789.1 flagellar assembly protein FliW [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>ETJ83788.1 pyrroline-5-carboxylate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALAKEGFKTLLYKDFNIEGKDVILAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIIPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEIQMNAAMAISGCAPAFLALIAESIANAGVYEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSAK

>ETJ83787.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKAFILIESISAITIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIILQTSALKPI

VLQEQFVNDGIFQFQKLYFQDQNYSVYFKE

>ETJ83786.1 hypothetical protein X909\_05350 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTALHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISTNFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLNQQGLISKNISSFNLQNNKLKICLKRQT

KYCLEKRILL

>ETJ83785.1 hypothetical protein X909\_05345 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQAKQENKECL

DNIYFNYAKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>ETJ83784.1 uroporphyrinogen-III synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIYLLNETPFKGVENLILNEIIFYDFSIDLSLYDALICTSKNALKALQNAKITLNFKLNLYAVGQSTAQ

YAKNLGFKKIKIPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNVGVDLDEVIVYENVFKKG

DKKLTHPAIFIFTSPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>ETJ83783.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNKLDLSLYLVASQGNKSEECFLNTLENAIKGGVSIIQLREKELNAREFYKLGLKVQKLCKAYKIPFLI

NDRVDIALALDADGVHLGQEDLEVKLARKLLGDEKIIGLSLKKLEQLEFIQGANYLGCGAIKATPTKESS

LLSLELLSQICDKSPIGVVAIGGVDKAVLDELKGINLSGVAVVRAIMDAKDAFLAAKELKRKIYENLPLK

>ETJ83782.1 phosphomethylpyrimidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFYAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>ETJ83781.1 nuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTGARIFTKLLNLDLNYHDFDWLENQGLSEFELLISVILTQNTNWKNVLKALENLKKENIVSLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDSILNYLCKREI

LVVDNYSLRLAFCLGYEFENYEELREFFQSGIESEQENLCKILGRKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>ETJ83780.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDWNKTYAAIYRARKDYLKPIFEIDPITLKDLVGMESQKKALYENTLNFIQDKGANHALLWGSKGTGKSS

LIKAIFNEFKDQGLRLVELNKEDLFALVDIIDEIRLENFKFILFCDDFSFEKGDDSYKFLKPLLEGSIEK

APNNVIIYASSNRRHLLSESIADNLDTQIAHTELHLSDAAEERLSLSDRFGLWLSFYQGNLEEYLKMIDF

YFKDYSCDKELLHAKAKEFATLRASRSGRTAKQFYLAFKENFK

>ETJ83779.1 transcription-repair coupling factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQASFYEYLQNPKICELLLCKDEKQADLLAQVSRFKGLKTFVLPDFRAQFGDDLRAFSKELFDLCKILNA

YHKEEEKKILISPLNTVLKKLPSKKHLQNYHIDKKQNFDLKCFEDEISRLGYEFVDIVQDKGEISIRADI

IDIFCINEENPIRILLFGEEIESIRYFDLQSQKSIPNELEHFEICPFLKYFDKENYEIFKDKLEDFQSDT

LIHDINSLGFWCIDDFFNYLELDFLACEKFDINEYEKDISFVNAKILPQAKKFKELQSSYNKDFFEFHKN

KKITLLAKNEALFKALELEDTQNIHFVKSDLRLNLISPEELIISLNQKEKQKTRKKASLIIDELKNGDYI

VHEDYGVGKFLGLEMIVISGAKKEFVAIEYQNSDKLLLPVENLYLIDKYLGVSGSIPSLDKLGKTSFIKL

KEKLKTKLLAIASEIVIMAAKRSLVQAKKITVDLSRQADFITSAGFIYTSDQEKACHEILQDFQSGKVMD

RLLSGDVGFGKTEVAMNAIYPVVKSGFCAFLFAPTTLLSHQHYKTLKKRFDPFDIEVFKLDRFTSSAEKK

QVLQNLKENKACVVVGTHALLSVECENLALVIIDEEHKFGVKQKEKLKEITQNSHILSMSATPIPRSLNQ

ALSSIKSYSVLQTPPEDRMDVRTFVKENDDALLKEAIARELRRGGQIFYIHNHIASIEQCKKHLLELFST

LRILILHSKIDAKVQEEEMLKFENKEYDLLLSTSIVESGIDLPNANTIIVEKSDRFGMADLHQLRGRVGR

SDKQGYCYFLIEDKNAITKDALKRLVSLESNSFLGAGSVLAYHDLEIRGGGNLLGVDQSGHIEQIGYSLY

LKMLEDELNALSKNEVDQKENKLDLKLNVNAFLNSELISEDRLRLELYRRLSKCEQVHEVYEIEGEIEDR

FGKLDIYTKQFLSLIIIKILALNKFKSISNYEQNIQFTALNDEKELIKAKSKDDDDILEAILTHLRKA

>ETJ83778.1 hypothetical protein X909\_05310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIFNKGGISPTSSSSSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGRFNGTSKIKEDTIKLIENNNEE

>ETJ83777.1 peptidase M24 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKNKFTITITDINGSRHFYLNQIIKKIVFYTIAFIVLFLVFSGFYIKYLDSKLSDISEKREELLKKSKE

LELSNSQMQKSIEEKTQQYAAIEDKIASFEEALGLEVENNLTISARLDNLQLTNEQQLGILGQIPNGWPI

ENKGITGNFGWREHPLLKRREFHPGIDLRAEIGTPIYAPASGVVEFSGYSDNGYGYNVILLHNFGFKTVF

AHMMRKEVVKAGQFVSKGQLIGYSGNTGLSTGPHLHYEVRFINKTLEPLYFLNLQRKNMNDFFNQERRVP

WQSLIKAVSAQHPALAQKQQ

>ETJ83776.1 folylpolyglutamate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNIMKVENFLAQKSINYDKIDRFLMFRMYEKYKKYFKNIPIIQLIGTNGKGSTGRYLTQLLENLNYKIG

HYTSPHIFSFNERFYLDGKIANDEELEQAHIRLEEIFKQDLQKLSYFEYATFLAMILFQKCDFIVLEAGV

GGEYDATSVFERRMNIFTRIGFDHIQILGNSLEDIARTKLKVMAPIALISDEQEQNVLNLAKKIAFLKKA

NLQVSSLNPFLKEKFEIYCEKFVLPCFLKHNLKLALKACEILTSQEKTLEALKKLQELNLQGRCQEISPN

FFVDVGHNPMAAKAMLDKFQGEKINLIYNAYLDKDIFQILNTLKPIIDTIQIYKYKSAERKLADDEIYSI

ASKLGIQCKEFVKLEENKKNLVFGSFMLVENFLKEWCGKK

>ETJ83775.1 hypothetical protein X909\_05295 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIPNTNEIAKQTLIALKERKLKPTPENYTEIFEELSLKYGITSSNKAKLDKYKTLLLPIYQQELNSKTIR

SLEELISFLISVLNRQSGKQFSEFFDFLYTISKTLQISKDKKIRDLAKVTSIRISKTMDSESIYLLTKKW

KELERNYDENDLEEQARKYGISKYDDYDSVIKKLLVKLEERSYEHFSELLCLGLNPSLVEDLKIQGFIQN

LTQKPFVIGEENFKNELMEFINHRIMVDNMYVQKNLNFFNDNLKKIYELLVLLNKSNEKNMDFINTLKPD

ENGEVKLSFEDLKLKFKQLGEKITSLNNQIEFTQSLEEREAWSVLKELDKMDENFNKYKVNYSLALFSIV

NYRFIMEKYGMGSLNEIFVRFKKILKDSCSEFDELWMIDEKSYLIVSPGKSKDEITQLVNTNLKTIENFR

FIYKQDIITPKIHVAYLDKQSKPSINILDELIKQIAAVNEQYNES

>ETJ83774.1 hypothetical protein X909\_05290 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILIFCIGLFLGACGYIPTSKIANNIFDEKVYVNVELSQQDPKNSIYVADTLKEMVISKLGRKLALKH

EADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYNFEISPNSIISDSAR

YEAIRAASSEAFDEFISVIAIKGQKRDSKY

>ETJ83773.1 leucyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEFFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVAQKKMPGYYVKITAYAEELLKDLEELKDK

WPNQVLTMQENWIGKSEGLEFSLNLDEESKQKTKESSLEVFTTRADTIYGVSYIALAPEHKIVQNLLSQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFILADYGSGAVMAVPAHDER

DFEFATKYNLAIKQVIQTQENLPYTQKSGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIVPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFILFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNVKKGELVELKQENLNKEEKYARLKVYEALKKSFEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFEISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>ETJ83772.1 preprotein translocase subunit SecF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQFFSEKKIYDFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPTLLWFKFSVLEFRNKEIEKAKRKQDKERNRAMYEKGTV

>ETJ83771.1 preprotein translocase subunit SecD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRNSKINYRLIIFIAVFIFGVAFSLPSFLQSERGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEAASYGLILVPDSRNPNLKYTLKSIPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>ETJ83770.1 preprotein translocase subunit YajC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNVTAKISREFIAKKIDA

>ETJ83769.1 apolipoprotein N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLKLNFLPYFSFIPKKLNTNSIIFKIIKVFFIAILLSNSIYLSFFENIFTQTISPFLAIWGLVLLLKSK

NSKQYFWIGFFVGILWFWWIGLSSIYFNLNYLVPIIPIIIGFIYGLLFRLCYLLKFDFLRLCGIFCISFI

HPLGFDWLNWGIFTVYGFFDPSYRGIICIFLIAYFIYEGYISRYYKIAIVLILFFSGFQYNEKQAQTLNL

NYKLINTNISQDQKFLQENLKSNSDILIQDILQAINEKKELVILPETAFAFDLKNTKYELMLKELSYKIT

IITGAFHVEKEHTYNSTYIFKKGNVYILNKHFLVPFGEEIPFFKDLTKKYFLKNIEEFSKGPIQSKYKLD

NQIITNAICYEATKEQNYQNSQIIIALSNNAWFNNSSEYKLQQLLMKFYASKYGVSVYHATNGKENIVIL

PKKLLSKDWKNLSKEIFNDKK

>ETJ83768.1 S-adenosylmethionine synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKADYDNLV

KDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGETGAGDQGIMFGFASCEAEEYM

PAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMKIEDLR

SLVMKLILDSNLPKELFDPNKTRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQSSKDYT

KVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQNFSLTP

NWIRDQFHLDKPSKETFLYADVAARGQVGQKDYPWEKLDALEQFKKLL

>ETJ83767.1 serine/threonine transporter SstT [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSKIIQSYAKGNLIVQICIGIVLGILIGISSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGAKIKNIIILYIVGTFLASACAVLANFFFPVKLVLDGVQTATNSSPTHMSEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGIALKHCSNEAKQVFIDINEGVLKIVKFIVKLAPFGIFGLVANSVAQTGAQGL

LSYVKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAACGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>ETJ83766.1 aspartate carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>ETJ83765.1 oligoendopeptidase F [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYTLDANEFLQALKDYENLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIMLYLSNTGANAFSRLFDESMSALKIPFEGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFNLVSQFYKRKKQILGYELKDYD

RYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFVL

LNYTNKRRDLFTLAHELGHTIHQKLSYHVSYLNQNTPLTTAETASVFAEMLVFDFIKDKLKKEELLSLYA

NKIEDIFATFYRQINFTCFERRLHAQENELSTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIHS

PFYCYAYAYAQLLVLALYGLYKSKKCENFKELYIKMLSLGGSVSPKELVGMFGFDIEDENFWEIGIKEIQ

KLINEFMELQSC

>ETJ83764.1 hypothetical protein X909\_05235 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLETILKNENFIHTMQKHCYEVISHLIEENIEFSIVANTNFIDFNPELPKELDIKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNDDFDSFVKVDLGAITQIQVENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>ETJ83763.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLFEDLNDSQKQAVSHIDGAMLILAGAGSGKTKTITTRLAYLIGEVGIPSHNTLTLTFTNKAANVMRHR

ALNFLQGNHNPLLCTFHKFGLLFLKLHFERLERKNSFIVIDTDDTKKIIKDLIHDKNKDNVYDIIQYISY

CKNEGKRVSNVFEDLNLLKEHNFEKYQNEYKFANYYRAYEEYLLKQNFVDFDDLLLLSNLILENDINFAK

EQSLLYNYITVDEYQDTNTLQYKILKNLCCMHENITVVGDDDQSIYSWRGAKIENILNFQNDFKNVKLVK

LEQNYRSVGTILQAANNLISHNEQRLGKTLICTKDTGENIKILKNENEKDEGLYIAQEVKKLLNSGVEAK

EIAILFRVNALSRAIEEAFMKKQISYKLLSGMRFYERLEIKDLISYLRLILNPSDDLSFKRIINRPKRSI

GEKALKNLEEYAKKRQISLFDALCESDGGVGILTTKKAQNEANIFIQNIHTLKSYDNAKKVFDNIEELFK

IKDYFSEQDDGDERIRNLDEFYANLREKLKEDPEASLEDLLSEISLLSDQDNLDEECVCLMSIHASKGLE

FDYVFIIGFDEGFFPLNSEENLEEERRLAYVAITRAKKLLTISVANSRFYHGSRANINPSRFLEESKLIN

EKSKNQNIQKTSFCKGDLVKHKIFGIGRVVEVNKSGKEEKLNINFGGIMRVIMASFVEKAV

>ETJ83762.1 tRNA pseudouridine synthase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKIFAAFKPRGLSSNAFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYTKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKEIKNIKEFDLANLQQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YIDLKPNFIKELNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>ETJ83761.1 carbon storage regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>ETJ83760.1 4-diphosphocytidyl-2C-methyl-D-erythritol kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>ETJ83759.1 single-stranded DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKNEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>ETJ83758.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILTLFLISLAFFLNACSKEEEIQNDFMFEEYHKGDKIVLNSVNGGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIIGLTHFEDVSDETVKKFADDYGAYYFLSNGGSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>ETJ83757.1 ATP-dependent Clp protease ClpS [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>ETJ83756.1 ATP-dependent Clp protease ClpA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKYQENLQKYLDNAKNLSLINHHEFVTCEHVLFALLKLSTDFKDIFEEFSDGDLELLETELKNYISQNNQ

VIKQEIEPTISVVLDEILLSSKNKNNEIKIIDFLEKLIQDSRSYSSYLLKKHNINLNKIQELQNHENIQN

LSNHTSDLTLLAQNGKIDPLIGRKFELERMMQILSRRKKNNPILIGEAGVGKTAIVEGLALAIAKKKVPK

NLQNAKIFSLDMASILAGTKYRGDFEKRIKEILNELEKIPNAILFIDEIHTIVGAGSTGESHTDFSNLLK

PALSNGTLKCIGATTFMEYKNTFDKNKPLSRRFAKINVDEPSQEESLQILKGLKNKYEEFHHIKLNDEIL

QYAVIWGKKFFNDKFLPDCAIDLIDELGASFALNPKAKKNVNLKDLENVLAKMTHHHKMFEFDQNKALMN

LKTNLKAKIFGQDEVIDSLVSSLKQSFAGFKNSNTPRGVFLFTGSSGVGKTELCKSLAEFLGLNLERFDM

SEYAEKHAISKLIGSPAGYIGFEEGGLLSNAIRKNPFSLVLFDEIEKAHPDLSNTFLQIFDNAELTDNSG

LKVDFKNTIIIMTSNLGLKESNELGFLSKNEEKSNRAIKDFFAPEFINRIDKILHFNDLNDTILVKIIEK

ELDEISKNLNNIKLSVDDKAKIYLAKKAYNKEFGVRLLKRIISEEIGEKISDEILFGKLKKGGIAKIKLG

KNGKLEFIF

>ETJ83755.1 leucyl/phenylalanyl-tRNA--protein transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MESSNLYSKLLNAPKNAPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCILIPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDTRSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVSIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>ETJ83754.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFGAKKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEIKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLCLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

SAEVAKAMS

>ETJ83753.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSSMGSELYLMFFAAITLLAILNPFGNLTQFLAMSDGLPLMLRKKLFRTILYTAFTIVLVFLLSGPLFM

NYIFRVSLDDLRVSGGLVLIIMAIKNLLFSTKIATKDFSSYQDMDDKEILRQSLIPMAFPMLVGPGTLAS

VIVIAEDGGLDVALGGVMIAFIFMFILFHFAATIEKIVGKLILHVFSRIAQVFIAAMGFKMIIVGLKDIF

NL

>ETJ83752.1 methionine sulfoxide reductase B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIVCANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>ETJ83751.1 hypothetical protein X909\_05170 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKEFFQELQDILYEKNITIKFHSFQNFYEDFKSRKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFLN

STHALAKIIHSVAHIEFNAINLALDASYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGIVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNRYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQKECEVIEKFYS

>ETJ83750.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLCPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>ETJ83749.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDFIAKDGYLSLIILSLIFIFMWIFYSFSILLLALIVICIFLFRTPKRELVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSAKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>ETJ83748.1 ribosomal protein L11 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKYYELFFIVEERYKNLFLDFAFDLGIEAIEEKDNGVYIRSHESLEDLSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTYSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFYKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

G

>ETJ83747.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>ETJ83746.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYIKDIHRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQDEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMVYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>ETJ83745.1 UDP-GlcNAc C4,6 dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>ETJ83744.1 aminotransferase DegT [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELENSRSNR

WLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>ETJ83743.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLQQRNLMARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>ETJ83742.1 UDP-galactose phosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>ETJ83741.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIGFLSHAGASIYHFRMPIIKALKDRKDEVFVIVPQDEYTQKLRDLGLKVIVYELSRASLNPFVVLKNF

FYLAKVLKNLNLDLIQSAAHKSNTFGILAAKWAKIPYRFALVEGLGSFYIDQGFKANLVRFVINNLYKLG

FKFAHQFIFVNESNAEFMRNLGFKESKICVIKSVGINLKKFFPIYVESEKKELFWKKLNIDKKPIVLMIA

RALWHKGVKEFYESATMLKDKANFVLVGGRDENPSCASLEFLNSGVVHYLGARSDIVELLQNCDIFVLPS

YKEGFPVSVLEAKACGKAIVVSDCEGCVEAISNAYDGLWAKTKNAKDLSEKISLLLEDEKLRLNLAKNAA

QDALQYDENNIAQRYLKLYDRVIKNV

>ETJ83740.1 peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>ETJ83739.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVHLILMNDKISYEIPECQIHFLECSKPSENPILKFLKL

PFLALKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTHLVINECTTPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTDLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>ETJ83738.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQASGEFVTFLDDDDELLSGALSTLMQKASEGYAHVFGNCLMEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSVFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQDSVTL

GASKNAYRVYLGYLELAKILENELRMSKDKDYKKTCASYYKMAAYYAKLAKNYKALYKCLFKSLSIKINA

PALILLILSIIPNNMIEKLSKIRVALCKN

>ETJ83737.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVKVTSLEQFKFDTLYHKIASR

FKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCDA

LSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPVMFLKAIAHLDKNL

QENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRIENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEVC

RISSSYYNGAKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWLK

LIAEVKNA

>ETJ83736.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKLFFILSKEDKNFLFFLLIFSVFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHAIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLVSEIFVVLLLYALMLLINYKITLFLSVFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKLKTKEDGVLSLFKAQSEAFSKANITNESVTAVPRIYLEGIGFCVLVFIVVFLVL

KNESDISGILSTISIFVLALYRLMPSANRIITSYHDLLYYHSSLDIIYQNLRQEEENLGEEKLSFNQELK

ICNLSFGYEGKKYLFKNLNLNIKKGEKIAFIGESGCGKSTLVDLIIGLLKPKEGQILLDKQELNANNAKN

YRQKIGYIPQNIYLFNDSIAKNITFGDAVDEEKLNRVIKQANLEHFIKNLPQGVQTKVGDGGSNLSGGQK

QRIAIARALYLEPEILVLDEATSALDTQSEAKIMDEIYKISKDKTMIIIAHRLSTITQCDKVYRLEHGKL

KEEK

>ETJ83735.1 UDP-galactose-4-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETSPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>ETJ83734.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIYEYCESDVLNTYM

LFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>ETJ83733.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIVSRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FMLNTDFNAKNLAFKQDVFSVDENLKQLLNNKLKLDKNEKNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQTKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFNLEELMAFTKMMDLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDTGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>ETJ83732.1 lauroyl acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARIAFHLNKKHRKIINTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFTTAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSQSRTQFDIELIDKKGGIRQMLSALKKERALGILTDQDCVENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPVYAYKEGGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKGAK

>ETJ83731.1 glycosyl transferase family 2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>ETJ83730.1 benzoate transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEDVLLYYPMLSQAQKIAYMNCNLYHYVPNNNSICNTKNEVLVKNNIQELQLVLNYLRQNYILNKYCSV

LYVLIKYLLYIQIYKIKRTKLMVTLLAKINILTLKILFKYKKFLKQC

>ETJ83729.1 glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKISIILPTYNVEQYIARAIESCINQTFKDIEIIVVDDCGNDNSINIAKEYSKKDKRIKIIHNEKNLGL

LRARYEGVKVANSPYIMFLDPDDYLELNACEECIKILDEQDEVDLVFFNAIVESNVISYKKFDFNSGFYS

KKEFVKKIIAKKNLYWTMWGETYKKEIVFRSFCEFKTRERC

>ETJ83728.1 alpha-2,3 sialyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>ETJ83727.1 polyhydroxyalkanoate synthesis repressor PhaR [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>ETJ83726.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILFITGTRADYSKIKSLMYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYY

QTDKALATTIDGFSRYVNELKPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISK

LAHIHLVNDEFAKRRLMQLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEI

TSIKNQADNLVKALIQSNKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFII

GNSSCILKEALYLKTAGILVGSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLF

FEYLLSGEFFKLSTQKVFKDIKHA

>ETJ83725.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKIISLYKRYSISKKLVLDNEHFIKENKNIYGKKHKGFFDFDEKAKDVKSPLNPWGFIRVKNEALTLR

VSLESILPALQRGIIAYNDCDDGSEELILEFCKQYPNFIAKKYPYKVDLENPKNEENKLYSYYNWAASFI

PLDEWFIKIDVDHYYDAKKLYKSFYRIDQENKALCYPRINFIILNGNIYVQNSGNYGFIGGGDQLLIKRR

NSSFIERRVSKKSQWIDPKGLIEELYSEQQVLSQGVKILQAPLLQWHFPALKYRRNDYQQYLDILSLEEF

QAFHRKSKEAKKIDFAMLKRPVIEQILKKFQGEIK

>ETJ83724.1 N-acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>ETJ83723.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>ETJ83722.1 ADP-heptose--LPS heptosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTALFKEFPNSKIIIENKQSRYKQALSLRK

ELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLSIKAHFKDLKLPFKLK

FQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSHEILIFGAGKAEQELCNEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENAKLVHLDL

ACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>ETJ83721.1 lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>ETJ83720.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>ETJ83719.1 cytochrome C biogenesis protein CcdA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>ETJ83718.1 ADP-L-glycero-D-manno-heptose-6-epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVGK

DEEPKNPYAFSKLMMDKLAKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPRLFEGS

DQIYRDFTYIKDVINANLIALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>ETJ83717.1 D,D-heptose 1,7-bisphosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARSYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYHCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNANIGTLILVNEEKKEGDFFRQFKNLKEILSFFKEKDI

>ETJ83716.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGLTEEDFKAIEAHIETLK

>ETJ83715.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALDKKRLS

>ETJ83714.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKCEHCKLDYKQAQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFITK

TKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIGYK

ASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPVLF

YTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYIYSLWAMFFRVGEVYFDSVAMIICFVFIGKYLEMFSK

KRALDTIDGLNDFLQNEVLVFDGKEFAPKEVQKVCLGDRILLKTGDKILIDGICKSGEMSVDTSSLNGEN

IPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIQLLELASSKKAKLESLVNSLSAYFSRTVLLI

AFICFAFWFFYKEESFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSKCD

CVVFDKTGILTKIELELKEVFLDKALDLNELYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSIQA

KGLSAELNEGLLLGGSSKFLQEKGIVAKEFDNTHFIFAKEGKILAFFEFDSVLREDAKELITYLKKEKKE

LMILSGDHQKAVEKIARKLEIQNYQASCLPEDKMKTIEKLSKNYKVLFVGDGVNDALALKYASVSMTLRE

GSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMSFS

SIIVVLNALRIKE

>ETJ83713.1 transcription termination factor Rho [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPREFRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRVLDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNIADRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>ETJ83712.1 DNA polymerase III subunit gamma/tau [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLQALAIKYRPKTFDELIGQKTVSVSLKYALNHNRLAHAYLFSGLRGSGKTSSARIFSRALVCEQGPSDT

PCGTCKHCLAALEGKHIDIIEMDAASNRGLEDIQALIEQTKYTPSMARFKIFIIDEVHMLTPQAANALLK

TLEEPPSYVKFILATTDPLKLPATVLSRTQHFRFKQIPQSEILNHLKEILLKENVKFEEEALKFIARSGN

GSLRDTLTLLDQAIIFCQNEISISKITDMLGFLDPQKIKAFYQAILTKDKEKVFAYLEELQDYEASNVID

EMLFYLKESFFAKSTEFSILIYERFFRILSKAKNMLCDDDGFTLCVMAFMMMEASHLKEIDAQIQEIKQE

NTTNITPRITPAPIIPNLEKKIEKNAYEILLDSIYDRDFDLAECFKQSTKFISFENNTLNISSNAQGQNR

DTLNKGFKLIQELFKTKFGENAKINVQKALTIDENKLQSLTQELPNNENKNIDIQSSINMLKEGAKKFDP

QEDLKEALKDCFGEPSIEN

>ETJ83711.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIRFSKIIILLTVASLAGIVVFGNVTDCNSNFQFVSHVMSMDTKPDYLGNAIVYRAITSPVIHHIGYIAI

ILFETFITLTALKGAYDMFKARNLDAQSFHNAKIFGIVSLTCCCILWFFAFQVVAAEWFGMWMSKVWNGL

PDATRLVTYMFLALIFISLKNDD

>ETJ83710.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEELRIKIGKMTCVNCSNAIERACRKIDGVKDASVSYVNSSGVFLLENQEKRKDIIAKIQNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLKIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

AVVLNGALRIKANKKAMDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFVFWVLKADL

NTAFLHSCAVLLISCPCALGLATPIALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLN

IFKHNLSKDDFDKLCQIESLSSHPVAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAKFLHENE

IDTKESDVFFDTFKEYVRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIA

KELQIDEFYAQLKSEEKLQIIQKFKKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPIAAGFVPFITLSPHIAALAMCFSSITVVFNSLRLKRI

>ETJ83709.1 heavy-metal-associated domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFKVKNVNCMNCVNLIKNSLEDEFGNIEVDLDQKILSLNLEENQVTNFTKEFQDLGFEIVERL

>ETJ83708.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYKFLSHEPLANKSCHHNHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IVLSILLLKWAIILLKQSANVLLESSPVDIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRVC

DLKEFEKLSQDLSHKLLHEFEIGHITIQPIRSENEI

>ETJ83707.1 hypothetical protein X909\_04930 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQAPRQESRYNDSAYHQHND

YYKKKKKESWLGELFDF

>ETJ83706.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIEFILRDMFFAAVAGFGFAYACNPPLKTLILSALLAAIAHGLRFTLVEYFHFQTLAIATFVASFCIGCL

GIALAKIIKTPAEIIAFPALIPMIPGIYAYKAILYLISFIRSDDLKAKSEFLVQFFDYFFTTVSVTLALA

IGVSVTLLIFFEQSFMMTRHAKKH

>ETJ83705.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKPDIQRLTNFLIVYTKTLLGAGTYTARVAKCVGRIAEVYGYEININFFFHHITLNVVDMDDNSIQRTY

VIPNHHAHVNFKLIFDLSALSWAMYDHKYDLEKAKVVFEQISQQKKHSYLLNLLFVSMANSAFCRLFGGD

FGAGNLVFFATFVGLLLRYILTKAKIDLRIQYILCSFISSWFVFFGLDMGYTNTSDVALGSSILYLIPGV

FFINSVIDILKDHILMGLSRIISVAILICCIALGIYMTLSISDFGILR

>ETJ83704.1 lactate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKIGIVGLGYVGAASAYSIVTQGICSELYLYDIKQDLALAHARDLEDMSAIHFSYTKIFHVSNLENLAS

CDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIVATNPNDTITYYTQVLSQLPKNH

VFGSGTNLDSSRLKKFLAKDLNINSKDIFACMIGEHGDSQFAALSNASVLGQNLLDFYKQKLGKDLDIQE

LEKAVISEGYFIYERKGRTEFGIGTSCANLAKAILEDRKSLHPVSVVFDDIAFSMPAIIGKDGIEKVFEL

KFNEKEKIKLENSKQQIKNAIQSVKDKI

>ETJ83703.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEIISFVVETASAWGYLGIIILMTLESCFIPFPSEVVMIPAGYLAHKGELDITLCILSGTLGSVLGALI

NYYICFFWGKNFVLKWGKYFGINEAKFAKFEEFFNKHGEFSTFTCRLLPGIRQYISMPAGLVKMKLVNFI

LFTALGSAIWVAILVFLGYYIGQNEELIKTYLTQILIIIIVFVILASLIYIKIKKPFKKA

>ETJ83702.1 hypothetical protein X909\_04905 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKILFASLLPIIALADCASLMAKYEAPEPESKTMKQVERWINKKVSDPADAAVLKECMIARAADNPNQV

SVAGK

>ETJ83701.1 hypothetical protein X909\_04900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTKFSLILSACLLSSSLFAKNADDEITKLQKQLAQIQAELAQIRKEREAQAKQNEAVKAELADLNDRAD

ETEFQAALSKVKFGLEFSTAVSNTNYKVSGQDYSANNKWMNELHLNMNADINDKTKFYGRLSMAKNWSQM

DWSGSPYDLDAGRNTRSSGPVLYVDRAYLDYYITPEWIATIGRQPGTDGPGSNLRNNALRQSTYPALAIN

ALGDAAVITYKPESLQDHKVAIRAAYGKTYQWDEEGKVRDWMSDQKDADANLYYAAVEGELPIEGMGDNL

IIFNVAHMTDFALPLPSIPSILNQGVYNLGDLTLANIHFENYNAFGTNFNYFVSLGYSNGANAHTLSANP

VAQSQLEFNEKDGYAVHVGGRYDFTKALKVGYEFFWGSRYWYTMSRPSINDPLNIRMTRGTAHDFYVIYQ

LDRYQFLRLSYTNIQNIWGNRGIPFGGAKKDKARADNIMLMYNVKF

>ETJ83700.1 peptidylprolyl isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKTIDTSKVNEYKFALIETEKGTMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGVGGPGYEIICECDDQEHKHERGTLSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>ETJ83699.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>ETJ83698.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNIAKKELFVAWFFLITAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIVLSIVGIIMINIGEVKE

>ETJ83697.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYIFIIVLSALLDIVANLLLKKSDGFKNKIWGLAAIVNAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIIIVIIAVFLLNY

>ETJ83696.1 arginyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>ETJ83695.1 preprotein translocase subunit TatA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>ETJ83694.1 guanylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQGFVLLISGPSGAGKSTLLKKLFDEFEDELYFSISSTTRKPREGEKNGIHYHFISHEEFQKGIDSDHFL

EWARVHENFYGTSLKHTQNALDNGKIVVFDIDVQGFKIARKKMADKIVSVFITTKNKDELKKRLIKRNTD

TIIQLEKRLQNASDEMKELSEYDYLIINDELKQSYEALRAILIAHKFRTKGQNLGQIQNIWNEGE

>ETJ83693.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILLLNENPVVSRLVSLSAKKMSYDFEELNAYSENLGNYDVIVVDSDTPAPLKILKEKCDRLIFLAPRN

QNVEDIDAQILQKPFLPTDFLNLLNNKDANKHTSIDLPMLSNDENPYADISLDLDNLNLDDLPDENSLDI

NSEGMEDLSFDDDAQDDNANKTLETQNLEHETIKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEP

SLDELDDKNDEDLEIKEDDKNEEIEKQELLDDSKTNTLEMQEELSESQDDNSNKTLETQNLEHDNLEQET

IKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEPSLDELDDKNDEDLEDNKELQANISDFDDLPEV

EEQEKEMDFDDLPEDAEFLGQAKYNEESEENLEEFAPVVEEDIQDEIDDFASNLSTQDQIKEELAQLDEL

DYGIDSDNSSKVLEDFKDEPILDDKELGTNEEEVVVPNLNISDFDTLKESDIQEALGEEILEKNEEPIVS

DVTKDDNSEEIVNELSQSIAGAITSSIKDDTLKAALKGMNMNININISFKED

>ETJ83692.1 flagellar biosynthesis protein FliR [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITSQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNMGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>ETJ83691.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MELLRAENLSHSFDYPLFEGLNLTLNTKDCIAIQGSSGCGKSTLLHILSSLLIPKKGEVFFKGSSLYQID

ENERLKIRRYDFGIIFQTHYLFKGFSALENIELASVLSGQDLDEKILKRLGIDTLLHQKIGKLSGGQQQR

VSIARVLCKKPKIIFADEATGNLDFDNAKNVIELLISYVKENDAALFFVTHDSKLASFCDKTYTINANGI

C

>ETJ83690.1 elongation factor Ts [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQSNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSTEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKAQGKPEKIWDNII

PGKINSFIADNSQLDSKLTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>ETJ83689.1 30S ribosomal protein S2 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>ETJ83688.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVSDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>ETJ83687.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MREIKIFLVVVVFTTLVYWGVEPYAHSVMKPHVTPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFVKGDAKKGKEFFENNCFACHGIKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPALALKVDHKFGDAFIMTAYNKDTSGESEEATNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQRVALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>ETJ83686.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGPELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIIAIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWIGFYASIVFLLLLIVVLPVITIMERKGAKQ

>ETJ83685.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNAAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEEGPEYKKMIAEA

>ETJ83684.1 arsenic transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLAFFIFLSTLVLLFWRPWNLPIWVFSSLGAFFVFIFQLVDFKDACFVFSLVWDSSLTLVGLIILSFSLE

ALGFFDFIASKILYFSREKNQEKIYISTKKMMLFLLIFVFFLSAFFANDGAILIITPIIIALFSTLKDCK

NHAFILSSFLLSLSFLCDASSNALVISNLTNIITANYFKIEFLEFAKNMFLPNFFVLLSTIVTVFVLYVR

VLPKRLEFKLIKKEQISLKLFFLCIVFLFLFVISFFIGEIFNIKISFFALLWAGIFWLIILKIQGKKSIK

ILFEAPYGVLLFSFGLYMVVFALHKIGVSEILVKSYAFLMQDKSGIFGVALISAFGSSVFNNLPMVLIGD

LALKEYFENFSFDSLMIYAHLLGVNIGPKLTPIGSLATLLWLGVLARKGINISFWQYCKFGFLITLPVLV

FSLFALIV

>ETJ83683.1 tRNA uridine 5-carboxymethylaminomethyl modification protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>ETJ83682.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYTMGEVLNKPHNIVRHEEMPKTVFKYLWDYMKEGK

EIFAYVKNKTKDNNYYWVFANVTPSIDVNNNIIGYYSVRRMPNKSAISTIESLYSDLLRAEQQQGLNKGV

EMLKNFCKDADKTYNELIFSLQEAK

>ETJ83681.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEIVLSENALITSKTDLKGNIIYANNDFLKYAGYKVDELLYKSHNIVRHEDMPRTVFKCLWDYIQKGDE

IFAFVKNKAKDGNFYWVFANVSASFDTNGNIINYYSVRRAPNRKSLSIIEEVYKILLEKEQKSGINAGVS

ALMDIVSSYKMTYNELIFNLQENN

>ETJ83680.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

METLSQTLAERKPPLYKRIIKSLGFWVIIGIIAGIVLGYIDKELAIASKPGVDYFIGALKVLIGPIIFVT

LVLGIISLESLKKVGSIGAKAVIYFEVVSTLALAIGIFMANVMQPGHGMNLNPSQLDTKSVQKYISQTTE

VSASSEIMHILKDAMPTDIITPFTEGKTIQVLVIAIITALIISLMRTEDKQAIQRVFEVVQNFVFKILQI

IMYFSPIAAFSAMAVLIAQYGIGSLINLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVL

IVFATSSSESALAPLMRKLEKAGLSKATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEIS

ILIVLMIASKGAVGVTGSGFIVLGSTLAALGNMEISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNL

CGNSVAALIVAIWDKQIDWEKFRYAMDNPEKFHNAGMN

>ETJ83679.1 hypothetical protein X909\_04785 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRGIFYIIALFSLLNGDELTEALAKNNNQNSWEHFDYKNTKEAPKIQEENVDFKSTFDSLLSKTLENNNG

IDKTDGNLDFQNENVQVKNLSSLYEGENNSLLFQKELFVAQNNYNYSGGLINRYEKDDFLFGVNGFIDKQ

KEQKDTKSFGTEFGYSKFIKAYSNYYIPNEAEKNLQLGMSFVIPTYTAFAFDISKDNDKTNYQVSYSPYS

VFSLNLLRRDYSARETVDDTVVQVGFSFNFNESFLKQFRKKDNTLEEVNRYDFLQRTH

>ETJ83678.1 phosphate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKDNLIAFVIFIISTIAFVIWGFGYISQHQLILFILASIFGIFMAFNIGGNDVANSFGTSVGAKTVTIK

QALIIAAVFELSGAIFAGAEVTKTIRSGIVIFPNSLDPMLFVIIMLAALLSSGVWIFIATKKGLPVSTTH

SIVGGIVGASIMMGLLKFDGIQTLSMVKWSEILRIAISWVASPLLGGIVAYIIYSYIDKKILKPSEKLND

DLKNIKKERKKFKEEYFLNLKTKSQEEQIKELSAIALDEEEQENNFYRNKMKEFKDQEKDIDIYSILKTH

MPIIACIAAAIISAMFLFKGLNNVSTLDILQNFWIIGIIGTISYVITFAIVKIVKKTELNKTTDRIFSWF

QIFTASSFAFSHGANDIANAIGPFAAILDVLKNGTINATSPVPFAALAMFGVALVVGLWFLGKEVITTVG

SKLATIRPTTGFSAELGASIVILLATQFGIPVSSTHILIGAILGIGVYNKNANWIMMKPIGLAWIITLPA

AGIMAALVFLGFKLSLGI

>ETJ83677.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSVRVKDTNGKLKNLATLLNKGACALELDSSLD

ANTLKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

IFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFDEAAFGIHSVCEFISLCYTFLIKEGFLNWQELCRFTSKNPSEFLGLNSGVIEVGKE

ANLVLFDENEEIFAPKSSLYSEDKLFGKIKMHIIKGKNILEK

>ETJ83676.1 glycerol-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGLS

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>ETJ83675.1 glutamyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>ETJ83674.1 S-ribosylhomocysteinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>ETJ83673.1 2-oxobutyrate oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLPILDLQAYEKDKSTFLKNLREIASKIGFFYLINTSIDKNLNEKLFKLGKEFFNLSRSSKELISMVHS

PQFRGYTSEGFEYTAGTKDYREQLDIGTERDALNWNLNSPLWQRLEGPNLWPSEIPELKKTFLTWHKQTK

KACLKLLKAFAQVLDLPSNAFDKLYGENSYEHCKIIHYPKSSKNITQGVGSHKDGGLITFVFQEKQSGLE

AFIDGKWLSIPPLENSVVVNIGEFLELATNGYLKATIHRVNLSPKERFSIAYFLGVQLDKDIPIFKLNPE

LAKESKGVDTDPKNPLLRNVASNYFKRMIRSHPDVASIYHSDLIEKFSFA

>ETJ83672.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSVLQKQGYDLKIYEFNDGVIPNVMVENGE

LDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRALRIVAS

KGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLNDVDYSLINSNFAILAGLNPVKDGLYTESKYS

EYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>ETJ83671.1 5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>ETJ83670.1 5,10-methylenetetrahydrofolate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCSFSFEVFPPRKDENIKNLHAILDDLGQLSPNFISVTFGAGGSINSQNTLEVASLIQEEYQIPSIVHLP

CIHSSKEKITQILQKCKEKNLNQILALRGDICENLEKSKDFSYASDLISFIKKQEYFEIYAACYPEKHNE

SKNFIEDIHYLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFVKILEKYENNALALEDAGIAYACDQIVDLITSGVDGIHLYTMNKSKAAIKIYEAVKHLLKEEL

HA

>ETJ83669.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYILEFFKGASLALMLFGALFFFFKYNSFFYLCLGIIPGLLLSLIFVLLIENHKLKNEIKLR

>ETJ83668.1 F0F1 ATP synthase subunit A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>ETJ83667.1 DNA repair protein RadA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKNKALFECQACGNQQSKWLGKCPDCGAWDSFVELKAERIKVLKELAQVSMKTSEAVCIEDVELEHFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQGKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTAKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLGIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

IPSKPLEDIGLKCFVAKELSQVLEWM

>ETJ83666.1 cell division protein FtsY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNFFKKGLAKTLENIVGVKGENKKITKDLLEEILLEADVSYEIVEEIIYYLPPQNEVKKEDLKRVMGSY

FLYEKKETNQEKPFVELILGVNGAGKTTSIAKLAYLYKNQNQKVILGACDTFRAGAIEQLKLWAQKVDVD

IVLTAQGHDPSAVAFDTISKAKAKDFDRVIIDTAGRLQNQKNLAHELEKIVRISNKALEGAPHRKILVLD

GTQGNAGILQAKAFNELVKLDGVIITKLDGTAKGGALFSIARELELPIFYVGVGEQMTDLQEFNANAYLD

TLLDPIFE

>ETJ83665.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGGSISVKKENTVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LAKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>ETJ83664.1 5,10-methenyltetrahydrofolate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKTDFRALQKIRLFKHSKLNFKQDYKIFKECLKIIKLFKAKNILIFIPLHYEPNLIKFRHILNKNYKLF

VPFMQDKSLKIVKLRLPFIKKRFGVLEPIDSFFKAKIDLAIVPVIGVDKNLKRIGHGQGFYDRFFENLNY

KPHIIFVQSIDALSQNNLTQKHDISGKLYINPYKKYYKKERKNDRITYRTYSRYSRTRYRIFSCKKNQ

>ETJ83663.1 ribonuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKFDDLSKKEQKLQQEEEKLKEDKEYLCKSQKHIQNLQSDVDKLKNKYQEKLDDVLKI

LEHSTGLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGETIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCKRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRVIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAVEYAK

>ETJ83662.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGVLSSQGKMDLSFCITLAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKIALAMIKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFIKFFIINTLASLAWAIVLG

FTAYTFGYVIEAIFDKLSLYPYAAPLFLLFLAGIIWLYLSKFSKK

>ETJ83661.1 competence protein ComEC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLWNSFSYSFKEFHYLFFSVVVIFIFNILLEYNNFLNFKNQKHYLIDNALLTHQYIKYNKKNKKYWVLK

LQTENFTFYTTSFKDLNLSKNQFLSLRIITHNINFKDYLSKSFYAPSYDFEKLKEKEYNPIISYFLNQHT

NEKIKEFYGALFFALPISLELRNDVNYYGIAHLIAISGYHIGLLFSLIFFILAPIYSFFQKRYFPYRNLR

LDLSILIFALLLAYACLIGFVPSFVRSLIMAFWIFYLLCKNIKIINFVTLFCSILLCISLYPRLLFSIGF

LFSILGVFYIFLYMHHFANKFNNLINIILLNIWTFFAMVLPVLYFFPLISYQQILGIILSGIFVIFYPLV

LFLHLINYGDLLNFILDEFFKFKIYGTNIHIPFWIFISYLIASLISVRFKYLAFLCIFANFIPFIMIVI

>ETJ83660.1 ribonuclease BN [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNFFTILLNLRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDV

VATYIDTFLKNSVNLGIVGLIAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLS

FYISGFIQQTLDDYKIGFNFFEILPFVIIWGLFFISYSSSVHKGTLKSLALVSFGAGTIWYIGKNLFVYY

VVYNKTYASVYGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKS

>ETJ83659.1 FAD-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKEFEQYFKRFLGEENAYFDEIHKRAYSYDATKKHYLPDGVLFPRNEEDIAQILKFCNENNIIVIPRGS

GSGFTGGALAVNGGVVLAFEKHMNKILEIDLENLVAVVQPGVINIHLQKEVAKYGLFYPPDPASMEYSSL

GGNVSENAGGMRAAKYGITKDYVMALRAVLPSGEIIRAGKRTIKDVAGYNLAGILIASEGSLAVLSELTL

KLIPLPKFKKTAFAIFPSVKSAMNAVYKSLASGVSPVSMEFLDNLSIRAVESKFNKGLPIEAGAILIADV

DGNVKEAIDEDLRNLEYYFLEAGASEFKIAKDEQETADIWFARRNCSQSIAMYGTLKLNEDITVPRSKLP

TLLEGIDEISKKYGFKIPCFGHTGDGNVHTNVMVPDKNDKEQVKKGYEAVEEIFKLTVKLGGTLSGEHGI

GLSKAPFMNLAFSEAEMNLMRNIKKAFDPNNILNPFKMGL

>ETJ83658.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPISDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEVTLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYRAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVVKIAKSELSGKAKE

NFKHIIAGYEQVVKEALVSNQPNPPKEEDFENYIEF

>ETJ83657.1 hypothetical protein X909\_04670 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEISEKEKEELATLLNSLINAKDKALLSN

>ETJ83656.1 laccase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKIHNENLFSHLGFKDIEKCVFMDQIHSHKVIIYEKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHENGIIAALHSGRKGSFENILKECVDQITMQNSHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFKEFVQDNKLDLKALVKFQAQNLGIENIKDCGICSFDDESFFSYR

RDKTPKRFVSVVYLKD

>ETJ83655.1 riboflavin synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFYISLPKEAMKFIAEKGSIGVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLARYIYAQLQGKNKGLSWEEVERISYLY

>ETJ83654.1 hypothetical protein X909\_04655 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFYGVIAFVVVLLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLQGALSPFKLGFDLDYLISLKQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGRGYLLGSNVLLNAR

MYNYSPVALNLDAQNLKIEEILHLLSYPSYAKGFLNAQAKISAQNLKPDGNIIIKLDTSYINYEAIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDMSKNILSTDFNLNIPSLAKLEKLTKT

RLNGSLGVIGETSVVNNALSSLNAQVIGLGGEVKASLKNNKIFADINEASLEKLLALAGYGALVSGNLNA

KLLNADLDFSNFDLEAKINNAKINTNELKKIAKIGLPNTIFSLDAKANAKNSNISYNALLASNLLNIKKL

QGTYNLKNSELNTDLNAFIDDLSQFSAIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVIAGMPNYASGVVNAKVNLDNIDFNNLNGKANLEAKGILNAATLSKILNKNFPN

NISYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDISKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKNLNFVVNSPNLFEGRLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKTDVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDITNDVYRTANAKALIKKENIKLDLNMQADRSYILVQSGA

LNSKSGALNLPFDIKLDRANFKGSITGTTENPKVNLNAGSVLNSIKNVVGGGVSDGAKSTGDKVDKAVNK

LLNKIF

>ETJ83653.1 molecular chaperone GroES [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>ETJ83652.1 molecular chaperone GroEL [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>ETJ83651.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKVIRQILLIYLTTTGIFLTIFFALWYQKLYEELVVLKGATLRENHRNIVISILNSRFTPIDISAKNI

AQSTALKFAIFDAKKIVFSNIDFDLRKAKIELKGRGICDNKVFFLAPMSADHYFLRHASNEEVNTNDGLQ

ILIQGEDVGKDLFWIRTKVFSFAIMAFCILGLISYILVKIALKPLEDKISTLNRFIKDSTHELNTPLSVI

LMSIEQLEHQNLGDNTKFTRIKLAAKSLSQVYSDLVFYNFPNTLETEKQKFDLRILLEERLEYFKVFFEQ

KKITLKLDLNQANIFAPKSQISKLIDNLISNAIKYNKKGGVISIILKTNFLSIADTGCGISKSNLNHIFD

RYTRFNTDQGGFGIGLSLVKKVCDDNDIKIICESVENQGSVFKLNW

>ETJ83650.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNAQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELAELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSELSLRAYVKNLRKILGKEKI

INQRGRGYCYG

>ETJ83649.1 iron-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLPKWDNSYSVHNAKIDEQHKKLFKLAAKVEVVSDRSVSKNEVKELLAEFFNYMKDHFNDEEKYMQLIGY

PNLEEHRKIHKEIIQTMINLIKDIKSTNDLKEKLYIVAKKWLLEHILYEDMKVEKWRSSSLSTDDGGDIS

FEAAEDEDNEHPQFYLYTCNCPGKIHDVPYSIHQKIELQGHKFTCKTCKQAIKFYKKYS

>ETJ83648.1 CopG family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRNVKTYSFRMPLELKERLDNLSKNLSKPKSTIVKEAIEAYLNEVEDFSFAVNALEELKDGDYQKASKK

IDKIVKNLKQTK

>ETJ83647.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKSSIFYTITFIFIFAGVSVILGFLWLIEYDQQNYTRELNTKYSLIANARLLNFAGVISEKEFEEQTKN

YNKMDEITEAKQIRKILFRGDVLARVEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKA

IAVAVICILVLLYIYIFKKLKPLKRLKKQIDKFAQGKLGDIEDVSTGVDEISQVSEAFYQAIVQIRKLNQ

SRQFFLRNIMHELKTPITKGLLTLEMIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNI

LDVLDEAKEIAMRDDSNIRIFMEESFFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRG

PELNNTLEYYTQAFTQGSKQKSSFGLGLYIVNTILETHGMKLDYLYEDGVNLFYFRNLKSVIVKE

>ETJ83646.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIVSSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>ETJ83645.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLSLSLASALFAASINFNESTATANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDIEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKIDRGFL

GVTILALQGDTKKAYKNQEGALITDVQKGSSADEAGLKRGDLVTKVNNKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQASFILKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGVGQSEIKNLKDLEQALKQVNKKEFTKVWVYRNGFATLLVLK

>ETJ83644.1 cobalamin ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSLYETLGVSKNASADEIKKAYRRLARKYHPDINKEKGAEEKFKEINAAYEILSDEKKRAQYDQYGDSM

FGGQSFHDFSRNTGGVNLDDILKDLFGGGFGGRSRGGFNGFSSKGFSSGFGGFGGFEEEILDSNLELHIP

FEKAVKGGEHSFNFQGETIKFKIPHGIKEGEKLRIRSKGKQSRNGARGDLIIIVKIEESPIYTREDDDLY

QKVDISLKTALFGGKINIKTLKEGKEEATINITPNSKNNQKIRLKGYGVQNRKSNIYGDMYLNLNVVLPN

LDTLDEKFIELLKEKLP

>ETJ83643.1 MerR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEQHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRSELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>ETJ83642.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDNFLEIFLITVAIAIVLNVIFKKFEIPTIIGYIAAGEIISEIYHLSGKGEITHIAEFGIVFLMFTIGLE

FSFKHLMAMKQEVFLNGSLQMLTCGFVFMLLAIGILGLGDKSATIVGFALALSSTAVVLKILNDNGDINE

QYGRKALGILLFQDIAVIPLLLLVDIFSSNNQNIEKLLFTTLISALILITLLFFIGKYLVDRIFRLIIHT

SSQEIFISTVLFMVIGASFLANYFGFSYSLGAFIAGALIAETKYKHKIEADLIPFRDLLLGLFFITVGMQ

IQLDVVAQNWFLIIVLTLLVMALKFGIVFGFLFLYTKKRVALKTAFAIAQIGEFALAIFSLLQAKNMLDI

KTSQILIVVSILTMIITPFILNNIRKITNVVEDIALNTNAVQNIDSNIKLKNHLVVFGYGRLGQEVVQKI

KNTGVPYLVLESDLNLVELGVSRGENVVFANAAQEETLKIANIEECAVAIITVTNEAKLEILCQVLANYP

KPIDTIIHVNGTLKKMLFSSIDENIRIIRSEKVIARNLVQEALECRIHKNT

>ETJ83641.1 hypothetical protein X909\_04585 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKNEEKALRVKYLRNLEKFFNGAISALKKEDFDKTKFEERMLKNAKFFEKNPAVNLNSTYAKNLEFFVN

ACLDFSKEKSELLNLANALDKQKKQGEKKEKHKNYLKDYE

>ETJ83640.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSREIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFVKHYEQSVVLFEGVKELLEFLKNKNCFLAIATNAPQSSLSSILKKHQIIPYFDKILGVSLGIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLQKYL

>ETJ83639.1 glycyl-tRNA synthetase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSELLIEIGTEELPAIPLLKELANIEKKWKNILEEYRLVSDFKFYYTPRRLVFFHENFAEKQEDSFAEFI

GAPKNVAYKDGVLTPAGQSFLQKAGISENELTFKEIKGKEVLYHQKAIKGLQSQEILGEMIEKFLKSLSF

GKSMRWGANSFEFIRAIRSIACILNDELVNFQSYGVKSAKKTFIHRSVSYDLQDFNNAKEYFELLEKNYI

ILDPIKRKEKILEQFKLIESQKNIQIGEDEELLAEVVAITEYPNALLGSFEEEFLEIPSEVIITSMRENQ

RYFAVFNDKGLSNHFIVVSNAVCKDYSKIIHGNERVLRARLSDAMFFYQNDLQNGLKPEKLAKMTYLEGL

GTMQDKSLREIKIAEILCQMLHNDKIENISTALKYAKADLATQMVYEFTDLQGIMGSYYAQKMGLDYEIC

LAIKEQYLPNSEQAPLPSTEFSSIVALANKLDTLIGLFSIGKIPSGTKDPYALRRAANGIIKIALNLNKE

FDIQILLEKLSSHYKSFDMQILKDFIFERLYTFYTVNASFVKAVLSSQNTDLIHINQSVNALIELSKKDN

FNENFATFKRLANIATKNPHKVDESLFVQEAESKLYKAFQEKTKANSLQEKLENLFALKPFIDEFFNQVM

INAEDEKLKNNRQALVYEIYAEFLKIADLKELSL

>ETJ83638.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKALWLFLSLTLWLFGAQNLELIKGQALFLELDKKDFLSLKNNDKNIPTFAHPKNQEKILAIFSLPYKNP

PQNTKLIAFYKDKKEEIFIKTLEGNYKSEKLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKALFNG

AFNIPLNSFITSDFGKARTFNEKVASYHSGTDFRAAIGTPIYAANSGIVKIAKDRYFAGNSVVVDHGFGI

YSQYYHLSKIDVKVGQKIKKGELIGLSGASGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFR

>ETJ83637.1 hypothetical protein X909\_04565 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFSDFFHAWLHESYYKNAVSIGKNGDFFTAVSVGNLFGTLLAKHFLNLIDKKILQPPLELVEIGANEGY

LSRDFLAALLELRPEIFSQISFFVIEPHEKLKNLQKKTLEGVEFTHKNSLKECHFKNAFFFCNELFDSFT

CELINHDKIAFVENFKLIFKNMDENLITKCKALNLTKGELSLELEKFFKDLDQACERFIFAGFDYGTFNA

QNFSLRIYQKHEVFSPFEVSLKDFFGKSDLTYNVNFTHLQKLIKEYDFKPLAFKKQSLALMDFGFEDLLE

YTKNKNIKTYESFLSQAKILFFNFDEKFHFFEFQKN

>ETJ83636.1 exopolyphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALSILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGIDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFGK

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKHLAFRAFDEVAT

IKKELHSLGVKTVVLNSGVPTTLSALKQNISYEKYEVTRVNGKKLCHKDFLNYAIKLFHMEEKKAIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>ETJ83635.1 pyridoxine 5'-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>ETJ83634.1 4-hydroxythreonine-4-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLAISIGDINSIGLEILVRSHEELSKICTPFYFIHESLLNKALKLLNLKLFNAKIVAFKDDKDYEFNF

IKKENSLEIYSFCLPLGFKVDENFEIQAGEIDAKSGLYGFLSFKAASYFVYEKHAHALLTLPIHKKAWED

AGLKYKGHTDALRDFFKKNAIMMLGCKELFVGLFSEHIPLAKVSKKITFKNLSIFLKDFYKETHFKKMGL

LGFNPHAGDYGVIGGEEEKIMEKAIAFVNAFLHSKKDEKFFKKALKDENLQKELLLNFKGKGVYLPYPLV

ADTAFTKAGLKNCNRLVAMYHDLALAPLKALYFDKSINVSLNLPIIRVSVDHGTAFDKAYKNAKINTKSY

FEAAKFAINLNSKA

>ETJ83633.1 hypothetical protein X909\_04545 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKERKICIKNMQNTKAGENPILPLLNASDCMQEAYAKALLELTQRAKKDIKTKEVLEQIFKNKVDKYEN

LLTQSLNTNKDLQDFIDSLAKEDLIDSRAKFKLWNLN

>ETJ83632.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNYKKALFALALSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSQNFYLTAFARFVAGTQHGVFFVIATLAVSAIVPNDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFKVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLTMHSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGIVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSLKKI

>ETJ83631.1 hypothetical protein X909\_04530 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVVDNTQKTSNAIFSTTTKVKEKNTSADEFQATLNEVKNKEEKEEEKTSSSKFTNEDIDLGAVREDFRSY

AWQKMREDQYKKNEETLLNKLFATIDAGNATNNTKA

>ETJ83630.1 uroporphyrinogen decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>ETJ83629.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILAGIIFIFNLILAYLSIDISKLDSVAEQLKIGMFSSIFVLSLTLFIFAFRQNRNINKIYQKIFYMQND

FLNFQKKIDVDSVLDLLKEKFETTGQNLTKTSHEKDRYLHLLEENLYQLGNISNAMRCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKIFNKNVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLITLLRKYLPKA

>ETJ83628.1 excinuclease ABC subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>ETJ83627.1 hypothetical protein X909\_04505 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKRNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDENLSKNSYLELSKGEFKNC

FKDEKLFKKFEDLRELIKKGSNLD

>ETJ83626.1 GMP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>ETJ83625.1 hypothetical protein X909\_04495 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDDELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNAANADPEKLKARQER

LTKLQKEAEYYRTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIVTGLNLCATIMDFKIWHLSLKS

SGIKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>ETJ83624.1 phosphoribosylamine--glycine ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIKETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGAEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIEDPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLEDGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>ETJ83623.1 RDD family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKENLQDRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDRLIQAKDLFETTQIIGNFYLGFILLHF

SYQAIFTYLYGASLGKILCKIIILDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>ETJ83622.1 hypothetical protein X909\_04480 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MWRKFSLLLGTSIALNAAQVDIYALDAKKEGDILTANNDVVIFSDFYFITANKAIYNEKTEDVELFGDVN

ILRGQNERSHSDYAKINLNSNQADFSNFFFSNNNLEVWFQSKTSHLNDKVFESKISAVSSCNVEDPDWEI

RFSKGWLNRETNFVHLYNARLYVKNTPVFYLPYFGFSADTHRQSGLLIPKIVLKSSEGLYYEQPIYIATQ

ENWDLELDPQIRTNRGFGLYSILRFLDSPYSTGELNFGAFRENSSYFHDENLKNQTHYGIELKYSRDDLI

KSLLSDNFQEGLWIDATYLNDVDYLNLGSRDYRDLNSLVTSKINYFLADENNFYGAYARYYIDTSKLSNN

TTLQEYPSFQYHRFLNNLFDERLRYSFDASFHNFYRPAGSYANELNLDLPISYHNAFFGDFLHFTFTERF

YASFVNYSNDPERNHEHYFRNTHDFNLYTDLSKAYENFFHTLNLGVNYILPGAKSGKITQDYLEEYDKEN

EHTSLYAVQYFYNNEGQKKLKHRISLDYLNKQNEFYELENLLTYYFNENINLNSEVLYSYEQSRFTNVIS

QIEVNTNSKFNWMFSHAYQNDEYGKYSFIGTRANYIATPNYNLFGGIWFDTQRAHTNMWELGYTYQRKCW

NYSLMYRERIDPQLTSGGITAKNQSGIYFIFNFYPLGGVKYDFSLAESENKI

>ETJ83621.1 polynucleotide phosphorylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQYSIEINKNTEIFDIDKVAKQAAGAVLMRQGKSIVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPG

GYVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPM

KAPVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQT

TSQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKEA

INQMAKSERASELNKIAKEILNLEITKDWSEESVLNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISI

ETNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPG

RRELGHGNLAKRALYPSVDENYPYIIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLI

FEDNKHAVLTDIMGLEDHDGDMDFKVAGSKDGVTALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEE

AAKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAK

DYIINITSSQKGTKKGSKDKDISGFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKSKHLNLSENQS

LKVKISEIKNGKISVDLCE

>ETJ83620.1 DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEFLTHPFEPFFDKDSKILILGSFPSIKSRQDGFYYQHPRNRFWPILETLFDVKLENIAEQQAFLRKKH

IALWDVLQSCKIKNSDDKTISYAKANDLNLILSQTKIQAIFTTGQSAYRFFVKFHPRLEAIALPSTSPAN

LNFSFEQLLQNYEIIKKFTK

>ETJ83619.1 tautomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQARKEKS

>ETJ83618.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEMILFVLVMILLVLLFVVLFRQYKSPKIEEKSTQSFSDIMQLKSIGELSVFQVFSKEIVTKKDSAFNGI

WKNLLGWSLSERQIALIFEFEITFLYDLRDKNFDILPLGDDAYKIIMPECRYKHSIIDMKFYDEKNAKFL

PFLLPDSINSTGISFSESDKNKLIKEAKDEVKDLSLNLIQNLESKIHKSAKDTLEAIAKGFGAKRVEFEF

KDNTQKLDVS

>ETJ83617.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENFNRTLLVCWFGVFTTSMGLSQIAPILPFYIKELGHVDTSEIAFYSGLAFGITPLFMAVFSPLWAFLG

AKYGYKNMLLRASFGMSVLTLWLSFAHSALEVVFVRGLTGIISGFTSAAVVFIAVIAPKEKVAYALGTLS

TASISGSLLGPLFGGFVAEFFSISAVFDVVAFLIACSFVTIYFFIHGRKIQKEAKKNTQKVKENKTLIIV

LFITTFVIQFGTFGVMPILSIYVEQIHQGGNLALWAGIVVAANGISNLFFAPKLGKIADKIGPSKIIFGA

LIFCGICFYLQAVASNVYTLIFVRLLIGVGLGGLLPCVNALLKKSVSAKNLSVIFGFNQTCQFLGNFCGA

FGGGLMASHFSVEFVFTFVCLIFIINAFIFLAFEKKYIFSNQGL

>ETJ83616.1 phosphotyrosine protein phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILFICLGNICRSPMAEFIMKDLVKKANLEKEFFINSAGTSGEHDGEGMHYGTKNKLAQLNIEHKNFT

SKKLTQKLCDESDFLITMDNSNFKNVLKNFTNTQNKVLKITDFSPSLNYDEVPDPWYSGNFDETYKILSL

ACKNLLVFLSK

>ETJ83615.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGVLRYRYDTGNFDKNFVNNSNLNNSKQDHKYRAQV

NFSAAIADNFKAFVQFDYNAADGGYGANGIKNDQKGLFVRQLYLTYTNEDVATSVIAGKQQLNTIWTDNG

VDGLVGTGIKVVNNSIDGLTLAAFAVDSFMAEEQGADLLGKSTISTTQNAVPFQADSLGNLYGAAAVGSY

DLAGGQFNPQLWLAYWDQVAFFYAVDAAYSTTIFDGINWTLEGAYLGNSLDSELDDKRHANGNLFALKGS

IEVNGWDASLGGLYYGDKEKASTVVIEDQGNLGSLLAGEEIFYTTGSRLNGDTGRNIFGYVTGGYTFNET

VRVGADFVYGGTKTEATNHLGGGKKLEAVARVDYKYSPKLNFSAFYSYVNLDQGVNTNESADHSTVRLQA

LYKF

>ETJ83614.1 molecular chaperone DnaJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEISYYELLEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGEGFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCSDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNGTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

ESIKVPTIRGEATLNLPKGAKDGQRFVLEKEGVKDVHSSRMGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKITNWFKS

>ETJ83613.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINVLMIEDDPDFAQLLSEYLAQFNIKITNFENPKSALNVGIQGYDCLILDLTLPGIDGLEVCREIRQKS

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHTNNENINSAFKIDERRH

EITYEDKVLTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>ETJ83612.1 sensor histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKNYSIHTKLIILFVVTFFLVCVLFIVLLKIEGNTYNEEESLKQENLIKNLLISYENTSGVEIGAYLGN

SGFNAIQNPNLVKAIRNNGQSLFKAGGELCTLSSLKYHSNLYFDVQCKDFDGLYEENTSDRVYNLLLIGF

FSFSLLVVFMYFSVLKSLEPLKKLRRQVAEVANGEQPDFLDYQEDEVGKIAFEFQKAFKKNQELIQSRQL

FLRTIMHELKTPIGKGRIISEMIKEDRQKERLIAIFLRMDSLINEFAKIENLFSKNYNLHFKPSRFSTIL

EEAKEHLMIDDFNKVVKVDIRYDALINVDMEIFSVILKNLIDNALKYSNNGTCELFCCKECFTIKNPGKP

LAEPIEHYLEAFTREKHNQVKGMGLGLYIVSEVCKLHNFDLIYFYDDGKHCFKIFFGDKEK

>ETJ83611.1 recombinase RecR [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERNKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQIILKLNISELIFALTHSIN

SDATIFFIEDKFKGLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>ETJ83610.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFLVLGIGNIMFADEGLGVHLCKQLEKNYKFTHSEFTLDFVDGGTLALQLSYIIARYDRLIVLDCIEAQ

GASIGDVFSFPYDAMPNKISWSGSAHEIEMLQTLQYMELAGDLPKTHILACVPKRIEAMSFKLSDELIQG

AKIMEKTLLDFLSKEGFTYEKIADFSLQELADISYKNY

>ETJ83609.1 quinone-reactive Ni/Fe-hydrogenase B-type cytochrome subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNKEEKLQRKAEYEFSIGLRLTHWVRAIAIVILIGTGYYLSYVFQSPISNGEPVNFMQAKYRLVHQAVG

FVLIACIIFKVYLFFCDKVSAKERRSVWDIFNIKLWIEQVKFYIFLGKHPHLKGVYNPLQFVTYFFFYLV

MLGIILTGLILYTHTYHEGLGGLLYHILRPLEAAMGGLADVRTYHRILMWVIMIFVPVHIYMAIFNAVKG

KDGAMDAIISGYKFVKEEKH

>ETJ83608.1 hydrogenase 2 large subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQKIIVDPITRIEGHLRVEVVVDDNNVVKEAYAGSTLWRGIETIVKGRDPRDAGFMTQRICGVCTFSHY

KAGIVAVENALGITPPLNALLTRTLMNAALFLHDHIVHFYQLHGLDWADVVSALSADVKKASDEAFKYTP

NPYATGADKLLEVQQRLKTFVDKGNLGPFANAYYGHPTYRLTPEQNLIVLSHYLECLRIQRIIAQCMAIF

GAKNPHPQSLTVGGVTCVMDLLDPARMGEYMVKFQEVQDFVNRAYYPDLVMAGKAYAHEASVLNDIGVNN

LYTFKEFQIGRDEWLFESGIIKNGDLSKVYEVEEDKITEEATHSWYADNEPLHPYDGKTNPNYTGLVDGE

SVDHHGNNVHSKVFDTKGKYSWIKAPRYEGNPMQVGPLANIVVNYAKGNPNVVPVVDEFLKETGLPLNAV

FSTLGRTAARCIEAKIVANNALKAFNNLVENLKVDQSTCAPYVIDNSKEYKGRYMGHVPRGTLSHWCRIK

NGVIENWQAVVPSTWNASPKDANGVGGSYEQCLIGLKIADVKQPLEIIRKIHSYDPCIACAVHVMDTKGN

NLSEYKVNVNL

>ETJ83607.1 quinone-reactive Ni/Fe-hydrogenase small chain [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIDYHQIESRLSALEKLPSLKDNDSITKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADR

LPVVWLHMAECTGCSESLLRSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVE

GGIPMGDTEHFLTIGAHGKTGYELSKIASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVIN

VPGCPPSEKNIVGNVLHYLLFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFC

LYKVGCKGPYTFNNCSRERFNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVS

DKIGIGVLTLTGVAIAAHAVISSMQKDKE

>ETJ83606.1 FAD-dependent cmnm(5)s(2)U34 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIIAESGFGIGLNFFLTLKRFLQ

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLGFYEEFKELLEQFLKFYPKAKEGIYRFYFEDCFLDLVF

EDIAVLKELDFKADIWYLDGFSPNKNSQMFDGNLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKPKVNLGEFSELSFIEASRFYRQILDLKFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLNTPFPLSSKAYICPVKDDLQVIGASYDRLDTSLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEVFYKEEYKALLWTKNKEQKLAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLIRKLKKGL

>ETJ83605.1 N-acetylmuramoyl-L-alanine amidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKIFVFLVFVFTTLFGAYENELANFDKNFIGSKSEVQVKFHHQLKSLYIQSVINEDEKTKIEILKRLII

SSNTLNLDDKSYANELKESGISEASINALRKAVVKDIKVQNIPQDAEKSTFEPIKTVQKNEKKSSNEQIK

NTEKTNSKTSQAPKSSIVSKVKSDDKIYVLKSSKTSQGVEFELNADLDKNQLKSFALDEKGNYRFISDFD

GVLEGGKKEFKFDEYRLVISQFNPKTIRIVVYAKEKIPIDISFKEEKLIFSKETTSQKKTEQASKISEKK

QDQKTEIKTKVLETKKQDKKTNNEKENQESLYVLDVDKISNAVVLNLSDDLDEKEIAVFDTKDQKFRYVV

SFKGVLEGNRKSFTFGQNAITVTQYNPKTVRVVLSAPKEFKLLKELDNKNLTLGFYTQTTNQNASKKANQ

SSSKTLNTNYKSGKLVVIDAGHGGKDSGALSDKKGSLKEKDIVLSTALKLGNELKKRGYKVLYTRSSDKF

INLRDRTKYANDKRADLFISIHANAAPNATKAKSSEGVETFFLSPARSERSKKAAEKENQGDFEEINYFS

KQSILNFLNREKIVASNKLAIDVQKNILTQTRKKYKIVDGGVREAPFWVLVGAQMPAILIEIGYITHPNE

GKRIANKAFQDLLVKGIADGVESYFYNNR

>ETJ83604.1 2-nitropropane dioxygenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLQPLQIGKHTIKYPIFQGGMGLGISWDRLASAVSLNGGLGIISSVGTGYYEERKYASKELNAKPYGSE

NFYSRKGLQALINNARKVCGDVPLGCNILCASNDYARIARDACEVGFNVIVSGAGLPTNLPEFTADFPDV

ALVPIISSAKALKIICKRWQSRYNRLPDAVVLEGPKSGGHQGFTYEQCLDPNYQLEKLIAPVVEEVKNWG

SFPVIAAGGIWDKKDIENAISLGASGVQMGTRFIGTFECDASEEFKSVLLASKEEDIELIKSPVGYPARG

VRTNLLNLVDKRMGPKINCISNCVAPCGRGKEATKVGYCIADRLFDAWSGKKETGLFFTGANGYRLDKLI

SVKELMEKLVNGE

>ETJ83603.1 tyrosyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDIKKILAEVKRGCAELIDEERIENLIKNYYEKGENFFIKAGFDPTAPDLHLGHSVVLTKMAFLQKHGAI

VQFLIGDFTGQIGDPSGKSATRKKLDKEQVLINAKTYETQVFKVLDKEKTQIKFNSTWLNELGAAGIVEL

TSTFSVARMLERDDFTKRFKEQSPISICEFLYPLLQGYDSVALKSDIEMGGTDQKFNLLMGRQLQRVYNI

GKEQAVIMMPLLEGLDGVNKMSKSLNNYIGVTEKANDMYAKILSISDELMFRYYELLSQKSLEEIAQIKK

DIEQGNLHPKKAKENLALEITEHFHSKEEANNAKSEFDRIHSQNALPSDMAEFEIQGKIWLAKALVECGL

ESSTSAARRSISANAVSVNSQKVSDEQMHLEQGEYILQIGKRKFAKLKVKE

>ETJ83602.1 potassium-transporting ATPase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKPIDEELLLEQLIDNVKNCKDLEAAKALLFEICGHDAILEKAVDYCIFCHEGQFRKSGEPYAVHPILVA

TLVGFLSENKSNILAALLHDVIEDTNCTEEELREQFGSEVLKLVLGLTKIIEIREDNLISSKSKKSLTKS

ALTFRNMLLASIEDVGVLIVKLCDRLHNMLTLDILREDKQKRISEETLVVYAPIAHRLGISSIKNYLEDL

SFKYLMPDEYKLIDNYINSNNQEMQLGLNEFISKIELLFLSNGFRQGSFEIQKRIKHSYSIYLKMQRKGI

GIEEVLDLLGVRILVEKVSDCYLALGILHTHFNPLVSRFKDYIALPKQNGYQTIHTTLFDAKSIIEAQIR

TFDMHKIAEFGIAAHWKYKEDGSVVAPRLDWLTDISMQSINNLENAEDYNAIELYEYAKDSLYVEDVAVY

SPKGEIFTLPRGATVLDFAYEVHTKVGLHAKSAYVNRIKVPLLTELKNGDIVRVVTSNDKFYRCSWIDSV

KTGKAKASIREFCKQKIREINLASSINMLSFIFGVDKNRIETWIEKENLARRIRQVATDSAYLKDIVNGL

KKYAKKSYWFDKYEIKEQKIGNFTLYCNHKIANVDFDFCCHPKRGDAVLAFVKGGNAIVHHKLCDRADKM

IDNNQDMVFIKWDSNIPKSYKLIFSLENKKGVLAEFLAFLAKMQINLLTINLSSDLNSAVDYFEITIEFP

DNINPDSVKDRLKSRCKILDFTSLNDAYKEG

>ETJ83601.1 DNA-directed RNA polymerase subunit omega [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>ETJ83600.1 uridylate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALESSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>ETJ83599.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKNILIFFCFFLFVDISLANAINEKTKSLEENKRIQEQLNKKLEDLASDILNGEKSLKDLSLQIESLNS

QTSKLEASAKAQNQELNTLTSQNEDLLKSKSNMEGKLISLMAKDFAYDLPIPQGYIESEESFMAFEILGS

LNKVLNEEIFKISKDYEGVSRLIDDKQAQIKKINESLKDYNAQLAKLQSLKQKQISEINKQKTDRAIYAK

KLDDLQAQQEELRKTLNQLKIINDTEDANSNKNDTKIVKNNQKIRQLGSSYQGSSVKRYTGKKTIAPLDS

FTVKQKFGNYVDPVYNLKIFNENVVLRSNKSDAVVKNVLDGKIVFAKDTSMLARVVIVEHDNGIHTIYAH

LDKIAPNIKVGKNIKKGAVVGRIKNDLTFEVTQKNFHINPLELISLN

>ETJ83598.1 cell division protein FtsX [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFFKTHLSLILPLLFMMFAFEFILITNATLKHYEELVNKDYNIIVVSKTELDQNVVKTKVPFFAGLESL

DPKDLIDRLKNDVSEKNLKVLKDSLPKFYTLKLNSLPDQNELNSIKNQLLNIVGVSKVETFSKTHDKIYS

LLILMKFVFWLFLFIIILLAFVLFLKQMRIWLYEHTDRIEIMCLFGAPFWFRSFMLYKVVVIDCFIAFVI

LLAFFTQIFDLSIIQESLKAVDIIFPPINFILHLTLIFLATLFICLLCVNTVMFKVKR

>ETJ83597.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPNLIQANKLTLGYDELVIKEASFAFKDDDFVFITGKSGSGKSTLLKSFYGDLEPISGKLEVCGSLMNKI

GNLELLKLRQRIGIIFQDYKLVQEYSVEKNVMLPLMIKGYSKKVCHDQAAKLLKHVNLTFKADKLPNQLS

GGEQQRVAMARALAHNPKLLLCDEPTGNLDEYSSDIIWTLLKSARELLGTCVIVVTHRIPSNLRVDYRRF

NIENGKMNEIF

>ETJ83596.1 tRNA (guanine-N(7)-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPNFKSKKIKEINLPYSKDDVEFLWLAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKVQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWDKKPHRRVIGK

DFCKECARVLTQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECKNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

PEHCYLHLDKTIDFVFKEPFKIQENIKAINELKEILKVQFKI

>ETJ83595.1 fibronectin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRFRLGFYLSFLTLLLSACSVSQMNSLASSKEPAVNESLPKVESLKSLSDMSNIAFEWESLYNENIKGF

YLYRSSDENPDFKLVGTIKDKFQTHYVDTKLEPGTKYRYMMKSFNEQGQISEDGKVIEVSTAPRLEAVPF

VQAVTNLPNRIKLIWRPHPDFRVDSYIIERTKGDDKEFKKIAEVKNRLNAEYIDSDLKPNENSSYRIIAV

SFNGIKSEPSQVVSSTSKALPPQVEHLSASTDGSNKIMLTWDAPTYEDFSYYKVYSTSSSFLPFSVLAKT

DKNSYEDIVEGVGKSKYYKVTMVDKDGLESPMPKDGVEGKTLGNPLAPSIILAQSTSEGINLEWSDNDTR

AVEYEVRRYGGEQNAVFKGIKEKRLKDVKALPGVEYSYEVIAIDSAGLRSEPSSKVKAAQ

>ETJ83594.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQTFLVDENSRLDVFLAKKLNQSRNQVALLIEKDCVQVNDKIQDKNSFKLKNGDIISIASLKLCNEIKPQ

FEVDFDIDVLYEDEDLLVLNKPSNLVVHGASSVKNATLVDWLIEKKYTLSNLGGEIRAGLVHRLDKDTSG

AILIAKNNFTHQKLSEQLADKSMGRIYLALIDLPLKEDKIIVEKFLMRSPSNAIKKIAIDKENKFSKNAK

SAFINIVKTENLTLMAAKLFTGRTHQIRAHLASLNRHILGDSLYGYKGKYDCRIMLHAYFLYFIHPKTKE

QIFVKAPLMEDFKNIMFKQINLGENDEKISLGFLLEFFNSFA

>ETJ83593.1 rod shape-determining protein RodA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFRLDRRILTHFDYMQPILFLPIILISFFLIFEANPFLAEKQFVYACVGLFAFMVFFFFPIRKFIWIIPV

AYWINIFLLLSVDIFGVEKLGAKRWLEIPFTHFTIQPSEIFKPSFILMLAYLIYQNPPPKNGYKLKQFIK

LSFYIILPFLLIAKEPDLGSAMVLLLVGFGVLFIMGVHYKIWLSIVIAISVSSPIIYTHLLKPYQKQRIH

DFISEKPSYQVAQSMIAIGNGGLTGKSQDEATQTHFKFLPISTSDFIFAYMIERFGFIGGLTLIIFYILL

IFHLLSLNYKLKDDYFARVAINCVALFIFIYAAVNISMTIGFAPVVGIPLPFFSYGGSSFTIFMIFFGIL

QHLITFRYFWTDIKAK

>ETJ83592.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQFGLDRRTFKILLAGYIIIALFGALLLHSSWAHTTPIDFLDAFFTSTSAVSMTGLVVKNTAVDFTLAG

QIIILALVQIGGLGYMGIGLFVYILIRKKVGFSARNLLKESLFYPSMDGLFKFFKKVLLFIFTIELIGAI

LLTMRFALEMNFKKALWFGIFHSISAFNNSGFTIFEHGLIAYKHDIAINLIITSLIIIGGLGYFVLVELY

FFQRKKLQNLSLHTKMVVVASIFLIFSSTLIIFAFEYSNPQTIGHFSFFDKILSSYFIAINYRTAGFSTL

DMGHLHDASLFFGSLFMVIGGAPGGTAGGMKVTTVMVLLLYAYWSIRDGRVRIFGHEIPRETISKAFIIA

VGSAVYIVIAVILLSLLESKFDFIALLFETSSAFATVGISVGNGGTLSLCALFSDPSKVIIIIMMLSGRI

GVFAFLLSVFKQDKAIHLKFPEGKVNL

>ETJ83591.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLNYGIIGLGKFGSVVADELIAGGHTVIVADKDEEALKSIQNPPSYAYILDSTNISALKEAGFHDVEV

VIVSIGENVEKSILTLMALKDIGVKNIIAKATSNIHGQILSKLGATKVIYPEKESAKRLVKEFLTKDADY

EVFDLSANTIRAIKINIDEKLAGNSLKHVAQNMKVISYKKLNSDWEILPDLETTTVYSGDVVILLGTVKE

LREFEH

>ETJ83590.1 hypothetical protein X909\_04310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFGKIDYINLLPLHIYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNTSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYAKTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>ETJ83589.1 uracil phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNIHCINHPLIEHKLGILRAKETKPFQFRMLIDEISSFLLFEASKDFSLKEIEISTPIQKTTVKKLDEK

IMICPILRAALGMLESVFKMIPDASVGFLGFVRNEETLKADFYFQKLPKDAKKRTAIVIDPMFATGGTAI

EACNFLKSQGVKKIKFISILAAPQGLKKFSQMHDDVEVFVACIDEGLNEKGYIIPGLGDAGDRVFNTL

>ETJ83588.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLKEEALKYHLGGKIDIVPSKPMATSYDLSLAYSPGVAEPCLEIAKDNELAYTYTNKANLVAIVSDGSA

VLGLGNIGAQASKPVMEGKACLFKKFANVNAYDIEINVHSIEEIVNFCKALAPTVGGINLEDIAAPKCFE

IEAALQDLGIPVMHDDQHGTAIISTAGLMNAMEISGKKFKDIKVVVSGAGAAGIASAKMYRNLGVENIIL

VDSKGVISKDRNDLTPQKLEFAVDSKEKTLKEVLKGADVFLGLSAPKILDDEMVLSMAKDPVIFALANPI

PEVMPEDVARLRKDAIVGTGRSDYPNQINNVLGFPFIFRGALDVRASKITENMKVAAAKALADLAKLPVS

DAVKKAYNLSTLEFGRDYVIPKPFDERVKAAVSTAVAAAAVKDGVAKVKNFDEKAYFESLK

>ETJ83587.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFEDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPKFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNAHYIKTLPFEEINRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDQKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIDNFLKVRGK

>ETJ83586.1 hypothetical protein X909\_04290 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLSFAFFASLASANTINAIAVVVDKEPITTYDIDQTMKALKIDRNKALGVLINEKMEISQMKQLGI

VVNDLELDDAINKMLAQNKTTLNAFKANLKSKNRSYEQFRTNFKKDLEKRKLYEKIASMAKTDFSDDGAK

KFFEQNKDKFTFYTQINANIYLSNNPQTLENIKNTKKTILKPQNASLNTSNADPRLLGLLSQIPVGGFSP

VLNGKNGYELYEVKSKDGTQTPEYEQVKNEVLNAYVSEQRQNFIQDYFDKLRSKINIEYLR

>ETJ83585.1 biotin carboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPSQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAEDRNKAIAKMKVALDELLISGIKTTKDF

HLSMMENPDFINNNYDTNYLARH

>ETJ83584.1 acetyl-CoA carboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKEEIKELVNLFAEANISKIKIKEQDGFEIELERDMCCDVPAPVCPPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>ETJ83583.1 deoxycytidine triphosphate deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLKADNWIRKMALERKMIEPFCEANIGKGVVSYGLSSYGYDIRVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>ETJ83582.1 N-acetyl glucosamine/N-acetyl galactosamine epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMSSIFNSNCMRYFIGDVRDKERLSV

AMRDVDFVIHAAAMKHVPVAEYNPMECIKTNIHGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFSVTRYGNVVGSRGSVVPFFKKLIAQGSKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITNLAHALAPNLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKLVDQESDFSINALGEKGQKVKDGFSYSSDNNPQWASEKELLDIINHTEGF

>ETJ83581.1 C4 aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MITYSHQNIDQSDIDALTKALKDEILTGGKKVDEFEEALCEYIGVKHACVLNSATSALHLAYTALGIKEK

IVLTTPLTFAATANAALIAGAKVEFIDIKNDGNIDEKKLEARLVKNSTDIGAISVVDFGGNSVEMDEISN

LAKKYNIPLIDDASHALGSEYKGKKVGSMADLSIFSFHPVKPITTFEGGAVVSNNKELISKIKLLRSHGI

VKKRLWDSDMIELGYNYRLSDVACALGINQLKKLDHNLEKREEITSFYDKEFEKNHYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIRLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>ETJ83580.1 aminopeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKLDFRSQDFNQTGKAMYELACELFPIPRSITGQGFRASLEILNKTLGGGYTQISLYKKWHKGF

>ETJ83579.1 SAM-dependent methlyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSNIQQIFDHIEKSNPIHAKYLKKVNLNEEEKVELENLIRFYLNQGFSINKQANAYLLFLNDTLKEIYY

FIEHGTYRYSTLKDVEDKIYFNHDYMENYMIGLAISNFIWDTHIAIRRYFIDLMQNNNIFGKYLEIGPGH

GNFFLQSLKFGQFSELLGVDISPTSCEMTKKIVSFNDHKAKQKCQFICMDFLEYDFNEQFDFITIGEVLE

HVENPKNFLNKARKILSDDGNIFITVPINGPAVDHIYLFSHPDEVKNMIKNCELEIVKEEYFMANNYSLK

KALETRNAIIMVALLKKL

>ETJ83578.1 N-acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEHNSNILTKEDFKNCLMDIGIKAGDMICVHTEIFNLGIPLLTKNEYLKALIECFLEILTNNGTLVMPTF

SYSFCKNEIYDKNKSKCTVGLLNNFFRKLPEVTRSNDPIFSFAAYGLKANLFQVENNSCFGKNSGYDILT

RNNAKIVYLGADWAHTFIHYIEEQIGVDYRYFKTFQGYIIDENNQKYEKKINYYVRCLDKPSELNLSTIA

KLLEESGSLKKKSFGGTNISAIDTNDFKKIIIQALNTDKYILVRKD

>ETJ83577.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKQFYEILKNILEIEVNEHTNLSMNNCPEWNSLAHIDIIMSLEEEFEIKFDKEKLTELNSQNMLLKEIK

KLKNE

>ETJ83576.1 hypothetical protein X909\_04235 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSISQKNLELFSKLSGDFNPLHLDQEFAKNSYYGDQVIYGIYQVFLTLENFFKKNQKNIKIQKIKASFI

NPLFKNEDFKLKSIKSKNNFLKKYEITNKNKILSKIDFEFQEELKLHNPYESNFFNKYDAISNPLSKEKN

AKEELKYNTILFKQLFPLCANYLNPQNIAILLASTRIVGMKIPGLHSIYSSLNLNFSNDNIENKQLIYNY

EKHHSIECYLIDFISPCKGSIKAFIRPQLVKNLNYKSLVLKYPNISENKNFKEQKALVIGASSGLGNTCA

KILALGGAKILATYHTKNIQEDIPNCDFLQYNVLKPSKISIEKIKKFNPTHIYYFATPKISTQNNKLDRK

MLFDFLDYYIFGLEKILSFTSPISSSSSSSSIEDLPLDMKEYSIAKAAMEIYMKYLKKTKNIEIKIPRFP

RAKTNQTLSFIPQDLKETDELIVSMLLNKGLK

>ETJ83575.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLFSPHLKRNELIKFAKELDFSKSQDLLINVHRNHAFEGVQSIIAPFLHFANLRAEFNFSSYDDSLSFD

NFKEASLELLWLDLTRYKNNVQNFIEERLLELRKISQNPILVLSLGEFKTDKKILNCEIFNIEKLIKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALVKPALKALVLDLDNTLYQGILGEEGIDNLNLS

PLHKTLQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INTNAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAANALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVTQHMQKELIVSVSMSDKLSDS

GIIAIFVFSCKEGNLFIDDLCISCRALGRKLETRMFFKAFELALHFFDLKNNNARLYYQKGERNMPFLSF

LEQISKEIEKNSALVSFQNLNFKGLIIHEN

>ETJ83574.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHAANT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLICGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFELGSDGKYFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVDEKDIAFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>ETJ83573.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKTEFLEELKEAMHRDEELNEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSNLINLA

KLD

>ETJ83572.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFCQRRSDVEKYSAFTMFTKDDVSNLSQALLEIGVNINVNLENAQQCYELLNQNITTLKSQRK

LAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAP

WYVDGVIDNSGSAVPPLNYILGREMEHSYSEYYEDFPHNRIIFFLKTHWTRKENSPYFFNNENYFIRTLL

NKDHLILQSQKNKNIIYVSYHSKEDPLTPANFKEQTMQILKILGYDVSLNLIDENKIDGKFIKNLDHGCG

IPDKALFRKELPLMLEKLQKRKSLMQENSISYPCGKKVFIFKDVGDKFELEIKD

>ETJ83571.1 amino acid adenylation protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTTHIYDFLEKSLIKFSEKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQAPVLIILPKG

INCLISFFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLKFNLDLPTLYTQDFESFNIDESL

IKNAKEKHIDTNLLYVLFTSGSTGIPKGVSIAHKSVIDYAFHFCEAFEVDENEIIANQAPLYVDASLPDI

LATIKPSATLHLIPNHLFAFPNKILDYLEQEKITMIFWKPTVLIYFIKDQDNLKNYPLKNLNKILIGGEI

MPIKQLNIWRKHLPNALFANCYGPTEITDVCCYYILDREFSENEILPIGKAYKNTELLVFDENMNFISPK

QIGVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDLLYKTGDIVSYNEFGELLCYGRNDNRIKF

MGHRIELGEIESVINSHSKIILCACIFKEKIICFYESDEELDFKAFLKDKLPSYMIPKHFIKIEKFKLNQ

NSKIDRKALHELI

>ETJ83570.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSFEKAFYEGFKLSNCYDNFNLIREKILKQELILEKHENNNFFFFNRTDGLLYYFINDLQDYDLKACYI

KILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHEDSKELYSFFRKYFDPYLFYF

SQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVAFALLNHYFAANTQNKFFKL

FVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>ETJ83569.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFQAIKNMIE

QAFI

>ETJ83568.1 carbonic anyhydrase, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

QNYGIMAALDHINALKDLVKRFPKLADLPKIYGGGSYGGYLSLLIAKIAPWYVDGVIDNSGTVLPLLRYI

IGRDLEQFDFIFNDPNTLIEMFTKTYWTREDENSPYFFANENYMIRSLLNSSHLIIQVNVNKNIVLVSYH

SSKDEFNTSKDKQTLFLAYKELGYDATLHLIKDESEIDGRFIKDLNHGMRITDRALFRKELPLMLEKLQK

RKSFMQENSISYPCGNKVFTFKDVGDKFVLCIK

>ETJ83567.1 hypothetical protein X909\_07030 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIAIKGITCKITAIITAIKNSRKCKNYLPNLQGVGTSQNTVAIKYTAPTREFSFYPLFIL

>ETJ83566.1 hypothetical protein X909\_06555 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDIRDEFEQDMDKKKRNFTFMSKLKKPKLLL

>ETJ83565.1 hypothetical protein X909\_05875, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLNKLSLSLVVGSLLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETV

NFKGSGYNYLN

>ETJ83564.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLISKGKVLTLLLGVGFALNVSSAENSNVLIQGEAAQDGDTKPRTLEGYVHQEDAFFKYLKEHHPMFK

YEKEGRIVGKYAISDREEEYVEFSNGPTFAQQNNLAHTSVTYRLGMESFLDFPNKFVGPKKCGECHPAQY

KAWERSRHAKTVRFPDEFEEVGNDLKKPMYNSQSTILPDGIYPDDVYAVIGTPRTKYGFIDRWLVRGTYH

VEDGNLSNMTGKIVAGGNQFSRLWSEFLTPEMTKKIAEFSPGFPTTMEQFGGNGSQVWGTNSYAAQYRKN

MLFQPASSYCETCHSFKFDFKSKEEFYKALGNTQELRKHTISKGISCEECHGAGAHLYGARGAGMPSNCE

RCHQRFSYNEEDAKKNPRKPFNAFFKSSCPACGTEGAQMYSSAHYDKGMRCSTCHDPHEVTFNDWKDGYT

KVGLKKTCTDCHDTQASFFKQGGIHSKDNCTACHMPNMMSCENFGAVQNPDKGGFDNVRASHIWKIKVDK

TAKTLNPPEGKERSPKTPGWTIARDDDGRFFLDLMWACGRTSFSDPNLMGPGASGCHSAVQSNLPKKLHF

TDQETIYDIVVGWQKPVKDGYENILKGVKEIDKAMAENPKLSVEKKSRVITLANQARAIAEKLQKDGSWG

VHGPVYSKKIVDEALVYIQEAKNILK

>ETJ83563.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQSLIKFILLAVFCFSTPFLLADGKIQIGIVEGVTPISMKDAEKLLGQKNVYFVDVNSKEEREVAGNIP

NAVLVDAQNWQNLLPDDFNATLIFYGSNRFTFDASNIANLSQKLGYTHVYVMLDGIESWVLSGRKVQKEQ

IEKWQNAKNLDDFKDSIHSRMYFGDVPSCRDCHGKGEDKKSIRYNNAANLDLINKNCASCHKDVDKEFKH

SIHQNISQIQLDKDGKKKKIPTCTTCHDIHNNDPLMNAMTLKQRSDFKCGECHQDKQDRYHDTFHGKAMV

LNSPGSAPKIAACYDCHGKHNILKVEDLNSTLSSLNRVQTCAQCHPNSNENFANFIAHADHSDGENYPLL

HGAYIFMTALVIGVFVFFGLHTLLWSIRLILARLSHPIEWKKAKENAHNDKILIKRFSTFHKIQHFFMAA

SFLGLAFSGLPQKFYTAPWAQTMIDLMGGPIGATIVHHISAIVMFIVFFSHIGEIILVNWKRRDLVRDPQ

TGKLDKMKILKALFGPDSLMPNWQDFKDMKAHFKWFFGMGERPQFDRWTYWEKFDYLAVFWGMFVIGLSG

LVLWFPTFFSAFLPGWMINLCSLVHSDEALLATGFIFAIHFFNTHFRADRFPMDMVIFSGTQSEAEIKQE

RNAYYQRLKESGRLESLYEKNSKFNSYKGIAKLAGYLMLITGMIFLFLMIYAFIVDLLK

>ETJ83562.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKKLILGFIILLFCACNDEKIDENILSKGTKTTEQYKQDANNLDLNSYKEIAEFFKDNQNIVFSDKPVL

IIFSANNCVYCDKLKHEIQNDKEVQNILKNTYNSYYINTSYHKIHNYDNKKTSTEELSREFNIDATPTLV

FFTPKHKTLLIYPGFMSAKRLALTMEILKDEKNQKLNEDELFKTLFLAYKEKNV

>ETJ83561.1 cytochrome C biogenesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKKIFFSFWMSLILLFIYALSCAVATFVENDFGTNAAKALVYNALWFDILHLLLLINLIGIIFIHKLLQ

RKKYASLLLHSAFIVILLGAAITRYFGIEGGMHIREGQSSDIIVTRDEFIALMLYNDEGKVVEYQSFGVA

FNPLLHNSFEKKVSMQQNKTINLKLLDYEKAPNAMSNPIIKMQISFNNESKEILLTPNYNNENVLPFRLG

GEIFALNWGPEEIKLPFSLALKDFILDRYAGSMSPSSYASDIEVIDQDKSFEYKIFMNNVLDYGGYRFFQ

SSYDQDEQGTILSVNKDPGKIPTYIGYTLLTLGFLWILFAKNSRFQKLSNYLKNQKNLLLILFCLFAFNI

KSFADENTLKLIQNIKENSAKHSMLFGSLLVQDFDGRIKPIDTLAMNYIHKITKKNDFLGLNYNQIFLGM

MMYPQHFRQIKMISVKTAKLKEILGVDKNEKYLAYDDVFDGDFYKLSNYIEEANRKKPALRDQFDKDILA

LDEKINTAFYIYSGEIFRIFPDPSQKTYTWYSPATPMPFDLKDIENIQSLLAKYFFDFEQALSTKDFSKA

DESLERLKNFQNFYGSNLIPTPTQISLELFLNHYNIFDNLTPIYLLLGSMLFILLVYEILSLKKAPKMLK

NAIFILIALSVLAHALALIFRWYVGDHAPWSNAYESMVYIAFACAFAGLVFYKRSSLALCTASIMAGISL

FVAHLGFMDPQITNLVPVLKSYWLNIHVSIITASYGFLGLCFLLGVFSLILFMLRNPKKAQIDQSILNLH

CINEMAMIIGLALLTIGNFLGGVWANESWGRYWGWDSKETWALISIIVYTMILHLRFISKFNNPYAFASA

SVIGFYSILMTYFGVNFYLSGLHSYATGDPVPVPKFLYFFIAFTVILILGAFFKRKLKSPA

>ETJ83560.1 gamma-glutamyltranspeptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRYLAIFAISITLSFGAANPPIQDRTGTGLVLSSHELANKIGKEVLDKGGNAIDAAIAVGYALAVVHPAA

GNIGGGGFAVIHLANGENTTLDFREMAPLKASRDMYLDSKGEIIKDASTIGYLAAGVPGTVKGMSAMLDR

YGTMKLKDLMAPAIKLAEKGYLINDRQEQTMLEAKDMFKEFPSSSKYFLKKDGSTYKSGDLFVQKDLAKT

LKLIAKEGPDAFYKGKIADLIAADMAKNKGIITKEDLAQYQAIWRKPVEGTYRGYDIISMSPPSSGGAHI

IEILNIMENANIENLGFASSKTLHIMAEAMRQAYADRSEYMGDPDFVKIPLDKLTSKEYAKEIYAKIPKD

KALPSSKVKPGLGQIHEGHNTTHYSVLDSKGNAVSITYTINASYGSGATVEGAGFLLNDEMDDFSIKPGV

PNLYGLVGGEANAIEPKKRPLSSMSPTIILKDGKVFMVVGSPGGSRIITTVLQVISNVIDHKMDISTAVE

SPRFHMQWLPDEIRTEPFGIIKDVQNNLEKMGYKITKEPYMGDVNAIMVDPKTGKIIGSMDTRKEF

>ETJ83559.1 hypothetical protein X909\_07105 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MERKIYNIKRGWLFKTKRDFAKRWNIEIEDRFYERCITLIGDIINPKQLSELEQKIFLIVGEIYKGEKKF

SGVISIFNHFNGLHDSYFAFHETALYSLLMQLKDVKFLEALENIINFCKKDKDDEFLLTFNDIVLMSNKP

FRLYYNDKYEFHPSNIEIFDQVLINDVLEFLKDYPKAKKQLSEALKIFITKENYRDVVDKTRLSLELFLT

QLLNNEKSLENQKDEILRYFGNLLDENFKKMFLEILNYYQRLNNNRAKHCKSNGQEFKDYEVEFLIYLVG

NFLQLFMTFNKFKK

>ETJ83558.1 transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNYNKVLKTKKTENFSNSKNYEEQVVNWQQYFPTYHFDYKKNRDIALEEYKFCCKILESEERIFDNLIK

YMLTFGTIIISLLSGASEKIKAIFKDVTENPNYIIWFIIALVLLFFIFMTKNFAEKQKSIIFAKRKIIIL

RRMLGMDYGTQEFLFKKGMLEGANMPFSIKLRFNYLYHIIPILCVTALLIIIHMFLGYSLMYAIVFNSII

IIALYLFYIYCILDINETILLVIIRILFSRLGINFVDNFEHVLYRAKLSAYECKRQKIDLDNLKKILVAI

EDQKFYQHKGVDFKALCRALLSRGRKIPFFNKISFIKNIPFTGGSTITQQLFRTLFIENMNKKRYRRKIA

EILLSYLWFNKILSKEEQLEIYLSAVRFDKKIFGIMQAIRHFYGGDKYIKNLSKAQSFFLIERVSVTSGT

MLPKVIDTIVRLEKEKILNKEDIEDIIKIYTKAQQDNKITVFFKNRNILEELSKKYKHQN

>ETJ83557.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNTQINDKILELANYLKIDNKCVAHNARLQSIQINGAVIKNFSFKLFNEYKLSFFNCKFLCEINEAPGF

FEIENPVYIYGCTFEENVISYNIKFKSNVVIAYCRFNKNFYFEANTFCNSSNFERNFYNYASFKKSHFEK

NVTFYNSTFKGLDFSQAIFNENLNIVNTKLNFTFSNLEEKIEQEYEEFNKNKKEEDQKSLDKFANDFRDS

FRTFKSALIKDNNALDASNFHKYELYCKEIELKQNWDKKGENVKNTTDLEKNVSRIRDFMDFLLLGFYRK

LCDHHTDFLKVFNNLILLIALYALFVFGFTWLHDDKLEDTRAILTLFGFFDKFRLYFDIISTIFVVFGCG

FFVCKLDSYEKKNNVSKKQNINFIYIIGDFLNLIKSLLFASFIPCVFYGLFSLFGFFLNLGKDFGYSLLI

NTLFVSLYICLVYTKSLFFGRYVVLIFSYIVFIIMLIKQPNVIHPLIGKIANESDKFFNYPSLIVLNILY

TILLALVLFSLQKTARKNSIVPS

>ETJ83556.1 hypothetical protein X909\_07090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTNNIFMALAIVLASLILAFGFNKALSDFKTLERSVSVKGLSQKEVEADTLILPIKFTRSNNNLTNLYE

ELEQDKENIIKFLKEQGVKEDEISYNSPNIIDRLSDPYGNDTQATYRYIGTANLLIYTQNVKLGKSILEN

ISSLAKFGIVTKIDNYDIEYLYTKLNDIKPQMIEEATLNARNAAIKFAQDSNSHLGKIKKASQGQFSISN

RDKNTPYIKTIRVVSTIEYYLKD

>ETJ83555.1 multidrug DMT transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKHTKIHGFAKFKLIVILALMSSIAPLSTDMYLPALSHVEQSFQTNSFLTQLSIASFFIAFALGQLIYG

PLSDIFGRKIPALVGIFFFIVSSLFCVIIDDIYAFIALRFFEALGGCAGVVIARAIVNDLFEIKEAAGIF

ALMMVFSSLAPMLSPTFGGFLLEYFSWHSIFATLFALGILLFLMILFGLKESAPHLKNKKFSHHEAMKSY

KFVLSDKRFLVYILCASFALAAMFAYITGSSFVFTQFFGLSEQKFALLFGANALGFVICANINARLVLKY

ESEKILAKALMIMFISTVILLVNAFFHPNFLLFELSIFTSIAMLGFIAPNTTTLAMARFKEHSGTASAVL

GTVQFGFAGLISFVVGAINANTPIILAFVMCACVLVANMIYFLIKIKEKNENK

>ETJ83554.1 hypothetical protein X909\_07080 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNLNQNEQIKCPSCGSFIDISTALYAQILDKAKQEMLKQKKEFDDEVNAKRAEYTKALNDLKTQKIEQE

KLINEQVSQKLLLEKQKFEQELLAQKQNFQKEFSEKFNKEHENEMKIMQEELEKKSKELSEFLSIKAENE

RLKREQKENEERLKFQAKEEAFKEFKEQESKNLEFEREKMRLEFQKSTQEQDLKYKELETNFKSVAQKLE

DAQRRIEQGSQQLQGEAAELLIEEYIQSEYLSDEVKEVPKGVNGADCLHIVKDNFGNICGSILYESKRTK

EFNKEWLDKLKLDSIAAKSDIAVLITKTMPKDKEKTHFKEGILICTFNEFKGVLAVLRESIINAYKLKNA

LQNKDEKNHILYEYLNSKEFNTQITFILKTYQNMKEELEAEKRALQNIWKKRERAIENLSFNSTAIVSSL

NAIFSDLQGGNLIGEEGIKSLENLAKDED

>ETJ83553.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKHILLLGLCLSLSLSAKSVSDYKVGEELSDKEGVEYFKELSKRPVQEWPNKNLSINDVPKGKQGDLIR

YGIELLSKTESTLGPYSKLKKTSNEVNCISCHMDNDGNGLPGTKKYVIPFLNVLNNYPRLDIETMKIISV

EDRIRGMGGTDSHRFPNDSKEMKAILAYFKWLKEAYGIKDGVKLEGDFFAKMNFPNRPADPVRGKKLFEE

NCVACHGERGLGVKNDNYEQGSGHLYPSLLIYPDGGHMAMIPFLARFLKSAMPFGASADNPILSDEDALD

IAAYVNTGFVRMPITTTENRAGLDTAYSKSPSLKPEYFASPQQNLDPKEYIKVKYGPWKNPNHFPGE

>ETJ83552.1 poly(A) polymerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLKSLENNRLYILKRLGILKFLSIIEALLVGFLAFVFIRDALIAVILAVFVGVFFFRFTAKKLKLAQKE

LQINALNLFLRRFGAKFKKQSLSQKDFLKLGLTKDLKEFKSQNCFEFKDFKIYDIQFLDENKRFFCGILL

EILSANKNPSFENEEQIYIKLQDKNFTLNHVFSKENHYLIATLSNPFFIDIKKDLESNFKDLEENLNSIK

NKLFK

>ETJ83551.1 GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENIRNIAVIAHVDHGKTTMVDELLKQSGTFSEREQISERVMDSNDIEKERGITILSKNTAINYKGTKIN

IIDTPGHADFGGEVERVLKMIDGVLLLVDAQEGVMPQTKFVVKKALSLGLKPIVVINKIDKPAADPERVI

NEIFDLFVALDANDEQLDFAIVYAAAKNGYAKLDLNDESDNMEPLFKTILERVPAPSGTNDNPLQLQVFT

LGYDNFVGKIGIARIFNGVVKKNQSVMLAKADGTKVNGRISKLIGFMGLEKMDIEEAGSGDIVAIAGFEA

LDVGDSVVDPNNPMPLDPLHIEEPTLSIVFSVNDGPLAGTEGKHVTSNKIAERLEAEMKTNIAMKYESTG

EGKFKVSGRGELQITILAENMRREGFEFCMGRPEVIVKVEDGVKTEPFEHLVIDVPEEFSGAVIEKLGKR

KAEMKTMAPTGDGQTRLEFEIPARGLIGFRSQFLTDTKGEGVMNHSFLEFRPFSGAVEKRNNGALISMEN

GVALGYSLFNLQERGVLFIEPQTKVYTGMIIGEHSRPNDLDVNPIKGKNLTNVRASGSDDAIKLVPPRKL

SLERALEWIEEDELVEVTPVNVRVRKRYLDPTQRKRMEKAKS

>ETJ83550.1 hypothetical protein X909\_07060 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKPLNEEIFIEFKSDLAERKNEVLLQVLELLETFRSDKNEKMARISSELTEILENEENLEKILNAKNLE

ELLNILIALNEDKMIKVYEDSYLKEKFPNVMVDKFLK

>ETJ83549.1 flagellar hook-length control protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNLAPQNDVLNLTPSKTSNTSSSFSKTSKNKEHESSDSKNSTQDDTESFLNSLLNSIDETNEFLPDHMK

ISQKEVVNEAMNRLQKGAFDESDKISIFESASFMQILSLLDKLKTDTADVKLANLSTQLSSLIKTEANFN

ALKGASNLSELLDIAKDLGLNVKNIKVDRLLDLKATFPNLDKADFFKGAVDNVFKEIINNKISNVSKNLN

HNLENTTHTTSTHSTQKTNSKDSGSLLSQTLKNLDSILSSKESKHEKNDKVKSKIEEDTTDAKNTLKNLK

NDEFAKNLTEELNIKDKKNQDNLNKDNNLKDLNKESKDLNKDFNKELNKELNKNQEKNNLNQENIQDQNK

NLKNNDQNLNLDKNLNKEIVKDTQNLVSNLTQKDFNLNKEPKNNNKENKDIKQNFFDQKLNFENLNKTQV

VQNKENNANFNNNATNKETFTQEQTKTHSENVDKNSLDELNSLVKDLNKVTQNNARNITPKETLQYFSQD

LKEAVDQYKAPITKLSITLNPNNLGEVEVTLIQRGNNLHINFNSNTNAMNLFIQNQAEFKNSLVNMGFTG

LEMNFSDQGKREQNQNQGKNRSGYGFKDALDGKNESEKVNLELVLAKYF

>ETJ83548.1 flagellar basal body rod modification protein FlgD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISSSDWNLNTTATTSGTTSSGSTSGTTRTDSSSSSGIVSNPNATLDKDAFLKLLLIELQHQDPTDPMDS

DKMLTQTSQLSALEMQQNTNTTMQKMVETMQKLSDSFSTSMSTSALGAIGKMATVSDNKIKLTGADELIA

LKMYLPEDSDENGVTLEIYDSNNKLVFSEKSDAKSISQGLFTMEWPGRNNDGVYAGDGEYTVKMVYNNKN

GEKITANYGTYPIEGVVFKDGVAYAKMAGQEVPFDAIQEITDYKLGSSSSTGGSGSSGDSSGGSSDGDSS

GSGSTEDGDKEEKA

>ETJ83547.1 flagellar hook protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMNSFYNGISGVKSNSFGIDITANNIANVNTTGFKYSDAQFKDIFYTTITTQSTNPAQGGYGSGAASSQV

VFEQGSPVASDGEFDVALQGKGFFGVLGADGNAYYTRNGSFRRDANGYLVDSYGNFVLGTMNPAFTGINY

SDRVAGLMGDYLNTGTPVNNGFTVNSNNSFSIGTTASQGAIKVPVNMYLPPQVTQNVKWSGSLNTNTTTE

VVKVDLDPSKFNITKTEDGKYVVSGSVSKEDVFSAKAGDRIILNFTDDNGVKTSFEATLDENLNFKSNEL

DLKGLDENSIKLDTAQISTEQQKANKDILESPIYNADGSKSTLRVTLERVLPQEGDNIQYKAIAQIYDSN

GNAVGNPTEGNMVFDKNGALLQNNITSIANPNGGTINIDLGSPYDANKPGSGYSGIYIKEGVEKNVVTQQ

DGVAEGFFEQYNISDDGSIVAQFSNGKNAIVGKLALYNFINEQGLVAMGDNIFAATANSGDASFIMKDGQ

VVNTAKFKGGFLEQSNVDLSAELSNLIVTQKAFDASSKSITTSDQMIQKAINMKR

>ETJ83546.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARGVIKTGLGEHLAYHFISILGKKTLGIAYSIAFCETILAPVTPSNTARAGAIINPIVQVIARSFKSTP

EDGTQNKIGTYLSLVNYQEPILFHQLCLLQLQLQILWWLIL

>ETJ83545.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLPGIAAMLLMPLMLYFLSPLEIKSTPNASTFAKDKLKELVKMKNSEKIMLSVFVSLLLLWAGALGLFF

WNFS

>ETJ83544.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MALLGLSLVLISGVLTFGEVLAEKAAWNTLVWFSALVMMATLLGKLGVTQFLAEA

>ETJ83543.1 2-oxoglutarate translocator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLGEISIMIFLSLAFLYTHYFFASTTAHISAMFFVFYSAGLALGAPPLLYAFIMIASGNVMMALTHYAT

GTAPVIFGTGYVTLKKWWSIGFVISMVDIVVMIAVGLFWWKILGFY

>ETJ83542.1 thiouridylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKSLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGAHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYDHDKVIASGFIE

>ETJ83541.1 lysine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNEKISQDLEKFANIPNLKNAVTFFGSARLKEDNFYYQQAKILAQKCVQNGFCVISGGGGGIMRAANEGA

FSQKNNTNSMSSVGFNIFLPHEQKLNEFVEYNITFESLAIRKMALIEKSLAFVIFPGGFGTLDELCEILT

LKQLEFKKDVPIILFGSEFWRGFDEFVRNSLLKLEVISKGDELKYKITDDLDFIINTLKEI

>ETJ83540.1 hypothetical protein X909\_06995 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINSLNSNLNYDYNTSNFKQDKNIDFKINKHGVAVITGEGALPYRGKKFEYNPKIFGLDESISKKDMQEF

NNFMKSNALKDPNKIEKSPLKDFNPAYTKWDPTTEKMMLGFFVSYSKMFHLGYDIIKKADEFYKEFDALI

SKDLSLNEFKTKYIDFKQRHDEFVKEYEMAMGDKMLLSSDNEIITQQSEKPFKAIQGESKNKETYKDDST

RNELVKKLLEGKFSTSKELELLFGMKFSDDDAGEFNKILSLNSTPKSIDIKA

>ETJ83539.1 hypothetical protein X909\_06990 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEVKGGYITYLKRLSDNEVIAFAKPDWNLELTLFQDSNGDQYYWNREGLVRFGGMCGIETTNCLVNGKH

SYINQKRLWETMSIVGDDPYRNFLGYTVKRNIGISNLGKRFVYFSYGVAVINEQSGSWYRVKSSPVLNNY

RVVKEISSNYKDFLERYLGGYSIK

>ETJ83538.1 flagellar motor switch protein FliM [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAEILSQEEIDALLEVVDDNTDTPIASNSKDEKDERNIVVYDFKRPNRVSKEQLRTIKGIHDKLARNLAS

QISSMMRSIVETKLHSVDQMTYGEFLMSLPSPTSFNVFSIKPLDGNCVLEINPSIAFPMIDRLLGGQGDS

YEASRELTDIELNLLDSILRIIMQRLKESWATVTEIYPSIEAKESSPNVVQIVSQNEIVIMVVMEIIIGN

SSGMVNICYPVVHLESILSRLANRDIMMGETSAKKSRNKELKTLIGRAEVVYEAILGKTLINVHEFLELK

QGDILRLDREADDKAIVSIDKKDVFLAQIGLHRFRKSIKILELIRTDKDEIKEILEKYEEERKAKASVYD

EPEEEDEEI

>ETJ83537.1 RNA polymerase sigma 70 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKEPPKAYAQMLKKEQDELVLSYMPALRAMAFRLKERLPSSIDVNDLISIGVEEMIKLSRRYDKEQNDN

FWGFARKRVNGSMLDYLRSLDVMSRNNRKIIKDIDAIMDEYFLEHECEPDDEYLAKKLDLDVEKIKEVRT

AHAISYTLPIDEQIELYNEDNTLEKIEKEELLEKIHEVLDDLKERDQLIIQLYYYEELSLKEISEILQIS

ESRISQIHKKLLKKLRERLV

>ETJ83536.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRPENYVAFFTVCGFFIGLTFSIISIDEAFDILIFTCFITFMFYVFVHIAIMNFIDVKKISGRIFNKHDY

EKTSNNIINDLVIREKKMDIILEKLNEEREELKKNEFKERRRNAKRAA

>ETJ83535.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNQANKLRNLMSQNGTKKSQNTHFIAITSGKGGVGKSTISANLANVLANNGYKVGLFDADIGLANLDVI

LNVRIQKNLLHVLRGECSLEDILIEVKPNLWLIPGESGDEILKYNDKNIYERFLNQASILDELDFLIIDT

GAGIGGNILNFLEMADEVIVVTVPDPAAITDAYATIKTTSKTKENLLMLFNVVKNENEALKVFENIKKVA

DANIKNPLNLEFLGHLSASKDVSGSIKKRTLFSDENTASSDEIKALASKLLYRLERKVLDNVSNRSFSSF

FRKIIERF

>ETJ83534.1 flagellar biosynthesis regulator FlhF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGQLIHTFTVEDTEQIIPKVKEDYGNKALIITNKQIRPKTLNRSALYEVMVAIEESDYEEHLKKQGKSLP

AKKSSPKPSSTSLAEEKIRSQIPQEDEDVVLDFSNTRLNTNLNTVKNNDLTKKTYQDFPQNKINPHQNKT

LGFDDFKEKLSEVSNEISKVTNTPLENYTPNPNYNKKIENFEKQFEKQINKLNDKIDLLADMMWDDKAEA

RKNLMIPPEFASIYKQAKESGMLENHLEAIMKATIENMPAAMKTNKDAVQRYFHSLLRNILPCRVESDIK

KQKIMMLVGPTGVGKTTTLAKLAFRYAYGDKRYKTGIITLDTYRIGAVEQLFQYAKMMKLPIIDSIEPKD

LDEAIKSLNNCEVILVDTIGNSQYDQSKLAKTKEFLMHSNAEIDVNLVVSANTKHEDLMEIYKNFSFLNI

DTLIITKFDETKVFGNIFSLVYETNIPLSFFSIGQEVPDDLEVANSDFLVHCILEGFNKGKNNE

>ETJ83533.1 3-dehydroquinate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKSLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>ETJ83532.1 chlorohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFIVAARYLFLCDEDFTILENQAFVFEDKILELGELDNLKKKYPKAKIIKTPKNSVILPAFINPHTHLEF

SANSTTLHFGEFLIWLKSVINSRSILNAQAKEELILQSIKKMQKSGIGTIGEISSFGSDLDPCLKASHKG

MRIVFFNEILGTNENQVEDKKQEFLKRFENSLKFKNDFFIPAISIHSPYSTHPSLAYFALDLAKKQNLLA

STHFLESKAENIWLRESKGGFKKWLENFTLHPKPLYTPKDFVKLFKGVRTLFTHCVYLKEYEWLDKNLHS

ITHCAFSNRLLSQKSLDLKTALKSGLNIHLGTDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMV

TLYPARALNLNLGELKKGKIADFSVFELGECDKKQAPLQFILNAKEVDKLFIKGKECKF

>ETJ83531.1 endopeptidase IV [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQILKSFFKALGCGIKFINTYFKTFVLLLIVIWILMPSANSSSNLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKPVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERALD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPVWKEEDKIDKFLNRLEGQTSSLIS

KSLIEIVYKTNSSFISAR

>ETJ83530.1 hypothetical protein X909\_06920 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPMVNALKAKGWNAEVIFFEVGKKDEIYKYVKENFDGYVSRINPGNLKEENEYFDMLRKLCADKLVGMPH

PDAMIGYGAKDALTKLADTDLVPSDTYAYYDIKTFKENFPKSLAKGERVLKQNRGSTGEGIWRVSVEGNV

SGDSLPLNTKIKCTEAKDNHVEHRELGEFMDFCEQYIIGDNGMLVDMTFLPRIKEGEIRLLMLYNTPVNV

VHKKPAEDADAFSATLFSGAKYRYDKPEDWKTLVDMFLGELPKVREKLGNYDLPLIWTADFILDTDEKGN

DKYVLGEINCSCVGFTSHLELADEVASNIINIVSKTKA

>ETJ83529.1 hypothetical protein X909\_06915 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSILLLQNGHSFSIVFKFELYSIEKKFSQNEHFVSLVSIG

>ETJ83528.1 cation-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSYLIQNIKTTNDLKEKLYTVSKKWLLEHILYKDVKVEQYRRSSLTSEDDGEVSFEEVKEEKDDENTVYL

YTCECVEQMHDVPFGIHQKIQLKGVKFKCKKCKEAIQFYKKYSENF

>ETJ83527.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIDIQHQKLCELASKVESAVYKFVKREELKEILTELFNYMKEHFSNEEDYMQEIHYPYLNEHKIMHKISF

VICLILYKT

>ETJ83526.1 hypothetical protein X909\_06900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKIDEISSKSKANILEHLKKAYKETTFTRIESIDPVEHIQTTQDMLTEMKQKMSDNKYIVENATKDTLE

EKINEIVAKYGFKSMIYGADLNLNLEQIKAEKKICFDKEIENLRSEVFHSDFSIIHARAGVSSHGVALIP

SSKTQPRMLSLAPKLCIVLLKKENVVKSLSEALNLVKKENEILPTNILFIAGPSRTADIELITVFGVHGP

QIAHIIIY

>ETJ83525.1 iron-sulfur protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSQKIPHEQIVQIKLNDKQMQENLMTAMHTLQKNRLNVIDARFKDWQGLRAKAKQAKNNALMSLEERLLE

FEKNATKNGIKVHWASSDEDACEIVYEIMKEKNITKLLKGKSMASEEIGLNHYLEKKGLKAIETDLGELI

LQLNEEPPLHIVVPAIHRNRHEIGEIFKEKLGANLENDEPESLNAVAREHLRKDFEGLKLGLSGVNFAMS

REGAFWLIENEGNGRMCTTAPDIHIALCGIEKVMESFEDAATMVSLLTPSATGQFIPTYNNIITGPRKNG

DLDGPKEVHVILFDHNRSKMLAHEDYYEALRCIRCGACMNFCPVYDQIGGHAYQTTYPGPIGEVISPNIF

GIDHTGDILNFCSLCGRCSEVCPVQIPLADLIRKLRCDKIGQGKNPPLGANNVHHNALEAFAFKQFKNIA

TNGDKWRFSLSKAHYFNWTVQNFASILPVIKKWYAFKELPQIKMDLYKEVQKLEGVSYE

>ETJ83524.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVYFYATCLGSAAMQQSVLNAIKLLRREGIEVIFKKNQTCCAQPSFNSGYFDESREIALYNVDLFDKD

YPIVVPSGSCAGMMSHDYKELFKNRPEFSKIKTFSPRVIELSQYLDEVLKVDYEDKGAPIKVTWHSNCHA

LRVQKSIQASKNLIKKLKNVELVELQYEEECCGFGGTFSVKEPEISNAMVRSKIKDIQNSGAKYLISGDG

GCLLNIDGTMKRMGLDIKGIHLYDFLLKRLEGERL

>ETJ83523.1 lactate permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEQILTWQQIYDPFSNIWLSALVAFLPILCFLVCLVVLKLKGYQAGFLTVILATLVALFAYKMPWNLVGA

SFIQGFTNGMWPIAWIIIAAIFLYKLSIKSGSFEIIKKSVMSITPDHRIQVILIGFCFGSFLEGAIGFGG

PVAITAALLVGLGLRPLQAAGLCLIANTAPVAFGAVGIPIIAMANLVGIEQHSVSAMVGRMLVPLSLTIP

FFIVFLMDGFKGIKETFPAILVAALSFTTTQFLSSNHLGAELPDIISAVVSLAVTTVFLKFWKPKNIFRF

DNESNFTQDNTLSFNQILKAWSPFILLIVCIIIWTQPWFKALFDKDGILSYTSITLQFSNITTGILSPSI

TGIGEAKPLSLALGVDLINGKTVAQAGTAILLAAFLTIAILKIKAEDAAECFWVTLKEMAIPCITIGLVV

AFAFISKNSGMSTTLGLAFAHTGDAFSFFSPIIGWIGVFLTGSDTSANLLFGTLQQVSAQKLGISEALFL

AANSVGGVVGKMISPQSIAIACAAVGLVGKESDLFKFTLKYSVAFIILIGIWTCIIAFFLQGIIPEVIVK

>ETJ83522.1 cytochrome C oxidase subunit IV [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIITLFFMFITLAFATPTGDLKDFTEMVSIRSLETGIFLSAFRDTSKDPIDQNWNIKEIVLSDELKQK

DKLADELPFGYVQFTNPKESDLCLAILEDGTFGAKSCQDDLKDGKLETVFSIMPTTTSAVQIRSLVLESD

ECIVTFFNPNIPIQKRFGIAPCTLDPIFFAEVNELMIITPPLTAATPLE

>ETJ83521.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIICLFLSFNLAFANLENFNVGTWNLQGSSAATESKWSVSVRQLVSGANPLDILMIQEAGTLPRTATP

TGRHVQQGGTPIDEYEWNLGTLSRPDRVFIYYSRVDVGANRVNLAIVSRMQAEEVIVLPPPTTVSRPIIG

IRNGNDAFFNIHALANGGTDVGAIITAVDAHFANMPQVNWMIAGDFNRDPSTITSTVDRELANRIRVVFP

TSATQASGGTLDYAITGNSNRQQTYTPPLLAAILMLASLRSHIVSDHFPVNFRKF

>ETJ83520.1 cytochrome C oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKIIVFILCCFMTFFLYACSSKFENVNPLGRSFGEFEDTDPLKLGLEPTFPTNQEIPSLISGADLVPIT

PITPPLTRTSNSANNNAANGINPRFKDEAFNDVLIFENRPAVSDFLTILGPSGAALTVWALAQGNWIWGY

TLIDSKGFGDARVWQLLLYPNDFAMIKNAKTNTCLNAYGNGIVHYPCDASNHAQMWKLIPMSNTAVQIKN

LGNGKCIQAPITNLYGDFHKVFKIFTVECAKKDNFDQQWFLTTPPFTAKPLYRQGEVR

>ETJ83519.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYLKHLYFSISQIFNFYKEGFKNLTLGKTLWKIIFIKLFVMFVILKLFVFDVNFNSIFKSDKEKSTFVLK

NLTLEGK

>ETJ83518.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNELSSVDWSRAQFALTALYHFLFVPLTLGLSFMIAIMETIYVKTKNERWKKITKFWLSLFAINFAIGVA

TGIIMEFEFGTNWANYSWFVGDIFGAPLAVEGIMAFFLEATFFAVMFFGWDKVSKGFHLLSTWCVAIGSN

LSAFWILVANGWMQYPVGMSFNPDTARNEMQSFFEVALSPVAISKFLHTIGSGYVISALFVMGISAWFML

KGRHIIEAKKSLVVGASFGLVCSIFLFFSGDESAYRVTQTQPMKLAAMEGVYQGEHRAGLVPFGILNPKK

TIDNNESVFLFDITIPYALSILGNRDPNSFVPGIEDLIYGNESKGIEPMQNRIDRGKIAIQALKDYKLAK

ENNDTIAMANHKSILETHFKDFGYGYLEKPSDTIPPVALTFYSFHIMVALGSFFFLLFIVTLYLTMANDI

EKFRKVLWVCLLSIPLGYIAAEAGWIVAEVGRQPWAIQDLLPVHIAATQLGKVNVQISFWIFAVLFTALL

IAEVKIMLTQIKKGFDAHAGHTPLMGKGEK

>ETJ83517.1 cytochrome C oxidase assembly protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFGLELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFG

GAAFAAFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAV

SSFFSGSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKL

MINSILFLPFFLGFLAWIFLKDGFSVDTNGVVSMSANLYLYNFLNQMIFAVLLVIGVILVLLGMVQGTKG

CSKAIFTLGLGTVLTVFALLSSIGLGQSAFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYI

IYVWNAMDKVKITREEIANDDHAY

>ETJ83516.1 hypothetical protein X909\_06850 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLHALFLLAWPLVIYLSYKFIMLNINQLEKDSKL

>ETJ83515.1 aspartate racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSAKILLYSVNFEEIENLQSQDKWQEAAQILTQCAKK

LELAGANFIIIATNTMHKVFNEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMTQDFYKKMLIE

ENISVITPSDEDIKIVNDIIFNELCKGKIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>ETJ83514.1 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>ETJ83513.1 aspartate ammonia-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKDVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMEAKK

>ETJ83512.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDIMIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVILGLVLGMKPGNIPWDVILIIAAAIAAISAMQQA

GGLDYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVS

SQIGITASPVSAAVVYMSGVLEPLGWNYPTLIGIWISTTFIACMLTAFIVSLITPMDLSKDSVYQERLKA

GLVKDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITW

LCKVEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEASIKEVAGDWVKQTPAMLAVAFFFASMLLY

SQAATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNH

SFFIPGVLAIAIAVALGFVLAPMLI

>ETJ83511.1 hypothetical protein X909\_06825 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKVGLIFSGIVCLFLTACVNQVKQNTTFENALTQKYCGDDFFNQNLEKIKKNDDVIYTGLNAGLIARN

CGDFNKSNVFFDAAEESYKYDVDLENVGSKAAKFVGTTLLNDTIVDYDGSLYERIMVNIYKALNYMEEDD

YENARVEFNRALMRQDKAKEYFAKEIEKNRADLDKAKEDKNYDKNMNENSKVIEAQYDNLFKEFDTTKNF

INPYATYLASIFFFMDKDYRKATDLFREVAIIYPKNKTIKKEAKIFKEYATKIKVKKAKKYVFVVYENGF

GVVKDEFALTLPFIVDKKIISTNIALQTLKKREASFANLNINGQNTNDFVDLDNIVATEFKINMPAMIAK

ALAQTIIKTTLNVAVANNDSTGGWLSLATAVATAATNKADVRSWRGLPKSIAMATIENDGNLEIKDPQGN

ILFQKSLDKNKNALVIVRSFAPYLPASVAIMEK

>ETJ83510.1 hypothetical protein X909\_06820 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIILFILMFLLSACAPSYQINSNQNTVILGSNLPKSLVKQFQKRINSNGYLEFEVILRSTFAKDVIYK

VDWLDKDGFVLRDVLNEDYQALRIPAGQEVILRKLASDIRAKDFRLEIKAKN

>ETJ83509.1 hypothetical protein X909\_06815 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKTKILGTALIGALLFSGCAQTAYTDGKASQVKKGDALTLGLDRQDFESAAETMINSMLSDPAFANIKP

GTRKVIAIGRVVNDTPQRIDTEKLTAKITSALRKSGKFVLTSAVAAGGALDSMSEDVRELRDNDEFNQKT

IAKKGTLVSPDFSLAGKIRQDNVKLSNGKTQVEYFFLLRLTDLTSGLVYWEDEQTIDKTGSSKTVTW

>ETJ83508.1 hypothetical protein X909\_06810 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILFIGSLVMASLLYAQGSQPVEITQQDINTQNEMSDASTKDITPKSIEDFFEEFADNFGIEYGITKD

GKTFYTGKSTVAVNDTDPQFAQALQNAYQKAMLNLQSEFIRDVFGRIATSRIQNYEADNSTNAKEFDELP

KGDKVDQILNKLTQLAGAQLDKALKDLGIDTNSLSEDRKKTLLKQEFLNKTMTNAIGSMSGLVPVQTIVT

QRRGEYDVGVIAVISNKTRQLAKDMALARQSAIKGKGKAISEYLPKDTKGFLNEYGIRLVYDENGAPIIL

SYGNWGYVADPSNAKKTNILEDRAKETALTMADAAIIEFINTNLSLKDERTTGDTYEEIIKQSINVNDSS

TQEQTQNITNIIDKVNSKIKASASGKIRGIRTLKKWSYTSENGIEHVGAVRFYSYENLANTNEALNSKSN

ATKNEAKKSSSIQRSSNVVNSMDDF

>ETJ83507.1 hypothetical protein X909\_06805 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIIKILFLGLFLSLSLNAKVVTTTSTKSSTGEGTGLTREDAINNAIIEAIGKMSGVSINSLKKSNTSVS

TDNSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGKYTANVTIFKTTTTKKYQVPGLSADNRRSITV

FDSTLDAAKRGIGSALQQKIISDLLQSRKFNVLDRDSSGYYEMEKALIKSGDAASDEVYKLKNMLATDYI

LLFSISGLEGKQKTSNLTGKSKTEIEVIVDYRVLLFATRQIKFSNTLSMKVNLKDNSLSANETALKQIAN

RIAGDILNAIYPLKVASVENNEVIFSQSLNQGDVYECFALGKVIKDTYTKENTGRVESKTGSIEITRTSP

KFSYAKITEGSVKVGDICRPLSNTGSGNGYTIGRDANYQTQEGGGVNLGF

>ETJ83506.1 50S ribosomal protein L21 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>ETJ83505.1 50S ribosomal protein L27 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>ETJ83504.1 GTPase CgtA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKNFNN

LGSVLY

>ETJ83503.1 gamma-glutamyl kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRIVVKVGSHVISEENTLSFERLKNLVAFLAKLMEKYEVILVTSAAISAGHTKLDIDRKNLINKQVLAA

IGQPFLISVYNELLAKFNKLGGQILLTGKDFDSRKATKHAKNAIDMMINLGILPIINENDATAIEEIVFG

DNDSLSAYATHFFDADLLVILSDIDGFYDKNPSEFSDAKRLEKITHIKEEWLQATIKTGSEHGTGGIVTK

LKAAKFLLEHNKKMFLASGFDLSVAKTFLLEDKQIGGTLFE

>ETJ83502.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNARMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>ETJ83501.1 biotin--protein ligase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKGLKVKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEED

LPKDLPLASVSIYFAYLLKELLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFSPQN

TALCDIEILLKDLVSEFLQKVEKKILWKNIFSKYMLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGD

KRVYSLR

>ETJ83500.1 sporulation initiation inhibitor Soj [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>ETJ83499.1 chromosome partitioning protein ParB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLGQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKKLKQILNRFGFDCKNKNNDFVIHLENIDKIKKLIKMLEKL

>ETJ83498.1 F0F1 ATP synthase subunit B' [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAIAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>ETJ83497.1 F0F1 ATP synthase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKASAAAALITAKKEAEILVQNIKKETQDELDLLQKHFEEQKDYEFRKMEKEL

VSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>ETJ83496.1 F0F1 ATP synthase subunit delta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>ETJ83495.1 F0F1 ATP synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>ETJ83494.1 F0F1 ATP synthase subunit gamma [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>ETJ83493.1 F0F1 ATP synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>ETJ83492.1 F0F1 ATP synthase subunit epsilon [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>ETJ83491.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFEAIFHFFNNSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>ETJ83490.1 biopolymer transporter ExbD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPFDDEKPELNITPLVDIMLVLLAILMVTAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>ETJ83489.1 energry transducer TonB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNYGLSNLNSFLLALAIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQVDIEKLFAQTTNKTVKTEDIDQKASNFNELFGNIKEIQEEKTTKIQSSAKSGASSAPKPQASELV

KQLNDSLLQEESSTQGQSTKAQKIGIYDEFLGKVVRIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDAKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>ETJ83488.1 translocation protein TolB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIVAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGSSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLASVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDKPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGVQSALGVIRVNANKTFYFPLRVGKIQSIDW

>ETJ83487.1 peptidoglycan associated lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILFTSIAALAVVISGCSTKSTSVSGDSSVDSNRGSGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>ETJ83486.1 hypothetical protein X909\_06700 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDNLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQVKKVLAELSSLVDA

INANYVSKNELNDANLSVKTITPSVVVSTTDSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYKQKNYNNAIVYYKKSSSLSTKGDYFPKLLYHTAI

SLDKTGDTKTANGFYKALKTNYPNSPEAKASPNRK

>ETJ83485.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAIEKNSVVSMFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLG

EYDENAVQTLPKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIVDA

RAASEDEILTGIIAGSHSCGCGSGHGHDHHHGHGHGHGGGGCCGGGGCGCH

>ETJ83484.1 malonyl CoA-ACP transacylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTAFIFPGQGSQSLGMGKDFYENSIKAKELLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLM

AYSVLLEKKPDLSSKFALGHSLGEFSALAVNGAFDFLEALSLVNKRGLFMQEDCAKVEAGMMVVLGLDDE

KVEELCQKAQKENKQIFAANYNCDGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASA

KLCVELEKVLKPNFKAVLSNANAKIYTCKEEALELLKAQLISPVLYKQSIKACENEVDYFIEFGASVLKG

LNKKITSKETYALTNMNDIDEFLKVI

>ETJ83483.1 S-adenosylhomocysteine nucleosidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFAKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQV

LLFTGVAGAFNPELEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIKL

RAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEFV

INSAKISANFVLKMCEKL

>ETJ83482.1 PP-loop family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQAHAPFKFELEAVTLSYGMGED

YSHLHAHCEEHGIKHSVLDSNIYEVSGDTIRENSSFCSYFSRMRRGALYTYALEKGFNKLAIAHHLDDAA

ESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRDNATQNELSVIGNEFCPGMKLSEKNVKFP

HAREEAKQLLANLEKNHPKLFTSLKTAFANLHTESFWLEKE

>ETJ83481.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>ETJ83480.1 recombinase RecO [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>ETJ83479.1 heat-shock protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>ETJ83478.1 hypothetical protein X909\_06660 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQADISNTSTNTAYGYSVDKDGYMGSDFNKAAGLPEDF

KIHKSTLDEIERKAENNSYTSDIKKYLGIDKYYTNIDMAETIKQYYNQFNQIVNHTFNDTNKTSFTEADI

NSMPKGYAINGIKSMDFNDPSNRMNITHLRDFSNSLISNVYKTPEQAKEADEIWLDSGCMIKGLSSETLG

LSLEEIKNVSKGEDWQFNPDMSVYPQNEDGSYSKETLFMSFLKSQGGQPVESPKTTLNPKVEAYNRAMAK

ESFSGPAINIDSIMTGKSDFKSFFRYWAERGIAEGDLYMYENNIPKESAMGNWALDAEIKQALANGWKAK

PSTINSYADSIMDRLNNLLGQTRV

>ETJ83477.1 amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIILIFISFFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGL

IPALKTAKIDLIMSSMTITDERKKVVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHL

YAVKNLKNATINLFDKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQK

GNAELKKELDEFIAESKKDGLFDSLGEKYLKDVKDTFKKNNLEFFF

>ETJ83476.1 flagellar biosynthesis protein FliP [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>ETJ83475.1 N-acetylglucosamine-1-phosphate uridyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>ETJ83474.1 phosphopantothenate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTILLAISGSIAFYKSYELISLFKKEDFRVKVLLSNGLLKFASKMSFEALVDEVLCEENESWQNSNNHI

AFSKDVDLVLFAPASVNSINKLAFGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LIIEPICKVLACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGSTRERIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLNHDFLIMTAAVSDFIPQSVKGKIK

KNEHLQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQKNYFGSD

QNELYFITLNNENKSTLQSKEKLAFELVKWCEKL

>ETJ83473.1 hypothetical protein X909\_06635 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSMINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKRPNFK

PFEEGLALIIAILQDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRA

KYLEIYLYFSVFGALKILIDSQGISVFTPFAKVQKFLNEHLDFNVSQENKIEPLFVFKRLFDFKG

>ETJ83472.1 UDP pyrophosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNELKHLAVVMDGNRRWARAKGFLAKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDRCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCVNLAISYGARDEIIRA

AKRVIEKKLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRII

KEFRNRERTFGK

>ETJ83471.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFFIIILGACLGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCQTCKCHLPI

SLLINEILGIILLILAYSLSQNFYDFLFLSLFLFNLFLLSLIDIKLKAVPQILLWSAFLFAFFYAFRESE

ILHFLIFKEFSGGFLLNAFSFGGFVFLLKSLVFFLMNFRKKDEILENLGDADIIIMSCIGGILGFEYGFL

VLLIASILTLPFFIFFKIKAIKEQELAMIPFLNIAFVAVLFYKNLGLF

>ETJ83470.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMIPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKYENIIMYRPKHKADDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYTTIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILSRY

>ETJ83469.1 tRNA pseudouridine synthase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFVN

LEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANEL

LGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMSE

KELKEQIEAKKQYNHFLAPPNGLYLSRICY

>ETJ83468.1 threonine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLELNKIYKAKQQISGFVNKTPFIYSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSTEQKQHG

VIAASAGNHAQGVAISAKKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNL

SFIHPFEDEFVMAGQGTLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMY

ESFHAKKIKNAKSVRTIADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAA

SVATLLHQKINTQNHKKIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIA

NANIVKIDYDRFSTKLDYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>ETJ83467.1 CoA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNEKETISYIINTSKNIAIFALSPDKTKASYRVAEFLQRKNYKIFPIYPKEEFILNEKVYRNLDQIEEKI

DTLILFRKGKVALEILPKLVEKNIKNLWLQLGISNETAKKECKKLDINFIQNRCIMLEYPYFKTKEK

>ETJ83466.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGVVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>ETJ83465.1 tRNA (uracil-5-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>ETJ83464.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKFLVLLFLPLVAFANSSEAAANANLFGAFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFFVVMTAIMGREFGSMYKAEVRARTTGQIAPLPKS

GTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAILGFYFNGLSTLEGEELAKASANPLSFETFRAA

FGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVETWIYGWKTMIFTIVLLLFAWSLSSIVKDLGTS

LFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMGILMPLAVPLAHEIAKINGMDANAMHHYMVIN

ISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQIPYALFICGISLIAGYIPVSLGISVWFVLPL

NFILIALLLRLIGKKVP

>ETJ83463.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTVFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNAHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMIDTNIKGFLYVAKAVIPILRKQKNAYIFNLGSVAGRN

PYFGGNVYCGTKAFVGQFSLALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKADAVYENTQFISAN

DIAKVVMSIINLPSHINVNEIELMPVTQTWNGFYIERDE

>ETJ83462.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLLFTSFCCFASLMASDAINCDNIKNNKTLLNESSNLDYLNCKESLKNQDFTKKLYAISNEIRGGNSSC

NGIAYLPKLQQFNLLLLKIAIDPITYQKTLDTPENLEKKYDILKSYFRYWAYQSIGNFRLYKAFWQEYNN

AIEPLEKYFESNFNFDKGSNIYYTSNALNEFLNWAVGETKIYKDISPLAKIMSNKNYSVSYIQDFIFSNN

PSQDDLTIALQAALLNQREKEILELLIRFGTRIDEGYESAIFYALENYENTNFLIQNGANVNQANAFGKT

PLFYAIEFNRLDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITFCALEHTSKNVLMHAAAYGN

VEILKLLISKGANFNAVDDLGFNALDFALSAGKKENADYLKSLGLKANENLFYGGSLE

>ETJ83461.1 bifunctional aconitate hydratase 2/2-methylisocitrate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSFMQEYNKLVEERAALGIPPLPLNANQTRELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKGKISAPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDSAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIKCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQAGSLEK

IKELKKSGREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNALLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVRPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDTVGTGGDSHTRFPI

GISFPAGSGLVAFAAVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIIDINLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTNEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>ETJ83460.1 methylated-DNA--protein-cysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKVYYKMPLCYLSLHSDGKFLTRVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLRKFSIPVLIQGADFE

SKVYKALMKIPYGKMVTYKDIAQKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>ETJ83459.1 hypothetical protein X909\_06565 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNNKKEITQAVKKGAYAIITENDITIEDKD

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHSLKDANFTLLSRSSFFFTTLICENLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>ETJ83458.1 methionyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRYITTPIYYVNDVPHLGHAYTTIIADTLARFYRLQGHETRFLTGTDEHGQKIEEAAKLRNSTPQEYADK

ISFEFKKLWDDFEITYDIYARTTDTRHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINDC

SCPDCGKQTRILKEESYFFKLSKYQDKILQWYEEKDPILPKNKKNELINFVQSGLKDLSITRTSFDWGIK

LPQEINDDKHIIYVWLDALFIYISSLDFQSKGENAKFWPAHVHLVGKDILRFHAIYWPAFLMSVDLPLPE

FIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGNDGDFSENMLINRINAELSNEF

GNLLNRIIGMSTKYSQGNISKEGVLKFYNVELNQAKEHLNLAVEFLENLQCNRYLEELFKALSVANLAIS

KYEPWNLIKENKHEQANALVALCANILAKTSLLLSPTLPKSCQKVALALNFEISSTNYAKIILDNELLDF

KANPCEALFPKVEKALLKQEIKEEPKKEKSPKIKIDDFAKIEIKVAKVLDCQNIKGSEKLLKFQLELDDK

EIRQVLSGIAKHYKASDLIGKQVCIISNLKKAKIFGHESDGMILSAKSGDKLVLITPEQLVQNGSLVG

>ETJ83457.1 fructose-1 6-bisphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>ETJ83456.1 molybdopterin-guanine dinucleotide biosynthesis protein B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQLIMAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDFNGKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLAPNFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLTWL

DLNDIQAICRYILKNAKNLQGEL

>ETJ83455.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKKILVFLFIFSSLNATQYSIEKLKKEENSLAKDYYIYRLLEKNKISKKDAQDLNSHIFRYIGKIKSEL

EKIIPLKPYINPKYAKCYTYTANTILDANLTCQSVRLNSLVFIASLNSKDRTTLAQTFKNQRPDLTNLLL

AFNTSDPMSYIVQKEDINGFFKLYNYSKKYDLDLNTSLVNKLPNHIGFKDFAQNIIIKKENPKFRHSMLE

INPENVSEDSAFYLGVNALTYDKTELAYDFFKKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKTLSQSSSL

NIYSLYAKELTNTPFPKIESLNPSKKKNNFNMQDPFAWQKINKQIRDANASQLDVLAKEFDTQETLPIYA

YILERKNNFKKHYFIMPYYDNIKDYNKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLANHIGEK

ELKIPNFDQDFMFKPEIAYYFGNYHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGKFEPFLS

MELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>ETJ83454.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGNIDLA

PLIIVLALQFLGIFLGNILRSIL

>ETJ83453.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>ETJ83452.1 metallophosphoesterase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVLFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLAWDFIKLILALIGKRDKKYNLILRLIFELSLIVLSVFLIYISINNALKIPEVKSV

DVEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLKNYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLLRKHTNMKILVNQNLDLGFINIAGLGDLAGLNKGLYAPDLARIKVD

LNTSKASILLTHQPKTALLYDLSDFDLVLSGHTHGGQIFPFMFLVKLQQGFVHGLYNLGEKTKLYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>ETJ83451.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSFSKESSRLFGFVAGIKFPKMIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLHIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSIEELLKDSFEKDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSATYTSGALYSVNEKHLERISNLYVKNERVSLKCQNEKGIFWLVFVGAQNVGKMRFNFDASIQTNAK

ISHNFTRKYENLNLKKGEELGNFELGSTIVLISQKGLLTFNLKAGQGIKFGEKIAD

>ETJ83450.1 hypothetical protein X909\_06515 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMANKTPKN

>ETJ83449.1 hypothetical protein X909\_06510 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINTQLASQIANTQKNDLKVDNSASKDKTNLKDNPKEALAQALKQNLGLSKDASSEEILAKFVQNETGTK

LKELVNKLLDQINAQKNPDSPVLKQGKNLNLAPNFANELKTLSTELAKSDTFTQVLDRLNQILKPASEIK

NNNLAPLFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLSPKDTLKELKN

IINSSKIENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNK

PENLMIKDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENMKEEKLNHNTKNQDEEK

HIKASKEETLTDDTKTDIKQDLKNEENSHAKETDIKEDENLDSDIKTHEEDTQDTKNDIQNNETENKPDN

DIKNFTPNQEKIKDEKQEKSKENIKENPKFYETKTENKTSINTNTNTSNPNTNNTQNLNNSQNIQSNNNQ

TMQNIFKNQEFIKQNIIKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLKELEPYTQNAKLNQAELKNL

EHKLNLSTKDLAQIKPKTEQDIAESLHHDVKSTLLQISNLAKNEGNEAIYNQANRLLAQIEINQLMSLAN

DSINTYLPFSWDDLNDSKIMFRRGKKDKFFAQIKLEFAKLGDLEILISLNNEKYIDINIMAENIEFRKTI

YENAHELKRNINKAGLLSANFFVGDIIRSKFDTRNMKNLDLEMGMDKKV

>ETJ83448.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSPKKIIKSMTALFAGMAFLFAGNALMVSSIGVILKENGESSLAVGVVSSCFFVGALVGTISAHKIISRI

GHIRSFGLFGAIFGISAMLHTVSENLIFWAILRFFIGICYYGLLMVIESWLNEKSKNTIRSRILGFYEIV

FYLAFGIGVLIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFI

AGMLINGFFSMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMLI

FIFFKLHLYMQYFLGITLGIGIFCLYALALARANDVLVNKNKGVELGRGVLFCYSLGSLFGPLILGFLMQ

YFEIKGFIWFYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>ETJ83447.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEHKKALFCIFAIIHLFFWIIFSSLNHFKLDTFLSYEIASFSVLLIIFTSYLNYKKVIIKKSKNYEKDFN

FISSLFIKKKQNLSKIIHFKVLKDDLKPNIKEKIHFFTMFFTLFKLMAYVILVAGFLFLHRQDKLDIFAY

ICGISSLLVCVFIFILYIKKYESKKNY

>ETJ83446.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNILKEEKNHLENSNSKRQKIIRKTLEAADGLSLGISMVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWG

ISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKNK

>ETJ83445.1 glutamate-1-semialdehyde aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>ETJ83444.1 hypothetical protein X909\_06485 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIVLMFFLFSISLFGADFITLKEYSKMLYENPRGISCKECHGADGSEQILGYYMKNGIKTAYKVPSIQN

LSFENFKNSLNQSKDAKSIMPNYSLTNDEIVTLYNYIKQFSKEEK

>ETJ83443.1 bifunctional 5,10-methylene-tetrahydrofolate dehydrogenase/ 5,10-methylene-tetrahydrofolate cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>ETJ83442.1 signal peptidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSGSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKEHFVKRCVGTGGDRIVYANKTLYVRMHEGDEFMKEHYPN

DLVTLGGQIYVKEPYKQKGIHYDPKKDIESDILRFLSIGDFAMSPAYIKELGNHIGFSGGNAYVFDVPEN

EYFMMGDNRDYSYDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDEDK

LS

>ETJ83441.1 molybdopterin biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNIFETLKDLENQISCLDESELISLEKAKDRILAKDLYARKNLPSFDNAALDGYAFNYTDINEALEIKG

TIFAGDKNFYTVAKNECYKIMTGAKMPKNADTILMLEDECIEENKLIIKKVPKQYNAYRYKGEELKKGEI

LLQKGTKLNDKHIALLASQGLYKIEVIRKIRIGIFSSGNELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDEFKSTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYRKGENF

VLILPGNPMAAYLSCFIFAKKIINLLSGNLDNPLTFYGKMGMDLKLKSGRNNLILGNLEKGIFTPFNENK

FGSGMILPLIKSEFLLISEENTGELKKGDEITLLKI

>ETJ83440.1 UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>ETJ83439.1 hypothetical protein X909\_06460 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQINNSLNSLSQYVKVNSNEENQNSKNQEQNALAQDPAVEVNISKEAKEKSNTSNQNNSQAPAQALNAQN

NTQQDSSSNSEDKLTELTQKLAEIQAKIVELTAKMSKANEDQIKSIESQIATLNAQASTIQAQIQELQSQ

QA

>ETJ83438.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGVFLVLLGGIFWAISGVLAEYLFKNNYSVDWICFYRLLSTGLILIFLSFKAQKILVFTNLKESLSICMF

GFFGLLLTQFGYFKAIYYTDAGTATMIQYCAPLIIMLYLCFKNKKFPKLIEIFALILIIFALFLLATKGD

IEAVVLNYWGIFWAVIGAFGVAFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYAFNLK

AFFSMGGIVFIGTIGAFCLYLKGVEYIGALRASMIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSV

ILNAKKTKVS

>ETJ83437.1 para-aminobenzoate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLTDYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFKFHSKMNSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKTKLFEIQSHPTLHQMTSSVQGKLKKNISLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHKLFKDFYNILNQKSSYKEYQNFTLF

KLDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGRYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTFYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>ETJ83436.1 integrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKYPLDCEENFEKSFLFWLAKYVKFKLNSLSNKELKNPQALAEVNFTLTKGVKNIDELDALAKKARNAGL

SGVNTYFNPLKKVFEYLNFYKLYSLKQIDEELIVEVLASITGALSDASKKNYRIAVINFFDFLDKQNEED

EKAHIFDINLKNWAGIAGSKGVKLPEFMSEEELKKFLDAIENADFKNNTIRNKLIIKIIIFTGIRVSEAI

NIKMGDISEENDLYIIRIRAKGNKYRVVMIKKELIYDLLKNVSINYMSKDALLFVNKKGTPLTQSYVSRI

VEQLLFRAGIRKQKNGAHMLRHTFATLLYKKQKDLVLVQEALGHASLNTSRIYTHFDNDKLKLAAQVAKE

LSDS

>ETJ83435.1 thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFPVKLARSIVVCAFLAGISASALSEGKEYVILKNPIANADNSLIEIFSYRCTHCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMGDYGKQANEIFAFAAFKDGVNKADPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMNVSKADFENFLKTPEAAELLKSYEIANPISQNYGTPAFVVNGKYQIVPSAIKSPEALI

EITKELSKQK

>ETJ83434.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGMIALIN

PTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPSWFLPI

GECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFIVLFAM

FIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>ETJ83433.1 arylsulfate sulfotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKIVCDDDYSKCPGYENDNGGFDFTWTQHTGWRIDSKSNKRYIYIS

VFDNGDARGAEQPAFASQKYSRAVIYKIDQQNKTVEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYS

ATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSVQIQFSGSGTGYQAMPFSVDQAFNPKK

>ETJ83432.1 protein-disulfide isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKFFCKFVLALVFYSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLEKLREAFPNLH

FKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRNFSNLDEFYDI

GLKAMNVNKNEVLNFLNTQKAKEILSEFQRANDIAKTYGTPAFVVNGKYQINPSAINSMQDLEDLVKKLS

NMK

>ETJ83431.1 hypothetical protein X909\_06410 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLSIQEKKDLDNCVFQNLGRQDTFALSAIFKNFYLKIKAFIYSK

>ETJ83430.1 hypothetical protein X909\_06405 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKKPNKDFKIQDVKLVQFSQENKDCLELLIEAGQVRILNSYN

SCQKLSKDESFQKFLNEDFLKLYKNNGYLINENLQNLKNTMQDIMIYYKLRYSFSKDVKDMSKNKNLDIL

NIDEKDGGTLLYKINNQACVGIELTRHDSRMAMKIYGIENLDKECKLFIQSPSFKDLSYTKKDFKWYYLE

>ETJ83429.1 cell division protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNQNNNKTLKNELEDLQYELSIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>ETJ83428.1 hypothetical protein X909\_06395 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIYHLSHTDLDGYACQFIVNFYFKNVRFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLELSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKESQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISCFVVEKLSELKENFSIEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>ETJ83427.1 flagellar biosynthesis protein FlhA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKNKIVDLVFPFLGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYI

PKPTDLTTFPTLILIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVL

INFMVVTKGSTRVSEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFI

KGDAVAGIIITIINIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDE

ENFAEGTLTQLLSEYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSK

PSAAVASQSGAGGTTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSI

AESLGFLMPKIRIRDNLRLKPNEYSFKLKGVSIASAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDAL

WIDANLKDEATLNGYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIVEGALGVAPVS

LIQKILKDLLKHHIPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSA

SSAVLMENVQFRDGSYHLPLSVAQTGTLVDTLRAEVAAVANGRIKPFILCVEPQLRKFIADICYNFSINI

VVLSFAEIAENTNFNTEGIIRIEL

>ETJ83426.1 Rrf2 family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>ETJ83425.1 30S ribosomal protein S15 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIAELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>ETJ83424.1 cell division protein FtsK [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGEWVYKANLFLFGEFGYYYPFSLLILNYLYYKKKYKIENFKRRELFGFSLAFFSTLLLFSVFYREFGYI

LEIVYGFFSIILGRTGSGIFALLLLLFSLVLLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVFGGENE

KEDVGKSEPIAPKLNILQDSIYGNLQINKKGETNNLEQIIKDSNINASKNSITTAKENFEKLKNQILDET

IEIDKQSLKESRSFVHEHSQQVRNFAQKASKMSISLDEDFNFISEEEVDMIPERFLKPKKLEDIKQIDTN

KNLDEPSYKRKNIEIPVSNQEVKPKIFTKELELRENLIKKEKLEQEYKAYQNEILENKVKQEIKKLEEYD

AINSSDIIEGNKYSFNSPKTIKAETEESDKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKNINEIV

IEEKNTLDFIQNTETKIDNEKTNDQEIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLDFLANP

KEHKQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLTMALMA

KSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKLPHLLI

AGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALSNMVAE

MERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARASGIHL

IVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRLHAPFA

SEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYLQRRLK

IGYNRSANIIEQLTQNGILSEPDAKGQREIL

>ETJ83423.1 lagellar hook-associated protein FlgL [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGAGTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLTQNPDKTK

YLTGDSKWQQLIGQGYVKDNSLDADKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPEDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQADDKTELNNIIQAAQNEGITME

DVTNRVMTAALGNPNNGDITNLNNPVTIQINGQNFEIDLKQTDFIKSKMTDTDGNAANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSYPDPNNP

GQTISFPIMHTNPATGNSGVVTGSNDITYGQINDIIGMFAADKIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIEISLSDSQSGQFPAPPFTTTSTVQNGPNFSFSANNSLTIDEPN

VDIIKDLDSMIDAVLKGNMRADSESENPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIEGVNTRTSF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>ETJ83422.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MALIDLIEASKKFGDKIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGTLPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEEPNNKDYLKKIDTLMTLIDSKDAWNIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCILLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRRGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRAALNFNGEKTINRKKMLFELKNISKNINDKNLFKDF

STRILQGERIAIVGRNGCGKSTLLKILLGQIKQDSGEIKRGELKIGYFDQARSLVNSDKSLLEIFCPNGG

DRVEVRGKNMHVYGYLKNFLFPKEFLDKSVALLSGGEKNRVALALLFTKEYDVLILDEPTNDLDIATINI

LEEYLLSFEGAILLVSHDRYFVDKIATKLYAFEGDGYINILHTLYTEYLENEKEIEELDNFALELQTQEQ

NNNQKEKSSKKLSYKENEILKNYPEKIDFLEQKIAKLNQDLSDPNVYQEIGINKLYQELEVMQKELEILE

NEYFLVLEKSENL

>ETJ83421.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKTKNIFIVFFVVLALIFGFIFYTFTNSYLNFLLTKQYEQKIKSLDDVLKFSLLEHLNDANIKDFAKDT

RADFIILNNDMKISSVKNPDFFSNLKEGEILNFNSKKILTKSFIYKGYKYIIIVYPRFLDLELFWIKIAI

GFGVCLLFVFILMLLLGRRIEKNFNKILDFLDSISDHKVVILEKGMFKEFNLLNEKLLKTKDKILKNTQK

NKKQSDKITLKNTQLASVISAISHELKNPLSVIDLSLEILKDEKLEDKKLKKELLEKISRQSIKLNALTH

KLNFVFNLNSEALQMQEFDLFFLCEKITKNPGFERVVLQGKNTKVKADEFLIEQVIINLLSNALKYSQKE

VILTARDQKIIVQDFGKGIEEDKIKLITKKFYKIDVKSDNSFGLGLFLVKKILNIHKSYLEISSTLGYGS

SFSFKLSQG

>ETJ83420.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKFKILIIEDDIDLNELLVLKLKSSGYEVISLADFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLSFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>ETJ83419.1 3-phosphoglycerate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKKIIVCDAILDKGVDILRKAEDIELIEAAKVPKDELMQMLSDVEVAITRSSTDVDVNFLNHAKKLKAL

VRAGVGVDNVDIPECSKRGVIVMNVPTANTIAAVELTMAHLLTSARSFVNAHNFLKIERKWEREKWYGIE

LMNKTLGVIGFGNIGSRVAIRAKAFGMKILAYDPYISASKITDLDMEQAKNLDEILEKSDFITIHTPKTK

ETNGMIGKQEIAKMKDGIRLINCARGGLYTEEALYEGLKSGKIAWLGIDVFDKEPATNHPLLDFENISVT

SHLGANTLESQDNIAREACEQALSAARGVAYPNALNLPIKTEDLPPFVAPYIELVSKMAFLAVQIDKNPI

KSIKLEAEGIIGEYANSMLTFAAVGALGGILGEKINYVNAEFVAKEKGVELSCETLPNSGYNNKLSVKII

TENSNISVSGTVFNENEQRIVGLNGFKTDFKPKGKMVIFKNKDIPGVIAKISSVLAAKNINIADFRLGRD

GFGYALAVVLIDEKVQKEVLDELKQLEACVFVQYVEI

>ETJ83418.1 hypothetical protein X909\_06335 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYITISILSILLLILLAVVFTLLWQFKANVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PAAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>ETJ83417.1 30S ribosomal protein S1 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEVNKKVQGGVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQGDN

SKLLFNVGDSIKVAVMGSRGGRSLLSHKKALRKEKVIEFIKNYQENQDDIFTVKVVGKNKGGLIVVDEND

VEFFLPKSQYGFKETNNIIGKTFKVKIIKIDKDEQSIIVSRKKTLDDERRKRKELINNIAQQEDLIEGIV

KKITTYGMFVDVGGVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSIKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPNE

RRLRVSLRNLLSRPFDGFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDDIEAAIVFIDEKKNRIRLSVKNLVRMKEREVLNEINNDDKVTLGDIIKDQLA

>ETJ83416.1 4-hydroxy-3-methylbut-2-enyl diphosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIQALSNEKKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEVVIFGDENHPEVKGVKSYVSTKAYVVLDK

KELQNIKLPNKIAVVSQTTKKPEHFMEIVNFLILKTKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIKNFKIN

>ETJ83415.1 3-phosphoshikimate 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIYKLQTPVNAILENIAADKSISHRFAIFSLLTQEENKAQNYLLAQDTLNTLEIIKNLGAKIEQKDSCV

KIIPPKEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKYLNNRPMRRISKPLTQIGARIYGRNE

ANLAPLCIEGQKLKAFNFKSEISSAQVKTAMILSAFRADNVCTFSEISLSRNHSENMLKAMKAPIRVSND

DLSLEINPLKKPLKAQNIIIPNDPSSAFYFVLAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMT

ITQNDFETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSSLINAKELRVKESDRIAVMVE

NLKLCGVEARELDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILS

NLGARIDY

>ETJ83414.1 phenylalanyl-tRNA synthetase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIITKSWLNDWLELEEISSDKIAKTLNSIGIEVDRVGALKAPDKVVVGYVKEKIKHENSDKLSICQVDIG

SETLQIVCGAANVDAGQFVAVATKDAIMPNGMEIKEAKLRGVDSCGMLCSSLELGFEKINEGIMLLDESI

GKLELGRALNTYEIFNDELIEVELTPNRGDCLSIYGIARDLATALNLNLKEPKPFKESENVLGIGRILRL

AAEKELNGLYNYRAIELKEEIQTNLLLSLRLAQIEGLGKNSIENLLNYATHSTGVLFNAYDLSSFSEKDE

EFTINLSKQVHGETKVSCKDKLLSFSGIFQNNESRCKDDSKIIIIEANYTDPLVIADAKIYHKDQDEKML

YRSFRGSEPKLNLGMDFLLSIFEQIPNLVIYSSSQQILTDKELPIIPISIESIGDIIGQNVDKDEVLKIL

KKLGFELILSGEGLINVKAPLHRPDIKNLSDICEEVVRIIGIDNIASKGLEFIEKNRLNSAYKNYIEFLN

LRKRAVASGYFESLHYVLDNEEELKRLGFDSVKLKLINPITAELNTLRTTLLNHLLNAASLNAKNSKKII

KLFELGAVFNVNNQELNRIAFIHSGLKEEAKISNKAKPESVQFYDFLLDIKNIIGDFKLKSSKYNILSPY

EQADIYLSDIKVGFIGRLHLKIENERDLPKTYICELDLDLIRQDFKIAKPYSKFPAITRDLSVLIPKGFE

YNQIKNCIEELNLEILENFRLVDIYSDENLKEFYSITISFSFRDINKTLEDNQVNECMDKILNTLKNLGL

DLR

>ETJ83413.1 phenylalanyl-tRNA synthetase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>ETJ83412.1 hypothetical protein X909\_06305 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKTKKENPQALF

>ETJ83411.1 4-methyl-5(B-hydroxyethyl)-thiazole monophosphate biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKVLIPLAQGFEEAEFIGIADVLKRARELNPDLEVVIASLNSELLVKGANGISIKADCSIEDVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>ETJ83410.1 hypothetical protein X909\_06295 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>ETJ83409.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FSLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>ETJ83408.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIEVKNLQKKYGELEVLKNINTTISKGDVIAIIGPSGGGKSTFLRCINRLELADSGEILINKQNILDKEI

DINKIRQKVSMVFQHFNLFANKNVMENLCLTPIKTGILSQEEAIKKAKILLAKVGLADKENIMPHKLSGG

QKQRIAIARSLMMNPDVILFDEPTSALDPEMIGEVLSIMKDVAKEGLTMLVVTHEMGFARNIANRIFFMD

KGKIAVDASPKEVFENLSNERLREFLNKVLNH

>ETJ83407.1 amino acid carrier protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLDIMLDFANKASDIIANKIVPNTDIIMVVLLIVCGLYYSFLTRFVQFRMLSSVFKILTEKNEGHTKEH

ISPFQALMISTASRVGIGNIAGISLALATGGAGALFWMWVMAFFGGASAFAESTLAQVYKSKDDTGGFKG

GPAYYIKKALGSHFFGAFFAFILIITYAYGFNGLQSQTMTSSFKVYYDMFNPNAAVDFASSSWPMIIGIV

LTIFGAWMFFSHHTKIGKISSLIVPFMALAYVLLAVIAVLMNFDKIPSVVHMILQSAFDFKAIFGGFAGS

ALVIGIKRGLFSNEAGMGSAPNAAAAALTSHPAKQGVIQAFSVLIDVVVCTSSGFLVLFSMAYLGLGESK

IDGGMPLVQEAMREYYGSFGIHFITIAIVLFAITSLIGNYYYAQANVKYLTNSKFAMNLFRITAVAMIFI

GSQMNLKLAWNLADLTMAFMATTNIISLLLLGGIVNKVLKDFNTQQKSGIDPKFNASKLGIKNAECWD

>ETJ83406.1 RNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNIVLVHPRIPQNTGSIGRMCFNAGFKLHIVKPTVFDISQKAVRRAGLDYWDKLEPIIWENLEEFLNEN

MIYKNRFFFATTKSQKAYFDAKFQKNDFLFFGSESYGLPMELMQLNWENAITIPMKSYGRSLNLATSVGI

ISYEALRQNFSNFVS

>ETJ83405.1 alanine racemase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>ETJ83404.1 hypothetical protein X909\_06265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKRLALLITLSSLMLHASDLVKIYLNQGLDAVGVAIEKELTQKDFWLSEIGDKNISLGYYDDNVAIVLT

NKTDKILRVYSYEDGKIRKDFEQKEIITGLMGDKKIEGDLKTPVGFYELGRKFNPGDPYYGPFAFATTYP

NLLDKVQGKTGGGIWIHGYPLDGSRLDEFKTRGCIALFNNNLEKFAQVVQDKKVFVMTEEKEKIRAKKDQ

IASLLADLFTWKLAWTNSDTNTYLSFYDEQEFKRFDKMKFEQFASMKKSIFSRKEDKKIKFSDINISPYP

NLENETMYRISFYEDYYTKNYQFRGDKILYVKIDSKGKMKILAEQ

>ETJ83403.1 hypothetical protein X909\_06260 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIRNFFIGMSFLGILFLAFYALYDKKKESVFSLNTCQPLTCNLNLQDCVFSFNKKNIEVSAYPKPIKIFN

KTTIKIKNFPHYSNLKIKIYSLNSYIGNIIPKFNIVNGDILINFIGRSITDDSRFRVEFLNNNAPTGFFF

DFDVTMQKNFQTGNTH

>ETJ83402.1 hypothetical protein X909\_06255 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILLLGALFAVNLWAVNDIEVKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSTELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKIIELKNIDSKEF

>ETJ83401.1 hypothetical protein X909\_06250 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKIIFILAFAFVIVILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCTYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>ETJ83400.1 hypothetical protein X909\_06245 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNIILFIVIVAIILGVIFFIKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSL

VGKALKQINNPKAHLLFISLDLNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLN

DSFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>ETJ83399.1 cysteine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVHEKVSELIGNTPIIHLKKFGINVFAKCEFLNPSHSIKDRAAFEMIKDALDSKKINQDTTIVEATSGN

TGISLAMICADLGLKFIAVMPESMSLERRKMITLFGARLELTPANLGMKGAVDKANEILLNTPNSFMVSQ

FENISNKNAHCKNTALEILRDLDNELDIFVAGFGTGGTISGVGEILKEKLEKVHIVGVEPLNSPLLSKGE

AGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGLMVGISSGANVFAASMLAKKFPDKR

ILTMLNDTAERYLSTDLFA

>ETJ83398.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>ETJ83397.1 CiaB protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNFKEIAKLVRKYKERNNALYEFLDKEDVSEYFRSLISLSELKQDKTTMLAILRRLIDLKEENLVQEWK

KNNFKEDKIIELKHKFYEEVRKFYEKEHQNLINEIKEKKLLNNFYQSLIQGVHNIGLIMNIFEISWTKEI

IEKNNKILSTQFPNLDDAMEFLRKNHLYQKTPEGEICERSYGVLVRIGNLWKFVPYARFFENEILKLEFA

FENMIDQLKIFASSKEEKAYIEYFEKLKLAFCEKDEDRVIKAWQEAEFAWMKVKSPLQVGHPLEYYEDNY

THAVALEWDIRIEDENDFDVLKFGSEIKESFEHVYKNIGLEDCELEKEVLSNIEKTQLYICTPMIFYGAE

LKGLFSAQVVPNDEFVSSKAGKKIFAFINFVYENAKTKPFMKISSEVFDKEFLDFGRNILFYQEKIWKRV

YEVSTIGHEFGHIFFIANDTEKTMNQSGFFKNIEEYKATTGGLINFFYHEQDDLIMPVFHELIKRAIGLI

SWQRVDEVRPYYTEGLIHLSLLFESEVLIFENNNLKINFDLGHYEKFKELTLKNYHELAKHYALRLDAKE

FLSRFCEIEDNIFLPIMPKCKEFVKFYYDLYEKIGNEIDNSGEFERYKKK

>ETJ83396.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKVVNVGNTSISVEVEVTAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>ETJ83395.1 hypothetical protein X909\_06220 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTRGEFFKECLDKKYNSGGLNKC

>ETJ83394.1 carbon starvation protein CstA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTQLSTKILWLFVATLGAICFGYLALQNGESVSAIYLVVAAVCIYMIGYRFYGRFVAYKVLELDKNRATP

ALVENDGRDFVPTNKAVLFGHHFAAIAGAGPLVGPILAAQMGYLPSMLWILVGGVLAGAVHDFVVLFIST

RRKGRSLGEMIKDEMGKFTGGVAMVAIFGIMLIIIAILAMVVVKALAESPWGLFTIAMTIPIAIFMGIYM

RFIRPGRVGEASIIGFVLLILAIHYGSVIAADPYWAKIFTLEAPTLAIVMMAYGFIASVLPVWFLLAPRD

YLSTFLKIGVIVVMAVAIVLVAPDLQMPKANTQYFDGTGPVFAGGVFPFLFITIACGAISGFHALISSGT

TPKMLENETHALAVGYGSMLAESAVAIMALICACILHPGLYFAINSSSALIGTDVVNVAQTISSWGFSIT

PEEITTLTANIGEHTILSRTGGAPTFAIGVALILHELFGGVDLMAFWYHFAILFEALFILTAVDAGTRAC

RFMVQDILGNVYKPLGDIHNYPAGLLATALSVAGWGYFLYQGAIDPKGGIYTLWPLFGVSNQMLAGMALL

LATTILVKMGKARYTWVTLVPAVFVLVATLYGGIQKIMPYEEGNKVANAVSHVAAVSIQSQKIKDLEFKL

NNTKDEKEISTIKKEISIATQNKVGNLLNAILCVFFMIATLLVIISCIGICLGKIKIPLKETKYIKIDEF

QKI

>ETJ83393.1 ribose-phosphate pyrophosphokinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRGYKIFSGSANVEFARQVSKYLSLPLSDAGVKRFSDGEISVQIDESVRGKDVFIIQSTCAPTNDNLMEL

LILTDALRRSSANSITAIIPYFGYARQDRKANPRVPITAKLVANLIQAAGIDRVATIDLHAGQIQGFFDI

PVDNLYGSIVFNDYIKAKHFKNAIIGSPDIGGVARARSVAKHLGLDIVIVDKRREKANESEVMNIIGDVK

DKEVILVDDIIDTAGTIVKAAEALKEKGAKSVMACCTHAVLSGKAYERIASGALDELVVTDTIPLKEQLP

NIKVLSVTPVFAEVIRRVYHNESVNSLFI

>ETJ83392.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENVFNAQNIEFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>ETJ83391.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNESVGFVEHLRQILTSWGLYDENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALLIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYAPAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTR

>ETJ83390.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>ETJ83389.1 chemotaxis protein CheR [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>ETJ83388.1 chemotaxis protein B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVASSFKPSVDLLFHSAVSLAKTNKILAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>ETJ83387.1 ribose 5-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLREKIYIASDHAGFELKEKICVFLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGVELAIDIIEKFIQTPFEEGRHMQRIQK

IEVKI

>ETJ83386.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>ETJ83385.1 adenine phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKLTQEEQKYLFDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>ETJ83384.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEEFLKNLLYQYKDLAYIIIFLWCILEGELALILAGIFAHQGHVNLGFVIFIAGLGGFVGDQIYFYIGRY

NKRYIQKKLKTQRRKFAVAHLLLQRFGWPIIFIQRYMYGFRTIIPMSIGITRYSAKKFAIINLFSAWVWA

SITILLAWYFGEQIWKMVTWAEEHWYYAAIIIIAFLSLLLFGFKQMEKAILKDKRKKS

>ETJ83383.1 aminopeptidase A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFELNDKKLDAIKADFELVFIQDKNLKNFNKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLSSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLERFIISSEELNGK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVHPPRLIHLSYKAKNAKKCVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDILISREGISIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVIGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>ETJ83382.1 GTP-binding protein YchF [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDIEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNDHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYEDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDVMHFRFNV

>ETJ83381.1 argininosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNEMWSGRFSSASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIIKGLEQVKSE

IEQGKFVFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEYAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELADFLPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFALDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGIFDSVKTAKDSLIILNAMLKE

IQINKENMLNACKKGHMLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPVFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILEGFIQNL

>ETJ83380.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>ETJ83379.1 biotin attachment protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFAMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVPFYEKILKEILAAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVDGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGFEEEKILKYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDTNIVELASKQLNLEPTTELAINIADKDE

GKSIAYTKTLLEKEGIETSEENIFIAAACKEKGIAFLKGEAKVNIRKLASMPKPMSVDENKFTVAVNGNK

YHVEVSYGFDKDVNVKSVKKVEENKNIISSNSTSSVDAENEVLAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>ETJ83378.1 sodium:alanine symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRTYFSKIGFVLAVAGGAVGLGNAWKFPTLSAENGGFVFVLLYLFFTLTIGFSIFLAEVAMGRLSKSDLA

NAYSNLAIKYGNRWRYGGVFMLGGIFVLSFYLVIMGWVLKYTVVSLYYLPKTLDEAASNFQNLITTNLTS

SVFFFTLSFFLTLLIVSKGLIKGIEKLNVVIMPSLFLMLVFMLFYCMGFKQGFANAFSYLFYPDFSHFKF

SSIAEALGLAFFTLCLGIGCIVTYSSALDKKTNFIKSSVYIVLINLLISFIMGLIVFTFIFEFGADPHTQ

GAGIVFVSLMSLFNQLGALGYIFAFCFFLALFFAGITSAVSMIEPLTFYMINNYQISRVKALFLIGLFVF

VFGICCILSLNLNFFSMFSFFGKDFFTLLDKLTSNFLLPLGAIVCSIFVGFFMNKKQIYKIFSKFISRKI

FLIWLFFIRFISPIAIILVMCYQIFV

>ETJ83377.1 sodium:alanine symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMIGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEVSKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGVKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSASLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFEPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>ETJ83376.1 F0F1 ATP synthase subunit C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>ETJ83375.1 hypothetical protein X909\_06110 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLTQKDIIKKIKTIFIRSFLYLIIKISKNKKINKRLKVLRYIDLRKGNSITQIINKMIKHLFKNTIIKAY

>ETJ83374.1 hypothetical protein X909\_06105 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRPIKAIYVKMVLK

AITGE

>ETJ83373.1 hypothetical protein X909\_06100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMKDLDYYLNLPYEIIIKKLDEKDGGGYFARYKDFPYIMGDGENEIEALKDLKEAFKGALEVMLEKGDYI

KEPIDNEAKIRINITLPKSLVEAIDTISDNRSKFLADLANSAIKSYKIST

>ETJ83372.1 hypothetical protein X909\_06095 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKDKIESKIAQFTEKAIKNNDNIKTNAIKAITTDLTVVNTPK

>ETJ83371.1 hypothetical protein X909\_06090 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>ETJ83370.1 mating pair stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>ETJ83369.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>ETJ83368.1 2-acyl-glycerophospho-ethanolamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKSFLKIYGLIPFLLIVFINAFVDLGHKIIIQNTIYKAYEGSEQLFLNAIVNALILLPFILMLSPSGF

LADKYPKNIVMKISAIFNVILTLIICICYYSGAFWMAFIFTFIMGAQAAIYSPSKYGFIKELVGKDFLAM

GNGVINAVSIVAILAGMALFSLSFESLYSSMYNQTDEILKEVAPLGIVLILFSCIEVFFACRLPKLKQTN

KDLVFNKKDYIRGKLLINNLKLVFKNKTIWFCIIGISFFWAISQLYLVSFPVFAKNELFIENTFYVQISL

AFSGIGVILGSLVAGKFSKNYIELGLIPLGASGMFLMVFLMPCFISLLSYSFLFFFFGFCGALFIIPLNT

LIQFHAKENELGQILAGNNFFQNIAMLGFLLLATLFAKFEINVVYLFYFIALVTFIGSFYILLKLPFSLV

RILLSIAFLQRYRLLVEGFENIPEKGGALLLGNHISFIDWAVVQMAIPRKIYFVMERSIYSKWYIKFFLD

KFGIIPVSSTGSKTSLELIAKHIKEGNLVCLFPEGTLSRHGQLNEFKAGFELACEYLSEDDGKIIPFYIR

GLWGSAFSRSDEEFSARNRTLNKRKIAIAFGKAMPLHSKKDEVKAKVFELSFMAWKSQCEAMHTIARAWI

DTAKKNLNQIAIIDTLAGDISYRKMLTLSLFLNFFIKRKSKELNINPQRGSYAPKEEAIGILLPASFASS

LTNLSVLIAEKIAVNLNFTAGEKALKAAIKNAQISQIYTSKTFLEKLANKGINLNFDTNIHLIYFEDIIE

DFKMQKTKIFSMMLAVSIMPSFILKSIFTPSKNNLAIAAILFSSGSEGSPKGVMLNNRNILSNIAQISDV

LCTRNNDVILSSLPPFHAFGLTVTTFLPLLEGIKSITFADPTDALGVAKAVAKNNITIMCGTSTFLGIYA

RNKKLDALMFESLRIVVSGAEKLKNEVRTAFEMKFKKSIFEGYGATETTPVASVNLPNRFDADYWLIHRA

NKEGSVGMPLPGTAVRIVDPNNYENLKTNEDGLILIGGHQVMVGYLNDKEKTDEVIKEIDGIRWYNTGDK

GHLDKDGFLYIVDRYSRFAKIGGEMISLGAIEEEITKFVDTEVVKFCATSLEDEKKGEQIVLLIECNNEI

FERVCEAIKNSNIPTLFKPRYYFQIEKIPLLGSGKVDLKKVKELAKNLAL

>ETJ83367.1 hypothetical protein X909\_06065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFKKFYKLKIDGIILKDNIDNFPKN

>ETJ83366.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLFTQKNKDFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAIATYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIVFLRFLSTFYIELIRGTPLLVQVLLMYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQVFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLILTLPISIFSRYLERKCQK

>ETJ83365.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKSVLKYLLFKYLRFDKEQPFINLSMLLTFLGVCVGLCVLLVAMAIMNGFDKEFEKRFFVMNYPITILP

KFYAPVNDEFIDELRKTFPNLLFSPYISTQVVVKGDNRFEGGVLFGVNFNDEKKINEVVAKALKDENLSG

FDILVGSALIDEFGLHKNDKLSLIFSNLNPSGFSLVPQTKRFDVKARFTSGLAFYDKAYMYTDVDALKKV

LGMPKNPNYDGVHVYSDNAFKDVEKIKSYLKDDYAVVGWWEQNKNFFSALELEKRALFIVLMLIILVASL

NIVSSLLMIVMNRRSEIALLLALGTSKNEVKKSFFALGMLIGGGGMIVGVVLAFFALWLLGNFDIVTLPA

DVYGTSKLPLDLSLMDFSLTIVGALIIIALSSFYPAKKATQINILDTLRNE

>ETJ83364.1 preprotein translocase subunit SecA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFLNTLKAVFGTKNDREVKKYFKRVTQINALEGKYQNLSDDELKAEFAKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVILSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKVEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPAKPEGDFVVDEKNRNILITEAGI

AKAEKLFGVENLYSLDNAILAHQLDQALKAHNLFEKDVHYVLRNNEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLVKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDVRAKISQNIAEYSANVMNDYILDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNAWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQEEVQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>ETJ83363.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKTFLIFFIFIGQLFALELNFNTFSSNFTQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKN

QVTIVEHDLEQVIFSHLDNIPNLNEIFKKASLIDKDKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVI

INLNNQIKNPKINSDVFKAKIPQNYDIVR

>ETJ83362.1 hypothetical protein X909\_06005 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLSVFLVLSLNAQNLEIDKIRTDLYSKSGTNVLKKVEISLEFDGNNLKENENKLIDAVNTVISGFF

YEDIFTEIGKNNFKKTLEKFLDKKYKIKLDDIYIISLSGVEKFDLEEFKRFLESTEAKEKGMGSEVKKAL

ENLEVPKTQVPSVEKITAPSVPNLEAKQVEQLFKDSDEENKNDNGEINIDNLNTPKMTPDIEEKIKRDLI

ANPPQIFKENNASKPYHLPQIGYDIKLDENSTQN

>ETJ83361.1 helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDKLEKILAYDNVFLSGGAGVGKSFLTNELIKSYRKQKKLAIALGSSALSAFNIGGVTLHSFFCLGYCD

DMMKLSALDRNQKQKEKLTKLKELLKTIELIIIDEISMVSANVFEMIGFRLKNSQFNGKILVVGDFFQLP

PVIKEKKETLFNHSYYAFSSFFWQDLNFKNIKLSQPKRTQNMEFYNHLSLIRQGFLDEKILSFFESLRID

YKELENLEDDYTLLCGINKKVNNINQEKLSKLETPLVCFKAQVKKEDKRIKDEELDSWIRSLNILEELNI

KIGARIIFCVNNWDKNYYNGEQGIIEDILYEEEKIYISIIKNNGMKILLEPYTFFMEELEQSGKDFVVNI

LASVTQFPIKLAYAITIHKSQGMSIEKLVCDIDHIFENGQLYVALSRATNPNTLKIYSTKKINFGFYFAN

ILKIDSNVIEFYKKHNFLDLEIQEQII

>ETJ83360.1 hypothetical protein X909\_05995 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSCLYFTFIVLFLTACSTKNLTSLHHENLEQKNENQHYAKLEYEQNVSILPQFTYNINFDVKRYKKHFF

NPWHDSFKNYKGQNIFWSFPLYLNSKNTYYFFNKQIIPLSWFKNAINNANIQEFGKLNQKALIIQNTIIK

NLPTQRAILKNPFFENEGIPFDYASDGILNTGSPVLISHFSKDKRYAFVLGEAGFGFVESKNLEFFSNDR

AKIYENLNFITPLKEKFAIYSEDGKFLFESRIGAIYPYYKEDKNYFYGKIGSKKYKISKKDVSKFPLQFN

DKNLKNQLSQVLNLPYGWGGYNFERDCSLLTRDIFSAFGLYLPRNSAAQKNSFNHFDISTLSNSQKKDFL

NRFGKAYLSLLYLPGHIMLYAGQITDNNIAIHNIWGLRKDATQRLLISSSVITSLEIGKNEILEDNLLLS

RLKEISFINLNEQEKEQIKSYLENIQNK

>ETJ83359.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLQKKATLVASLCAIVLALVKFIVGLTSGSVAVLSSAIDSLMDFAISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGIFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALVLIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICTLISNNPEIISYHELKTRKTPSCNYLSVHLVFCPIISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>ETJ83358.1 agmatine deiminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKVVSEFQKVLLIAPKQSDFENFKDIKNVEF

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEELKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLLELPIPKPLYYEERRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPNHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>ETJ83357.1 hypothetical protein X909\_05975 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKMLQIALAATFFAGCASTSLTSSTSKGNNELVQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>ETJ83356.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKEA

IEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIADE

SCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELLN

HAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDIS

SQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKKV

ENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQIT

KELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSRM

QENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>ETJ83355.1 phosphoribosylaminoimidazolecarboxamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>ETJ83354.1 molecular chaperone DnaJ [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLVLIILVVLVFYWYYKTWGKQDFLNSATRGAKGFAKGFARGVMEERMDEFKRRMNYYVIALLAKIAKS

DGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAFYVAKDFLKEVPLPKNERFNVLRVLVF

MALIDADFNAKKREILEQIAKAFDIAKSELDAFIASLSNLKSTKKELSLDEAFAILELPNNADLNAVKKQ

YRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHLER

>ETJ83353.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>ETJ83352.1 tRNA modification GTPase TrmE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>ETJ83351.1 hypothetical protein X909\_05945 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIEAIDLQSALTEASRSLECSVMDLEYEIIQHPRKGFFGFGRKKAIIEAKAKKRILKKNPKKEFTSSKN

HKPETHEPKQENKIEIKNEKNKSQKEKYTVKSDEIFDSFHRESKGVRNTQDILDEIRIQLVKLLESSQFK

IELSELRMYDEDCVLIRLDGEDAALMIGKEAHRYKAISYLLHNWINLKYNLLVRLEIAQFLENQIQGMQL

YLQSVIEKIKIHGRGQTKPLDGVLIKIALEQLRAEFPDKYVGIKQNNDQRFVVINDFFKKDE

>ETJ83350.1 insertase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNTPNIQNTTTNTPSAA

LVSQDSVISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYVANASNLFVDENGSQVLKLTQNLSGLKIEKDITFYPKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVMDNKETIETYKDGDVEKDESANNVVMTSAFDRYYATFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFLHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKTSGA

>ETJ83349.1 membrane protein insertion efficiency factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGIEKTRMFQMICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFFSTFFRILRCNPFFK

GGFDYPRVSKNFYPINLCFKPIFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>ETJ83348.1 ribonuclease P [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>ETJ83347.1 50S ribosomal protein L34 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>ETJ83346.1 diadenosine tetraphosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSEFKIIDLRQEDLDILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>ETJ83345.1 family 4 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIRSLYYLKAMGFNFVDTHINHFEQVQNFQELKQLVSSCTLCQFSKTRKFSLMEPKIKNAKLLILDVFGQ

KSENESGILLNSKKGEKLKRYIYQILGLCDEDFYFSYLFKCFCNGKFDDFSLQSCLPFFWNELKLIQPAF

LLCLGEYTFKSLGFKDYHILKGEVFAYKNFFIMPSYDLDFIEKNPSYEKNFIQDLKKIKGFL

>ETJ83344.1 hypothetical protein X909\_05910 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLIFFLSCFLLNAKEQKLVDVKPVENFYPKLSVQECNTNCLFDLLESRLYLSFLSEFTDQNDQFLS

NVYAKLLNSITDFEKNVQKITSVKLAIIIPEKTIKSYSNTIINSSIAYLLRQRAEIKVKVFLTGTEDSDK

IRAALDAAQAQGYQYAIAGFTLKGANELKNYSGNMKIFIPTIHKNNIQISNQNIIFGSIDYDAQIATLLS

KSNANIAIFSDGSALSSNLNSRILAQNNNARIYTIEGEKLDFSRLLRSQGGVNNASIFFNTPLIKTALAS

SQLRIYNIHPYVLLSTQINYNPTFLSLTQQGDRENFIIANSINNHDDNLVYLNEIFNQSIDYNWIAYATS

IGVDYFYTEFLNKKSESLFDEKIKNSQVDYKVRLMQGKQASFEELK

>ETJ83343.1 acyl-CoA thioester hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKMRVYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILEVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDTQLKKLFEELF

>ETJ83342.1 hypothetical protein X909\_05900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>ETJ83341.1 hypothetical protein X909\_05895 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>ETJ83340.1 hypothetical protein X909\_05885 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNFYAGAYNNGEVNYNTLNIELKHPLEIANNFLGYNQHSFYGDFATKGVNHNTINIKNDLTTTDLSQSY

KDALNIVAARTLEGSADYNKVYINNSMSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTV

LTEAKEASYNTINYNNVQSITDASNTDKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYN

KIIINDTLFGVASDKREGILSIIAGLSNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNT

LYRREFKYI

>ETJ83339.1 hypothetical protein X909\_05880 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKNKEDFKLSSIDRLKKMNLQKLSYEVRISQDGKSIYAKIK

>ETJ83338.1 hypothetical protein X909\_07430 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSKYNSVVKVRKQQLDKAESNLNQAKQRQLEHEKAYELSRQECESLGVLPKSGSIAELRSNLSMAQVGR

EALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKVLEAEEIKQKQKELAKAEEKFLDEIAISRFFKGEK

DD

>ETJ83337.1 adenylosuccinate synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>ETJ83336.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNSFKQKYLINFWDNPRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFIGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMVLGIYLGVKICNTSFFKPKAKLERVNKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRDNAIKGALIGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVFAGGCECGWTYRAFEGQSHFIIVGIANIIGTMILALSYD

FLPKAFKEGIKINLLTEFGNLNGFFINLILFILMFVFVVFYKKHFFKNQLKG

>ETJ83335.1 hypothetical protein X909\_07410 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKITYSLNLQGEACPYPAIATLDVLPKLKSGEILEVLCDCPQSINSIPQDVKNRGFKVLEIDQSGPTLRF

LIQKP

>ETJ83334.1 sodium:proline symporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEVVQINTPIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLLMGLPGA

LYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAVVILIFF

TFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIVPLVMLY

HLGGFGEAMNIVREIKPQALSMGEGVGIVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMATFIGIAW

MAVCLLSACMIGILGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQLLVSSS

TIAEDFYKKIFREDAPSHIVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSVMLFSLF

WSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLVASAVIIIASLFTNVRSGTKAAYEKMLKEL

>ETJ83333.1 1-pyrroline-5-carboxylate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIQKALALAEELQGQIEANISNSEKEFHAKMQKLLNNPKNKVMLIELLDRSFRCKDKNASFELIEYTLSK

YGIADFFSTFEKFLLFSFLNFGKFAPNLSVPFFVKHLREDTKAMVLDANPSVLEPHIKKRKEQDKITLNV

NLIGEEVLGEAESKYRMQKYEEALKSSYITYISIKITTIFSQINIIDFNYSKEEVVKRLDYLYALALEEE

KKQGVSKFINLDMEEFRDLELTVAAFMESVAKFDIKAGIVLQAYIPDSYKYLKKLFAFSKERVLKGMKPI

KIRFVKGANMESEETIASQRGWELPTFYKKIDTDSNYNKMLDFILEGDNYKYINIGIASHNIFEIAYAYT

RISEVGALDSFTFEMLEGMSLQCSYELSKMHDLILYAPVCDEAHFNNAIAYLVRRLDENTSEDNFMRYFF

NLKVGDKNWNIQKELFLKSLEGIKTLDNTTHRKQDRNKESNIISSYESKKFSNESDTDFILAQNRAWAKE

IKTKYENLKDYDVYPVIGELDFKAENLNVLEVKDKIEDRVIGKAYLAGEKEIKQALEVAKNSKFTQKSHD

EIYQILAKSAKLMRERRGDLIGLAALEVGKTFLEIDPEVSEAIDFIEFYPHSLEELKKQNPKVTFTPKGI

GVTIAPWNFPIGISVGTIAAPLAAGNVVIYKPSSLSTLTGYMLCKCFWDSGIPKDALIFLPSKGSDISKY

LLIDEAIKFSILTGGEDTAYAMLKANPTLLLSAETGGKNATIVSKFADRDSAIKNIIHSAFSNSGQKCSA

TSLLVLEEEVYHDEEFKKTLVDAASSMAVGNPFEFKNKLGTLADKPSSKVQKALDELQPYEEWALKPKFL

EDNPYLMTPGIKYGTKKGDFTHMNELFVPILSVMKAKDLKEAIDIVNSTGYGLTAGFESLDEREWEYFHT

HIEAGNIYINKPTTGAIVLRQPFGGIKKSAIGLGRKVGIYNYITQFLEIKQEDFDDHLIEDKFSKKLAQI

DLKEAQDFMNNLIKMSQSYAYHYKNEFSVSKDYVNIRGEDNLFSYTKIKNMVLRLCGNESLKDVLGVVLG

ANIANIDLSISYDEQDVSMIERIVQSIGAKVLFLKENKENFIKSIKEYERVRYLAKPDVNDEIYKEAAKL

AKIIIREKPLLNGRFELLNYFNEKALSISFHRYGNLGIRAIS

>ETJ83332.1 hypothetical protein X909\_07390 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFKIVLRPPGLNFAAQPAALTKCVKF

>ETJ83331.1 regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIDCRNLSCPQPIVETKNALEKLQENEILEIVLNSIISKNNVVKFLNSLNLTPVVDENAQEFCIKVQKK

NFDSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLSTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>ETJ83330.1 MCP-type signal transduction protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKSLNIGLKLIFSVAAVVVIGLVILISLITKQVSQNITKNTEDILASITKEYATQTQGIFGEMIALNKS

ISGTLTEMFRSTSKEDLDIDNITNIITNTFDNSAYSNFTYLYLIDPPEYFKEESKFFNTQSGKFVMLYAD

EEKDNKGGIKAIQASDEIANLQVVQDILKKAKYGENKVYIGRPIKMNLEGQDFDAVNVAMPIFDRKNQVV

GVIGMTLDFSDIATYLLDPKGQKYDGELRVLLNSDGLMAIHPNKNLVLKNLKDVNPNKGAQETYKAISEG

KNGVFDYIASDGDDSYAAINSFKVQDSSWAVLVTAPKYSVFKPLKKLQLIILGASFIFIFVVLGVVYYCV

RKIVASRLPVILSSLESFFRFLNHEKIEPKAIEIRANDELGAMGRIINENIEKIQISLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDVLQSKIGSNMNEINRVFDSYKALDFSTEVFNAKGE

VEITTNILGKEIKKMLLASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLETVTKENVEVANVTNNITNEVNQIAAAILEDVSKKRF

>ETJ83329.1 regulatory protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKNQEKEIISYMRELLNSNEKLDCGTAFKIAKKFNINIEKIGQLADENHMRIDNCELGQFGHLDFEKAK

IEVLKKIEPSLDEKRRIFCKDARDIAKEGCGLKSMRSALKTYKVDVKYCQLGCFKEKKGKQFIVRTKTWI

ENADGDLLFGRGKTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKL

TPRAMELMENYSILQKDIEEYANKRFKELFLKGKK

>ETJ83328.1 formate dehydrogenase accessory protein FdhD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDPLFTTQILKYKGNESFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIETKDDGMSVHIKAKIDKENLAKLNAEGVVISGCGRAHTANIDPEAIEASKISSDAKFSKGEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHG

>ETJ83327.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSEKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>ETJ83326.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTNHLGDIQRSKCIIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYARIRPGTDIAF

MYGMLKIIFDEGLEDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAKNKPTTLIWA

MGLTQHTVGTSNTRLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPLNEATWRYYA

KIWGVDYEWLLGNFVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGITSTAQQVKV

KEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDPLYESMEDQE

ILFELAKKLGFYEDFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWSPERLKKHTLYWDKFDEVTLEG

KDEVAGEYYGLPWPCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYEGESLLAKNAPLNSPIDTGYPQ

ITKDNIEKVLGITLSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNAKARAVVWTFKDKIPLHREPLH

SPRNDLVQKYPSFEDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLVNLNGAGMENRASMYLTRLTPE

MFCEINPELAKEQDIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLPFHFTGVMQGVDLTHNFPEGTK

PYASGESANTVTNYGYDIMCQIPETKGGLCRISKDGK

>ETJ83325.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARI

>ETJ83324.1 Tat pathway signal protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>ETJ83323.1 hypothetical protein X909\_07340 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSIQAFF

KEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILVKSKIRRNEKFFKESEDSVGFCLLLMSEFLRQ

NEDDLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQNDLS

RSEFLRREANKQRRTREKSQGIS

>ETJ83322.1 carboxynorspermidine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIDEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSTIEGLHFHALCEESADALEAVLKVFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYSVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNARILATRENEKISDLKESEFSYLLTGNTCLAGDVMGEYAFDKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLNAKNELQMIREFSYKDYSLRN

>ETJ83321.1 bilirubin oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNRRNFLKFNALTLASMGVAYANPMHDMHSMHKNHSINHDLDTSFINFAPKNLKLLDPKQFPQGEILKAL

PLLKNESKEKNIFRATIEIKENHIELIKGKKTLFYTYNGLVPAPKIEVFEGDKLEILVKNKLKEATTIHW

HGVPVPPDQDGSPHDPILAGEERIYRFEIPQDSAGTYWYHPHPHYTTSKQVFMGLAGAFVIKAKKDALSH

LKERDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPKIKLATNERIRIYNATAARYLNLRIQ

GAKFILVGTDGGLIEKAIYKEEFFLSPASRVEVLIDAPKDGEFRLESAYYDRDKMMVKEEPNTLFLANIN

LKKENVELPKNLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALASMFLINGKSYDLKRIDLS

SKLGVVEDWIVINKSHMDHPFHIHGTQFELISSKLNGKVQKAEFRALRDTINVRPNEELRLRMKQDFKGL

RMYHCHILEHEDLGMMGNLEVKE

>ETJ83320.1 molybdenum cofactor biosynthesis protein MoaD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>ETJ83319.1 molybdenum cofactor biosynthesis protein MoaE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEHFTLYQGSLDIPKIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGISLLFAHSIGDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYAKERSTKL

CGAGLLKG

>ETJ83318.1 molybdenum cofactor biosynthesis protein MoaA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>ETJ83317.1 hypothetical protein X909\_07310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>ETJ83316.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDKQVMINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKS

VDLAINDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYP

RRLIDYVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRN

SYRRIEFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESR

IKHYDKLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVL

DDEREIDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTH

SPFIYDNIFEDYIVDLEKYRVNNG

>ETJ83315.1 phosphoribosylaminoimidazole synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEESEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIIGEICINEGIVLE

>ETJ83314.1 dephospho-CoA kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKILENFTHPKIRAKILEQMQILDKENKAFFVEIPLFFESGAYENLGKVIVIYTPKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>ETJ83313.1 diaminopimelate epimerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>ETJ83312.1 mannosyl-glycoprotein endo-beta-N-acetylglucosamidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKPIIIFLSLFLIPLFADDLKSGFGEEYYKLDIDQKRQIFFIKMNEMFDQSFKKIEQERAFIEAFFKDAY

KTGFRTSNQINLEKLITIKNKYRIENLYDFAEYKKRIQKIPKSMGIAQALVESATGTSRFAREANNLFGE

WTWGEKGLIPDLRHPDKKHKIKIFDSLQDSVDSYVLNLNRHFAYEKFRDARAKFESEGKEITGLEAIKTL

DSYSERKGYYINLITKIIKRYNLEKYDTNSNNT

>ETJ83311.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVLNFFYENHPKFEVSYERKNQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTNIKDLNINGFEELELDYFDFEEFISVSKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQISISKIFIELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDNFFEQGVKFEVISFDKFSLGF

>ETJ83310.1 DNA polymerase sliding clamp subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSVTKQLLQMQADAHHLWVKFHNYHWNVKGLQFFSIHEYTEKAYEEMAELFDSCAERVLQLGEKAITCQK

VLMENAKSPKVAKDCFTPLEVIELIKQDYEYLLAEFKKLNEAAEKESDTTTAAFAQENIAKYEKSLWMIG

ATLQGACKM

>ETJ83309.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLQFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVVSLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDVIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>ETJ83308.1 UTP--glucose-1-phosphate uridylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQISGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRPLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEENLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTKAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFYEKSKC

>ETJ83307.1 acetyl-CoA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNQNNQELFKPSKEFSRNARIKNLCEYYDLCDEAKEDFEGFWKRQAFEKIEWFSPFSRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKAANLLKKFGVKKGDRVVIYM

PMIPETAIVMLACARIGAIHSVVFGGFSPEALRDRIIDAGAKLVVTADGAFRRGKPYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYIKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

ISKFYTSPTAIRMLHADAPNEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGGTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKDEGEDGLLCITKPWPSMIRGIWGNDERYIESYFS

QAKKDGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIGTAEIESAIAKHPSVAESAVVSILDTIKG

ESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGPIAKIEKILYTPGLPKTRSGKIMRRILRTIARGE

EIKQDISTLEDSKVVETIVKLAKAEFE

>ETJ83306.1 metal ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSKNISYFGNFKPNNKQ

KREIYLLFPEPILLNRSVRANFLFTLKTYGIKEDIEERIKESLMFLNLDESLLSKHPNELSSGQSQKIAF

AIALSVRAKYYLLDEPSAFLDKNTTLLFKKTILKMHENFNTGFLIASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFCNFIDFSNCKKYKDFKKPPSKIAIDPYKISFFNSKNIPKNNYDFILEKCYIIAL

RSRKSDVFIRVSCMDKILEFALEKQEFLRFDLKLYEELSLYFYEDAICFLN

>ETJ83305.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLALLIGFPLGFILGFFEFKLKRFIKLIVDTSL

SFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFILALPIVIALFSNLIENMNKKHFLLIKSFHLS

PLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGNIKYDTRTITTAISLETNKGEFASGIALALV

LILIAFCLNFITHKLKRT

>ETJ83304.1 tungsten ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIISLALALALSASAAELKMATTTSTDNTGLLDALKPLYEKESGNTLKWVAVGTGAALKMGEDCNADV

LFVHSPKAEKEFMKKGFGVDRTPVMYNDFIIIADKSLASKFKGKNLKESLELIKNEKLTFISRGDKSGTD

NKEKSLWKNLGGVPEKQSWYQQSGQGMLASIKIAEEKKGVILTDRGTYIKYEANEKGKPNLVIVNEGDDS

LKNFYSVIATNPKHCKNVNYTEASKFIKWVTSDKTLNFIADFKLLNKPLFVIDAKTRKD

>ETJ83303.1 LamB/YcsF family protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>ETJ83302.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSVHFSGSKALLLRFEQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLAEQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFDIQEQVAKKVYQKEIYEYKNH

>ETJ83301.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSIKIIETSINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYEFLDENY

FVLSGAEFEAKLDNQKIKTCKVYQANKGDILELDLAKIGFRGYLCVAGGFEVKSFLNSKSSDAKMGAGVF

EGRALQKDDILNTHNTFIPFNLEARECENPLFKSPKEPIIRVILGTNEDAFTQKGIETFLNTTYKVGLKS

DRMAIYAESSESIEHKNSADIISDPAVFGSIQVPKSGIPIILMAGRQSTGGYTKIATVIENDLSLLAQAK

LGSSFKFQSISMQEALELYKQREMKFKAMDQKINLDFENLI

>ETJ83300.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTRTKYLYILLVIAMFLWGSSWPTSKILANYTDTSIITFWRFFFVVLGSFFVLNFLKIPLKIEKTALKWV

LIAGVLNGLYAFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAIFFQKNKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALMAVFNHKAKGAHPLAINFYINLISILMFSWILFDVKSY

EIFHFEFKFWISMFVVAFLSTIIGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CALAIGAIYFINIYGKKA

>ETJ83299.1 NADPH quinone reductase MdaB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKIF

>ETJ83298.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKENSPCNFEECGFNYTLALINGKYKMSILYCLFRYEIVRYNELKRFLSSISFKTLTNTLRELENDGLI

IRKEYAQIPPKVEYSLSKRGQSLIPILQAMSKWGKKDKKGKKCLN

>ETJ83297.1 biotin transporter BioY [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLELIGELSLQNYMGEWLEIARKPAFFQKSCLNSKAKYELKYKNGIPYVEIENFCSKKNEISSIKGKAKI

VSNRQLAVRFNIFMNLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILARNIIDEKNIKELLNIAKQRGFD

ISDVVFDKY

>ETJ83296.1 NADP-dependent alcohol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGECDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNNIVVSEKFAVCVPKDAPMEKVAPLLCAGITTYSPLKFSNIKEGSSVAVAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSCDKNAVKERFDLIISTIPTPYNPAIYLDLLKFGGEMAIVGLPP

HEVAPSISVITFVHKAGKKVYGSLIGGIAETQEMLDFSLKHGIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>ETJ83295.1 restriction endonuclease subunit R [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKIACYHQYYAVNKAISR

TITASSKDGDKKGGVVWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQ

EPKQANDKEHLKELLRVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKS

KSGDVLGQKIVYGFAKYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYE

SRLAKIELSEEGKRLVNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMI

VSISRSVAIKLYDEIIKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDEL

KLVIVVDMWLTGFDVPSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSE

SGGKGDIITTQEDAVKVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFA

ALDKAYTIAMPHEKALSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDAS

GIKKPDISILSDEFLLEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLIS

SSEALDELINMSKSIVSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSI

DWMIKENVRARLRVAVKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>ETJ83294.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKYKFVKFQVKNFRSLLDITLNIDNNNINTICGENNIGKTNFLRALNLFFNHNNGVEYNQNEDRPYHIQ

KGSTGGRKTELIGYFTKNNVTHILKVEFHKDKIVYILNGKMVEWKVARDIVESFKLLFIEASNVNMPSVI

SAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDIEKDINIYLKQMLDFDNTLKDKEIKIRFAEF

EKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQYITDKITTDIIWAIDEPEAFLQPKLQKKIM

EIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKEEKIYARKKGRVFQEINTKPIYIGTAFEKLS

VIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILNLSMPNIIHSGGATKIAGFLEYFNNQCSYTS

FKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKRYGESIQENNRDIWEIEDFMPIKIIVDAVNI

ILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRNEEKERFILNTESRKKEICQNAFRAREKYTK

NDLEDYHVDFMNELIDSFNKVDLIKKDN

>ETJ83293.1 type I restriction endonuclease subunit S [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>ETJ83292.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIVGTNFK

PKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRKELDKY

PEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGLVKNLN

DSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQYVPKNE

VIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDMPSKSR

NDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIRATYQH

CCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>ETJ83291.1 type I restriction endonuclease subunit M [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>ETJ83290.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIAILCASGKVGKEISKEALKRNLEPVCFVRNSSKMNEFLPQAKIVQRDLFELDSKDLIDFDIIIDAFG

EWENLSLHKKHIECLSVILQGSKAKLFVVGGAGSLYMDENHTTRLMDMPDFPKEYLDIAKASAEVLEFLR

NEKGFKWVYVSPSAIFSPDLPKNNHYKIIGEKFEVNANNESKISYSDYASAMIDIVLNSCYENTRIGVIS

L

>ETJ83289.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYHSLCPIETTLNLIGNKWKILIIRDLLQGTKRFGELRKSISFTKNQNISQNVLTQNLRELEEAKLIK

RKVYAEVPPKVEYSLTSLGNSLESILKSLENWGNSYKNIV

>ETJ83288.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYTIKKVEKETKISAHTLRFWAKKGLFPFVQKDENSVKYFSKSDIEWVKWIEWLRISGMPIEQVKHYIK

LCSLGIKTAKERQEMLKQTKKKLQNQIKTLKESEKVLSKKIKIYEEMLANEVDGFNPESKDYQPCDKLHK

FKG

>ETJ83287.1 hypothetical protein X909\_07440, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

YSWYENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKKYKLDDDYSSKAYVSFGKYF

>ETJ83286.1 phosphate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILSLSVTSLALCGALNAVDLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKAGVTDIVGMMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>ETJ83285.1 ferritin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHAKKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALSRKK

>ETJ83284.1 acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTYFSLEFSILMIAFFAIYWTFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKREFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYVDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYIYIPLGGNRKGIPRTVANILIAFILSGMWHGNTLAFIVWGLLHGIGIVFIHLLTLSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLEDAIEYFKACYYNFFQIPSYNDIYMLVAFGVLFMIYPLFINFKEYCI

KILNLTPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>ETJ83283.1 hypothetical protein X909\_07990 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSVVRFFFILIIVLGLVVVVMNQSISSYIEQKYHFAFYPHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

EETTNQENKSIDENLSKIDKVLNTLENDENTSHKETNPTLIQDANISFIDNTKLELQNGDEFLFIGDSLM

QGVAIALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFIKNSNIKYLVVLLGANDPWDIKKGGN

YHRFGSLSWIDIYTSRVDEIIKIAKKHKAKVFWFEIPPVKKEDLNKKIQVLNKIYSDEILKNKEIFINTK

LFFSVNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>ETJ83282.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRVIFSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALTRADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIEQSLLR

AKQNLLSNDQNRNLLIKNLQDLLAKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFTYEQL

LISYEQALQSAMNEFALNYKDYQSNTLLLQNLQSINIKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYQITALSFNDENLEFLKY

>ETJ83281.1 macrolide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>ETJ83280.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKLVENLALKYYDKVVDLRHQIHMHPELEFEEENTARLVCKILDEFGIKYQKNIAKTGILATIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGAALILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGSLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVVSRRLAPYEAGVITVGQICAGTTYNVIPINAYLKGTVRFLNDKTQDILKSSLE

EVAAATAKSNGGDYKLKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>ETJ83279.1 thiol:disulfide interchange protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIFGIILLSFCLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKLKLYINEKDISSLINLPQ

SSTRGNENVYYQKLNLALPNLLLEHFAKNTTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKDAFEISKPY

KTQKTDKKTKIESEESSIANFLATDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIVAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGASIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVLGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFGFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFTIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISASKSALSYDYINNFEQLKQEIQTNTKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSENNNEQIKTMKEFNVFGPPVLIFFENGKEKLKITGFISADD

LLKKLEP

>ETJ83278.1 sulfurase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIQSLQIGKIKNYKNFQSAFIKDTYLEETQIDFLGILDDQIADKIHHGGYHKAIFANSCQNYPIWERFL

NKKLNFGSMGENLSIDGLCEQNVCIGDIHQISNAILQVSEPRKPCVKISKIHNNSNFTHEIFKTGLSGWY

YKVLQVGQIRKYENIKILEKNSTSLSVFELNQLFYSPHQALRQNPILLDKLEKLNSLISQNWHETIHKRL

KNTYDISYMDSL

>ETJ83277.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLGNFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIINYIILKRGIIDGIEKSVKFLMPLLFICLIIVVGRNLTLDGAMAGVKFYLEPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFVLLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>ETJ83276.1 1-aminocyclopropane-1-carboxylate deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFVSYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKNNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGTGTSAAFLAKYSKFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEFLTSDKKYHFAKPYKEFYELYMDLKLKCNIEFDLLYDILGLSIALKQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>ETJ83275.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANITNYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGFIRENLSKELQSKLDNNITIDEKTGSISLPAEVLFDKDSYVLKNEAKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKLQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>ETJ83274.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVIMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

GEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETSQMMSKLSGDENQNKGNETKQIEDFSESKTEENQDEIQAEISKQESNDELKNEDKENK

>ETJ83273.1 fructose-bisphosphate aldolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLSTCEVYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDKFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNRAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>ETJ83272.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>ETJ83271.1 endonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKAYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFGGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTGIFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>ETJ83270.1 endonuclease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIFIFLLAISLNIFALEPYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEASNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQIAQINNKIWN

EIEQRERNLAFKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYVKIIKTPKFKECYQVPNHEVNNENIKQYQ

INCDKF

>ETJ83269.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEINALTITTLYIIGISAEGMTGALAAGRHKMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIIAGAIYYSLIIWLELNALVCTLLTLFIGVFARLLAIKYQWSLPIFSYNEEK

>ETJ83268.1 hypothetical protein X909\_07900 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRRLSILLTILIVINITACDSKTENYYKNHPSEAKEKAKECKESGTLSEDCINALKVGVKPTNEESKYSP

NTPKKSDNQILETLKQNDLKKEKTTKDINQSSENNESIIIPPITETPSEIYPSKTTENNQSSIFSDDVNI

TQEKLP

>ETJ83267.1 hypothetical protein X909\_07895 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAYKVGFPKDEWEDENISN

P

>ETJ83266.1 tRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>ETJ83265.1 riboflavin kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNIFTTISKINITSLAIGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIEVD

FENIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYDAKDIESLSGIKTIIVDEFSIGGVGVHASL

IKDFLSKANLQKAKEFLGRDYSIKGKMIKGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGEKFTQGEFFELEFISFLRENQKFQDLKKLKNQIAKDIEQARELLRK

NDER

>ETJ83264.1 hemolysin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFDFFVSKRLNISRNKALELIENEEVLLNGKSFKASFDVKNFLENLKKTQDLNPEDILLTDGLKLDLLS

EIYVSRAALKLKNFLEENGIEIKHKNCLDIGSSTGGFVQILLENQALKITALDVGNNQLHLSLRTNEKII

LHENTDLRTFKSEEKFELITCDVSFISLINLLYYIDNLALKEIILLFKPQFEVGKNIKRDKKGVLKDDKA

ILKARMDFEKACAKLGWLLKNTQKSSIKGKEGNVEYFYYYIKN

>ETJ83263.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLLKNSSYILTLLSLFGFLLTWQRTVFSLFFLIPIFLTLFWEFFLFLKLRKNIIKEATLIKGSLFYRIS

IGDFYLYIFSFFLAIFGLISLFLNFLNLEKIDFVFIFIILPLLMIFLKKELHLQFVDNAYNDFRIVVIAS

FFTALFYAFYGLFFTYNEILNLELFSRKIIAYKSASFVYFDFLSEFLHFISNLKFFIFSYFGYLGFRALN

FIFDFFNFFMFCSLLAFVFNFVLKIKIKIIVLFLCFIMVLASYFLKEQRNNALKSEQEQILLWMNNFDFL

KDHNLSLIQKEKDLFEKDLKDLREIFKKNAFEIGIWWFSKEKEDLEKRINESLK

>ETJ83262.1 NAD-dependent DNA ligase LigA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>ETJ83261.1 dihydropteroate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFFKINPNTDFNLLCSFINPHKMGQKIMSEKTKIHFIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEE

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKVLDLIYEKNYYEQAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYGAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAGHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALAQAMDNIGV

>ETJ83260.1 DNA polymerase III subunit delta' [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFISKIIISEDFLGIKEEMINNFGIKKLRFFMPQNEFLLDDARAVEKESYIAETEEKIIVLMADSYRIEA

QNFLLKLLEEPPKNIKFLIVIPSKNLLLPTIKSRLICEKRKVEKEVKKLDLDLKRMDLRMLFDFLQKNEN

LDKNELMDQIALLAKECVKYKDFNAEELEFFYESYELAKLNSKSGVLLATLLLNYYTKK

>ETJ83259.1 hypothetical protein X909\_07855 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAA

RPMLPFVSLNSLCKKKVQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSRVQLG

>ETJ83258.1 aspartate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIVQKYGGTSVGTLERIEAVANRVIQSAQQGNQLVVVVSAMSGVTNTLIEQAEYFSKTPNGKDMDMLLS

SGERVTSALLSIALNEKGYPAISFSGRKAGIITDSVFTKARIHHIDTKAIKSELQNGKIVVIAGFQGVDE

EGNVTTLGRGGSDLSAVAVAGALNADLCEIYTDVDGVYTTDPRIEPKAKKLDKISYEEMLELASLGAKVL

QNRSVELAKKLNVNLVTRSSFNNNEGTMITKEDGMEQALVSGIALDKNQARVTLRNVEDKPGIAAEIFSV

LANENINVDMIIQNVGVDGATNLGFTVPQNELELAKNAMQKILSSKTTIESDSAVVKVSIVGVGMKSHSG

VASKAFKALADEGINIGMISTSEIKISMIVHEKYGELAVRALHECYGLDK

>ETJ83257.1 RNA pyrophosphohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>ETJ83256.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFQALKEDIVFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKVGFKNINLDLIYDTKLDNKKMLEFELLHLKQIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LMKFFIKQLLELNFFQYEISNFSKTKAQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>ETJ83255.1 preprotein translocase subunit TatB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSFGEIIVILVVAILVLGPDKLPEAIVQIAKILKAVKRNIDDAKSSIEKEIRINDLKEEAKKYKDEFSST

NENIRKKLSFEEFDDLKRDILDKTKVDLTFDSRDDNTKNNLSGQNLNTEEKPNLSKLETQDKTEK

>ETJ83254.1 preprotein translocase subunit TatC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFEELRPHLIELRKRLFISVACIVVMFIVCFALRSYILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

VSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITIGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPAPKDKESDE

>ETJ83253.1 S-adenosylmethionine tRNA ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKDLLLSSYDYTLANELIANYPANPKEDARLLVFDRKNKEIFHTTFKNLKDFLPDCAIFFNDTKVIKAR

IYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKARVVELLDDGLRKVQFFQNDKT

LDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSETMFENLRKKHKIYH

LTLHVGAGTFKGVECENIQEHKMHSEFFNIPQQACEIIDSKQAILGVGTTVTRTIEYYARTKTKSGFCDL

FLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYKLAIKEKYRFYSYGDAMLIL

>ETJ83252.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFTELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

ALITQSPHLSFAFLSKLFAKPLISTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAINFKEKSQD

>ETJ83251.1 acetolactate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRRVLSVIVLNEHGVLSRIVGLFSGRGYNIDSLTVAPLENKEFSRINIVTSGNERTFEQIVKQLHKLIPT

YKVIESEEFIDKEMALVKIPLNENLGGLDAVLKAYNGTIANSNENFLFLMVADDANRIDNFLKTIKKYNP

SDIVRSGSVLMEIK

>ETJ83250.1 acetolactate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKELSGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNTITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPC

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKFAELLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSVGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENSNTTFKEWHETLK

RYNELYPLSYEDSNEILKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNIQELMTAYEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISNKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>ETJ83249.1 aspartyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEELGVSSLKEQGLIMKEAKIKLGASVDGKRLNL

ALKELLQ

>ETJ83248.1 3,4-dihydroxy-2-butanone 4-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFVSVEQAIKDLQAGKMLVMVDAEDRENEGDLIFPAQFSTQEKVNFMIKEARGVVCVALDETLAKKFEL

PLMVPKNTSNHETAFTITVDAKDATTGVSAYERNMTIQIFADDNAKASDFVRPGHINPLIAKKGGVLERT

GHTEGTVDLCKLAGLKGACVICEIVKDNGDMARREDLEIFCQKYDLNMIAVSDLIEYRLKHESLIKLEEK

SQSVLAGFKAEKFIFSDHNQTQHIAFCFKDIKKCENVKFHISGSDFELLTSDKFSKLLEQIKFLSENGGV

IVFMQGEKSSTIQYKNYGIGAQILRYFGIEEIKLLSQSCDKDYIGLEGFGLNLKACNFN

>ETJ83247.1 ATP/GTP binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKISCNFFLSDYANLFVAKVVKISKNVDESLIPSYYKEKNLEVEDFFIISDLRELVREDFSLLRDKFLA

NFITPNDHTYAIYGNNYTYPLPVRLKEECSYFLGDEKHYLSVYKSKEYLAMQENFIRFVFGKRIFYLLHP

DSISNIIHAELELLQSENDLLNDFTSIVVKYSKTLEYEIYAFAKKVLLKACMKDPSLYDLTYNVQGKSFI

LKDFFTQKPNLGSIKFLLRHENIQCHLGKSLTQFINYPFSKSLTLIQEIRNEAVHAKAPSLNEVKKLRNE

ILGIEGVSLLKSILTHKEIS

>ETJ83246.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNHLLILYNPYYQEDVIKQHLSILQEKSQVAFGKIKSKLNDQEKQNSLEEIYQSTNEENFLQLFFKRLC

>ETJ83245.1 hypothetical protein X909\_07770 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>ETJ83244.1 hypothetical protein X909\_07765 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFLSSLKDKAVNASEAIKDKTIKTAEVVKDIGMEVKCGIGWHAGEYQNEKDKPKCFFSKICPDCGKYLT

KNQHDFEAPEILNPDNCYGYRRCTLCSIQVFDNFHNYYEIKKDAKCRMHEKCNLCGHERLGQTRHNWKYD

ENGQKICLDCKETV

>ETJ83243.1 hypothetical protein X909\_07760 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKEIKSNMILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVK

SDGKVIRLSKAAKEQFQQIQKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKN

YNDKIVQEQECKINELKDILNKRKNVFTNSISILALIVSVASIVLYFIGR

>ETJ83242.1 hypothetical protein X909\_07755 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>ETJ83241.1 hypothetical protein X909\_07750 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDAVTGHFGLASTILNAKDGGNVTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKI

VRSEYTGEEMERGAGKNKAQLDHVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRD

LMEWGKEIDLKTGKTNFEKYGIDEKKLKKFTIQPNQT

>ETJ83240.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>ETJ83239.1 hypothetical protein X909\_07740 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLKQIAFGSIALTATGYGIKKLYEKLSKPERKFDTHAIVPSCKDMINIEEYKLKRELEVEQKKNQIQEFL

CECMECYSGFSKYFNSKEFLEFEQNFTSKNNHKTEFLLSSYKDQMIKVIDYAKKFECLSAFLETQSEKND

LAVVKMISESMERKTQRFYLQTKFQTFPQYIFPSVWSSPMWGKQWE

>ETJ83238.1 replicative DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDISPKDFSLKAHQDIFKAVIACSNNKEPISVSFLRKHKKI

DEQILAEILATPSMIDLPAYVNELHEKSVKRQLLSFAHLLPTRINEDRAVSEIADEIGKEIFSITNRVNS

RDIKDVDIVISELFEEFKKQKTLENKGIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KVLRQKKGVALFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKAYQRLFIPNPMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYETTEFTG

>ETJ83237.1 hypothetical protein X909\_07730 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKYLFSCVLASILTQSATAVEFQEGFSGNLSIGVGARDIKSNISTLANSDYLSSYNADNSDSSFIPFIG

AELYYGNLIDNDRIFIKNYNGRDISGIALGYERAYLERFSTSFSVISSLREKAYANPYAIGNREETDVDR

YGFKISQLYESDFGKFTTSYLFSKNKYDKDTIAQSSLKREGYYHEIELNYNYSLLNLGLNYDYNDADGKA

QSYSRYGFSIGTNLAFANDYIFTPNLNLSKYEAVGTDPIFHKKQDGNIVKLNLKVVKNQFLGYNGLYGFA

NYGIEKRNSDIGFYDETYQIILTGIGYKF

>ETJ83236.1 multidrug transporter MatE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSSIFSTLSPFRLFVKCAVPNVISMAFISFYYIVDGIFVGKYLGSDALAALALIIPFIMMSFALADMIAI

GSAVQISMHLGLGKKNLTRKIFSSSMLIIFIISCFIGILEYFLGPVLIDCLNVSDEIKTMTKECMFVFAL

FAPFTMLSFALDNYLRICGKTAYSMVMNVIIALSNIVLDYIFIVELGWGLFSAALATCLGLVLGGIFGIF

PFLFQNLELKISSLYMNLKIFKNILYNGSSEFFGNISGSLYSIFANFVLLKISDTQAVAAFSIVLYIDSF

IIMLIIAIGDAMQPALSYNYAKKDFSRIKAIIKVVFFAGGFLSLFSIVLILIFGENLITLFTKENNQEFK

TFAYTALMLFAFNYFFAWFNVLSGSFLTAFNKASFSLVLSLAQNLFIPLFFLLFLSCFMGLNGVWLSPFF

AEFCVLILAWIFLKRIFKDLSL

>ETJ83235.1 pyridine nucleotide-disulfide oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIDLIVVGAGPTGIGCAVEAKLKNKEVLILEKSNNICQTLMQFYKDGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFGSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSVLGNEKILVVGGGNSAAEYAVDLANSNQVSLCYRKKEFTRLNDINLKDIHEARNSGK

VELKLGIDINEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>ETJ83234.1 gamma-glutamyl phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>ETJ83233.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKIEILKQYLKEIAKLNSSEQVWQMPFFAALGVGIVLGLSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPAIFAFIPIGIMAMGSSILIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAVFVDSLIMGSFVAFSIFI

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELILLMMSLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADKLILARLIDVVIGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>ETJ83232.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIDTHAHIFLKKLNTVANTRYKPDYDASFKDYKANLDHYDFNKGVLVQPSFLGIDNEFLLQSIEKDENI

KAIVVVDENIKFDELKKLKERKACGVRLNLIGKELPNFKSMVWTQFFENLSKLKMQIEIQRDLDNNLVDI

VENLIPYGCNIVIDHLARANANLTNLEDLICLKNSRIFFKISGFYRAKIDYANNEQAVKFAKKIYEILKE

HFPLSNFVFGSDWPHTNFEANINFSSALVAFNEVVVSKKEQEQILGDNACALFGF

>ETJ83231.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVFLIISSIIVAIILGYITRHNVGIFAMIFAYIIGAFFMDLAPKKIIAFWPISIFFVIFAVSLFYNFATV

NGTLEKLAGHLMYRFANHPYLLPFVIFVVSAIIAALGAGFYTVLAFMAPLTFLLCDKIGLSKIAGAMAIN

YGALGGANFMTSQSGIIFRGLMENSGIEANEAFANSSIIFAFTIILPIVVLSFFVFNAFKNNIKISVISK

PDPFDYKQKTTLILMFMMIVVVLIFPVLNIIFPHNEIISYFNKKIDIAMIAMIFVAIALFLKLADEKQVV

ALIPWGTLIMICGVGMLISIAVEAGAIKLFSDLVENEINVIFIPLIMCAIAALMSLFSSTLGVVTPALFP

IVPSIAASSGLSEALLFSCIVVGAQASAISPFSSGGSLILGSCPDKYKEKLFKDLLIKAVPIGFIAAILA

TIIMSFIL

>ETJ83230.1 hypothetical protein X909\_07695 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKPPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLTLEINLLAKENDKAEIWAKNLEGI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLHKNDFVKFFKAYLPNLEAKEPVTLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKILSNFCDENLKILLRNNATEHFDKAIAHIEDDYLGSHWLGSFALLALDVDIL

>ETJ83229.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISLDLLYYIVGILFLVFGILSFSNQAKDIKSRISGGVFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAVHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIAV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>ETJ83228.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMCYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILFIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLSDDKS

>ETJ83227.1 elongation factor P [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>ETJ83226.1 hypothetical protein X909\_07670 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQWLSDFKLALIQEDVNKLENLLDELDMKAFIKNLAKESPSEDFLKENANDVFYQVQALLQEAVILIEQ

KKKTKAVEIQKFQKALTYFKS

>ETJ83225.1 flagellar biosynthesis protein FliS [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNNLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKVAIRNEDIEQRVYFVKRTTAIFIELINTLNY

EKGGEVAHYLSGLYTREIQLLSLANLENNEDRINEVINVTKGLLEAWREVHNNETVAQ

>ETJ83224.1 flagellar cap protein FliD [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFGSLSSLGFGSGVLTQDTIDKLKEAEQKARIDPYTKKIEENTTKQKDLTEIKTKLLSFQTAVSSLADA

TVFAKRKVVGSISDNPPASLTVNSGVALQSMNINVTQLAQKDVYQSKGLANDSGFINANLTGTTDLTFFS

NGKEYTVTVDKNTTYRELADKINEASGGEIVAKIVNTGEKGTPYRLTLTSKETGEDSAISFYAGKKDSNG

KYTSDSEAETIFKNLGWELDTTSSIDPAKDKKGYGIKDASLHIQTAQNAEFTLDGIKMFRSSNTVTDLGV

GMTLTLNKTGEINFDVQQDFEGVTKAMQDLVDAYNDLVTNLNAATDYNSETGTKGTLQGISEVNSIRSSI

LADLFDSQVVDGTTEDANGNKVNTKVMLSMQDFGLSLNDAGTLSFDSSKFEQKVKEDPDSTESFFSNITK

YEDINHTGEVIKQGSLNQYLDSSGTGNKGLDFKPGDFTIVFNNQTYDLSKNSDGTNFKLTGKTEEELLQN

LANHINSKGIEGLKVKVESYDQNGVKGFKLNFSGDGSSDFSIKGNATILKELGLSDVNITSKPIEGKGIF

SKLKATLQEMTGKDGSITKYDESLTNNIKSLNTSKDSTQAMIDTRYDTMANQWLQYESILNKLNQQLNTV

TNMINAANNSNN

>ETJ83223.1 flagellar protein FlaG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEISKANGQMDTALANISQRTSETQASLNIQTDRSQGQEGDDGQQRGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>ETJ83222.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFIQILKENDLLRVIEEPVDVDLEIAHLAYIEAKKGEKGKALLFKNPIDKKLNKQYKFPVLMNTFCNE

KALNLAFGRDYEEVAEEISKLTKLHIPTSFKAKMDFFMNLLSFKNIPPKRLKKNKALYDYEILNSLEELP

ILKTWEDDAGKFITMGQVYTQNLDKTQNNLGMYRLQMSDKNELLIHWQIHKDGANFYHEYKNVGFKKMPV

SIAIGGDPLYIWCSQAPLPKGIFELLLYGFIKKTPAKLTPCENGIFVPYDSDVVIEGYVDLEEFKIEGPF

GDHTGFYTPAELFPVMKVEKIYAKKDAIYQATVVGKPPLEDKIMGLGTERIFLPLLQTSVPDLIDYNMPE

NGVFHNLILAKIDAKYPAHAQQIMHAFWGVGQMSFVKHAIFVDKNAPSLKDYDALIPYMLDRFNTKKILI

SEGICDQLDHASPNSCFGGKAGLDACEEIQVEELEILEDEKLLELFKTKVELLNLKQFYKESKSPIVCIL

LDKKEKIEQSFDKLLEFKKHFRILVFLDVENKLENSYMLVWRVVNNIDAKRDIFIKEERLGVDASAKGEA

EGYLRAWPKQTDCTKSVIEDLILRNILENNPDLFNKFEIF

>ETJ83221.1 porphobilinogen deaminase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>ETJ83220.1 integral memnbrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNYKLSLSPLFVLEIIASILFIVFFGFGNFLFFILLSMIFGAVLLGIFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLVFPGIITSVFGIFVFFFGIALKLITKSKYQYTKQEYQNSNEEIIDVEIIEDRK

>ETJ83219.1 prolyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEVN

LSFITPASLWQESGRYNVFGKELLRFKDRKKNEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKFR

DEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKEF

MVLAKNGEDDILICENCDYAANVEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKINAFYTIK

AVVKKAIYENESKLVVFFIRGSDDLQEIKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYID

FELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQKY

SKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEANHDEKGCIWNKTLAPFVLEIIVSNLKDEKALEF

ANKLYEDLTNLGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIELIQREDLVKELIKTDELM

EILKKKVL

>ETJ83218.1 octaprenyl-diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAAIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEKDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNENEKEWLKTKFEEQKALEKAILEAKTYAKKARKAIEKY

DNNKLNDIIKAMIDREF

>ETJ83217.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFKISPYLICIFFIFSNVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVH

SKFRKYPRQFVMSLRRNLDWVTQTLIPDYTNPHIDRARLILEFSGYNKGLATFTVYIEDKESRLMVEFLD

PRKKALQNPPQNNQVVPMINFNEPQVKPLTSKENNNSN

>ETJ83216.1 hypothetical protein X909\_07615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEERQNDIYI

ELGAKILGHEG

>ETJ83215.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKDTMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>ETJ83214.1 2-oxoglutarate ferredoxin oxidoreductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFNYDEYLRTDKLPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVVDKSKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>ETJ83213.1 2-oxoglutarate ferredoxin oxidoreductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASVAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIEIINRKKFTGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGAIVKKNMERLIGKIKNNQDDICTYEEYMLDDAEFLIIAY

GSVSRSAKEAINRLREEGIKVGLFRPITLYPVAEKKIAEVVNKFKKVMVSELNMGQYLEEIERVSSRRDF

ISLHRANGRPITPSEIIAKVKENI

>ETJ83212.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>ETJ83211.1 succinyl-CoA synthetase subsunit alpha [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGVTPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIKENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESAAAKKEALKSYGIHVVDSPALI

GEEIQKILG

>ETJ83210.1 malate--CoA ligase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>ETJ83209.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNIDLLCAKDYTHTKNS

DIVLFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMLESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SLQEKDKLEKSLIKYQYKGE

>ETJ83208.1 isocitrate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTSDISLSGRILATFSEYLKEEQRCEDALELLGELV

KRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNYPDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNS

DRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGDFFSNEKAVLIDQDCVANIEFTSVDGKNEILKEG

LKLEKNEILDATFMDVQKLQEFYAKEIKASKDDDVLFSLHLKATMMKVSDPILFGYAVKVFFKELFIEFQ

DEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEILAKSADISMVNSDKGITNLHVPSDVIVDASMPA

MLKNGARLWDKEGKEKDTNAVIPDQTYATIYEAVIEDLHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDK

TFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKFDAVLNWIDLGIERSELSGAEAIFWLDSKRASNK

IMITLVQNRLKEKGKNIAILTPKEACLRSLELIREGKDVISITGNVLRDYLTDLFPILELGTSAKMLSVV

PMLKGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGEFLALQASLEFYANKCSNHKAKVLAECLDEAIGE

WLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQASDMELQSFFKDIALELSSNEEKIRAEFNNAQGVK

VDLGGYYKFDDEKANKIMRPSATFNAILEKIGQR

>ETJ83207.1 hypothetical protein X909\_07570 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKKILYIVVFFVVLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQ

THSSDNASTEILKITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQRQNKELI

ADIKKLLLKDYDLNIDGNLSINTKSEFYYFQGRASGELFDFNASISYKDKNLAYKIEDLNIRNITEIFKR

VNKRIELPQSLNLWVAYRAKGEFYHLDYLQGFIDFTKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKL

DLNLNKQKLDFVFNKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFY

QKSGKIKSDLELKIDFHDKGEISYSGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADF

NAKFDLQKQQGNFNTQISRLYFDNGELLDLKNQNAEVKLDYSQNVNISIPQWNLILNFKDGLEANLNNPK

ILFSFSPLLKKFGFIDAKNVYYKTLNFEDFNASVNDAYFKNNLLINGQTPYENDSFDIVKNKGIMEIHTQ

SDTASAKISSDNKEIHLKNLSYIYKKDSNSSNSTFDISTNTQNISFGGANVALILPDSNKTLAFDRVEAD

LKGNALDLKGSRGNAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLSIKGSGLEYFDGQIDF

KNTYVKDLRGINQLISFIDTVPSLLMFKSPTFNQKGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGL

GSANLRLNTVDFSLELKTLKSASEAISKVPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTP

FNLIKNIIQLPANLLN

>ETJ83206.1 aminodeoxychorismate lyase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTIPFLSTINKANISTTKNTTIYKIFFFIRNFFLIFILGIFYYLTQPLKSNSVVFIPQGSISQIITYLKQ

NKYQMSSIDKYILFFLGHPQSGWINIGTKDLNRAEFLHKLTIAKAALQTITLIPGETSVIFLEQAAKQLE

LDKDMLLKEFQAQAPYDEGVFLPETYKIPKGITENLLIQMLLNHAEISNKKTSEKIFGDYNPKKWHQYII

IASVIQKEAANDNEMPIVASVIYNRLKKGMKLQMDGTLNYGIYSHVKVTPQRIRQDNSSYNTYKFTGLPK

EAVCNVSLAAIRAAIFPLKTDYLYFVRDKNTGVHIFSTNIDDHNKAINLQKGK

>ETJ83205.1 flagellar basal body rod protein FlgB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MINPFKSKELVTGALAGRNLRNQLINANLANVDTPFYKARDIEFETALVNRANEIFKKNDNKELQLAVTE

EGHQKPWKFPDPSKSTIYLRDGHLARNDANTVDLDVETTEMSKNTVMITALDGVLRRQSNIFSSILDASS

KLS

>ETJ83204.1 flagellar basal body rod protein FlgC [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYLSDFDISGYGLSAQRFRMNVISSNIANANTTRTAEGGPYRRREVIFKATDFDKLLNEQINKDNNFLK

YENPLNDPSSPEEAKPPIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>ETJ83203.1 flagellar hook-basal body protein FliE [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNNINDLRLNNNISNTNKSQNSTGIGDEFAKMLKNEIDDLNKAQESGEAAMTDIATGQVKDLHQAAIAIT

KAESSMKFMLEVRNKAISAYKEITRTQI

>ETJ83202.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MALLFMIIFISSTFFLTSKRHIPNTEKDQYALALRGSIITKDNFTITSSKQIYRAEIDLRSINKDKFDLF

LKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKLYIQGFFKAFTNNSGRVE

TRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYDECLSPVQNEKIQGLKDIG

GNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVMESKTGRILALASSRRYD

PQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSYKLGRFTIKDDHKMDKMT

MEEVIRYSSNIGMIQIAKRLNNIEIVSGLKIFKFGEKSGIDLPYEQKGEIPNPKRLRDIEKSVLSYGYGL

KTTFMQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAAKTMQNVLINVIEKGTGK

KAITQGIIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHPTKPYSYYAAQSALPMFK

DVVDILINEEFLTPIQDNNQTSTNN

>ETJ83201.1 Na/Pi-cotransporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEERNSLKYFKFISWSIFTLVLIFILIRYDELANLLAGVAILLIGMTNLGIGFKAFSGGLLEKILAKST

DTKIKSILFGTLSTLIMQSSTLVSIITISFLSAGLISLGAGIGIIFGANLGNTASSWLIVGLTNIKISML

AIPLLIIGVLFFFQKDSVLKGLGNIFIGIGFFFLGVDYIKSGFENFKHIIDLSRFDFAGFKGVFVFLGLG

ALLTGVIQSSTATMAIIVAALLAGQISLENSLAATLGTSVGGVVTAVLASLSTNIEGKKLAFANCIFNFG

IAFLIVLIFPYFIHFLNFLSIVLNIEDIALKVALFHTLFNLIGVVLFSFFTPQIVLFLNKIVKAPKDKNK

DKPLYLDSSLVKFSDTAIESLRKESEHLYNNTYAIVAHAIGFSRKDIQSDKSFKEILENKKWFSKNVDLD

YLYQTRIKVLFEAIIDFSTKAQVYINDETKNHKIFTFKMAAKNLAETTKNLKIIQANIKKYSSSSNEFLA

LEYNKIRSNLGELLRSIEELRVVEDREKLYLIIKNLQKGKEILKEIDTLTLSNVEHLISVRKITTAEGIS

ILNDTTFAAKIAEELIGAVEVIFSKDISN

>ETJ83200.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENVQNANLALKISD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAEILREFLMNEFE

KLKG

>ETJ83199.1 rhodanese [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIENIPASLWTKQDLNAYQIFDVRTPLEWEEGVLPNAQCVALYDNQGLLNAKFLDEFQSKRDENKKLAFI

CRSGHRSMVAAEFIAEKLGLESINLDGGMLALKGY

>ETJ83198.1 heat shock protein Hsp90 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKDDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEIDDANKEEQGTSITLYLKDDEFANAYKIESIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKPDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNESFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>ETJ83197.1 chromosome condensation protein CrcB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>ETJ83196.1 1-acyl-sn-glycerol-3-phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIYKKIKALYFWIFFVLSVALVIFCFCFTKSQNTLWKIRKIWAKFQRYTISYKQEIIGTFNPQAQMILMN

HQSALDIIALEELYPKNLCWIAKKELGEIPIFKVAMKKPKLLCIDRKNPRDLVRVLKEAKERISEDRVLA

IFPEGTRSKNEKMLKFQSGAKILSEKLNLKVQPILIVDSAKILDTKSFSASSGVLKIICMDLVDTNDEKW

LENTRKKMQELLDQERAKLC

>ETJ83195.1 hypothetical protein X909\_07505 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILLTLIFSVVVLFGRGEISVFSGQDENMQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGS

LVLTNDEYPSKVYVGEVFPITIYARTTENTKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNS

NASLSKISIKLLRNNEAFQEADINLNPIKFENTLFNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNA

TNTNLKSFFIEGIQKQGIENLKGDFNASSAFYYAILPLSKTNFEFSYFNKDSKKLENINLKLKISDDEIS

TQSDLNPVNKDLNIYKQYALWFLAVLFGVLFVWRKNYIILALAVVCFALSFLVDTNTQNAIIKAGSRAKI

LPTEPSTYFYTANADEKVEVLGKRQNYIKVLFSDGKIGWVNKDDLQKN

>ETJ83194.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVAIIRFPGTNCEIDTAYAFEKLGVKTQIVWHEEKEFDADLVVLPGGFSYGDYLRCAAIAKLAPAMQGV

FNHAKKGGYILGICNGFQILLESGLLKGAMKHNNNLSFISKNQSLRVVSNDNAFLKNFKKDEIISLPIAH

GEGNYYADETTLKELQDKDLITLKYEPNPNGSVFDIAGICDENKKIFGLMPHPERACEKILGNDVGLKML

KGFLF

>ETJ83193.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNSV

IEDYELVIEKE

>ETJ83192.1 phosphoribosylaminoimidazole-succinocarboxamide synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>ETJ83191.1 peptidase S41 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTKRFFAGLAGFATTFILCLFLTSHLQAKVDQKEEQVQKRLEALDKLTKTLAIIEQYYVDDQNISDLVD

KSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVGMKDGALTVVSPIEGTPADKAGIKSGDIIL

KINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENILYLRVT

NFDKNVVDVASKELKKYPNVRGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRITSENQEYKADPK

NKISDVSLAVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSVQQIIPINKTEALRLTIARYYLPSG

RTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKKEDKQENKDNKNLISQKQINDD

AQLKSAIDTIKILNIKQGQ

>ETJ83190.1 hypothetical protein X909\_07480 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCQEKHTHTHSQKHLKAVCNRLSRTIGHLSAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAIEENDIQSIEELNKAIDMFMK

>ETJ83189.1 molecular chaperone ClpB [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MANIQDFLTDNMLSNLESAASLAIHSKNTEVVPLHLLWALSVDSTSILNQILNKLNISKEALELEIKSRI

SKLATSSNVNRENIRFSNELINSLENAKGLMSANGDSYLSVDTWLISESQKSPIKEILAQFLDLREFQKE

LESLRAGRKMDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIERLMQILIRKTKNNPILLGEPG

VGKTAIVEALAQRIIKKDVPKSLQNKKVIALDMSALIAGAKYRGEFEDRLKAVVNEVIKSENIILFIDEI

HTIVGAGATEGSMDAANILKPALARGELHTIGATTLKEYRKYFEKDAALQRRFQPVNVGEPSVNEALAML

RGIKEKLEIHHNVTINDSALVAAAKLSKRYITDRFLPDKAIDLIDEAAAELKMQIESEPSSLRKVRKDIE

TLEVENEALKMENDEKNQKRLDEIAKELANLKEKQNALNSQFENEKSVFDGISAKKKEIDLLKNEASLAK

ARGEFQKAAELEYGKIPSLEKEVEILEDKWKKMSENGVLLKNQVDEDLVAGILSKWTGISVQKMLTSEKQ

KFLEVEKHLKESVIGQDKALSALARAIKRNKAGLNADNKPIGSFLFLGPTGVGKTQSAKALAKFLFDDEK

AMIRFDMSEFMEKHSVSRLLGAPPGYIGHEEGGELTEAVRRKPYSVLLFDEVEKAHKDVFNVLLGILDDG

RATDSKGVTVDFKNTIIILTSNIASSAIMNLSGKEQEDAVKNELKNFFKPEFLNRLDDIITFNPLGKDEA

YEIVKLLFKDLQMSLENKGIKASLSENAALLIAKDGFDPDFGARPLRRAIYDLIEDKLSDMILADELHEN

DSIIIDAKDDEIIIKKA

>ETJ83188.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILKYIFSFFTLLFIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYAPYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAALGYFHKNLNELSLKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYNLGWISKADYDTAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPNIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYDEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGGKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGTIKDPQIIRQVQDK

TGKTIMEFNSNERKVSDEAQSFLVLDMMRNVVEKGTGRNARVKDIEIAGKTGTTNKSVDAWFCGLTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPNGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>ETJ83187.1 septum formation protein Maf [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>ETJ83186.1 alanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>ETJ83185.1 aminotransferase DegT [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFINLQAQYLAYKDEINAEIESVLSSSSFIGGAKLNEFEQNLAHFLGVKHAIGCSSGTSALYLALRALD

IGKDDEVIVPSFTFIATAEVVALVGAKPVFVDINLSNYNLDFEAVQKAITPKTKAVIAVSMFGQMSDLRA

LEEILKNKNITLIEDGAQSFGASFKGEKSCSIAKISCTSFFPSKPLGAYGDGGAIFCHDDEIAKKIRILL

NHGQTQRYKHEFIGINGRLDTLQAAILNVKLKYLEKELDKRQKLAQTYNANLKNCQIPQIDPNAFSAYAQ

YSVLVEDRASVLQKFEKANIPYAIHYPTPLHKQPCFSEFSNLELKNSEYASEHILSLPFSPFLSEEEQEQ

VICIFKD

>ETJ83184.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNRNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSLYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCIASIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFSEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>ETJ83183.1 ferrochelatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>ETJ83182.1 hypothetical protein X909\_08020, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIIDHSNTSDDNNSKTINTKKNTQKDNNNTQKNQPNLSNDNTLKTKTPNSNTPSLKNTSKEESIHKVSF

SFHITNKNINFKDLGLDEQVLQEALNDYKKESISVQDLQDIANIISYYVQVSGYPAATAYIPQQELKDQI

QINITLGVLGKYVVQNNSSVRDYAIESKLPNHKGEIITTKLVEDAVY

>ETJ83181.1 hypothetical protein X909\_08015 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRIILLSSLAILSLYASDTKDNKKTIQMLE

>ETJ83180.1 hypothetical protein X909\_08490 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGNKIFIQKIKMIKDKNHSFLSDEQIQNLADFINKGK

>ETJ83179.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

EVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISS

TVSDIANNILEDVKKKRF

>ETJ83178.1 transcriptional initiation protein Tat [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDDNDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDILYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDANTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSDENLEFNDAFKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGADTSKILDEGTLYVGQFNGNMG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQVLINTRLAASIVGATPMDRCEWIASHKQSGSKEVFATLTNN

KNRQEPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>ETJ83177.1 thioredoxin reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELTKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPSTVEKVKKNEKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTSVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>ETJ83176.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKYIELTSDNFAQAKEGVALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>ETJ83175.1 hypothetical protein X909\_08540 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>ETJ83174.1 homoserine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVAILGYGTVGSAVVKFLLENDKLIRARCGQSITPVIALARSPKKNALIPITHSVEEILNADVDVFVEL

MGGVDEAFKIVSEILKKKKAVVTANKAMLAYHRYELENLAKNLAFGYEASVAGGIPIIKVLKEGLSANNI

LAIKGILNGTSNYILSSMSQKNMSFEQALQIAQNLGYAEADPTFDIEGQDAAHKLLVLSSIAYNLKAKPE

DILIEGISEIGPEDMYFANEFEFTIKLLGIAKVRENKVELRVHPTMIDKEKMLAKVDGVMNAISINGDLL

GESLYYGVGAGGEATASAVISDLMDIARDQVKAPMLGFVNTLEYELLSKDEIYTKYYLRVKVEDKIGVLS

KITQLMSENNISIDSFLQKPKKNDENYSTLFFTTHLTYEKSIQNLLEILRKQDFIKTKPFMMRIE

>ETJ83173.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFDEIRFNTIERLPNYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLAYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPESKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQATRNIKKYLKE

>ETJ83172.1 hypothetical protein X909\_08525 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKKIIILTLWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYINNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTPKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>ETJ83171.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFVKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITPKLDAYSQKSSNAWPFLIVLIVLVIIGSGIYYFDTLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTPKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>ETJ83170.1 RNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIVYGKQIFFYILEYHKDCINELYLAKECDKITFSKIAKSGFKIKKLDFKTAQAYAKGGNHQGFLLDIKE

SSFANLNEIKKNDFIVMLYGISDVGNIGAITRTAYALGVGALIFIGEKLAMEGVIRTSSGAALDLPIVIS

NDALSVINELKQVGFYFYASDGSGKEIHSVKINNGKKVLVLGSEGFGLSSKIVKKCDECVGIAMKNNFDS

LNVSAAFAILCDRMLNA

>ETJ83169.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLYFIPTPIGNLSDISFRALELLKTCDLVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGKALVEFAQENNITYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNFPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFEKKFKGNAKELSEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKINGKNAKEIYQKLLLSQD

>ETJ83168.1 50S ribosomal protein L31 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>ETJ83167.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQFLYNKQAGEEFIQLQGENFNHLKVRRVKENSELNLRNLQDNFLYNYTITNLTRNSCTLKFLNKKSQNI

KQSELNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFIQKFPNAIMVDFQGKQQSHFDEKELYFIGPEGGFNNDERLLFNRKISLKSSNILKSQTAII

AIASKILL

>ETJ83166.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNVNIWVMIFSWILIFALAIFHFVCFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>ETJ83165.1 6-carboxy-5,6,7,8-tetrahydropterin synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMINGEQGVTLQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>ETJ83164.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLNA

NELLKRVIKLKQDFNPIVVITGGEPLIHYENPEFIKFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKEGV

>ETJ83163.1 molybdenum cofactor biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>ETJ83162.1 hypothetical protein X909\_08470 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSDDVLYLVFIIVLLIAMLAYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGVKDDSEEDEDYKTSL

LKEEIMIELDKQISSKITPVLRTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLRIGTGNVELVLKFKKLIK

>ETJ83161.1 hypothetical protein X909\_08465 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MELTLFKAGFEAHLECCEIENNRFLGEYLKLGAISQILKWKKLALRIDFDEGEKIIFDLLLSLKEDILRL

ENSLDKNKELIPLKQKGVIESLNFEYLNFLDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKP

EDKMAFDAFVVEIQRNMIRNKKGQE

>ETJ83160.1 prenyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNTFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVGARNFAMATNRLM

DEDIDKDNPRCANRPNVSGKIGRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGKIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHRIVHKNFAHINRAFFTLNGYLS

IIFFIFIWIDLLWN

>ETJ83159.1 tRNA delta(2)-isopentenylpyrophosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>ETJ83158.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>ETJ83157.1 hypothetical protein X909\_08440 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKVVLISALLGAFAANVFAANTPSDVNQTHTKAHHSKAKADKKHEAKTHKKTKEQTPAQ

>ETJ83156.1 superoxide dismutase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>ETJ83155.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDNSLSAYTQKYDKEGYGLQYPDGHVIRFYERILKYKLSKTSGKLLDFGCGNGVHSKYFKNITGGGGIEP

YGIDIVPSLKKVWEKDPCLDSKNFHIISPNSSFKKLFNTKMDFIFANQSLYYLTKQAFKEAVQEFYELCN

EGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLSGSSYIRFTKDIEELKEDFKPFKPLFWGDYE

LINLYNFEGSVEHFIYIGQK

>ETJ83154.1 saccharopine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNLLIIGAGGVSRVTTVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDADDSNAVVE

LIKKTEAQILLNVALPYQDLSLMDACIKARIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGVTNVFCAYAQQNLFDEISYIDILDCNAGDHGYAFATNFNPEINLREVSAKGRYWENGKWIETQPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEECYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPSLGE

>ETJ83153.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMFQ

NYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCQLLL

LDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSDQIAFLEKGKILAHANPKELYFKPD

FKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFCRLKLLYKNIIF

FILVSSSYDLEEKISFDIINF

>ETJ83152.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYKTLKYYKLGAILLALFLALPIFGIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISMGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLALFI

KKRKLNPIKQILSCIYCFMIAFVGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALVTALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYVIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRTSYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>ETJ83151.1 iron deficiency-induced protein A [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIFLMFLTAFSFLGASELNIYSARHYDADFEIIKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFITADISNLTEAKNLGLLSPVSSKYLEEFIPAHLRDKDKEWFAITKRARIIAYNKNANIDISKMKNYED

LARAEFKGEIVMRSATAPYSKTLLASIIANDGNKEAKAWAKGVLDNLATNPKGGDRDQARQVFAGEAKFA

VMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDAVKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>ETJ83150.1 hypothetical protein X909\_08405 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSMKKIILFLLCVGFAFACSEHSHTDFKDLNKTEYNSQ

>ETJ83149.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

TTLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>ETJ83148.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVVVALALVFLNGFFVLSEFSIVKVRRSKLEEMVKEKKAGAKKALEVTSRLDTYLSACQLGITLSSLALG

WIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGELVPKSIAIAVADKAVLFIARPLHW

FWILFLPCIKIFDFLAAISLKLFGIKPAKESELTHSEEEIKIIASESQKGGVLDEFETEIIRNAVDFSDT

VAKEIMTPRKDMICLNKQKSYEENMQIICEHKHTRFPYIDGSKDTILGMIHIRDIIQNELSHKSQNLDTF

VKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDIMEEIIGEIKSEHEEDSYKKLAENI

YEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDRIEDELCYYEVKKMDGNSIERVKVV

KKTNKDEE

>ETJ83147.1 serine/threonine protein phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRILLVLRGNYYAGQEEFIKNNKLQNYTLDLNALRLLSGSVKNIVSEYKILNVKNDEDLSKILLKLLEMR

MQKGEFCIINAYNETLKIYKDLAKQYRYKMYVIVFDSSLKQCQEKNLLEAKKNGYIIPYALLEKTQDLLK

KNPKKYPILDSSDWKKCLYQMPNLSKYKKIHHIGDLQGCYSVLKEYIKTIKEDEFYIFLGDYINRGIENG

KVIKFLLKICEKENVCLLEGNHERHLIKWANGELSNSKEFNENTLKDFRKEKLTPRDARKLYPHLKECLY

YKFQNKFIFCSHGGVNFIPSKPEKISFIPSHDFIYGVGGYEDSQKVANQFCNFTSDNLYQIFGHRNKEKL

PMKIAKRVFLCEGKIDGGGYLRVVTLDKKGFECIEIKNQIYKKK

>ETJ83146.1 PhnA domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTSKEGEIEARVDKFGVIVLKTEFLKKI

>ETJ83145.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEHRDKGRILGLAFAMITRILLLLSLFWVM

KLVTPLFSVLGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKLWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLVAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNG

>ETJ83144.1 phosphoribosylglycinamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLVKLAVLFSGNGGNLENILEKLHKKTIGENTYEVVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYNTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESDMKVAGVSVH

WVSEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>ETJ83143.1 kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKAIIDNIKILEQNAINKGLDELILMENAGLNLAKLIKKEAKKIRIQRKIRKVKTLFLLGGGNNASDGLV

ALRNLKHAKAYKIGFKENTLFKKQEQILQNYAFKFCKKEPNFKKFHIIVDCILGTGSNRCLDEKTSLIIQ

KVNQSKALKIACDIPTNLGFYPCFKADITFCMGALKEILLEDFAKEFVGRIKIANLGISSKKFYPNSQAF

LLEKKDLKTIDRKINANKGNFGHIYIVANASAGTLAGLGALNFGAGLVSLVAQKSFSPLLMLKEKIENNA

SAIALGMGLENLDFLKDEILQNTPLILDANCFLSEALLWYLNRKDIVITPHPKEFIKLYKMCFDENLDIE

TLQKNRFFYARKFSQNYDCVLVLKGANPIIAQKEKLFVVNLGNQALAKGGSGDVLSGMIAAHLGFGFSAL

EAAKNATLAHGLVAKKYKFNKNSFDALKLIKGLKCL

>ETJ83142.1 hypothetical protein X909\_08365 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

KDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>ETJ83141.1 Fis family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKLKCISFHEGLDIIEVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCDFAFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIKKAKIVVPKSIAQKA

SMIPNLEVYGLENLNEAIEFFKEKNYENFRFSHNHPLFASPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKTSISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNISKTH

ILEALSFRARN

>ETJ83140.1 peptide deformylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFNENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>ETJ83139.1 ATP-dependent Clp protease proteolytic subunit [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGV

ITSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQA

KEILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>ETJ83138.1 trigger factor [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>ETJ83137.1 GTP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVI

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>ETJ83136.1 ATP synthase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEKLRSKLGKENLSAIFGEITKISATSIEIRGLKTGVGDIVKLVSNENENLNTLAMVVEIKEQFSYLS

PFSFIEGFKIGDRAFISDAGMQIGVSDELLGRVVDPFMRPKDGKGAIEVSKYMPIMRAPIDAMKRGLIEE

VFPVGVKTIDALLTCGVGQKLGIFAGSGVGKSTLMGMIVKNSKAPIKVVALIGERGREIPEFIQKNLGGK

LDDTVIIVATSDDSALMRKYGAFCAMSVAEYFKEQGKDVLFIMDSVTRFAMAQREIGLALGEPPTTKGYP

PSVLSLLPQLMERTGKEEGKGTITAFFTVLVDGDDMSDPIADQSRSILDGHIVLSRELTDFGIYPPINIQ

NSASRVMSDIISPEHKLWARKFKRLNSLLKENEVLLRIGAYQKGSDKELDEAISKKEFMQKFLGQNPEES

FEFNQTLELLSQIDTPNTPLPPTQNINVGSASATLPNPNLK

>ETJ83135.1 amidophosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MCAVVGVINSKNASTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENVVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNSMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>ETJ83134.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>ETJ83133.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLALTFRPENFDDILGQYELIEIFKKFTALQKLPHSIFFGTAGSGKTTFARVVAKEFGLDFYEFDGGNF

KLEELRKILDNYKNSLYKPLIFIDEIHRLSKTQQEMLLIPMENYRLILIGASTENPYFVLSSGIRSRSML

FEFKSLGAKELETLLLRVQEKMKFSIDKEAKDFLLKSADARAMLNLLEFVLVLDEKHISLENLKKLRNTI

NSEGVSSKDTHYILASAMIKSLRGSDVDAAIYYLARLIDAGESADFIARRLVIFSSEDVGNADPNALNLA

VSTLDAVKNIGYPEARIILAQCVVYLASTIKSNASYKAINEALNYVKNNEALEIPNYLNNNHQEKQNYLY

PHDFGGWVEQKYLSKNLKFYHSKGLGEEAKLLDNLYKLKNHKA

>ETJ83132.1 hypothetical protein X909\_08315 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KINLKFNNYFFLNKIIKGNFTNPFDFLDKVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEALMNKNLEIKNIKIHFDMINFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSKSQQQINFDYLVLD

NNKINSFYSKNLVNFNEENSTINLNIQGKSNEIDIDLKSLLGQNLNFDKTKFNITINKFLNSNFNISHFI

QKNLDLEIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKENNNFFL

NLSYDSLANPQLKINGSEFSNMDLN

>ETJ83131.1 hypothetical protein X909\_08310 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSILFASALLASSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGIPATPNTQAIPVARKIEIQCYKKAY

>ETJ83130.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFFLLKKIENGLFYLNKILYFFLILFLLIGILGFFINSNPSNQIIKKPYLPFLEIGDLVFRAGIGSESFL

IENLSQSPYSHIAMVVKTSPTILIHATTDDDKNAKNQVILSSMDDFLKLSHKIAIKRLKFDEKTKQKIVA

KALEHLGRKFIISTDKDAFYCTTFLEQSINSITPFHLQYTLIKAPFNEGLYLFPQAFFENN

>ETJ83129.1 citrate transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEIFLALLGFFSLGLIVWLLLKDYTTPALAFISVSISVACILLILERLGFGVGVALGVKGGVFDIKTLVV

FIKDGVKSVTDTAALFVFSILFFSVLNASGFFTKILNAFLSKMKANVYQVCILTVFIAAAVHLDGSGAST

FLIVIPALLPIYERLGIRKTSMLLIITSAMGVMNVIPWGGPTLRAATNIGMDANLLWHHIIPIQIVGLVL

SLLLAIWIAKIEIKRGAGAGNLSGINLNIEKSEHHNEKWFWLNLLVAIGVIGLLISGIIPSYICFMIGLA

IILPLNYPNLKTAKKVLDRASGGAMLMYITLIGAGILIGVFDKSGIMEKMGVLILNFVPDYLGAYIPLMV

GILAVPMAIIFCTDSYFYGVMPIVLSVTKAFGAEPLTIAIIMVIARNCATFISPVVPATLLGCGLAEVNI

KDHIKRSFFYIWGISIICLIFAEVAGII

>ETJ83128.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVVISMAVLSLFKTSNILENNMVQT

QASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRTMVVESKLAYPEGRAAAE

ILKVANKDQSSKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGAG

YLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSAKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELLK

PVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVGT

LVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTSV

ILATAAISNDNLQDLKTGHLVGATPWKQQVALLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASSA

LAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILKGTQKMSLPPLAVGIGIYLPPAINIPL

VIGGILKYIVMQHLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENPL

ALNLANFHDSELFALIFFVGVVLYFIKRIVKKDA

>ETJ83127.1 UDP pyrophosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>ETJ83126.1 threonyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFRVESKIGEEDLVKIEKKMKELAEAKIEISKYEITKSEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHAPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLTIIEEAKKRDHR

KLGTELKLFTFDDEIGGGLPIWLSNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKIYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEIATKALKEALNEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTVQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVVKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVHF

>ETJ83125.1 translation initiation factor IF-3 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>ETJ83124.1 DNA modification methylase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKENPSFLKEQIITYLGNKRALLSFLNNGFKVAKKELGKDKFSFCDIFSGSGVVSRFAKAHSNYILANDL

EDYSKLINECYLANKDKDLLQNIKKYYKNLIQNLDFQKGFISELYAPKDDDDIKKNERVFYTFKNALYLD

TIRQKIENEIPKELRHFFIAPLIYEASVHSNTSGVFKGFYKGKDGIGKFGGEGQNALKRIKGEIELKIPI

FSNFSCEFEVMQKDANMLAKELDFFDVVYLDPPYNQHPYSSNYFMLNLIANYKKPEEISKISGIPKDWNR

STFNKSKFAQDALFELINDLKARVILLSYNCEGFVKKEIFLKRLSTLGKCRILEQKYNTFRASRNLKNRN

IHLHEQLYILVKN

>ETJ83123.1 hypothetical protein X909\_08265 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLKLSFCTLMAFGFSNYLFASAIDPKLFSRIS

>ETJ83122.1 hypothetical protein X909\_08260 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKQGSVLHFGGVTNRIVSSSDNFTYKKENVGFAVLKMSKISLNKSANLSKDLNLIEKNSGDGGDIYEYKD

PFWDSCQSGKCDYSKGKGKLFDSSRYEYFVREGSGIVALGFEDTNKVPIKIFDSNEINLGGFVSLTPKNT

EDKRFKLQFLNYTNDKRNSFTSSSISRDSGSGVYVYDKMDKNGI

>ETJ83121.1 hypothetical protein X909\_08255 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNSKDLYFSQNGSINLNSDVDLGASVLNLIKIQIGK

>ETJ83120.1 boa domain protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSANTDKALIFDGNIYNKEGVFRTENAKLNFQGHARIHAYVSKEQAKKLQEHGLSALTKPVSFTQEDWVF

VLKELNLEKKRVLFRA

>ETJ83119.1 hypothetical protein X909\_08245 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFEQKLQNTQNAKIEKVYFSVNLNLDHSDVTLQNTFFSGNIKGINDTQKNLAIKDSLLESHIQMSNLQV

EKSAIYRKVDAKKIKCK

>ETJ83118.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKKLSANNTIFKINVDFENSKADYINSKESTQGVNNTLVLIFLNNPSKKRV

>ETJ83117.1 hypothetical protein X909\_08235 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDLKGDIASLKRFSYIPLVVKTAFFIGSQN

>ETJ83116.1 hypothetical protein X909\_08230 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MYADLIKAGDQILEDQASQRRYEGKKIKECL

>ETJ83115.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MFINLGNDYKLNDKTRFSFEFEKTFFGDLNVDWSANANLRYSF

>ETJ83114.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>ETJ83113.1 N-acetyltransferase GCN5 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLGEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>ETJ83112.1 acetylglutamate kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>ETJ83111.1 acetylornithine aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLHTS

NLYYNENIAAAAKNLAKASALERVFFTNSGTESIEGVMKTARKYAFNKGIKGGQFIAFKHSFHGRTLGAL

SLTANEKYQKPFKPLISGVKFAKYNDISSVEKLVNEKTCAIILESVQGEGGINPANKDFYKALRRLCDEK

DILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYGGN

PLVCAGVNAVFEIFKEEKILENVNKLTPYLEQSLDELINEFDFCKKRKGLGFMQGLSLDKNVKVAKVIQK

CQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>ETJ83110.1 protein-L-isoaspartate O-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALDFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKAAQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDDGILVAPILHNGKQFITRLRKNGTNLQKEILEECLFVPIVDGKE

>ETJ83109.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIKFKNHSPKLGQNVFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRELNDEEISFLKQSALNYMDFKNEFLKDLQ

>ETJ83108.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAEDI

EFLRKQGIFDTEFLDFLANFKFKGEIYAMREGEVIFPNEPLLCIKATTIEAQLLETFLLLSLNHQSLIAT

KTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFEN

ELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQKGGVRIDSGNLLKLSLKIRQELDQAGL

QKCKIIVSNALDEWSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNEK

STLPHFKKLFRVYDKNTQKILFDELYVFDENPNQDENLERKELLKLVYKEKRLLKKSSLNTMQDYTKEQI

SKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>ETJ83107.1 ribonucleotide-diphosphate reductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQRKRIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVRKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>ETJ83106.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYDLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFARKDRLNLHDILTQSCIVTKA

>ETJ83105.1 orotate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>ETJ83104.1 preprotein translocase subunit SecG [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLGY

LYNKASKDSLAEKIKVENNNTTIPSAPIVPTTPNTNSIAPSAPQLPSDVNSSK

>ETJ83103.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWILFAVEI

GLLFALQWKKREAPLNLVLLFGFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>ETJ83102.1 carbonic anhydrase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>ETJ83101.1 mechanosensitive ion channel protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSSINLNSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLAFFISLRRFFANIVYFFLVQLFYR

NKNDVDDIKVIFIENIKKPVGFLLIVYAISLCLTIATYPAPLSVNLSNFFHIVYAVLIAWLILRMLDGYG

VVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVETGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYIKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>ETJ83100.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKARNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>ETJ83099.1 cysteine desulfarase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKVYLDNNATTMLDPNAYELMLPFLKDMYGNPNSLHQYGSATHPALREALDKLYTGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQVGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVPYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKRERRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGAEHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>ETJ83098.1 bacteriohemerythrin [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>ETJ83097.1 hypothetical protein X909\_08130 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYNINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLSRDL

ISKLSSGFSTDNGEFLSQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLRSNSIENFLDRRQKQANINKILNSYMSVMV

>ETJ83096.1 50S ribosomal protein L35 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>ETJ83095.1 50S ribosomal protein L20 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>ETJ83094.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEGAIKLVIQTIQSIAKSSNSSTQEMNFIRDKSNEFSKIISNLINSGKEISDKLEQRSNVSEDFEKNVNE

LKCYEDVLAKLNQC

>ETJ83093.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGIAKSLVAIFFYEVENFNDFKPRYLKTFIQKYSDFKYYYLNIRAQKLEITNEIKIK

>ETJ83092.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSQNFNPQSNITFTILDASLYDKTIHEFIDKKTSQSINAVEALCNYFNCTFEELKNKIQEYTFALKIGE

DYLISPMEINPDKTLFSYCDIESAQELCLLKKTNFIEAIKKIMKNFLLINQNH

>ETJ83091.1 hypothetical protein X909\_08100 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MMLFSEDMIENLCTNKIKLFSNIKDYTERKKLIEKEVLSINVPFEAHCINTLHYLIYDGLSQSESSLLEL

LYKHNPYPCALVGGGSSGNMDFSGTFIFYNGEILKNQALSLHIQFKPKISF

>ETJ83090.1 hypothetical protein X909\_08095 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLNNLLSKLPSKAKEN

LNKED

>ETJ83089.1 cysteine permease [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSLILPPNEFLDHYILNAEFHRFAGISKNAYKFWKNVEIGRYQGTRIIFLHRNCILEKHQQALRQCSGL

NGFVLASAFCSFTGLAPSHLVEKNNSSIYKLLELKEICGIKFVNLKKFYDFLGLNYHQHIYIEKCHFFSP

APFEKRIKITESMCVGYY

>ETJ83088.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSKTLNQKDIKVLGLSSLGGTLEFYDFIIFVFFANYISTNFFPKDLSSFWQMFNTYGIFAAGYLTRPLGG

VILAHFGDKFGRKRMFMISILLMVIPTFTLAFIPNYESIGFLCIVLLVFIRICQGIAIGGELPGAWVFVY

EHAPQGQKRTYLGILTASVVGGILLGSLVFLIMNKIYTQEELHEWAWRIPFFLGGIFGIISAYLRKFLRE

TPVFEQMKKDKALEKFPLKEVFKKAKMGIVLSMMITWVLTGCIVVMILLMPSYMAKILQINTSIQTYLQI

GGILLICLGCIISGILADKIGIIKSCVFFSVFFGIVSLLYFNTLYRQNADFNLVACLYLLVCFFSGVMNF

CPLIMSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFSLGIYVFFLAIIALLC

AFIFSYLNNTQRTYSQ

>ETJ83087.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAYEDEEDLNYDDYENEDEEYPQNHHKNHNYDDDDYEYDDDNNDDDFYEMD

>ETJ83086.1 molybdenum cofactor biosynthesis protein C [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLSHLDEKNHPKMVDVGDKNITSRIATASGMIYMSQEAFDVIKNNTAKKGPVLQTAIIAAIMGAKKTSE

IIPMCHPLMLSKVETDIMEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRS

>ETJ83085.1 hypothetical protein X909\_08070 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVNLCDLKKEPQINYPTFWDYKVIFEVHVRASEIFQEILGQREYKFEHSNSSASGKYQSYLLNVYVDSKK

DRLDIFDKLKAKAKFVL

>ETJ83084.1 hypothetical protein X909\_08065 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNTLIIFENSLSNLGKDEASDLLEDLSFNLAYKQISHNPHETKKVLNSLLVEFLTILKKLDFFDDENVT

KVIKALVKASIVDAQNSLYEYISEAELLNKQIENQKNLIKNQISDNFFEFENILQECSFCDEFSGGLNDA

ILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSIILNTAFEIA

NESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDVSLKSKELIGIEDDFIALLKKEIQLQNDP

CKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEIFELEKIAS

EKYKDLNSKKAKKLGVRLWEKAKKIVKK

>ETJ83083.1 exodeoxyribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKLLSWNVNGLRAICDKNALDWIAQEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRAGYSGVMS

LCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYADFLVYLDKLLKDGFEI

IICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFIDTFREINGEIKEKYSWWSYRMKARER

NVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>ETJ83082.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLRLTWFQFTFFNSLMIVLLNFNLFYFVYEKNTQNWFITFVFIVAYFALVHVICSLLFIKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVKDLLNLKLILFIVLALLLVFYVVKVKIDYYGSFKSH

IKIKIINIISGLIVVCAVLIPLSKTFLPFFRNYNEIRMYNTPFYQIYAVYRYYVRFVKAKPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGVCDRLAYKQKLSSDLDENLLIPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDEKLMNLAKEHKGLKLSQDNLFSTLLGYF

NVKTSVYEPEYDLLNPKLKANP

>ETJ83081.1 DeoR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKPKYHFLNNARYALEGLFALFKNEMAFRIELCIIIPAIVFSFFLKVSFLEHLLLISVLILILIVEALNS

AIEACVDLITNKWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>ETJ83080.1 ArsR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFENLIREILGKKRFELLKFLCENADENGFIMIKISDLEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGGKNDT

>ETJ83079.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MILKNPLDMHLHLRDNQMLELIAPLSVRDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLYSAKDEIFGIKLYPVGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKHFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLIITLDDVIGGKMNPHLFCKP

IAKRYEDKEALCELAFSGYEKVMFGSDSAPHPRDTKECCGCAAGIFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMAGEILKFQLKH

>ETJ83078.1 hypothetical protein X909\_08035 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVKNLIIKFGRLILDAIAAISFVVALLYSLFMMFSIGFLAGLLSLIVSFIALFLSFFVIYLVIDIRDALV

NKA

>ETJ83077.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLWDKKAKTYARYQNTLNTIQKQTFEYLQNLNISFQNKSIIDIGCGTGVWTLHLAKEAKEILALDSANT

MLEILQEDAKKLNLNNIKCENLSFETWMQNNPNVKFDLAFLSMSPALQNEKDYTNFLNLAKIKIYLGWAD

YRKSDFLDPIFKYFNTEFKGFYKKDLENYLLEKNIFFHKIVFDETRKVQRTKEEAIENALWHLSMNKITT

SKEAVSSFVENDIIETIESKIKLLIINNL

>ETJ83076.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

NDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>ETJ83075.1 hypothetical protein X909\_08595, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

LLFTQSYALPSGGKFTHGTSGSISSSNGTMNISGSKTNSVIQWGGGFNIASGETVNFKGSGYNYLNIVYG

SKSSHIDGKLEGGSNNIFLINPNGIVVGKGGSINANRVYLSTSSVSNEDMQRFANGVSDTDAIFGLGLSL

SPVIAKLNGNVINLGVIEGKSDVTLIGNEVAHHDENKNVGLFISDNPISFRANLLYFILKSNYSIASGSM

NYGIQKGSPVEQFVANNQVVYETNDKITSTDIDANVMNSIFNDLKFNSSVNIEDLSKFYKDGKLLTADDL

ASINQSMDFITALYGQTQDSNNATFANALKEVLGNSYGNLGKANQAIIKTKEILSQIPKITEQQKNIQKA

YDQAVDAYNEAVKKYNAALSGVTGSNASETITALKTVLDKAYNDLKNAEANLESTTASNNSSLKSSNETL

ASVSIDGYKLTVNGEYLADYKTVNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNNNPNDTIGQQEPDIAT

ALLMQTTDEDPNINEDDKQASIDEASTQLSGNTCIVSDNFKAGNPCSR

>ETJ83074.1 hypothetical protein X909\_08590 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKRIILLSSLAILSLYASDTKDNKNHTNVRIISL

>ETJ83073.1 flagellin, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FFSMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINKLMEELDNIANTTSFNGKQLLSGNFTNQEFQ

IGASSNQTVKATIGATQSSKIGVTRFETGAQSFTSGVVGLTIKNYNGIEDFKFDNVVISTSVGTGLGALA

EEINKSADKTGVRATYDVKTTGVYAIKEGTTSQEFAINGVTIGKIEYKDGDGNGSLISAINAVKDTTGVQ

ASKDENGKLVLTSADGRGIKITGDIGVGSGILANQKENYGRLSLVKNDGRDINISGTNLSAIGMGTTDMI

SQSSVSLRESKGQISATNADAMGFNSYKGGGKFVFTQNVSSISAFMSAQGSGFSRGSGFSVGSGKNLSVG

LSQGIQIISSAASMSNTYVVSAGSGFSSGSGNSQFAALKTTAANTTDETAGVKK

>ETJ83072.1 hypothetical protein X909\_08605, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FAYNNGEVNYNTLNIELKHPLEIANNFLGYNQHSFYGDFATKGVNHNTINIKNDLTTTDLSQSYKDALNI

VAARTLEGSADYNKVYINNSMSTLPVYIYTAKKNILNNQDFYPSSANNNKVSIKDFASFRNLTVLTEAKE

ASYNTINYNNVQSITDASNTDKGSKIIIRALDKANHNIIDIKNYSSNAADNAYLIMAYNEAAYNKIIIND

TLFGVASDKREGILSIIAGLSNNGHDNTLIINNLNLDEYKNNNSVFIAPSAITGLSEAKSYNNTLYRREF

KYI

>ETJ83071.1 hypothetical protein X908\_00765 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAFEQKLQNTQNAKIEKVYFSVNLNLDHSDVTLQNTFFSGNIKGINDTQKILRLKILCLSLIYK

>ETJ83070.1 hypothetical protein X908\_00220 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQISDLKKELILKKGILHFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQTYEQARKDIKKV

YH

>ETJ83069.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLWDKKAKTYARYQNTLNTIQKQTFEYLQNLNISFQNKSIIDIGCGTGVWTLHLAKEAKEILALDSANT

MLEILQEDAKKLNLNNIKCENLSFETWMQNNPNVKFDLAFLSMSPALQNEKDYTNFLNLAKIKIYLGWAD

YRKSDFLDPIFKYFNTEFKGFYKKDLENYLLEKNIFFHKIVFDETRKVQRTKEEAIENALWHLSMNKITT

SKEAVSSFVENDIIETIESKIKLLIINNL

>ETJ83068.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILKNPLDMHLHLRDNQMLELIAPLSVRDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLYSAKDEIFGIKLYPVGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKHFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLIITLDDVIGGKMNPHLFCKP

IAKRYEDKEALCELAFSGYEKVMFGSDSAPHPRDTKECCGCAAGIFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMAGEILKFQLKH

>ETJ83067.1 ArsR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFENLIREILGKKRFELLKFLCENADENGFIMIKISDLEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGGKNDT

>ETJ83066.1 DeoR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKPKYHFLNNARYALEGLFALFKNEMAFRIELCIIIPAIVFSFFLKVSFLEHLLLISVLILILIVEALNS

AIEACVDLITNKWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>ETJ83065.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLRLTWFQFTFFNSLMIVLLNFNLFYFVYEKNTQNWFITFVFIVAYFALVHVICSLLFIKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVKDLLNLKLILFIVLALLLVFYVVKVKIDYYGSFKSH

IKIKIINIISGLIVVCAVLIPLSKTFLPFFRNYNEIRMYNTPFYQIYAVYRYYVRFVKAKPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGVCDRLAYKQKLSSDLDENLLIPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDEKLMNLAKEHKGLKLSQDNLFSTLLGYF

NVKTSVYEPEYDLLNPKLKANP

>ETJ83064.1 exodeoxyribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLLSWNVNGLRAICDKNALDWIAQEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRAGYSGVMS

LCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYADFLVYLDKLLKDGFEI

IICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFIDTFREINGEIKEKYSWWSYRMKARER

NVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>ETJ83063.1 hypothetical protein X908\_00945 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNTLIIFENSLSNLGKDEASDLLEDLSFNLAYKQISHNPHETKKVLNSLLVEFLTILKKLDFFDDENVT

KVIKALVKASIVDAQNSLYEYISEAELLNKQIENQKNLIKNQISDNFFEFENILQECSFCDEFSGGLNDA

ILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSIILNTAFEIA

NESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDVSLKSKELIGIEDDFIALLKKEIQLQNDP

CKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEIFELEKIAS

EKYKDLNSKKAKKLGVRLWEKAKKIVKNNIPFFGILNIYFYTYRCVIRAKNIISYESVFKFIF

>ETJ83062.1 hypothetical protein X908\_00940 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVNLCDLKKEPQINYPTFWDYKVIFEVHVRASEIFQEILGQREYKFEHSNSSASGKYQSYLLNVYVDSKK

DRLDIFDKLKAKAKFVL

>ETJ83061.1 highly acidic protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYEDEEDLNYDDYENEDEEYPQNHHKNHNYDDDDYEYDDDNNDDDFYEMD

>ETJ83060.1 hypothetical protein X908\_00915 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLNNLLSKLPSKAKEN

LNKED

>ETJ83059.1 hypothetical protein X908\_00910 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMLFSEDMIENLCTNKIKLFSNIKDYTERKKLIEKEVLSINVPFEAHCINTLHYLIYDGLSQSESSLLEL

LYKHNPYPCALVGGGSSGNMDFSGTFIFYNGEILKNQALSLHIQFKPKISF

>ETJ83058.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSQNFNPQSNITFTILDASLYDKTIHEFIDKKTSQSINAVEALCNYFNCTFEELKNKIQEYTFALKIGE

DYLISPMEINPDKTLFSYCDIESAQELCLLKKTNFIEAIKKIMKNFLLINQNH

>ETJ83057.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGIAKSLVAIFFYEVENFNDFKPRYLKTFIQKYSDFKYYYLNIRAQKLEITNEIKIK

>ETJ83056.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEGAIKLVIQTIQSIAKSSNSSTQEMNFIRDKSNEFSKIISNLINSGKEISDKLEQRSNVSEDFEKNVNE

LKCYEDVLAKLNQC

>ETJ83055.1 50S ribosomal protein L20 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MARVKTGVVRRRRHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKRDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDAAAFAKIAEAAKKAL

>ETJ83054.1 50S ribosomal protein L35 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRDLRTAKYVHSTNVKAVEKMLGI

>ETJ83053.1 hypothetical protein X908\_00880 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYNINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLSRDL

ISKLSSGFSTDNGEFLSQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLRSNSIENFLDRRQKQANINKILNSYMSVMV

>ETJ83052.1 bacteriohemerythrin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTYNEKIISMNNDLLDHQHKELFEISKKLSLMNQRHVGTKELKIVLRELLIMINRHFSDEEAFMREIGYP

YINHHTRIHRKIILEIEEIIISEAKFVNIMTEKLNLVVQDFIFKHTAKEDSKIVKYYEEKFKK

>ETJ83051.1 cysteine desulfarase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVYLDNNATTMLDPNAYELMLPFLKDMYGNPNSLHQYGSATHPALREALDKLYTGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQVGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVPYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKRERRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGAEHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>ETJ83050.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKARNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>ETJ83049.1 mechanosensitive ion channel protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSSINLNSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLAFFISLRRFFANIVYFFLVQLFYR

NKNDVDDIKVIFIENIKKPVGFLLIVYAISLCLTIATYPAPLSVNLSNFFHIVYAVLIAWLILRMLDGYG

VVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVETGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYIKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>ETJ83048.1 carbonic anhydrase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>ETJ83047.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWILFAVEI

GLLFALQWKKREAPLNLVLLFGFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>ETJ83046.1 preprotein translocase subunit SecG [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLGY

LYNKASKDSLAEKIKVENNNTTIPSAPIVPTTPNTNSIAPSAPQLPSDVNSSK

>ETJ83045.1 ribosome-recycling factor [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKVNIHILDHITVDYYGTQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDTYTTKIDESVKSKESELLKV

>ETJ83044.1 orotate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLEQIYKDCGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCNELAKIIASYKIEFDSICSPALGG

ILAGYELARACSKRFIFTERVNKEMTLRRGFEVKKGEKFIICEDIITTGGSALESAKIIESLGGIVVGFA

ALANRGFCAVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>ETJ83043.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYDLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFARKDRLNLHDILTQSCIVTKA

>ETJ83042.1 ribonucleotide-diphosphate reductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQRKRIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVRKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>ETJ83041.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAEDI

EFLRKQGIFDTEFLDFLANFKFKGEIYAMREGEVIFPNEPLLCIKATTIEAQLLETFLLLSLNHQSLIAT

KTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFEN

ELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQKGGVRIDSGNLLKLSLKIRQELDQAGL

QKCKIIVSNALDEWSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNEK

STLPHFKKLFRVYDKNTQKILFDELYVFDENPNQDENLERKELLKLVYKEKRLLKKSSLNTMQDYTKEQI

SKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>ETJ83040.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIKFKNHSPKLGQNVFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRELNDEEISFLKQSALNYMDFKNEFLKDLQ

>ETJ83039.1 protein-L-isoaspartate O-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALDFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKAAQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDDGILVAPILHNGKQFITRLRKNGTNLQKEILEECLFVPIVDGKE

>ETJ83038.1 acetylornithine aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLHTS

NLYYNENIAAAAKNLAKASALERVFFTNSGTESIEGVMKTARKYAFNKGIKGGQFIAFKHSFHGRTLGAL

SLTANEKYQKPFKPLISGVKFAKYNDISSVEKLVNEKTCAIILESVQGEGGINPANKDFYKALRRLCDEK

DILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYGGN

PLVCAGVNAVFEIFKEEKILENVNKLTPYLEQSLDELINEFDFCKKRKGLGFMQGLSLDKNVKVAKVIQK

CQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>ETJ83037.1 acetylglutamate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDENFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>ETJ83036.1 N-acetyltransferase GCN5 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLGEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>ETJ83035.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPNTLLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAVYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFSSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYNLALHRHTP

EIEEHLSYAAKKKITLQFTPHLVSMQRGILISAYANLKEDLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSVDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>ETJ83034.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFINLGNDYKLNDKTRFSFEFEKTFFGDLNVDWSANANLRYSF

>ETJ83033.1 hypothetical protein X908\_00780 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYADLIKAGDQILEDQASQRRYEGKKIKECL

>ETJ83032.1 hypothetical protein X908\_00775 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDLKGDIASLKRFSYIPLVVKTAFFIGSQN

>ETJ83031.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNLQVEKSAIYRKVDAKKLSANNTIFKINVDFENSKADYINSKESTQGVNNTLVLIFLNNPSKKRV

>ETJ83030.1 boa domain protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSANTDKALIFDGNIYNKEGVFRTENAKLNFQGHARIHAYVSKEQAKKLQEHGLSALTKPVSFTQEDWVF

VLKELNLEKKRVLFRA

>ETJ83029.1 hypothetical protein X908\_00755 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNSKDLYFSQNGSINLNSDVDLGASVLNLIKIQIGK

>ETJ83028.1 hypothetical protein X908\_00750 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQGSVLHFGGVTNRIVSSSDNFTYKKENVGFAVLKMSKISLNKSANLSKDLNLIEKNSGDGGDIYEYKD

PFWDSCQSGKCDYSKGKGKLFDSSRYEYFVREGSGIVALGFEDTNKVPIKIFDSNEINLGGFVSLTPKNT

EDKRFKLQFLNYTNDKRNSFTSSSISRDSGSGVYVYDKMDKNGI

>ETJ83027.1 hypothetical protein X908\_00745 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLKLSFCTLMAFGFSNYLFASAIDPKLFSRIS

>ETJ83026.1 translation initiation factor IF-3 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVALLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>ETJ83025.1 threonyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFRVESKIGEEDLVKIEKKMKELAEAKIEISKYEITKSEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHAPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLTIIEEAKKRDHR

KLGTELKLFTFDDEIGGGLPIWLSNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKIYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEIATKALKEALNEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTVQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVVKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVHF

>ETJ83024.1 UDP pyrophosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENLYALILGIIEGLTEFLPISSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLAVGFFPTGVIGLFVAKYLNALFNGWVVVGMLIFGGVVFILIELAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFIVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>ETJ83023.1 peptide transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVVISMAVLSLFKTSNILENNMVQT

QASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRTMVVESKLAYPEGRAAAE

ILKVANKDQSSKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGAG

YLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSAKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELLK

PVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVGT

LVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTSV

ILATAAISNDNLQDLKTGHLVGATPWKQQVALLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASSA

LAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILKGTQKMSLPPLAVGIGIYLPPAINIPL

VIGGILKYIVMQHLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENPL

ALNLANFHDSELFALIFFVGVVLYFIKRIVKKDA

>ETJ83022.1 citrate transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEIFLALLGFFSLGLIVWLLLKDYTTPALAFISVSISVACILLILERLGFGVGVALGVKGGVFDIKTLVV

FIKDGVKSVTDTAALFVFSILFFSVLNASGFFTKILNAFLSKMKANVYQVCILTVFIAAAVHLDGSGAST

FLIVIPALLPIYERLGIRKTSMLLIITSAMGVMNVIPWGGPTLRAATNIGMDANLLWHHIIPIQIVGLVL

SLLLAIWIAKIEIKRGAGAGNLSGINLNIEKSEHHNEKWFWLNLLVAIGVIGLLISGIIPSYICFMIGLA

IILPLNYPNLKTAKKVLDRASGGAMLMYITLIGAGILIGVFDKSGIMEKMGVLILNFVPDYLGAYIPLMV

GILAVPMAIIFCTDSYFYGVMPIVLSVTKAFGAEPLTIAIIMVIARNCATFISPVVPATLLGCGLAEVNI

KDHIKRSFFYIWGISIICLIFAEVAGII

>ETJ83021.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFLLKKIENGLFYLNKILYFFLILFLLIGILGFFINSNPSNQIIKKPYLPFLEIGDLVFRAGIGSESFL

IENLSQSPYSHIAMVVKTSPTILIHATTDDDKNAKNQVILSSMDDFLKLSHKIAIKRLKFDEKTKQKIVA

KALEHLGRKFIISTDKDAFYCTTFLEQSINSITPFHLQYTLIKAPFNEGLYLFPQAFFENN

>ETJ83020.1 hypothetical protein X908\_00700 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSILFASALLASSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGIPATPNTQAIPVARKIEIQCYKKAY

>ETJ83019.1 hypothetical protein X908\_00695 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KINLKFNNYFFLNKIIKGNFTNPFDFLDKVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEALMNKNLEIKNIKIHFDMINFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSKSQQQINFDYLVLD

NNKINSFYSKNLVNFNEENSTINLNIQGKSNEIDIDLKSLLGQNLNFDKTKFNITINKFLNSNFNISHFI

QKNLDLEIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKENNNFFL

NLSYDSLANPQLKINGSEFSNMDLN

>ETJ83018.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKIGIYGAKGRMGKQIEECLKSETQARISILYDKGGNLGELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLVIGTTGLDEKILHLMQSASEVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFLGI

>ETJ83017.1 GTP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEIIGENPNREGLIKTPNRVFKTYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIEFYSLCEHHLLP

FFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENVDAKGVGVVIEARHMCVEMRG

VQKANSTTTTSALRGIFLKNEKTREEFFSLINSAKQVRF

>ETJ83016.1 trigger factor [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEVKAKQLDSVNATASVKIPSGMIKSEVENLAKKASKSVKMDGFRPGKVPVSAVLKRYERELTQDAEQNL

FKSAVNSALQELKKESKELVGEPYFEKFDRKDGEIIAELILSFKPEIKLDGYEKLIPEYQTPKVNKKEID

EKKDELLKRFSTPEAIKTKRALKEGDFAKFDFEGFVDDKAFEGGKAENYVLEIGSKQFIPGFEDGMVGMK

IGEEKDIKVTFPKEYGAAHLADKDAVFKVKLHEIQELKIPELDDEMLKKLLPGEEKASVEVLDEKLKEQI

KNEKLFKLVNDELKGKFADALIEKYNFDLPKGIVEQETDMQMRAAFNTFSEKEIEELKASKEKYQEKRDS

FKEEAQKSVKLTFIIDELAKLRKIEVNDQELIQAIYFEAYRYGMNPKEHLENYKKQGALPAVKMALIEEK

LFNDIFMPKTEKSEKASKKEKEDK

>ETJ83015.1 ATP-dependent Clp protease proteolytic subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGV

ITSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQA

KEILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSTQEAKEYGLIDKVLEKSFK

>ETJ83014.1 peptide deformylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFNENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>ETJ83013.1 Fis family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLKCISFHEGLDIIEVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCDFAFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIKKAKIVVPKSIAQKA

SMIPNLEVYGLENLNEAIEFFKEKNYENFRFSHNHPLFASPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKTSISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNISKTH

ILEALSFRARN

>ETJ83012.1 hypothetical protein X908\_00645 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

KDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>ETJ83011.1 phosphoribosylglycinamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVKLAVLFSGNGGNLENILEKLHKKTIGENTYEVVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYNTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESDMKVAGVSVH

WVSEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>ETJ83010.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEHRDKGRILGLAFAMITRILLLLSLFWVM

KLVTPLFSVLGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKLWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLVAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNG

>ETJ83009.1 PhnA domain protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTSKEGEIEARVDKFGVIVLKTEFLKKI

>ETJ83008.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVVVALALVFLNGFFVLSEFSIVKVRRSKLEEMVKEKKAGAKKALEVTSRLDTYLSACQLGITLSSLALG

WIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGELVPKSIAIAVADKAVLFIARPLHW

FWILFLPCIKIFDFLAAISLKLFGIKPAKESELTHSEEEIKIIASESQKGGVLDEFETEIIRNAVDFSDT

VAKEIMTPRKDMICLNKQKSYEENMQIICEHKHTRFPYIDGSKDTILGMIHIRDIIQNELSHKSQNLDTF

VKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDIMEEIIGEIKSEHEEDSYKKLAENI

YEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDRIEDELCYYEVKKMDGNSIERVKVV

KKTNKDEE

>ETJ83007.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

TTLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>ETJ83006.1 hypothetical protein X908\_00605 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSMKKIILFLLCVGFAFACSEHSHTDFKDLNKTEYNSQ

>ETJ83005.1 iron deficiency-induced protein A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLMFLTAFSFLGASELNIYSARHYDADFEIIKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFITADISNLTEAKNLGLLSPVSSKYLEEFIPAHLRDKDKEWFAITKRARIIAYNKNANIDISKMKNYED

LARAEFKGEIVMRSATAPYSKTLLASIIANDGNKEAKAWAKGVLDNLATNPKGGDRDQARQVFAGEAKFA

VMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDAVKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>ETJ83004.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYKTLKYYKLGAILLALFLALPIFGIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISMGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLALFI

KKRKLNPIKQILSCIYCFMIAFVGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALVTALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYVIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRTSYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>ETJ83003.1 saccharopine dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNLLIIGAGGVSRVTTVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDADDSNAVVE

LIKKTEAQILLNVALPYQDLSLMDACIKARIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGVTNVFCAYAQQNLFDEISYIDILDCNAGDHGYAFATNFNPEINLREVSAKGRYWENGKWIETQPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEECYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPSLGE

>ETJ83002.1 hypothetical protein X908\_00580 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFIFANQSLYYLTKQAFKEAVQEFYELCNEGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLS

GSSYIRFTKDIEELKEDFKPFKPLFWGDYELINLYNFEGSVEHFIYIGQK

>ETJ83001.1 superoxide dismutase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFELRKLPYDTNAFGDFLSAETFSYHHGKHHNTYVTNLNNLIKDTEFAGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSIDANLQAALEKEFGSLENFKAEFIKGATGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPAYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYANELHPVK

>ETJ83000.1 hypothetical protein X908\_00565 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVVLISALLGAFAANVFAANTPSDVNQTHTKAHHSKAKADKKHEAKTHKKTKEQTPAQ

>ETJ82999.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFYSLIFLSCALGMDAFAVSLCKGFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCDSNANQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>ETJ82998.1 tRNA delta(2)-isopentenylpyrophosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFEIALIGTTASGKTYIANTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELSWDKEILKKRIQTRTKEMLDNGLLDEA

KILFSKFDHKLKALNSIGLKECKEYLDGEISFKELENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAI

LRMKFSIEK

>ETJ82997.1 prenyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNTFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVGARNFAMATNRLM

DEDIDKDNPRCANRPNVSGKIGRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGKIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHRIVHKNFAHINRAFFTLNGYLS

IIFFIFIWIDLLWN

>ETJ82996.1 hypothetical protein X908\_00540 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MELTLFKAGFEAHLECCEIENNRFLGEYLKLGAISQILKWKKLALRIDFDEGEKIIFDLLLSLKEDILRL

ENSLDKNKELIPLKQKGVIESLNFEYLNFLDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKP

EDKMAFDAFVVEIQRNMIRNKKGQE

>ETJ82995.1 hypothetical protein X908\_00535 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDDVLYLVFIIVLLIAMLAYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGVKDDSEEDEDYKTSL

LKEEIMIELDKQISSKITPVLRTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLRIGTGNVELVLKFKKLIK

>ETJ82994.1 molybdenum cofactor biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIDQFGRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKAAIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEALSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>ETJ82993.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLNA

NELLKRVIKLKQDFNPIVVITGGEPLIHYENPEFIKFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKEGV

>ETJ82992.1 6-carboxy-5,6,7,8-tetrahydropterin synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMINGEQGVTLQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>ETJ82991.1 cytochrome CBB3 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKAKILIALSFFLLVLSACSNDEKNISKTQNTDQEVVQIEQNDEKTELSDSNLPLPVDDEAQSSDDEHE

ANPTIINSLYKQKCATCHGEKGELKPKNSTAIKTLGNKIFIQKIKMIKDKNHSFLSDEQIQNLADFINKG

K

>ETJ82990.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNVNIWVMIFSWILIFALAIFHFVCFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>ETJ82989.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQFLYNKQAGEEFIQLQGENFNHLKVRRVKENSELNLRNLQDNFLYNYTITNLTRNSCTLKFLNKKSQNI

KQSELNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFIQKFPNAIMVDFQGKQQSHFDEKELYFIGPEGGFNNDERLLFNRKISLKSSNILKSQTAII

AIASKILL

>ETJ82988.1 50S ribosomal protein L31 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKEIHPEYVECKVSCACGNTFTTKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAMQ

>ETJ82987.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLYFIPTPIGNLSDISFRALELLKTCDLVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGKALVEFAQENNITYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNFPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFEKKFKGNAKELSEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKINGKNAKEIYQKLLLSQD

>ETJ82986.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFVKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITPKLDAYSQKSSNAWPFLIVLIVLVIIGSGIYYFDTLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTPKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>ETJ82985.1 hypothetical protein X908\_00480 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVKKIIILTLWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYINNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTPKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>ETJ82984.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDEIRFNTIERLPNYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLAYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPESKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQATRNIKKYLKE

>ETJ82983.1 hypothetical protein X908\_00465 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEVKFTQNDYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>ETJ82982.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKYIELTSDNFAQAKEGVALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>ETJ82981.1 thioredoxin reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELTKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPSTVEKVKKNEKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTSVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>ETJ82980.1 transcriptional initiation protein Tat [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDDNDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDILYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDANTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSDENLEFNDAFKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGADTSKILDEGTLYVGQFNGNMG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQVLINTRLAASIVGATPMDRCEWIASHKQSGSKEVFATLTNN

KNRQEPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>ETJ82979.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSVKLKVSLIANLIAVVCLIILGVVTFIFVKQAIFHEVVNAEINYVKTAKNSIESFKARNSLALESLAK

SILKHPIEQLDSQDALMHYVGKDLKNFRDAGRFLAVYIAQPNGELVVSDPDSDAKNLDFGTYGKADNYDA

RTREYYIEAVKTNKLYITPSYIDVTTNLPCFTYSIPLYKDGKFIGVLAVDILAADLQAEFENLPGRTFVF

DEENKVFVSTDKALLQKGYDISAIANLAKTKEDLEPFEYTRPKDGNERFAVCTKVSGIYTACVGEPIEQI

EAPVYKIAFIQTAIVIFTSIISVILLYFIVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFG

QISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDVLQARV

GSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLT

TSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAG

EHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNV

EIANESAIISSTVSDIANNILEDVKKKRF

>ETJ82978.1 cation ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLFFEISNLNYAYNNEIILKNINLSYDNKDFLSIIGPNGVGKSTLVKLILGLLKSKNEIHFKALQKKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTASVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEKNCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>ETJ82977.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMALVDS

VVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMVLASFLSMIFCVLGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>ETJ82976.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIVLSSDDKKRFKKYLVDFFHNAYNGNKLSSKDEVVNFNFFKKYDFYVDLSYGKGNVAKIPWIIFIRMDT

QEYKASYGVYVYCGIKRENREIVVCIGESEDKTVNYLARNKVDEYNAQFNHQVYNYSNLSNDINLIVDKI

ILNMQWFKELPLNEIQDININTLESKSLEVENNVQQISSKMENKNMPLNQILYGSPGTGKTYHTIDKALE

ILGKNLESRDDKKAKFDEYVKKGQIVFTTFHQSYGYEEFVEGIKPRIDSKENSKEIEYKIKDGIFKELCE

KALDNYENSILNADELNKKIELKEKVENFLNWLLETNEPIGKTKGGNFFVVEIDNKTIVIYSEGVERFDG

IFNLNLSIFMELLKCKDEFNNATEMFKKVFNRDYADRTHTYYFNLVKKFKAYEEKQLAAKIENNKNNDNS

LKPYIIIIDEINRGNLSKIFGELITLIEPSKRIGEKEELKVTLPYSGEKFGVPKNVYIIGTMNTADRSIT

SLDTALRRRFEFVEMMPDVSKLSIDCEGINLQELLKAINTRIEYLLDREKTIGHAFFISVENLESLKKVF

KNRIIPLLQEYFYNDYALIDAVLNKNGMLEISVENKDYLKNMTEFIESDKIVYKFSDSNNWNKDTFIKIY

K

>ETJ82975.1 ribosome maturation protein RimP [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLEALCKEAELSFYDDELVSENGRKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKFEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFIIW

>ETJ82974.1 ribosome-binding factor A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNPNEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNVHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>ETJ82973.1 hypothetical protein X908\_00400 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKHIPIRMCIVCKNRFEQNMLFRFKVVLGDIVPKAEHGRSGYLCQNCIEREDKVLQKAFSKICKNLNTK

ITQQGLKEIFLNGKD

>ETJ82972.1 homoserine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKERILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKIQTKFKDFRVQ

YLEFDDNGFEIC

>ETJ82971.1 glycoprotease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVGLSTLSIVKNIPL

FAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLDAI

>ETJ82970.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQLTLAKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAEVKELDAPKKIMVIKKPVEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYISYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>ETJ82969.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKRKGKTYLSVLILVLIAILIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDESSIKNVQIIL

HKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKAEDANLDKVYIETNKGKIFKVTPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYRVSNINLTDKFLDGKIENLANQYAPKDNNLNRYEKFKFVNETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGLDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWVENNIYNVLNDGKKIILGKN

>ETJ82968.1 prephenate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIAIIGLGLMGGSLGLCLKENKLISCVYGMDLSKENEKDALRLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNVTIIELGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>ETJ82967.1 inositol monophosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KASPKQMILDPLDGSSNFVSKIPFYGTSIALMEKDQAKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFSKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFVLILGKTRIFDTAAALAIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>ETJ82966.1 acetyl-CoA carboxylase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFADIFSKIRRQQPSIKEAPNHWVKCQSCHALMYYKEIESCFNVCPKCNYHMRISADERIKLLSDEGSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINSLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSAALKLLSKEKLPYISILTNPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>ETJ82965.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQVNIFCIQKSDEFKTWSEKYSKLISKYATLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDEKGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>ETJ82964.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKHEN

>ETJ82963.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKLFLLASFIYIALIFAFAWHLELGSYTLNISTYTFELPIMIWLVIPLFIYMILAVLHIAFYGFLRYL

KFKHFFKDAAKFEAYTQDLLLEKDLKTTFQTKEFRAVAQLFKTIKTHEKIPHSNKINEILDLIDGLNKNE

FFNLSKFKLENNNVLYLQNEKNHLKNDANYAYNKLKNLNEIKDEFEEIAFNTLIEKASYEQIKNVKIPKK

PSEVLTLIKRFKEGNLELSVAEYEVLLSHNTLSEKDYLNAAKLSTKLLNPDAILGIFNKIKNEKSEALRA

HLYLLAEFGLLDELREQIHNDDKKFNDFKAFLVLREKNIKIDLNQLIQ

>ETJ82962.1 tRNA-dihydrouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNEMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFISIHGRTRKQLYSGKADYESIASAKASVSIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDEVNRINDAKIMQEKIESFF

>ETJ82961.1 hypothetical protein X908\_00335 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFK

IHKSTLDEIERFNQHNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLND

GCNQNKEYIVTHIFNAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGS

YSKEALFMSFLKSYSPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQD

GWLDAGIYAMEKGVAWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>ETJ82960.1 3-deoxy-manno-octulosonate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKDHESG

TDRINEACKKLALKDDEIIINVQADEPFIECENLLKFKEFASSCLDKKAFMASCYKKITQEEAMDPNLVK

VLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAIENGKK

IKMLEISTTSMGIDTKEDYERALKIYLEK

>ETJ82959.1 threonine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKDEILALFDLKNSDEKVFEARNIKKEILDWMQK

>ETJ82958.1 tetraacyldisaccharide 4'-kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEEKNYELWLDNYFFKPNFWQKCLTFVLFPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENIKGVIVSEDRVKGIE

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFTLPSGAYRLPKIYEKRADFIALEGRDFVRYSF

VKENPKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>ETJ82957.1 beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKKHVKKPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDDFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIVGKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQVHLPSWLRYF

>ETJ82956.1 hypothetical protein X908\_00305 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MELDQILLYAFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWTLNFIFLLALLSVFLGWKLKLD

>ETJ82955.1 7-alpha-hydroxysteroid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNAQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDVDFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRVNVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>ETJ82954.1 dihydrodipicolinate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPVGTTGESATLTHEEHRTCIEIAVETC

KGTKVKVLAGAGSNATHEAVGLAKFAKEHGADGILSVVPYYNKPTQQGLYEHYKAIAQSVDIPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYLAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>ETJ82953.1 protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELMENLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWSIEDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKTIPKIHTKEPKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKLNLINDYYAYVNDCIDDNLFIFICNCNPNVNAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDSNG

>ETJ82952.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYEMIKPLLFKLNPEHVHTLVEYSLRALSASFPGSLSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKNLRELQNDDFLNTLLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGADGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISEAVGVN

LK

>ETJ82951.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLKVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLAVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDALCKLNLKSARIDALTSPLMDMIGSVGVAVVIIVGGREVINGSMSVG

SFISFVSALFAIYTPLKRLSSLYGKLQGAVAASERTFYLLDLEPQIKGGSKELKNIEKISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGTSGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHAKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANACEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLIFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>ETJ82950.1 cysteinyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRLLDSVTKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLAQGNRVKFARNYTDIDDKI

LKKMTQSGQTLEEITEFYIKSYEEDMRALNVLDPDFKLRATHYITAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSNRNLEENISRLSNEVQKRNESDFVLWKFDENFYENEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKFYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNV

SKALALLDDFISSANLELDKESKNKILKQNIKEALSELAKIFGFGFMDTTLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLNSKKITLLDTPNGTIWEKINA

>ETJ82949.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MALDEKIIAYTENPARELLSVASRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNIPLNKTIQITVAQGIDPIESQDESLILAYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVKDAVNSGVGIECEELNVVGSVGSNTQLNAAKMKIE

GTTHSKAKIQAKQAYIKTHRGFVEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDSNYDEEFAILGEQISKLNHKMNKIRQYILSSKNGILSVEKKITEL

KNQGQNVPIQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYEEKDIAWLSASKE

>ETJ82948.1 prevent-host-death protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>ETJ82947.1 2-hydroxy-6-oxohepta-2,4-dienoate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAQTQLSYKNKTYQISYEILGDLTLPQILILHGWGANKELMKQSFYPFLKDFCQIYMDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNVCFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLSPMMYETFKNVVDEDFGEIFAKQKAKSLVFWGKSDEATPLYCGEKMHQLL

KNSTFYPLEGDHFFFLKYSAFIAQKIKEI

>ETJ82946.1 UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHTPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFTILALRFSFLFNLFSLPFALLSLKIYEFFTNLY

YKKQAKAKLRANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINNNLSQDTQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNVHLEYFKSVENILSTKLEALNSKRLEKAFLHSSTQKEG

DKLISLYDEKLSLIHSSLEGLEFKVDIENKSYDFKSQILGDFNAQNLCVCILCAHYLGIKLEKIQKQVLN

INSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYKLCKSYKGRKVLVSPGIVEVSEEENIKLAKIINECF

DLAIISAQINAEIFKKELKIKTIILKEKSQLVQTLAKETKHGDLILFSNDAPSFM

>ETJ82945.1 signal transduction histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDELEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>ETJ82944.1 formyltetrahydrofolate deformylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISVLKICTKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMLGQEAL

IELCEKRKKDIVVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGANPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVLPVNHEFTWQDMQQAGRNIEKDVLSKALDLVFEDRIFIHNNKTIIF

>ETJ82943.1 multifunctional Cca protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGAQGFGKSFFVCKFKNYDLALARTENKISYGHK

GFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLKDLGAGFLRHIDKQSFQEDSLRVLRAVVFA

SRFNFKITSESLKLMQSMDITDLSKDRINAELCKFFKSPRLDVGYRYLQELGLEKQIFGFESVFMSLEFQ

NLLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEYLKYANQAFYLDDISDFELAKIAFEMPLKE

WLGLWSKKRIEQAKRLGLYENKFESKILAKDFINAGFCGKILGLKLQEARENELKEYIKGLAK

>ETJ82942.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELPPMEFVCEELDTPQDLEDKISMAKFEE

EQKIQNNIEISTQENKEFKKEEPFLQSEILNPSVMTEVQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKK

>ETJ82941.1 hypothetical protein X908\_00195 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDEE

INEFKRWLIKI

>ETJ82940.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSYKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGAIETIEKNENAENVRYYGSVFNQFS

>ETJ82939.1 nitrate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKKLVLLGSAAVVFFAACAMNSGVSSEQIGLRKASLENENKVNLVEANFTTLQPGESTRFERSYENAPP

LIPHAIEDLLPITKDNNMCLSCHDKAIAADAGATPLPASHYYDFRHNKATGDMISDSRFNCTQCHVPQSD

AKPLVGNSFKPEFKNEQLKSRSNLIDVINEGVK

>ETJ82938.1 quinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKYLIARRIVQLGILALFSFKATDFILQGNLSSSRLFNTIPLSDPFAVLQIILASWSIDLVALIGALIIF

FIYGLLLGRIFCSWVCPVNLITDFAAFVRNKLTLNNKFLILPKNLRYFVLVLVLVLSFVFSLPVFESFSY

IGMIHRGIIFATSSWIFVAFILFCIDTFLSPRAICSHFCPLGAFYAFISRFALLKIKHDSDKCTKCYECI

RICPEKQVLWMVGKESTSVKSGECIRCARCIEVCNDDALNFNIFDLRNK

>ETJ82937.1 thiol peroxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSTVNFKGNPVKLKGNSVEVGADAPKVNLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>ETJ82936.1 ATP-dependent DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVAPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIALKQASELKTLLKSVYEKRTFRHLSDIKPYQSSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYVDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDVKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLTFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSSMLALVVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKNVNLQNHQKRNYQLGLFADLEELASETRFKFESEFDAHPILKLSKINDLCARNLE

KIYLFLKKAMEIKHSLTLVNLICENSFYREICEELATKRATNKAGQVDLLRKSENLEKIETKFNVLKELA

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGELTID

>ETJ82935.1 hypothetical protein X908\_00140 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKNYTLNTNTYTEQKSYTNNYDNSYSPSIQTNNSSSDI

NINNNTIQKQETNPLDENQSLNNDTFNTSISENNQSLNNDTNTSNNINTNENKQILDTDKEKLKQENKQA

KIEALKKEISKQQKILERERAVKKELQSNKSNKNKYLNTAREYLSIGKNSRLEPELSTENMKVYVLDGKF

LSQYRINLLKDMLSVIQDNAKDYYLSVFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISLDRLSPYLNNP

KELNEHVAREEILERLKLQIKKDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>ETJ82934.1 valyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMRTLGITPAWSRL

RFTMDEGLVNAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSDEFLV

VATTRPETFFGDTAVMVHPDDERYTKFVDKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLDFISVFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFIEKIEEHNNQIGYCYRCNNIVEP

YISKQWFVKKEIAQESIEKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSEKDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTELKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNDKKIKDEIKAYMNFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENVDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>ETJ82933.1 methionine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKIKNLKKYYGKELVINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQ

KKSKELRVLRKDIGMIFQNFALMERKNVFENVAMPLRTHYTQCKFHAKLFNKEYMSEKEIAQKVNSLLEI

VGLDHKNKSYPRELSGGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLV

THEMDVVKDIAQKALLLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVI

THMARTLNIDFNIVWGKIEKLNGKALGNLVININENDKDKVLDYIEKSGVLWEVAS

>ETJ82932.1 methionine ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNEENISIISAFFGRIFQFFNEFSWQDIKEVSLSSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLAIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGISIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>ETJ82931.1 methionine ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKSLFIASILTLSLNANALETITVAATPVPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGVKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDIIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDPKIKALTQVLQSDKIKQFIIEKYNGSVLPAF

>ETJ82930.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLFKIIILACILNLSSLFAQNITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKVIDEILRSDKFKAIINEHYKDILIPAF

>ETJ82929.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNIKKIFLSVLFTISLSFGADKTIIIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLNSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKKLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFMEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYKGSVIPTF

>ETJ82928.1 flagellar basal body P-ring biosynthesis protein FlgA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKTTSLPKDFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKNVFFRYFIQANLEVLKSERAIKRGDKLGAFDYKSVLIDFDKVPLNALTLDDVDN

LVAKSNINKNAILRANMFKTTALIRRNDPIIGVLSEANVDVLIELVALQSANMGERIRAKNKEGKVMQGI

VVGKNRMIIQ

>ETJ82927.1 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGAKLSFKAENQANLEEICQENFKYTHFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIHAGFADTLLMRAAAVALKERKKLILGVREMPFSTLNLEHMLKLSQ

IGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHNLYEKWQNF

>ETJ82926.1 phosphopantetheine adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>ETJ82925.1 thymidylate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPINKRAELLLFLADRAQHF

EEILKINQNKLIISDRSFISGMAYAKDFENDLLFALNSFALENFFPQKIIFLKGDANLIQERLSQKELDS

IEKRGIEYFLSVQDKLEKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>ETJ82924.1 aspartate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFDTPQIIKNAAINAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

EGLEENGFKITAEQLKKAITAKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTQITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGECDKDIEKMRQAFEKRRNLALDILKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYATSDELIKKGLERIANFIKNYK

>ETJ82923.1 cupin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIIQWSRAEFSPKEVKINVLIDNEKGKEIQILLAKDSVMKEHKAPFAIHIQVLSGKIWFEVEKEKFELN

ALDMISLEANVAHSLGGLENSIIRLSLNKSDSIQRVNAVLKKP

>ETJ82922.1 zn-dependent hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFVSVDFFKTFDISNSERLKAKKVQGKKYEIFLNENEQSLITPKVSFKEILRYYYLYPKNAIPSFKLPFF

KPDLSDFNTPHITWLGHSSLFISFKEYKILIDPVFNTHASPISFINKAFKNAPVYNINDFNEIFAVIITH

SHFDHLDAKSIKALKEKARFFITPLKVGNYLKSYGVSEKKIIELDWWSGVEFDDLKIIATPAQHSSSRGD

GKNKTLWASFVMEFLSVDKRVFFSADGGYFTHFKKIGEYFGSFDLACLESGQFNIAWPYSHSFPEQILKE

AKDLNAKAVMPIHWGRFLAGTHAWNEVVKFLYENLDLPLITPKMGEAYEIGAKFKQDFWWKEG

>ETJ82921.1 DEAD/DEAH box helicase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNYKEKDLENFIESYLLENHAYIKRTNENYDKNLCLDVELFENFLQATQSVALEELKKRCGQNYKKELF

DRIFSQIKAKGIVKALQGYVEIKGIKIYLAFAKPNTNANEESVKKYEQNTLSIIRQLYYSTQNKNSLDIV

IFLNGLPLITIELKNHFTGQNVFHAIKQYKKDRNPKEAIFNYTIVHFALDHDLCYMSTKLDQDATTFLPF

NLGLNNGSGKIGLANGAGNPPSDGIKTAYLWEKIFKKDTLLNLFFNFVQVVKKKNEEIIIFPRYHQFDVV

EKLLAHAKENGTGQRYLIQHSAGSGKSNSISWLAHNLVSLHRLEKNIFDSIIVVTDRKVLDSQIRENVKS

FSQTKNLVEAITHGSKQLKNALEEGKKIIITTIQKFPFILDEIKTLKSKTFAIIIDEAHSSQSGSNAQKM

AEAIRDKSGDESQNLDDEILEIIKNKKLQSNASYFAFTATPKPKTLEMFGMPCDVNGEQRFIPFHLYSMK

QAIEEGFILDVLKGYTTYKSYYKIISCTNDNPKYDKKRANTKLKAYVQNNIKTIEQKSQIMCEHFFQNSF

KKINGKAKAMIVTSSRENAVKYYLVFREYLRKNYPHFKAIVAFSGEVNLEGEIYSESGLNGFAENVLKDE

FKKDEYRFLIVAEKYQTGFDEPLLHTMYVDKALSGVSAVQTLSRLNRTCKNKENTFVLDFVNTHEDIAKS

FSVFYEQTYLSEATDDNRIFDLKANLNEYEIYTQEEIDDFANAILRKEKENIIHAKLDIMLDRFNQKSDD

EKLDFYNKAKTYLKEYSFLAQILPYEDIELEKLYILLKKLASKIILPKSEDLAKGILDNVDFDSYRLQLD

KTQDIVLQGNGELKPSFADGSSKSVEAELEELSNIIKDFNNKYANIDFNESDKIAKILYDIKDDIAKNER

IRETFSKSDIQNSRIEFDALLKDKIQDILELNLELFKQFNQNIEFKDKIANTMFNMVCNDF

>ETJ82920.1 hypothetical protein X908\_00050 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENKLFEYDEVLKQTDEKRHLLLGNGFSMAYDKNRFSFTSLLQSAIDNGIIEENSNIHKIFKNNNTSDFE

EVVKILENTSKILKIYTQDERLCEQLSNDSEKLKNFLVDIITNNHPNKIQNQKKLNSTAQFIENYQKIFT

LNYDLLLYWVIHKIMQNRKDFKDGFGGNDGEYVVFDESKKDITCFYLHGALHIFDNGNKIIKKTYSRTKK

PLKEQITEELNNNRYPVFVSEGTSEQKKAKIIHNAYLNHCYKSLSYIDGDLIVFGTMLKSNDEHIQDAIL

KSKVKNIYFGVSSLEKGKNDLNSFIEKNNNLEKNKKQIFFYDYKSVKIW

>ETJ82919.1 hypothetical protein X908\_00045 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKYTKPCFKGAAFNCPHCGVYSRMEWDGFYNGYNNRIKQVEGYSFSESTCYHCERSVIWYLKDENPKIF

FPREVAIPPEENMPENVKEIYEEASLVLGDSPRASCALLRLALQELMKYLKENIQIYNGLKNRNINEDIK

EIINIGNFYQEQKESLEEAMNSIRLIGNKASHPSELDINDNSEIANILFEMINFIVGEIITKPKEREERL

NKLKSAIGEKQ

>ETJ82918.1 DNA methylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEQSQFQPIVNFIWSVADDLLRDVYVKGKYRDVILPMTIIRRIDAVLEPTKDKVLKTYNTYKDEFENLES

LLGGKQGNKLGFFNYSRFNLQTLLNDPKNIRINFENYLDCFSENIKDIILKFKFKNQLDTLEESNILFGV

IERFCSPKVNFGIEDILDEKGNVIHKGLSNLGMGYVFEELIRKFNEENNEEAGEHFTPREIIELMTHLVF

LPVKEQIKQGTWLIYDNACGSGGMLTESKEFITDPEGLIQSKANIYLYGQEINPETYAICKADMLIKGED

PDHIKFGSTLSNDQQNLQFDFMLSNPPYGKSWENDQKILGVEKKGSNSTCNDPRFSVGITSKSDGQMMFL

LNMLSKMKFDTPLGSRIASVHNGSSLFNSDSGMVAIRKHIIENDYLEAIVALPTNMFYNTGIPTFIWIIT

NKKPEHKKGKVQLINATNEEYFSKMKKSLGSKQNEMTKEHIEKITKLFLENASNKDCKILDNEDFGYTKI

IIEKPKSIEALKDDEKFAKLKDKDKILEKLEQLEQNLQDFKNREEFIKFLGVKLKKSEENLIIDSDKTNN

TEKIPLKTNIQNYYDTEVKPYVANSWIAWESASVGYEILFNKYFYIYTPPRKLEEINSELEKLEKEVQDL

LKEIMQ

>ETJ82917.1 molecular chaperone DnaK [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKNRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEIVMVGGSTRVPLVQEEVKKA

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGRA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDARNAADSLAHQVEKSLSELGEKVAAADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>ETJ82916.1 heat shock protein GrpE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKNYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKHGVALIKEEKEFDPNLHEAMF

HVDSENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>ETJ82915.1 HrcA family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNLNLCIPASTIRVYLKRLSDEGLITQLHISSGRIPTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLDLNAKFIVLDFKEEELVLKYE

KEAWNFLQSLIGLDLFSIEKIALRVHFMDLVEKIASLRQNLICYRSNEERAYQIYQNDEFVKLLDCGVHR

YFKESLEFEPLFKEGFMGLKVDAQFLGEDVNIILAGSVYTDYKKILQYIKEAA

>ETJ82914.1 Cj81-040 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFIKFLNHFQPISKSSQQASVYKSFKLNLKPKILNEKDENSSSFQDQKTDVAQTMLQRLEDEKVFNQKV

SDKVKKAERGMTTIYFRDPITNKLVRSALSSTAINKMGIEFDKEDMTKRLDGSYILSGKAENFVAGWYAD

IAYTRAYMASDRNNDGYLEDYELEDTKSGFVAQETNLGLFVQSYTQLNGSVDTLFGFEKDFREMRPDDTK

DTDYAGRTIGLELDKMIRKDGDFDGELSFSETGMQAVKTKAPNSGWTESVGILTLTKFDQTNTMEIKDIL

DKLGKGVKYDDLSEDEKSLLKMQLSDKIFDEVEDKETGNKKLVFNLDKFKIFYEGFVDLFKQRSAKMLGL

KPEDATKLNYDNLGEIVNEMKQTYFDTNSTSYGKIADLIKIWA

>ETJ82913.1 hypothetical protein X909\_08630 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLRVLNNILTIFNNHKPNITNINDLNFKHYLLTPDMREDEFLSFKARHGVNTADRSIKNS

>ETJ82912.1 hypothetical protein X909\_08625 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLPFLITVKTDHADASYNKLILEQGELSSVFYLKPKDTHIKTLVILKAINA

>ETJ82911.1 hypothetical protein X909\_08620 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNFLMSSTFTHYSNASYNQTILQKDAHISMGVENTYDLALNGSPYLIGAITTYGDSTNNSLNIKASSSVE

FFTSLPKKDKNGNNTFDERITHLVGGLAYQGNVKNNKIFIKDANMIIHGPSKAYASLAAAHISAGYIIKT

FKPVKTF

>ETJ82910.1 hypothetical protein X909\_08615 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNHDKQPLAYNSVLFADFLGGKTEQGQALDNTINIKRY

>ETJ82909.1 membrane protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FFXXSLNAYLQRSDEAQTNYGISYTTFLGNLKITPSYSKGNYALGGIWREFDFIGTSENLGVDLKYPLWI

TTYNSFYLTSSYYHKKLSDSKFDILTFDKSSDTISFGIEGVYNGISNDSFSYSANVSYGNVKDEGMTIVG

IGTSKVGGVEFGKFAKLNVNLNNAYFFNDTFTHLFSLNYQQVINGATLDSSETISLGGPYGVRAYNNGDG

EGDNAVVASFGLRMATPLKDFYITPFYDIGYSWYENDSYTNYMDAYGLQLLYNKTGNFYVKLDLARALKK

>ETJ82908.1 hypothetical protein X909\_08645 [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGLALAKLLIEARVNGGRNYNGPKVAKFLVG

>ETJ82907.1 chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQ

>ETJ82906.1 hypothetical protein X908\_01385 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQFTFEQIFIAMLLTLFAGFSTAIGSIIAFFSRKDDLRVLSLGLGFSAGVMIYISFMEILPTALKDFKNH

YDSHWAELLGLACFLVEF

>ETJ82905.1 hypothetical protein X908\_01380 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFGGILISLLIDKLIPEDVNPHEPKEDLSELKICPLPQKGQNPPKFHPGEKLHQINTKALKRTGIFTAL

AIAIHNFPEGFATFISSLDNLTLGIAIAIAVAIHNIPEGLAVSLPIYHATGDKKKAFIYSALSGFAEPLG

AFVGALILLPFIGDLTLAISFAVIAGIMVFISLDELLPAAKTYDKAHDSLYGLIAGMAIMALSLNLLGQ

>ETJ82904.1 trimethylamine N-oxide reductase I catalytic subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLDRRKFLKIGASLSALPLIPSLSAGKTVEASKVSLGLVKNGEVITAAHWGILKLTIKDGKIVKSEPWEK

VTKMDNPLQHYTADMVYKSRVKYPYVRKSYLENPDNPKPELRGKDEFVRVSYDEAIKLIAKELKKTRDSK

GASAIFGGSYGWKSSGNMQNSRILLHRFLNVTGGFVGATGDYSTGASQVIMPYVVGSIEVYEQQTSWENI

LSDSKYVVIWGADPLSTLRIAWTSNEQRGLAYFEKLKNSKIKVICIDPVKTTTAKFLNAKWIAPRPNTDV

ALMMGMASHLIAKKKVNYEFLDTYTTGFDKFKDYLEGKEDGVKKDTKWASKICGIDEKTIKNLAETFYDN

PTMIMSGWGMQRAHHGEQPHWMLVTLCAMLGQIGTKGGGFGLSYHYSNGGVPTCKGGVIGGMTAGSLGIW

KNGKFKGLSKAEASSEGAEWLQNAASYSFPVARIADALLHPGKTIDHNGAKITYPDIDFIYWVGGNPLVH

HQDTNTNVKAWRKPRTVVVNEIYWTPTAKMADIIMPVTSSYERDDITMTGDYSNMHIAPMKQAVEPVGES

KDDYVIFSDICKIYGKDVFNAYTENGKKAKDFIKEYYNSALKQTQSFGEAFATPMPSFEEFWAKNEPITF

EPTAESLEWTRFSEFIEDPILNALGTDSGLIEIYSETIKNYNYDDCKAHPTWFEPIEWLGNASKEAPFHL

LTNHPRDRLHSQLCHTSLRDTYAIKDREPILINSKDAKKLGIKNGDVVRVFNKRGEVLAGAVVSDEIMQG

VVRLCEGAWYDPNENGLCKCGNANVLTMDIPTSKLANGNISHTGLVNIEKFKGELPKLTAFSAPKGAN

>ETJ82903.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFISFVVLATCLWAKNIAYTDEVVSLYLNKDDTKVIGRLLPTNPFEVLKSENNKVLLKIDGYVNPKA

LSVIYFNDSQRIIVAAFSKNTKLNFSQRVAGKDGKWDKVSLEIWADKKEFAKDNKEMLNRAKELFVNNCG

ICHAIHKEKEFTANAWPAIFRSMADRTGIDKKDRWLVIEYLQKNAKDFKTK

>ETJ82902.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHFTIFHIIAFIILLICFALICILIFLKVKQKEMALISYTIATIFTALLIYSIFLTINQFTTQADLSKLT

YTRDLRHESVIVSGKVQNLTKFEIRKCYLMLSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>ETJ82901.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKLREIVLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIAALFIIAFDIIICFLVYIYGYKLID

NEVRTRKTAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKS

REIKDLKKNATQVQRIAFENFNYENNYTIRLVSECF

>ETJ82900.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIILFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSSGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIAAQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSAANMN

>ETJ82899.1 branched-chain amino acid aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISADKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEDHTKRLLESAKITLLNC

PFSQKDLENAQIELLKANNFQSNVYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLKIAHDLGITVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARIIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>ETJ82898.1 tautomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPLVNIKLAKPSLSKEQKAELIADITELLSTKYNKSKERVVVVLEDVENYDIGFGGESVEAIKAKANK

>ETJ82897.1 bacterioferritin comigratory protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSANYDKFGGKNAVIIGIS

PDSVTSHEKFISKFNLKHILLSDSEKEVAKAYRAWGLKKNYGKEYEGIIRSTFVIDETGKIAQIYSNVRV

KDHALKVLESL

>ETJ82896.1 hypothetical protein X908\_01335 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSSVNKQILPASIEARIALYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPVKSHILFYSHFKNAYTRFSLDEESLKQNLKEGFYRS

TKDEMVFVEFWRFNAFFKNKWKNFEDFLKKPLSIQAEVRWRNQVFGAYNLSPVIILEEIFPSRYEVIAKS

EIYHDNQEVLAKI

>ETJ82895.1 3-hydroxyacyl-ACP dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVLGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>ETJ82894.1 UDP-N-acetylglucosamine acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVVIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNNIILANNATLAG

HVELGDFTVVGGLTPIHQFVKVGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGTRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENVKKMCHFILETKRGIPVYRGKNNA

>ETJ82893.1 ATP-dependent protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHNTEFKDITPKELKAYL

DRYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAIC

DATSLTEAGYVGEDVENILTRLLQAADGDVQRAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLK

IIEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEK

IEPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIA

QLALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>ETJ82892.1 rod shape-determining protein Mbl [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGFDKYLSEIVRLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>ETJ82891.1 hypothetical protein X908\_01310 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNKIFYVLVLAFLVFISFYYGGLIKQNVLRVNDFVIGNFYNIKDYLGKKFQNTLIKQIKFSN

>ETJ82890.1 rod shape-determining protein MreC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDYKKLWLDWSKIPVGKNRGLIYQGYAAGIAINKNGRAMALLQGDDQCVFSVYIGKSKAPGLIQGEDGR

IVVKFIPKWAKINTGDEILTSGLDNIFFSDIPVGIVNRVNDEDMYQSVEVKPYVKISIPAYLYVVDNL

>ETJ82889.1 carbamoyl phosphate synthase large subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGTQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAADEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQVMRNASFAILREIGVDTGGS

NVQFAINSKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFGAKIIGTSARVIDVAEDRKKFAEFITKLGINQPKNSTATSVE

EAVLKASDIGYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKSLQNM

>ETJ82888.1 carbamoyl-phosphate synthase large subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIRFKIPYF

TNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKS

>ETJ82887.1 Sua5 YciO YrdC YwlC family protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNHSAKFCELKSLARIPKSFKNLVRRSKKTTFIYPNNQAIRIVKECKHANFLSKNGYFYSSSANKHGKE

FDEEWARSVADIILDEKFFENIPSKILKLSKNKMIKIR

>ETJ82886.1 transaldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNFSLWCDFIENSFLDNEFLNLLSHGINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAISKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKAKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDDLPKDYYIKELLFENSVNTAPLDAIEAFKGKMHFKKP

LMNFEIYTELNQIISQSEREKACNDLLSDGLEQFCIAFEDILKAL

>ETJ82885.1 phosphoserine phosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKLCVFDFDATLMDGETIDILATAHGKGNQTSEITRHAMAGELDFFESLQKRVSLLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGISLGFANYLHHKNDILTGLVGGEMMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLTMFNESGLKIAFCAKEILRSKADICIDIKDLKEIIKVI

>ETJ82884.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>ETJ82883.1 chemotaxis protein A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLDLLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGNDTAIGMDIEPICARLTAISEGESPVAATDSN

EKSTPQAEPEAPKQETTTPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNTSSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGVEDPATRAANGKPEKGIVQLKAYNEGNHIVVEITDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLVEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>ETJ82882.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDENIVKTGSNEMELVDFRIFKQGHDKVYEGIYGVNVSKVREIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

EKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>ETJ82881.1 hypothetical protein X908\_01260 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGDIFDLLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPIKLNLHTS

KGNNLVLNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITCNFISNKILQNQNKKTFFIK

>ETJ82880.1 transcription elongation factor GreA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIAELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIIDLDTEKESKYTLVGICEGDLDKGYISIASPIAKAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>ETJ82879.1 ipid-A-disaccharide synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTFLVCALEPSANLHLKEVLKAYKKDFGEFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELINLSFAQKINGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDEIKEFKNQEDINHTFSKKDDEKTIAFLPGSRRSEIRRLMPIFKE

LSQKFKGEKILCVPSFNLEKLEIYGDISEFKIESNTPKVLKKADFAFICSGTATLEAALVGTPFVLTYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>ETJ82878.1 ABC transporter ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIITLFGACALAFSMANADVNLYGPGGPHTALKDIASKYSEKTGVKVNVNFGPQATWFEKAKKDADIL

FGASDQSALAIASDFGKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSG

TGVWEDMIGRTQDIKTIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLV

VYRTFNVVAKEGASKETQDFIAYLSSKEAKEIFKKYGWRE

>ETJ82877.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRTWSLSGVFIGYMGYYLVRNNITLANWYPKKERGIYTAVWNISHNIGGGIVAPIVSLSGFALAALLGVS

MANFNETYWHMNHFYTPAACAVIISLYALYAVKGNPKNEGLVDITEINEMRGIKTEEIKAIETPNLSSFE

IFYHYVLKNKNAWYVAWMDTFVYMVRFGLISWLPIYLLETKGFNKEQIGIAFWLFEWAAIPSTLLAGYIS

DKIFKGYRMPPAIGAIVIIFFMIIGYFTSNNLYMVIFFAAMAGCLVYIPQFLASMQTMEVVPAFAVESCV

GLHGFMSYVVGASLGTKA

>ETJ82876.1 acid phosphatase SurE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEILITNDDGYESEGLKKLIKMLTKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLALHALYKKRLPDLVISGINKGANVGEDITYSGTCAGAMEAVLQGIPAIALSQFYKKSEKELDY

KNALQITKKSFKIFLIKVFLWKKKNF

>ETJ82875.1 hypothetical protein X908\_01230 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAYSNVNPRGVEYYWLAAANLDFEDEKNSDIALLKKGY

ATITPIMLDLTAYERMKKVKKWLKANDE

>ETJ82874.1 MoeB/ThiF family protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDRFTRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFQNLTLIDADKFEITNQNRQIHSEN

LGEEKAKVFARIYNVKGIVSKIDNEFLANFDLSEFDLIIDAIDDIPAKVALANLIDFKRQIFISSTGGAR

KLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLAL

RKVLAR

>ETJ82873.1 aspartate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNITLLKSKIHRANVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNVNNGARFETYTIATQEEGVVCL

NGAAARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGAIF

>ETJ82872.1 pantoate--beta-alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQVITSVKEAKQIVKDWKSHQLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDAAQMYLKNFSTYVDMNTITDKLCGAKRLGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVQEGEKDTSKIIQAMKDILEKEKLIKIDYIELVDFNTMENIKNIADNVLGAVAAFVGKTRLIDNFLVQG

LK

>ETJ82871.1 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKSMISFLEKKAKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMTVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQSSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNMLGGYRVQGKDLQSAQKIIDDAKAVQDAGACMLVVECVPVKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQVGVEKYRDEVKSGIFPSQEHSFDYLDDELLDKLY

>ETJ82870.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKIDIKLPINTAKGKKQLELNTCLKANEITAIFGESGAGKTTLLKIIAGLIKPEFGRIEVGDELWLDTQ

KNINLAIQKRKIGFVFQDYALFPNMSVKENISYAATSKQKVEELLSLMNLENLAKIYPKNLSGGQAQRVA

LARALAREPQILLLDEPLSALDFKMRSFLQDELVKILQHFKITTLLVSHDLAEIYKLSHRILELSDGKII

KDARTNEFFTSSNLSAKLRLSATLLEIKKSDILMIFTLLLNQDIVKITLSEEEFLRTYKNVKIGDTLLLS

IKAFNPIIVGKLDKQK

>ETJ82869.1 molybdenum ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDNDFLQTLYLTFKLAFITTFILFFIGVFLAYLLSFVKFPFKSLVQTFVALPLVLPPSVLGFYLLISFSQ

NSFLGQFLKEYFNLSLVFSFEGLVFASLIFSLPFMVNPLQSAFSSINQNLLDASYALGKGKIYTLFRVIL

PNSKVGIFSACAMSFAHTIGEFGVVMMIGGHKKGETLVASIAIYDELEVLNYTLAHQYAFTLFAISFAIL

LSLYFVNKKIAL

>ETJ82868.1 molybdenum-pterin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNILNGKIIELLNEGEIVIVKISIKEHIFKVLMLDLHSLQDLKIGTKIQVLFKEHELGFALPHSILSVEN

SFLARIKSIKKGKILYHIFFDFEGDEISSIIAKEKALELKLEEGQEWLCFVKENDIILKAIYG

>ETJ82867.1 molybdate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLVLIFIVLFLSLNLNAQNLSVFVASSASKAMEEVKNEFLKSHPNDNIDLVFGASGKYYQLLKQGREF

DLFFSADTKYAQAIYEDQNALDKPKVYVLGILALYSLDESLLEGGIEKLKDKANKIHHLSLANPKVAPYG

VAAKEVLENLKLDKLFEDKIVLGENISVPVLHVDSNNADLGIVAYSLVSSINHPKGKAILIDQKYFTPLK

QSYVITRYAKDKKLAFEFSDFISSQKAKEIFKKYGFDTP

>ETJ82866.1 biotin biosynthesis protein BioC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFLKAKDYQKHAKVQDLMGLKLCEILKNLEISHFKKVFEFGCGRGEFSDKLSKIITFDEYLKNDILDYP

DNLNVEIFDMNTLATQILSKQKFDLITSNASLQWLDLKQVLPTLANMLNEKGILLLSTFGKMNLKEIKQS

TGLGLKYFSTKELEQIFKPYFSDIKITEEIVNLEFQNALEVFKHLKLSGVNSLGFYRLNKQFLKEFEEKF

QNKLTYHPIFILCKKDTK

>ETJ82865.1 hypothetical protein X908\_01180 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKISNLIQNENSQELILVFGGFASHPSHFAHLKSDKNVVLVYDYENLDFKFDLKSFSKITLIAFSMGVCV

ASRVLKDIEFSQKIAINGTPFGIDKLKGIHPAIFAKQIKKFDLTAFKKSLFKERKNEAKNFIFKDEKDLK

TELEKLFEFASKECNENFIWDKIYSSNNDEIFPQNALKNTFSKLIFLNEPHFAFFHFKTWDEI

>ETJ82864.1 8-amino-7-oxononanoate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLENILEALEKNHNLRKLTSLKHEGNFVFKEGKKLLNLAGNDYLNLSSCKSLKDEFLDNVKEQDLFFSS

SSSRSLSGNFTIYEELESFLKSKFKEKEILHFNSGYHLNISCIAALVSIPNTLFLADKFIHASMIDGLKL

GGAKFFRFHHNDMNHLENLIQKHYDHYENIIILSEALFSMDGDFSDFNTLIAFKEKYPKIKLYIDEAHSV

GCFDEEGLGLVKALNLEEKVDFIVFTFGKALASMGACMICNNLYKSFFINKARAFIYSTALPPINIAWTK

FIFEKMSELKEKREKLQIIGNFFKNQLIEKNHQILGDAYIISLVLGENQKTIELAKKLETNGIFAPAIKE

PTVPKNTARIRFSLHAGLSKEDLKKVIELL

>ETJ82863.1 adenosylmethionine-8-amino-7-oxononanoate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNEILKKLDLEHIWHPCTQMKDHENLPLIPIKRAKGVWLYDFDDKAYMDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGVKKSKF

LSLSNSYHGETLGALSVGDVALYKDTYKPLLLECLSTPVPQSKDYTQELEILKDILEKNASEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHKFGVQVIFDEIAVGFGRTGTLFALHQCKQSPDFICLSKGITGGFMP

LSVVLTRDEIYNAFYDTYESQKAFLHSHSYTGNTLACAAANAVLDIFEDENILVKNQILSEFIKKEFSRL

EKFDFLGNFRTCGMISAFDILSTKYKRVGLFVFQKALEKGLLLRPLANTIYFMPPYIITKEQIVYVLESL

EQIFKEF

>ETJ82862.1 ATP-dependent dethiobiotin synthetase BioD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIYVSGIHTDVGKTHFSAAFCANFNYDYFKLIQAGTPTDSEFIAKFSPKTKIFKEGIFLQTPASPHLGK

IKEKLDYKALDIILPKSKNLLIELAGGLFSPMDENYTMIDFVNIFKHPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVMMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>ETJ82861.1 quaternary ammonium transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEWFYLFLATACEIFGVVIMKELISTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIITCTAGLKFLS

>ETJ82860.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWQYILTAIGVCISFTCFLKACERLEVSITYSVFVGI

GTIGVVLNEMFIFNEAVSIIKLVLIAILLLSIIALKWVSKEA

>ETJ82859.1 50S ribosomal protein L25 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDSVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>ETJ82858.1 peptidyl-tRNA hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDTLCGNDYERVRIGVGKGENVISHVLG

KFKSEEEITLSKVLEHTKKALLELIENDDLSAISSKYSLKA

>ETJ82857.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFLSFSAVPYVLPISLIFALVVSLISMIRANEFVSLYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFA

YANDYKRNILKNGTIMNQSGEVFLKFNNNFVYISKINNGQNSAQNIKIFNINDLNLSSFVSAKNAHFEGE

SWILRDGNITLLPKNYELANDGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNT

DTLKINLYKFVFTPFFAPFLMLIMYYFFPVIARFFNLAIVTFVTFVVTLMIWGVLFLLTRLSENSVIASE

IGIVVPIIILGCLSAYMYYKHR

>ETJ82856.1 diaminopimelate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAGAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIARKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIHEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECESDLYDYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFENQIALEEKFLKA

>ETJ82855.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYVIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLKPCKVAAFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFVDFASMIELARREVRFIAMHETS

IYKKDGRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRKQNSKIDFEDIKIISDDFRGDLLK

AKELGMKTLLVLSGKISDTKGLDTDLLDGVYPSVFEFLKELKCQI

>ETJ82854.1 chloride transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGAIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALANIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFAGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>ETJ82853.1 histidinol-phosphate aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFNEFLNHLSNYEPGKDIEVIAKEYGVKEVIKLASNENPFGTPPKAIECLRQNANKAHLYPDDSMIELK

STLAQKYKVQNENIIIGAGSDQVIEFAIHAKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHDLN

EFKKLYEAHKDEIKLIFLCLPNNPLGECLDASEVTKFIKGVDEDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFDNVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVAAINDDEFAKKTLE

NNFSQMELYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENEKFFTEFDKILR

>ETJ82852.1 flagellar M-ring protein FliF [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFKNMLHQIGQLYQNLTRKQRIVIAASIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQVYRQRMFIASEGLIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRVQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

TKKQFATVLRTSAAVTIDGKYQDVVDENGDVKSEYVPLTKEELASVESIVKNTINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAARKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>ETJ82851.1 flagellar motor switch protein FliG [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQNLQNKVLFKQAMRMK

>ETJ82850.1 flagellar assembly protein FliH [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEENQAITPTQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELENAKEKFAKEGYEKAKEEFQKE

LSDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGELKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>ETJ82849.1 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMAYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

DSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAMQKPCVIHTQTIKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKSDTKKSATEIFSKNLLDLASKYENIVGVTALCQVEQVLISL

>ETJ82848.1 hypothetical protein X908\_01095 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPSGTGLDKLIEKYPNRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVV

FAMDRAGIVGEDGETHQGVFDLSFLAPLPNFTLLAPRDEQMMQNIMEYAYLHQGPIAFRYPRGSFILDKE

FNPCEIKLGKAQWLVKNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKS

KIWFIFSENVKIGGIESLINNFLQKYDLHVKVVSFEYEDKFIEHGKTSEVEKNLEKDVNSLLTKVLKFYH

>ETJ82847.1 peroxide stress regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYTEIKKEYPSISLATVYKNLNTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCAKCGGIEDLSFKDAKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>ETJ82846.1 hypothetical protein X908\_01085 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVYEIQKNFLLSDCTLLGNLKKDNIPFRNSKFETFYTQITSNHSVKFQSFCNEFYKITKFNNSILEQNQE

EKISKKKFEKARKKIIGKSIKKERFEFKFCSLKSYIDMYEEPKICILKIFFPTLDSSNEFKIPKDFKIQK

ELHHDLNSKHIVLYGFEYQNFDIEKYFKIIEKNQNFSLDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLE

RKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILALKFKDITKKTQDILASENSNQDLLLFLSDEKIQ

DLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKIILFRKNILKNFDLELFENSFFELAIFLEYFYRF

LEIKNLNKLYEKYCKDRDKNIFSKIINNKNKFCKLLKKSSKNLKIYKG

>ETJ82845.1 ubiquinone/menaquinone biosynthesis methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKQEKIIEMFNQIAPTYDKANRILSFGADVAWRKKACQRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMEKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILVVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKEEFILELK

NAGFEILDYKSFSFGVSSMFIAKKL

>ETJ82844.1 exodeoxyribonuclease VII large subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTPTELNLKAKALLETHFDDIVLSGEISKITLHGSGHWYFDLKDERSSIACAMFKGANLKVGFKPAVGNF

LELCGSVSLYPESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALKKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVADFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLMQLWNYKI

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQTSQKEAKIL

>ETJ82843.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKINFSAGPSTLPLEILEQAQKELCDYQGRGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYANTGVWTKKAIKEAQILGVNVKTVASSEESNFNHIPRVEFRDNADY

AYICSNNTIYGTQYQNYPKTKTPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKAAMLYECIDLSNGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQIKTLCEFM

KEFQGKYA

>ETJ82842.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKRFDECDRMSQIIVFDKYFKTAGQVAFEPSGDIKKQTKEALAELDALFEKIGASKGDLIQIQIWLANM

QDFDAMNEIYDAWIKNYPKPVRACVGSALAEGYLVEIQAFGKLREN

>ETJ82841.1 3-oxoacyl-ACP synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKASLKSIASYIPEKILSNADLEKMVDTTDEWITRRTGIKERRIASENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYNDRSICILFGDGAGAGVVSLDNENHILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>ETJ82840.1 phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNENATDALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVNKT

LLLDVGANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGN

AEGRDIFNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKQSFISKIGALLMKPSFKKLKKHTDWQ

EYGGAPLLGVNGCVIISHGKSDSRAIKNAIFQAINFSQSHINKLIENELGKYNA

>ETJ82839.1 hypothetical protein X908\_01050 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKN

>ETJ82838.1 50S ribosomal protein L32 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAVPKRRVSKTRAAKRRTHYKVSLPMPIKDKDGSYKMPHRANPTTKEY

>ETJ82837.1 hypothetical protein X908\_01040 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAIMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEVYLSDYFYCINCNN

>ETJ82836.1 nucleoside diphosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIC

>ETJ82835.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>ETJ82834.1 peroxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKLTLKAWLNILAKTKLNFNFLV

>ETJ82833.1 flagellar biosynthesis protein FlhB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIMIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVTQLAWLRDRAIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVAGADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKETKTFKVL

>ETJ82832.1 flagellar motor protein MotB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QEKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQVALNLPSKVEFERGSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKAP

>ETJ82831.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVDGKSFEEIHESMEIQTEQLEEHYKECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGIS

GAFTATVTGIFGAYALFAPWGKKLKANGMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPRIS

QFDKG

>ETJ82830.1 hypothetical protein X908\_01005 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKL

>ETJ82829.1 DNA polymerase I [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMISGFANFIYSLKNEYKSDYIVFALDSKGKTFRSEIDP

NYKQNRTPPPPELLEQIPICIKMIEKMGFISVSQEGYEADDIIASFVKTCENRDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEAACLEKYGVKPNQIRDFLALCGDSSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLVRNERSRNLLLEGKENAFLSKKLASLYDNLEVQNLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLVQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMNENEAFYV

PLTHNYLGVGEQISLQSAKKAIEAIFNHFVIGHNLKYDFKIIQNNFDLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLETPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEILMKKFENEIKNLSEEIYTLCEDRFNLNSPKQMGDILFEKLKLPSGKK

GKTGYSTDEKVLNILLDKHPVIAKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFISLDYSQIELRILAHFSEDEKLLNAFANDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEANLAKSYIEKYFENFTSIKKYFEKVKNEAKQNGFI

VTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADVIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>ETJ82828.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNQQIDGIADKNFNTPEGRKVFKKAVFSCWLGTAMEYADFALYGLAAATIFSEVFFPEQTPVIALFLVL

>ETJ82827.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFGYLGDKHGRKNVMMATIALMGISTTLIGFIPSYAVIGVWAPICLVALRFM

>ETJ82826.1 hypothetical protein X908\_00985 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLGEYAPSKRRGLVSSVIALGSNSGTLLASFVWLLMVQMDEASFKEWGWRVPFMGSILIALFAVYIRFHV

KETPVFEKQKNEMMKLRLNNEKHMKKDERSFWQRSRAFWTMVGLRIGENGPSYLAQGFIVGYVTKILLLD

KSVATTAVMIASLVGFLVIPLAGYLSDKFGRCITYRMFCLLLMIYAFPAFMLLDSKNEIIVILTIIVGMS

LASLGIFGVQAAWGVELFGVKNR

>ETJ82825.1 chemotaxis protein, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

IVSKYLSPLAAIQTGLTSFFDFINYKTKNVSTIEVKSNDEFGQISNAINENILATKRGLEQDNQAVKESV

QTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDVLQARVGSDMNAIHKIFEEYKSLDFRNKLENASG

SVELTTNALGDEIVKMLKQSSDFANALANESGKLQTAVQSLTTSSNSQAQSLEETAAALEEITSSMQNVS

VKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAGEHGRGFAVVADEVRKLAERTQKSLSEIE

ANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVRKKK

>ETJ82824.1 hypothetical protein X909\_08665, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FFIISYYVQVSGYPAATAYIPQQELKDQIQINITLGVLGKYVVQNNSSVRDYAIESKLPNHKGEIITTKL

VEDAVYKVNEMYGIQTLASLKAGDNPGETDVVIETTPSDSFVSVLFYGDNYGIKESGRYRGGASMSFNNI

AHQGDSLNAYLQRSDEAQTNYGISYTTFLGN

>ETJ82823.1 flagellar basal-body rod protein FlgG, partial [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

FFLTQIIILYFHKVKLIKNSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFSIS

SKTSSPNYDISSEFKNSIYTLKYKQADISNNTAYGYSVDKDGYMGSDFNKAAGLPEDFKIHKSTLDEIER

KAENNSYTSDIKKYLGIDKYY

>ETJ82822.1 sugar transferase, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKK

>ETJ82821.1 hypothetical protein X908\_01615 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFVAKDKCAGIPQAMSAGRVISPPPPTIESIKPAKRATKKV

>ETJ82820.1 hypothetical protein X908\_01610 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLMGVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGA

TIIKVAWDYFS

>ETJ82819.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPLLSVVIPFGLSKERSYIEERVLQKAKFFQSDENMEFIFVEGYSSLKNNLKQIIENSGHIYLKDDDQKD

YFSQGKCRNLGAVYANSKVIMFLDVDCYISLLSLEKILNLIKVKNIAQNINELLVLPVVYLSQSGSEKIY

KEDKYLWDEIIKHDLITGKRKLIKYFSLISSSIIVNRYKFLVLGGNNHNFIGHSYEDHDFFARLLFYTTN

FSNTPKALCYDEGTWNIRKFKGFRAWFSLLGYEMSFHGIYMYHFYHEEPNQNNYMSYRHKNHKIFYKNLA

NLKNYQIKPLLDKDALKNNILLLCSKEKLILNSLHSALVYIGNVISKNENYFFEDEKFNQDKLLDFLKQN

NINKILFPNPYGNEKRLKIYKFAKSENIDFVCFDRGALPDSWFFDTNGFNYDSNLYNEENWNKVLSKSQI

LECKEYINSIIDGNNFLEKQGKRNFNYLKDKFFVNDKKIVFVPLQVESDTVIKYFTYKPFDWSGFLDIIN

DMAFKLRQTHIFLVKKHPLSLKIAKSKYKNLNFISNKTNIIDAISLCDVVVTLNSGVGLYAMIMNKPCIN

CANAFYNFQGLNFQAHNSDELLRFLVSDLKIDYNKVLKFIWYLKNNFYSFGKSYYKKSFNNGRFYNKVYK

IDFYKIVLENQCFLDVKNIDKVSYNFQSLIYTPYKFELYNKNIFIKLFNILIPDFIKTKISHMKFYRILK

KFLFHRKEFFRDRKNKNKEKPYV

>ETJ82818.1 arabinose 5-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNTLEIAKEVFEKEAQAILDLAKNLDENFNQAVNLMLNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKKNSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVDVMTSGKLGLCVVLENEKLVGIITDGDLRRALKTSDKPRFDFRAKEIMSTNPKVVDADAMA

SEAEEIMLKHKIKEIVVSKEDKVVGIIQLYAIGNV

>ETJ82817.1 sugar ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILILLFSCILCFGAVDVSQIISAEDQGSTTTSIDQNLSSNYDIANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMDLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSKNITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSGSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTINVPSKNNLIIVQGEVSLPGAFVYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAIATNVVLNL

>ETJ82816.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEENKTLLEKIKDLSIFDSFKIVWFIMILVVIYYTLIAAPRYVSTMILDVRSTSGESAQTSGILSLLSST

STASEDLNYLKGYIESSDMLKILDEKIKLKSLYQEQYIDLPFKIWDSSSIESYLKYYQARVKVHTDETTK

LLQVEVEGFTPKSAHLIAQTIMQESEKFINEISHKAAREQMAFAENEVQKYKERYQKAQNDLIAFQNKYG

VFDPLKQAEAKASLVAQIETNLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNSS

QKLNDLAAKFQDLTIEATFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>ETJ82815.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKLINLTKSYPLFSGGRHYVFKNFTFEFPENCSIGLMGGNGAGKSTLMRLLSGAELPDNGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFDFDYYLIDEAGAVGDPAFREKSVKLYRERLSKSKVIMVSHNVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>ETJ82814.1 hypothetical protein X908\_01710 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYAFDEKNLAFIIASHEDTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIANKEQMKIYFSKFPFAKLDKSAKIYALELFWLKFTNNALGLSKKLEFCKK

>ETJ82813.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIDASKNQSFSMDYTTKSGKHLALSMYDNQSISYANNEEGKTLNLKRQYGFSFTFEGSKLTQNDLDEIK

NAMKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDKNHQNAIMNNFTNKLSDLLKQNQTNDK

DINTSMLEDSKKLLDEVLEQMKKQLEKQQEKAKENQDKTDDSLNLYA

>ETJ82812.1 dUTPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFAWKHWKNISNPTNWEN

VRIEIVDIWHFILSLLLEEYRDKNGKDLKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHKC

SGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>ETJ82811.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDILKLAIKDFLSLKFLKFALIPLIFSLILMLFLGVLGFSALLDYFNSLFSVGEDSFWAWFYALHFVQIL

ITIISFLFSGFIVVFASVFLALFITSFLTPFIAKEINQKYYHYDNTNEVSTLKTIFEIFKIFIKFIGILL

LCTLALFLPFINIFVYYLAFYYLFHKLLMIDVTSTILDKESFKNFHSDFSPLEFKFSTLCFYLLSSVPLL

GLFLQVFFVIFLTHLSYQRILKLKAKA

>ETJ82810.1 tRNA(Ile)-lysidine synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIKDEILALLKRGKNLLAFSYGSDSSVLFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKHAPKFQSNFEKKARDFRYDFFEKICLEQGYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQECE

KRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLD

EDRKKLYDFENIKEIQGLLICPKNESLIARAVKMKGLLLSTAQRKELLKGDCVLGGKIALAYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPRLLRAYLYNHKIDISSLSF

>ETJ82809.1 ribosomal protein S12 methylthiotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVIIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGKLKSREISSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGANSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEELCEFVKDFGFDRVSVFAYSKEEDTTAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVGQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>ETJ82808.1 hypothetical protein X908\_01680 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQHKNKATAFKMLKSRLYELELMKQQDSANTG

EKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGDIKK

>ETJ82807.1 hypothetical protein X908\_01675 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKKYPNHKLYDYTSVRTISDINNPE

GKIKEMKRDLEIDKTPYSNYVFLLNPNDKKTIKL

>ETJ82806.1 tRNA pseudouridine synthase D [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLEEENTIFKPLYSLKHSPINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLTTNEALKILSET

SGVKIRDFGYAGLKDKQGSTFQYLSMPKKFESFLSNFSHPKLKILEIFTHENKLRIGHLKGNTFFIRLKK

VLPSDALKLEQALMNLDKQGFTNYFGYQRFGKFGDNYKEGLEILHGKKMKNVKMKEFLISAFQSELFNRY

LSKRVELSHFANDFSEKELIQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELGRFK

ARDISAMGLLIGAKAYETGEGLALNLENEIFKDTLEFKAKMQGSRRFMWGYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLFE

>ETJ82805.1 thiamine monophosphate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKEDFIIKAFLNEKNGDDGAVIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNAVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINDKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGNLKPNHVFIKPKLRASFFYEVAPLISCAMDISDGLSKDLSRLLALNKCG

ISWFKKLDDYTLYSGEEYEILFAFDEKERQNIKTIAKKHGVKLNIFGKAVKGKYEFRGREHHF

>ETJ82804.1 hypothetical protein X908\_01660 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLELRIFRFDKTKDYEAYYKPYIYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTYMVVNKQIIPLFT

PLEKIAKEFDFSLCIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILH

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLKAKFISYENSIKNNGFSLLNLNPTLSY

KIAADIVLDAYDSGADFMVVKEEKDFYLFDTCAKKLMQTSGREFEDFYILSRFEFLALIEGIQAPSLKNH

TLKVSLI

>ETJ82803.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDEFISVKDFFNHNEKRKKFLQKQEIKPLKEKTKKTKETKLYTNIESGKYKGKKLLLPSLTTTRSTKSM

VKSCVFNVIREDLRSKIFIEAFGGSALIAAEALSNHALKAYAIELDVKAYKIALENAKNIDPNLEVIHAN

TFEILPKLIENSKNEIILYLDPPFDTREGFSDIYEKIYHFLENLDLKTLNLIIFEHHSTIKTPEKIQNFQ

KVKEKKFGSTSLSFYAS

>ETJ82802.1 flagellar P-ring protein FlgI [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNSDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDPSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>ETJ82801.1 hypothetical protein X908\_01640 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVDNFLNTYSMNSALLDRAAKARSLESSIKINDNDIVTKTKEDEALKEQTDAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFLKERG

>ETJ82800.1 hypothetical protein X908\_01635 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINPVQQSYVANTTLNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIDTKATAAAIADSLI

>ETJ82799.1 hypothetical protein X908\_01630 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKQRLDEVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITAKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINDGTNNAYGDKKTNPESIF

KINV

>ETJ82798.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDQSFLKEKIEFLI

SQGQSLIILDEVGMYDYAMLESIRIYSDSISFVLSSHKKLNMLKKEHFKSRLSACFKLKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>ETJ82797.1 type II protein secretion system D protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIQESLDELAKYCSFSIIVKDKIAKEKLEILQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGINTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEAKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLNENHSSGINWQNFNIGLNSQVNNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>ETJ82796.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCFSTLFAQDNFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRHIKITAIMLDKVKIYDRWYKKGDMIDD

AIIYEINTKEIKFQYDNLEIAIQINKNDKININ

>ETJ82795.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKTILFDLDGTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>ETJ82794.1 30S ribosomal protein S9 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>ETJ82793.1 50S ribosomal protein L13 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKITKPNEVKREWIVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFTGANKAE

DKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTAQIAKEG

K

>ETJ82792.1 hypothetical protein X908\_01530 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKALEYLIVIGLVVAAAITAWSVLTVNHLHIG

>ETJ82791.1 hypothetical protein X908\_01525 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENNNRCVFSLSGVTGMLIATVLLLAILAVLTIWGLKAQQEVMQKPYSLKDVQSVKMFGSKEQDHRSIKE

AQ

>ETJ82790.1 cytochrome CBB3 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWAIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTANENLV

AKGKEAYATCAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>ETJ82789.1 cytochrome B561 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEHLSIVFDVIKNLITFDLATVQKHEWEIFQGYGFFALVMFLSIVLYAYLYHLYRTEKKGERNYENYANL

ALKDDIDDSVLESKRSA

>ETJ82788.1 peptidase S13 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETAYAEALTVKKVFNVPYDAENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>ETJ82787.1 cytochrome oxidase subunit I [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHPGNVLNYDYTVARYFMFATILFGIVGMAIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

LVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVTGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>ETJ82786.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSQECKELIILVVEDEIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSAYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGKEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>ETJ82785.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKDFFKDQFFKALEKNTIFSRADVQGNLIFVSDKLCQISGYSKKELIGKKHSIFKHPDVEECYIEELLKK

LSYKKPYQVIFKNIDKLGKTFYLETLLIPILDKNNELIEIVAFSHDVSNSFKLNEELALNHAKLRELSIN

LENTVKNHQQEFIQLGKKFEKKMQIALEKNEKDIKIAYEEILKSSLEQMISDIAHQWRQPLNELGIAMFQ

MKQNLKDEKGFAEIYSQSKDMIKNMSETIDVFRTLFNKGVEQCVFIKETLNKALEIAFETIEKNHVNINI

VSKSDYEVLAYENGLIRVFLNLILNSIEAFKNKKRKIITINFSKFGKNYLKITIKDNAGGIDKENLDKIF

QPYFTTKHPSQGIGVGLYISRQIIESFQGKIKVKNGKDGACFEVFLKLKERVE

>ETJ82784.1 carbamoyl phosphate synthase small subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNASFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>ETJ82783.1 competence/damage-inducible domain protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>ETJ82782.1 hypothetical protein X908\_01475 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKKFILLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEA

EVNATLAKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLE

SRKISGVLSKMDPKKASELTLLLKNLDNNASN

>ETJ82781.1 hypothetical protein X908\_01470 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSKYNSVVKVRKQQLDKAESNLNQAKQRQLEHEKAYELSRQECESLGVLPKSGSIAELRSNLSMAQVGR

EALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKVLEAEEIKQKQKELAKAEEKFLDEIAISRFFKGEK

DD

>ETJ82780.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSFKQKYLINFWDNPRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFIGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMVLGIYLGVKICNTSFFKPKAKLERVNKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRDNAIKGALIGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVFAGGCECGWTYRAFEGQSHFIIVGIANIIGTMILALSYD

FLPKAFKEGIKINLLTEFGNLNGFFINLILFILMFVFVVFYKKHFFKNQLKG

>ETJ82779.1 hypothetical protein X908\_01450 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKITYSLNLQGEACPYPAIATLDVLPKLKSGEILEVLCDCPQSINSIPQDVKNRGFKVLEIDQSGPTLRF

LIQKP

>ETJ82778.1 sodium:proline symporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEVVQINTPIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLLMGLPGA

LYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAVVILIFF

TFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIVPLVMLY

HLGGFGEAMNIVREIKPQALSMGEGVGIVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMATFIGIAW

MAVCLLSACMIGILGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQLLVSSS

TIAEDFYKKIFREDAPSHIVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSVMLFSLF

WSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLVASAVIIIASLFTNVRSGTKAAYEKMLKEL

>ETJ82777.1 hypothetical protein X908\_01430 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFKIVLRPPGLNFAAQPAALTKCVKF

>ETJ82776.1 regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIDCRNLSCPQPIVETKNALEKLQENEILEIVLNSIISKNNVVKFLNSLNLTPVVDENAQEFCIKVQKK

NFDSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLSTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>ETJ82775.1 MCP-type signal transduction protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKSLNIGLKLIFSVAAVVVIGLVILISLITKQVSQNITKNTEDILASITKEYATQTQGIFGEMIALNKS

ISGTLTEMFRSTSKEDLDIDNITNIITNTFDNSAYSNFTYLYLIDPPEYFKEESKFFNTQSGKFVMLYAD

EEKDNKGGIKAIQASDEIANLQVVQDILKKAKYGENKVYIGRPIKMNLEGQDFDAVNVAMPIFDRKNQVV

GVIGMTLDFSDIATYLLDPKGQKYDGELRVLLNSDGLMAIHPNKNLVLKNLKDVNPNKGAQETYKAISEG

KNGVFDYIASDGDDSYAAINSFKVQDSSWAVLVTAPKYSVFKPLKKLQLIILGASFIFIFVVLGVVYYCV

RKIVASRLPVILSSLESFFRFLNHEKIEPKAIEIRANDELGAMGRIINENIEKIQISLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDVLQSKIGSNMNEINRVFDSYKALDFSTEVFNAKGE

VEITTNILGKEIKKMLLASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLETVTKENVEVANVTNNITNEVNQIAAAILEDVSKKRF

>ETJ82774.1 regulatory protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKNQEKEIISYMRELLNSNEKLDCGTAFKIAKKFNINIEKIGQLADENHMRIDNCELGQFGHLDFEKAK

IEVLKKIEPSLDEKRRIFCKDARDIAKEGCGLKSMRSALKTYKVDVKYCQLGCFKEKKGKQFIVRTKTWI

ENADGDLLFGRGKTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKL

TPRAMELMENYSILQKDIEEYANKRFKELFLKGKK

>ETJ82773.1 formate dehydrogenase accessory protein FdhD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDPLFTTQILKYKGNESFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIETKDDGMSVHIKAKIDKENLAKLNAEGVVISGCGRAHTANIDPEAIEASKISSDAKFSKGEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHG

>ETJ82772.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSEKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>ETJ82771.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLRALVVMGNGITSTAQQVKVKEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATN

RSGQWRFKVVDPLYESMEDQEILFELAKKLGFYEDFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWS

PERLKKHTLYWDKFDEVTLEGKDEVAGEYYGLPWPCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYE

GESLLAKNAPLNSPIDTGYPQITKDNIEKVLGITLSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNA

KARAVVWTFKDKIPLHREPLHSPRNDLVQKYPSFEDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLV

NLNGAGMENRASMYLTRLTPEMFCEINPELAKEQDIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLP

FHFTGVMQGVDLTHNFPEGTKPYASGESANTVTNYGYDIMCQIPETKGGLCRISKDGK

>ETJ82770.1 RepE replication protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKNKK

RFYENVVEFALKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTI

LDLRNFCKISNKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYF

KNLEYIKEKDKTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPLQKGKE

>ETJ82769.1 hypothetical protein X909\_08940 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKNKKKVVTA

WISNEYREKIYEKANQTHSTMRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>ETJ82768.1 chromosome partitioning protein ParA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>ETJ82767.1 hypothetical protein X909\_08930 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>ETJ82766.1 hypothetical protein X909\_08925 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>ETJ82765.1 hypothetical protein X909\_08920 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>ETJ82764.1 hypothetical protein X909\_08915 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEEVEG

>ETJ82763.1 hypothetical protein X909\_08910 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>ETJ82762.1 hypothetical protein X909\_08905 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIERQEIERQEIERHKERNQFIYNDNIR

AKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKNDEQHFLFAEVDTGRDYYIKEGAEIIH

EEYNIMKNIKFKGKEK

>ETJ82761.1 hypothetical protein X909\_08900 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNTMYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>ETJ82760.1 hypothetical protein X909\_08895 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>ETJ82759.1 hypothetical protein X909\_08890 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>ETJ82758.1 hypothetical protein X909\_08885 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>ETJ82757.1 hypothetical protein X909\_08880 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKKHFQ

EYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKEKFF

ELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERLL

>ETJ82756.1 hypothetical protein X909\_08875 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>ETJ82755.1 single-stranded DNA-binding protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKGD

RFLGTGKIVTSSYTDQYGNIRYGWQVVISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQA

EIYMQDDENLPF

>ETJ82754.1 hypothetical protein X909\_08865 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>ETJ82753.1 DNA topoisomerase I (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDDEKNTYTLIYLNSIQSQAKNAINEITSYDFNIGILSFKTNISKCIDKGFKGAFDFKEEDEKDEKD

DTQELELNIKEGEEIQVLDFELIEVKKQAPRRYKESNFISLLEKEGIGRPSTYASFLKTLLDREYVELAT

KGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEILDTISKGNLQYIDFIKPLHQKMEFIHIDDS

DQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLEKAKENAKPLPASAKQIAFAEKLAKENNLE

LPKDYKENIKVCSSFIDEAIKKNKK

>ETJ82752.1 hypothetical protein X909\_08855 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>ETJ82751.1 hypothetical protein X909\_08850 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MLGVLAEFIKFLGLNNETNFTKTRTEEKEDELKELIEYENDMPKYYEESEIIDLGNQKIEVIKSIKINPL

GKGKAMKTSQIKEQRIIKF

>ETJ82750.1 hypothetical protein X909\_08845 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLDENGQTMTRAIKDQNGNQKIGKDGKPMFEIVTEKIYHKTPILETVTLYHTSQFDNL

KMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKVTRDINNFLNAELKGLDYFKIQDREVTKTQT

NEKEQNKSQGRGM

>ETJ82749.1 hypothetical protein X909\_08840 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>ETJ82748.1 hypothetical protein X909\_08835 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>ETJ82747.1 hypothetical protein X909\_08830 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGTIRVYLNEYEQRQLKKLSIKRNESQSAVIRKLIAIEKYAKTLEILEKNNEINVEYLYHIAQCGNNLNQ

IAYHLNIGIESPSQTQNRLPKLIEELSQILNEHKEHIKNKAIKTSINKKIKRLSPDENFIGEENQ

>ETJ82746.1 conjugal transfer protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKTGTRDITDILDLKNDYAKLLI

>ETJ82745.1 hypothetical protein X909\_08820 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEISNYEKIKKDIEEGIQKRKEEDKKNKKIINQIKIISSLENKVQKEKEKLDKLVKNETKELENE

>ETJ82744.1 hypothetical protein X909\_08815 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKNQQIAKEIHQDNISSQERKIKKLIRD

SILADRGNTQIYFQENSSKYGVDGFSNQKSIDVSTNEHRLYRMIRAGRLIPALLTSAISSDLQGIVTAQI

EQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREIITPQGVNILLTNALASDNMGMAGAVGSV

NNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQSKNDVSTIVDDIIQQQSQIKPTIEIKSGS

RIFIVPTNHMWFAKPKNNEVLIQYFQDN

>ETJ82743.1 hypothetical protein X909\_08810 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKKFTIKSGDSYVCVERLDQ

NKKAKK

>ETJ82742.1 hypothetical protein X909\_08805 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKNVWETFSNLVKAPNSIYTTQGVFRSI

EIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPMELTYNSVPKNPTGFIVKQYSITDII

DNDTFNNTQQTKGAK

>ETJ82741.1 hypothetical protein X909\_08800 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>ETJ82740.1 ATPase AAA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKKISGALESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKR

ALSIFNPTQITADDILNFYATYSNAQETKFRYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISI

KAYETDIISSHITTKILRSSSDFIIFMNMQAYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENL

MLVSFSVYILAENLEDLETKTNELKGILANQNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLAS

IANFEKDVLGFAKNDWGEQPVTIFRHLSGTPYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNL

YKYDIDIFSMDKLRGMYNFATYTDGEYHDADFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAV

NEISKTIERLYNNKLEEDIFTLSDFIDSLQYEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSIL

KNPTLASLTASYIFHRLKNSAKNSKKRGFFCFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNL

SFFDDIPKGASFLENIANYIIFPTTNAQTLENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAIL

NIDLSRLGKHLRVFSSSSDNVMLMKELKELYPNDWRNMYLENQKPNLNQGAK

>ETJ82739.1 hypothetical protein X909\_08790 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFLVLYSLIVIAFLYCFFFILEFFDEDIYQIIFAK

LSIPQDKYYA

>ETJ82738.1 hypothetical protein X909\_08785 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKSIFQKILTLILISPIFLFGADGGNIASKLANSVNQQITEAGSSVASIINTISIVMGVIWITVMLLMTF

INMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>ETJ82737.1 relaxase (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKSFSDYWEEIQKIKKASSVIKDNYKRNKVFNSFVNSYSIKHNINNINQTTYSKQAVVKLCSNLSKDGA

KRAMDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVK

ETMDNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHY

HNQVSYEKDLDRKYQKIKSTLYLDDIDTKKDLSDMILNIIRKESKKLENKKSKIDILNNESLELKQKRLD

FINLFNQYKKKNNKKYFKLGKELKKLSDDLNKIDLKILSETKEIQKINEKISLLNKELDKYNYQSIVDTK

NLKNFVDFMRKNKLATKSDYDLLEKVKLSILKNDVNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKIN

NINNYIEILKQSNAEVKEYENYLKILEKNKEFLKDYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCE

YLNINDDLKLVSVKSNKINYGGFNKSKDNQKIL

>ETJ82736.1 hypothetical protein X909\_08775 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>ETJ82735.1 hypothetical protein X909\_08770 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>ETJ82734.1 hypothetical protein X909\_08765 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFLSELEKGVDFRSYEFSNDEDEYIVNAFELFSCVFWGM

DFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKVLKELKKCSKK

>ETJ82733.1 hypothetical protein X909\_08760 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>ETJ82732.1 hypothetical protein X909\_08755 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>ETJ82731.1 hypothetical protein X909\_08745 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>ETJ82730.1 hypothetical protein X909\_08740 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>ETJ82729.1 hypothetical protein X909\_08735 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>ETJ82728.1 hypothetical protein X909\_08730 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>ETJ82727.1 hypothetical protein X909\_08725 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>ETJ82726.1 PTS mannitol transporter subunit IIABC (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNLIAKKNIQSYFLYLCIIVSICIFKSEIWSFIKNVLKELFLTFVESVNYIGKDNIVFVSNFIILCFILK

IVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFNFYFLTFIIVLNGLLWAYNQELK

>ETJ82725.1 hypothetical protein X909\_08715 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFFVFRKIKNSKEFKEYILKLEDKKSPKLFSDESLKVR

LIY

>ETJ82724.1 hypothetical protein X909\_08710 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>ETJ82723.1 hypothetical protein X909\_08705 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>ETJ82722.1 hypothetical protein X909\_08700 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>ETJ82721.1 hypothetical protein X909\_08695 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFFNDDRLISQEILET

FNTLKQDKHYNVCVPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNK

DNKQKIEDIKTIIITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDN

DEKGLDFTLKTKQCFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKS

VLIESKKTELIKEISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>ETJ82720.1 hypothetical protein X909\_08690 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>ETJ82719.1 hypothetical protein X909\_08685 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MRKISLAVIAFSLINVSASAIDLSEFTGDTKLSCEAVLCLASPYKPSECAPALARYFGFSARYWSDVVRM

RTNFLNLCPLGANNTIKSDDKDLEAWRNSLVNLTGTCYIPDLNKKYQRTVLWIETIQKCSHGEGCTTESI

KHYGYRIDPTLDNNCKILSSNKYSDYNLKYTCPTKFYPEEDWNNGYEKKEVNQSEFNSLKEEDRFTADKL

TEVSYSEYKNLPNNKRKISTSGFKTTYYRIDLGYYKKEWINKNCWVNQGK

>ETJ82718.1 hypothetical protein X909\_08680 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKNESTNP

YTKAKMDKDLQELSKQLLKANNQKQAQAMTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQ

PKDENGFPVFTF

>ETJ82717.1 hypothetical protein X909\_08675 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-UMCW7]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>ETJ82716.1 hypothetical protein X908\_01865 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKKVKEVLNNSIFLYQIIKEIMLGKKKI

>ETJ82715.1 30S ribosomal protein S17 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAFKREIQGVVVKIAGEKTASVLVERKVVHPRYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>ETJ82714.1 50S ribosomal protein L16 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>ETJ82713.1 30S ribosomal protein S3 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLIGKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKPRRTRRGK

>ETJ82712.1 50S ribosomal protein L22 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVVVKSCR

VDAAAVLKRFRPRARGSASRIRKPTSHILVEVAKAEVKAEEKKTVAKKAPAAKKTTTTKAPAKKTTSTKK

ATAKKES

>ETJ82711.1 30S ribosomal protein S19 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>ETJ82710.1 50S ribosomal protein L2 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPVHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANVTIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRRKKASDKLIISRRKGK

>ETJ82709.1 50S ribosomal protein L23 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENTEA

>ETJ82708.1 50S ribosomal protein L4 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLALERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDALIVKDLLDEKTLLAYRNLANCYVVDVTEVNAYLVSVFNAVIIEKSALESITKEG

>ETJ82707.1 50S ribosomal protein L3 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>ETJ82706.1 30S ribosomal protein S10 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIVAATPDTVDSLTKLDLAPEVSVEVRAMGK

>ETJ82705.1 ribonuclease J [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKKNR

NLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDAII

VDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGMIS

NKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPIDG

YPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFARTKGRVIMSTFSSNIHRVYQAIT

YGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIVTTGSQGETMSALYRMAT

DEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLTKP

KFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIADD

VVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINVKDEVLNDP

RFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>ETJ82704.1 purine nucleoside phosphorylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIVCAGGNENFSFAKAIGIGLVESAFHLGQLCFKEKPSKLIFIGTCGLYDKGEILEIYRSSYAFNVEFSK

ISHAFYTPAKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLNIDAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKYHYI

>ETJ82703.1 50S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKKEKINTEGKRISHARYTICVSSQVGCKSGCSFCLTAKGGLKRNL

STGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSNKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>ETJ82702.1 hypothetical protein X908\_02005 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTMLDIFEIVFITAVVIIGFGGIVFVVTKEKK

>ETJ82701.1 isopropylmalate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYLDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELAKDEVLGIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>ETJ82700.1 3-isopropylmalate dehydratase large subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKTLYEKVFDAHVVYEGKNELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>ETJ82699.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKNEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHITFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALAQGKMTKDLNAKSYLNTDEMGDCILE

ILKENDNG

>ETJ82698.1 2-isopropylmalate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKDNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHMQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGV

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLKGFYTDIKCENIFKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYENEEENEFVIEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPALKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGISTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>ETJ82697.1 hypothetical protein X908\_01950 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQIFEISNSVQQKSKDNTFNLLLQLSL

>ETJ82696.1 hypothetical protein X908\_01945 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKELLEIKKEMEPVIHEANVKLNVLAREVIVRKKEYEIYGPMVDRVYLDNAIYVKVMSSGRDVKTDNVT

IKNGFYMVFVAPEKESTKDIKNKLKVAYEGLDNKFIATLIRSCQRFKEIINKTQATLAKASKMNVVVKTN

LGEASAALKFNITIEYTKENQKLTRENSKSAGSFRDTKTYINLVVEKNTDSQICEKLLDDVEKYFIGGG

>ETJ82695.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKKLLSIIASATLFSNLALADENSGFFIGADAAWMHAQVKSELKHKNTKQNFNGDISGNIPSFGLKLGY

RLNENHRIYAGYNYSDEFSDFIKTPKIQIEGDFATHKFLTGYDFTPKLFEKTRAVLGVYGGYARTDLTLK

TSFLSLSQNFDGYFYGAKIGALYDLTPHNEIELGFKAEQIHYNSRNFYQNKVGSNFYDPKQTNYGVYLGY

NYKF

>ETJ82694.1 7-cyano-7-deazaguanine reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVVELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVPK

>ETJ82693.1 hypothetical protein X908\_01930 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKSIAIIGGSIAGLSAALFFASAKNKELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSDIKELEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>ETJ82692.1 homoserine O-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPLIIPENIPAYELLKEHAFIMGLRRAKHQDIRPQEILIVNLMPKKIETENQILSLLANSPLQVNITLLA

TTSYVGKNTPFTHLEKFYKGLEEVKKHKFDGAIVTGAPVEQMDFEKVAYWEELLEIFDFLKQNVTSSMYI

CWGAMAALKYFYGVDKISLDKKIFGVYKHDKVSPDLLLTNLDEKVLMPHSRHSSMDEEQILALQKQGKLK

ILLRNKKIGSALLRDEKNIFILGHLEYFKETLHQEYVRDNFIQKAKNYYDKKGNIKYNWRSNANTIFANW

LNYDVYQSTPFVL

>ETJ82691.1 O-acetylhomoserine aminocarboxypropyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRLSNPTSDVLGQRLAN

IEGGAFGIPVTSGMAACFYALINLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIAIADIEKISQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GTALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRVIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEAKDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGITKATIRLSIGLENSDDLIADLKQA

IES

>ETJ82690.1 hypothetical protein X908\_01915 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFAPLKGASLALQAYLGSLVILGLGLNCLQFIANSLLLGVSCNKILSNVI

>ETJ82689.1 flagellar hook protein FlgE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATAPTDGRGGSNPLQIGLG

VSVSSTTRIHSQGSVQTTDKNTDVAINGDGFFMVSDDGGLTRYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAKSTEVAIKANLNSGLSVGTAKTPIYGLDSVHGFNKKDGTAKN

ENDTGITQFYTTSKNSVEVTEKGVDCAALFNGKGDGLNLRDGQGIWVSYADSKFSTDVPNGVNVFNPNTQ

ATQNGVIFWGDENNAVNLDITLNGVRIQNNSIKSLDQAIEYINTFTAPTDTREGTGVKAVRKADGSGIEF

INTNADGTTDNMKNIDLVVNQANTAGERHNLTWQANNNSFQATSRKQGANSVWIPGNNPVNGTERIQIVT

AHKYVYSSTPVQLDPMYNPDGGPAFNQANINTPGTAENNYRNAVNGSLLNTTVRTFRTTEDLRELLQRDA

RYGVDYDGSGGFEADGSDVNEGVKVTVGATGEFIISNPNVQSTPPNGIVQNNRRPHDISFNVTAYTDAKG

KVSTNMAFTNIFKGFDGVLTVGNSNRQSEQLFLSAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQ

MIIRVPEPAEINTTGEGPNNIIVGTARFNNDGSLANYSPKTINFSPNNGAAPNQQIKLSFGTSGSNDGLV

SSNSASTLTGQATDGYTSGNLKPDAIRVDDKGNILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKV

TANSGAIVVGEAGTGGRGEMKTSALEMSNVDLSRSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>ETJ82688.1 chromosomal replication initiation protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSAKQSNKSTKIDIAHIKAQSTILNPSFTFDSFVVGDSNKYAYGACKAITHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARALTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

ASLKAKIEELKNKILVKSQS

>ETJ82687.1 DNA gyrase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNGEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVIDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPIEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEANYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQAHAKDVKHLDV

>ETJ82686.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIILILALFLSASWAQNLEINPDTGLIIDPDSPLVEANCLACHGSNLITNMHASKKAWLAAIRWMQDS

EGLWEIEPEDEEKILNYLEKYYGEKYDTRRRIPLAIFLQNKTH

>ETJ82685.1 molybdopterin containing oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQNDQKENRRDFLKNIGLGLFGISVLSNFSFENFLGSKALAKELPDFKIEGKKDLIYHGEKPLTAETEI

YALDSDFTKPENFFVRNNGLPPSLETIKERLHKGWTLEIDGESIINKKSYTIEDLKKKFKTYTYALTVEC

GGNGRSEVIPSTKGTQWGYGAVACGRWTGVRLKDILKDCGIKNDAVYIGYYGIDTKLNGEETSPISRGVP

ISKALQDETLIAWAYEGKDIPLVNGYPLRLVCGGYPASTSGKWLYKISVRNKIHDGEKMEGSYKVPVNPV

KPGDFNYKGEMKIIESMPIRSVITNIKNGSEIKANKKFEVRGKAWAGELEVSEVYVSNDYGVTWTKAKVE

KPLNRLAWQKWSAQISIPTKGYYEIWARAIDSQGNSQPMVLAQWNPGGYINNACHRVNVYGV

>ETJ82684.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLLTNPIIISVVLMTLLCLFRFNVLLSLLISALIAGVFSHLELVDTMNILISGMKENLKTALSYILLGA

IAAAISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLSLFNKLKIDRR

AVACALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSASLNDVTNTMYFAAICMIAGLFLALFVFYRK

PREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFVLMVILGGVEFSKVNEVFD

DGLKMMGFIAFVILVAAGYGEVLKESGSVVDLVNSVVPWMEQSKFLAVFFMLLIGLIITMGIGTSFGTIP

IIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFYNG

PLLILGSIIAMFL

>ETJ82683.1 glutamate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNTDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYSTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

IADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKEDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIVNKDLD

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSALFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEERYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKHANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKMIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>ETJ82682.1 glutamate synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFTIPLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWSDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVQRRVD

LLKKSGIEFKVNENIDNKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADVAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>ETJ82681.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>ETJ82680.1 non-heme iron protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRQYETYKCQKCGNEVEVQNVGGGKLSCCGEEMKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEG

WHAVARHFREAAENEKWHARAEFKAYHEIVDGKPLEVTTKNLVTAAEGENYEHTTMYPNFAKIAEDEGKK

AIARLFTAIGKVEIEHEREYLALKKMLEEEEFFNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFK

REFLG

>ETJ82679.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

RILPFVPEGLRAEFSYILGIREGRNGESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>ETJ82678.1 7-cyano-7-deazaguanine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDVPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>ETJ82677.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCLAGFLIILLPVGIANLIFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGKYLAALLIMTAVGL

YQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFEAELNGEKFRKYTK

FSFAAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSKEGWNGLWQNISFLGKRDVKAP

DYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVASSKWDVAFLDNNF

SVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQYADFVKGNDKFKGQ

GESLGRGRLDTVRAKFNHVASMTTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSGEFTPKANLKEGKT

LGDLYVTSMTFKDGEIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDGKINILSYQDGANK

LYTLN

>ETJ82676.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>ETJ82675.1 cytochrome B6 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIIMILCLSYANIVFAVDMITPIPNSISYDKEKAKLGKSLYMDKSLSKDGKVSCNTCHRLDQHGVDGL

EFSIGVDNQLDKPFNTPTTFNSVFNFVQFWNGRAKDLAEQATVPFFNPKEMGLSPELLLQKVNSNENYVK

TFKKLYGEVTVENIALAIAEFEKTLITPNSPFDRYLSGDQNAISAQAKKGYEDFKANGCISCHQGQNIGG

NMFQKIGIFEEYPNQEDLGRYEITKREADKMVFKVPSLRNIAKTAPYFHDGSIPTLDACVQFMAYYQLGK

FLDQETVDNIVAFLESLTGEYHDK

>ETJ82674.1 fumarylacetoacetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFVNFIQGQKHNLGVLNSSGKIVSFTDLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEIPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATAPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIAYVLEELSAGMLLKAGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKIKNINY

>ETJ82673.1 ribosomal pseudouridine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYIKIKLSNNGKKAFQVLMENLKISINEAQKLIDKKRLFCDGILVEEKNKILNGLVELIVYENNPKGVE

IVFENEDFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKEACVAHRLDKETSGLILIAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEENFIVDKAINLTKNYDDVKTRMQICKEGKQAITEFEILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKQQIESILDEKLNPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>ETJ82672.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLIDDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLSDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>ETJ82671.1 ribonucleotide-diphosphate reductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFQKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLIKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVAIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIYWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>ETJ82670.1 sodium:dicarboxylate symporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKQFFQDFLMLSQAHTITTLAMLCVVFYALKKMRDIKINFSLRMLFALLMGLGFGFALQYLANFPDAKE

ASNILWYSETKHWFAFVSSVFVAFIKMLVVPLVSICIIKVIIEIDKNIKISSLLGISLFWILFSTAIAAT

LGIFLGYSFDLGSNFAIYEGNKQIREIQTFSNIILGLIPSNIIAAINKENIIAIVIFSFFIGISAKKISK

KEEYEQAFKSFHNFILTFYNIMMNMTATVIRFMPYAVVCMMANVLLSNGFEAIKTAGLFIMLIYIAMLIM

FGVHFLLLASQGLNPIKYAKKAFPVWLFAFSSRSSLGTLPMTTSTLQNKFGVNSAIANFVASIGTTTGLN

GCAGYFPALAAVFVAFATHTHIDFTFALMIVLVAVIGSLGIAGVPGSATMAASIMLAGIGFGNNFVMLSL

ILAIDPIIDMARTASNVSGAMTSALCTAKNLKALDKEIYNS

>ETJ82669.1 FAD-dependent thymidylate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEHCLHKDIE

>ETJ82668.1 CTP synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKVSILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILSPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESSEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFNEKCQNPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEVKSVKERHRHRYEANPKYRADFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICSFIKAAINYEDN

>ETJ82667.1 recombination protein RecJ [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIIRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMCKFLELLAIAIVADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLVLTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGMVTPQFVIKEIL

>ETJ82666.1 L-asparaginase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANISGEQIANIDSSNMRDEI

WLKLAKEINKLFAEGVDGVVITHGTDTMEETAYFLNLTIKSDKPVVLVGAMRPSTAISADGPKNLYNAVA

LAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIVDGKVFFYNNVIKAHTKNAPFD

VSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGIVVAGSGAGSIHEDQKNVLKELMKKGLNVVVSSRV

VAGRVAVSDSDEKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>ETJ82665.1 ABC transporter ATP-binding protein, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MALIDLIEASKKFGDKIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGTLPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEEPNNKDYLKKIDTLMTLIDSKDAWNIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCILLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRRGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRAALNFNGEKTINRKKMLF

>ETJ82664.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKFKILIIEDDIDLNELLVLKLKSSGYEVISLADFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLSFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>ETJ82663.1 hypothetical protein X908\_02395 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKYITISILSILLLILLAVVFTLLWQFKANVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PAAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>ETJ82662.1 30S ribosomal protein S1 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEVNKKVQGGVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQGDN

SKLLFNVGDSIKVAVMGSRGGRSLLSHKKALRKEKVIEFIKNYQENQDDIFTVKVVGKNKGGLIVVDEND

VEFFLPKSQYGFKETNNIIGKTFKVKIIKIDKDEQSIIVSRKKTLDDERRKRKELINNIAQQEDLIEGIV

KKITTYGMFVDVGGVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSIKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPNE

RRLRVSLRNLLSRPFDGFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDDIEAAIVFIDEKKNRIRLSVKNLVRMKEREVLNEINNDDKVTLGDIIKDQLA

>ETJ82661.1 phenylalanyl-tRNA synthetase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKELEDEAKKEFAAKLNAQKEIFNEAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSVLEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKGKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>ETJ82660.1 hypothetical protein X908\_02365 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKTKKENPQALF

>ETJ82659.1 4-methyl-5(B-hydroxyethyl)-thiazole monophosphate biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKVLIPLAQGFEEAEFIGIADVLKRARELNPDLEVVIASLNSELLVKGANGISIKADCSIEDVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>ETJ82658.1 hypothetical protein X908\_02355 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>ETJ82657.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MESEKYKNFCFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FSLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>ETJ82656.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIEVKNLQKKYGELEVLKNINTTISKGDVIAIIGPSGGGKSTFLRCINRLELADSGEILINKQNILDKEI

DINKIRQKVSMVFQHFNLFANKNVMENLCLTPIKTGILSQEEAIKKAKILLAKVGLADKENIMPHKLSGG

QKQRIAIARSLMMNPDVILFDEPTSALDPEMIGEVLSIMKDVAKEGLTMLVVTHEMGFARNIANRIFFMD

KGKIAVDASPKEVFENLSNERLREFLNKVLNH

>ETJ82655.1 amino acid carrier protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLDIMLDFANKASDIIANKIVPNTDIIMVVLLIVCGLYYSFLTRFVQFRMLSSVFKILTEKNEGHTKEH

ISPFQALMISTASRVGIGNIAGISLALATGGAGALFWMWVMAFFGGASAFAESTLAQVYKSKDDTGGFKG

GPAYYIKKALGSHFFGAFFAFILIITYAYGFNGLQSQTMTSSFKVYYDMFNPNAAVDFASSSWPMIIGIV

LTIFGAWMFFSHHTKIGKISSLIVPFMALAYVLLAVIAVLMNFDKIPSVVHMILQSAFDFKAIFGGFAGS

ALVIGIKRGLFSNEAGMGSAPNAAAAALTSHPAKQGVIQAFSVLIDVVVCTSSGFLVLFSMAYLGLGESK

IDGGMPLVQEAMREYYGSFGIHFITIAIVLFAITSLIGNYYYAQANVKYLTNSKFAMNLFRITAVAMIFI

GSQMNLKLAWNLADLTMAFMATTNIISLLLLGGIVNKVLKDFNTQQKSGIDPKFNASKLGIKNAECWD

>ETJ82654.1 RNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNIVLVHPRIPQNTGSIGRMCFNAGFKLHIVKPTVFDISQKAVRRAGLDYWDKLEPIIWENLEEFLNEN

MIYKNRFFFATTKSQKAYFDAKFQKNDFLFFGSESYGLPMELMQLNWENAITIPMKSYGRSLNLATSVGI

ISYEALRQNFSNFVS

>ETJ82653.1 alanine racemase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAQEIEEF

FENILILSHRPHGNENSRFIYALNDISQVKKYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSDLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKIVKKYFSNLLFHSHNSAALFRGKIPEDEYCRVGLVQFGYGD

SNLKKVLSLYAHRLSQRILQKGQSIGYGGIFTAAKDMEVATYDLGYADGLFRYNGKGELVLGNGKVMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>ETJ82652.1 hypothetical protein X908\_02320 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRNFFIGMSFLGILFLAFYALYDKKKESVFSLNTCQPLTCNLNLQDCVFSFNKKNIEVSAYPKPIKIFN

KTTIKIKNFPHYSNLKIKIYSLNSYIGNIIPKFNIVNGDILINFIGRSITDDSRFRVEFLNNNAPTGFFF

DFDVTMQKNFQTGNTH

>ETJ82651.1 hypothetical protein X908\_02315 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILLLGALFAVNLWAVNDIEVKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSTELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKIIELKNIDSKEF

>ETJ82650.1 hypothetical protein X908\_02310 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKIIFILAFAFVIVILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCTYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>ETJ82649.1 hypothetical protein X908\_02305 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNIILFIVIVAIILGVIFFIKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSL

VGKALKQINNPKAHLLFISLDLNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLN

DSFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>ETJ82648.1 cysteine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVHEKVSELIGNTPIIHLKKFGINVFAKCEFLNPSHSIKDRAAFEMIKDALDSKKINQDTTIVEATSGN

TGISLAMICADLGLKFIAVMPESMSLERRKMITLFGARLELTPANLGMKGAVDKANEILLNTPNSFMVSQ

FENISNKNAHCKNTALEILRDLDNELDIFVAGFGTGGTISGVGEILKEKLEKVHIVGVEPLNSPLLSKGE

AGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGLMVGISSGANVFAASMLAKKFPDKR

ILTMLNDTAERYLSTDLFA

>ETJ82647.1 CiaB protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNFKEIAKLVRKYKERNNALYEFLDKEDVSEYFRSLISLSELKQDKTTMLAILRRLIDLKEENLVQEWK

KNNFKEDKIIELKHKFYEEVRKFYEKEHQNLINEIKEKKLLNNFYQSLIQGVHNIGLIMNIFEISWTKEI

IEKNNKILSTQFPNLDDAMEFLRKNHLYQKTPEGEICERSYGVLVRIGNLWKFVPYARFFENEILKLEFA

FENMIDQLKIFASSKEEKAYIEYFEKLKLAFCEKDEDRVIKAWQEAEFAWMKVKSPLQVGHPLEYYEDNY

THAVALEWDIRIEDENDFDVLKFGSEIKESFEHVYKNIGLEDCELEKEVLSNIEKTQLYICTPMIFYGAE

LKGLFSAQVVPNDEFVSSKAGKKIFAFINFVYENAKTKPFMKISSEVFDKEFLDFGRNILFYQEKIWKRV

YEVSTIGHEFGHIFFIANDTEKTMNQSGFFKNIEEYKATTGGLINFFYHEQDDLIMPVFHELIKRAIGLI

SWQRVDEVRPYYTEGLIHLSLLFESEVLIFENNNLKINFDLGHYEKFKELTLKNYHELAKHYALRLDAKE

FLSRFCEIEDNIFLPIMPKCKEFVKFYYDLYEKIGNEIDNSGEFERYKKNNKVF

>ETJ82646.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKVVNVGNTSISVEVEVTAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>ETJ82645.1 hypothetical protein X908\_02280 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTRGEFFKECLDKKYNSGGLNKC

>ETJ82644.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENVFNAQNIEFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>ETJ82643.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNESVGFVEHLRQILTSWGLYDENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALLIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYAPAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTR

>ETJ82642.1 amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVDAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFVKEHKNEIDALAKKWGL

>ETJ82641.1 chemotaxis protein CheR [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKKITPSELELNEFIKIINEMSGIDLTDKKNILALKLNKFLEGTNTKNFSEFLGKLKSNRQLKQETLDF

VTIGETYFLRELAQLKEIIYYAKSLEKRVNILSAPCSSGEEVYSLALLAAQNFIKDMYILGIDINSSVIE

KAKLGKYQGRTLQRLSESEKRRFFLESEDKFYTINKNELCTCKFELCNVFEEKFSRLGKFDIIASRNMII

YFDHESKLKLMERFHRILNDKGRLYVGNADLIPETIYFKKIFSPRGVYYEKV

>ETJ82640.1 chemotaxis protein B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVASSFKPSVDLLFHSAVSLAKTNKILAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>ETJ82639.1 ribose 5-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLREKIYIASDHAGFELKEKICVFLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGVELAIDIIEKFIQTPFEEGRHMQRIQK

IEVKI

>ETJ82638.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>ETJ82637.1 aminopeptidase A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFELNDKKLDAIKADFELVFIQDKNLKNFNKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLSSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLERFIISSEELNGK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVHPPRLIHLSYKAKNAKKCVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDILISREGISIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVIGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>ETJ82636.1 GTP-binding protein YchF [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDIEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNDHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYEDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDVMHFRFNV

>ETJ82635.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKANNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKINQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKDDVALFFGLSGTGKTTLSTDPKRRLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKHEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSIAKCEFENFEVFNLAIPKALEGVESTLLNPINTWLDKNAY

AETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>ETJ82634.1 biotin attachment protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFAMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVPFYEKILKEILAAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVDGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGFEEEKILKYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDTNIVELASKQLNLEPTTELAINIADKDE

GKSIAYTKTLLEKEGIETSEENIFIAAACKEKGIAFLKGEAKVNIRKLASMPKPMSVDENKFTVAVNGNK

YHVEVSYGFDKDVNVKSVKKVEENKNIISSNSTSSVDAENEVLAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>ETJ82633.1 sodium:alanine symporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMIGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEVSKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGVKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSASLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFEPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>ETJ82632.1 F0F1 ATP synthase subunit C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>ETJ82631.1 hypothetical protein X908\_02170 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLTQKDIIKKIKTIFIRSFLYLIIKISKNKKINKRLKVLRYIDLRKGNSITQIINKMIKHLFKNTIIKAY

>ETJ82630.1 hypothetical protein X908\_02165 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKDKIIKDLKNNPNNVRFETLKILLESEGYECFNKGGSHYQFRKEECDLIAIPFKRPIKAIYVKMVLK

AITGE

>ETJ82629.1 hypothetical protein X908\_02155 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKDKIESKIAQFTEKAIKNNDNIKTNAIKAITTDLTVVNTPK

>ETJ82628.1 hypothetical protein X908\_02150 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKGDEAFKKAFANNIGQEIQNRTDLTSEEKAEIALAASAHAGFSVLGNGAEIQSSASSKRGIGNVETFS

EAQKAAYNEIMERASLKTLSTTKGMSSWSNTLSGGDSTAYSKMVGYAQSYTQTEQGIQSVSTNNIDNTLN

VVARDLAAGDNKDFSNLNTAQQNEYFAKADNYVSDMVKNDPAQLAQYNSQYGAQSIVSPNNTTMPHAAGM

NFKTIDGSERSVLTQSNLNQDQVNQSSKRTSNTTTMPDSQEVKSGATHSQIAQDNKKEVMLLGKLLKIGI

LLEKILLLFKQKAL

>ETJ82627.1 hypothetical protein X908\_02145 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIFKEVANRSNFMNYLVMSTPVLAYAIAKASEQGFVSFASGLSQALTGASRTAGSFANQQALSTQTSIA

APRGDEVWAVGAGVASLQYARNIDGVVTKFNTQSVMGDNTKNSETSNANMTGTNVDGMMSGAKLSAGTMT

TVNSVSQANSDAWNKNFNDQYSHMSQSGRASAFK

>ETJ82626.1 mating pair stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFGGGCCDKDNVFLGLVACKEDEKKLAKLNDAGKCHEVGTYCSKKVSLGFTKICVEKKKSFCCFNSKLGR

IFNEQGCPQLGKGWGSEEGPQCKGFTPEEFQKLDFSEIDLSEFIADIVGSFDTGKIQADSVKIQEKIQNN

IENATKKPTN

>ETJ82625.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFVFIPLFTIFILLAGGYFAKRIGVLKQKQARTFLDFAIIFALPCLIFDKAYHLNFDFSLIIFIFIGLFS

CILAAFFAILIGKVFHFSKVTLVSMFLLSCFGNTIFVGMPIVAGVFNDPQFSAEVIFYDALATTLPISLF

GPFILSLGNGEKVSLLANVKKILSFPPFLALLFGFLCKLITLPEFIFSPIRLFGASATPVALFAIGLGLG

FMAIKTSYKPTVIVIFAKMILAPLFFVFCLKIFNLELKDSTIVAIIESAAPTMTLAGAMVMKAKLDSNLA

VSAVAFGVLFAFVSMPILIWALL

>ETJ82624.1 hypothetical protein X908\_02120 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFKKFYKLKIDGIILKDNIDNFPKN

>ETJ82623.1 hypothetical protein X908\_02675, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNHLGDIQRSKCIIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYARIRPGTDIAF

MYGMLKIIFDEGLEDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAKNKPTTLIWA

MGLTQHTVGTSNTRLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPLNEATWRYYA

KIWGVDYEWLLGNFVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGITSTAQQVKV

KEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDPLYESMEDQE

I

>ETJ82622.1 formate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARI

>ETJ82621.1 Tat pathway signal protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>ETJ82620.1 hypothetical protein X908\_02660 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGALMDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSI

QAFFKEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILVKSKIRRNEKFFKESEDSVGFCLLLMSE

FLRQNEDDLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQ

NDLSRSEFLRREANKQRRTREKSQGIS

>ETJ82619.1 carboxynorspermidine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIDEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSTIEGLHFHALCEESADALEAVLKVFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYSVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNARILATRENEKISDLKESEFSYLLTGNTCLAGDVMGEYAFDKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLNAKNELQMIREFSYKDYSLRN

>ETJ82618.1 bilirubin oxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNRRNFLKFNALTLASMGVAYANPMHDMHSMHKNHSINHDLDTSFINFAPKNLKLLDPKQFPQGEILKAL

PLLKNESKEKNIFRATIEIKENHIELIKGKKTLFYTYNGLVPAPKIEVFEGDKLEILVKNKLKEATTIHW

HGVPVPPDQDGSPHDPILAGEERIYRFEIPQDSAGTYWYHPHPHYTTSKQVFMGLAGAFVIKAKKDALSH

LKERDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPKIKLATNERIRIYNATAARYLNLRIQ

GAKFILVGTDGGLIEKAIYKEEFFLSPASRVEVLIDAPKDGEFRLESAYYDRDKMMVKEEPNTLFLANIN

LKKENVELPKNLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALASMFLINGKSYDLKRIDLS

SKLGVVEDWIVINKSHMDHPFHIHGTQFELISSKLNGKVQKAEFRALRDTINVRPNEELRLRMKQDFKGL

RMYHCHILEHEDLGMMGNLEVKE

>ETJ82617.1 molybdenum cofactor biosynthesis protein MoaD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>ETJ82616.1 molybdenum cofactor biosynthesis protein MoaE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEHFTLYQGSLDIPKIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGISLLFAHSIGDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYAKERSTKL

CGAGLLKG

>ETJ82615.1 molybdenum cofactor biosynthesis protein MoaA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKAPKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLVPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTKLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNVEFKNGRI

LANLEGKKEGSSAIINNLNNKAALMVVLKECEMLENESLVDIIFMP

>ETJ82614.1 hypothetical protein X908\_02630 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKKNKNVIFQDIIASKSKVDIFVLLEGDDDIKYYGPIIDNRLGDNKKIRYYTCKGKSEVLLLLKRIQES

TKLDLSKKIMSFIDRDFDFEQNLEHTYITESYSIENYYFSNEAINKTMKYLLKVDDLELNNKDVKNEVDK

IIKERDEKLEDIVFVNAIYCLQKTKSLECGIQPKLNKIKEYDAIIKIDQDKIKDYIEDYIEVSKDEIDLQ

IEYMKKNLVYETRGKYIFSLMKKKYRIFCDKFNKEKKRPSSIDISLLNNIIVSFAACADKPKDLINYIDK

YR

>ETJ82613.1 hypothetical protein X908\_02625 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKQVMINRSGLKSIVIQGLFEKYDYKINFENGVKILLSENGYGKTTVLNIINSILERNVNYLADLDFKS

VDLAINDKTYHISKILNKDDASMIEEYLKHLDGMYDVGFFLKEIKQRKINIKKLKYLIYNRTEQNRRIYP

RRLIDYVDKINDIVADYLYKQIEKIEKINFKVLFYPTYRRVEAALEEVVDSDFFDEEHRFLTRRNLRYRN

SYRRIEFGMDDVKHIIQNKLNEIKNEANELYVNMSSEIINDLIDDKVKCDKKDIDIDKVKIVIKRIGESR

IKHYDKLENIINTQDKKNEFLTYYLDKLSGIYDKQKALDLRLSNFEKVCNKYLIKKQIQYDDTLLSMKVL

DDEREIDFDSLSSGEKQIISIFAKVYLDMDAKCIFIIDEPELSLSVEWQRTFLQDIYESNNIELLLATTH

SPFIYDNIFEDYIVDLEKYRVNNG

>ETJ82612.1 phosphoribosylaminoimidazole synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLAIDAKKYDTIGQDLVAMCVNDLICN

FATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAEMPGMYAKDDFDLAGFAVGMAEEDE

IDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIEGKNLIDILLEPTRIYVRDFLTLKP

YISALAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQAVEESEMYRSFNMGVGLVMVVDPSN

VSKVLENSDAFIIGEICINEGIVLE

>ETJ82611.1 hypothetical protein X908\_02615 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKISYEDAGVSIDNGNAFVEAINLWLKKLLMIML

>ETJ82610.1 dephospho-CoA kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKILENFTHPKIRAKILEQMQILDKENKAFFVEIPLFFESGAYENLGKVIVIYTPKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>ETJ82609.1 diaminopimelate epimerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFYKYCASGNDFVITNADRKEDRSALAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPNMSFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEELGKTWQLCNTGVPHLV

HFCQNLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEVGFAYKNEELFFEGKVKYCFEANYNFS

>ETJ82608.1 hypothetical protein X908\_02600 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKPIIIFLSLFLIPLFADDLKSGFGEEYYKLDIDQKRQIFL

>ETJ82607.1 mannosyl-glycoprotein endo-beta-N-acetylglucosamidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDQSFKKIEQERAFIEAFFKDAYKTGFRTSNQINLEKLITIKNKYRIENLYDFAEYKKRIQKIPKSMGI

AQALVESATGTSRFAREANNLFGEWTWGEKGLIPDLRHPDKKHKIKIFDSLQDSVDSYVLNLNRHFAYEK

FRDARAKFESEGKEITG

>ETJ82606.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVLNFFYENHPKFEVSYERKNQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTNIKDLNINGFEELELDYFDFEEFISVSKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQISISKIFIELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDNFFEQGVKFEVISFDKFSLGF

>ETJ82605.1 DNA polymerase sliding clamp subunit [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVTKQLLQMQADAHHLWVKFHNYHWNVKGLQFFSIHEYTEKAYEEMAELFDSCAERVLQLGEKAITCQK

VLMENAKSPKVAKDCFTPLEVIELIKQDYEYLLAEFKKLNEAAEKESDTTTAAFAQENIAKYEKSLWMIG

ATLQGACKM

>ETJ82604.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLQFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVVSLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDVIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>ETJ82603.1 UTP--glucose-1-phosphate uridylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQISGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRPLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEENLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTKAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFYEKSKC

>ETJ82602.1 hypothetical protein X908\_02570 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLCITKPWPSMIRGIWGNDERYIESYFSQAKKDGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIG

TAEIESAIAKHPSVAESAVVSILDTIKGESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGPIAKIE

KILYTPGLPKTRSGKIMRRILRTIARGEEIKQDISTLEDSKVVETIVKLAKAEFE

>ETJ82601.1 acetyl-CoA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNQNNQELFKPSKEFSRNARIKNLCEYYDLCDEAKEDFEGFWKRQAFEKIEWFSPFSRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKAANLLKKFGVKKGDRVVIYM

PMIPETAIVMLACARIGAIHSVVFGGFSPEALRDRIIDAGAKLVVTADGAFRRGKPYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYIKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

ISKFYTSPTAIRMLHADAPNEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGGTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKMKVKMGCFV

>ETJ82600.1 metal ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSKNISYFGNFKPNNKQ

KREIYLLFPEPILLNRSVRANFLFTLKTYGIKEDIEERIKESLMFLNLDESLLSKHPNELSSGQSQKIAF

AIALSVRAKYYLLDEPSAFLDKNTTLLFKKTILKMHENFNTGFLIASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFCNFIDFSNCKKYKDFKKPPSKIAIDPYKISFFNSKNIPKNNYDFILEKCYIIAL

RSRKSDVFIRVSCMDKILEFALEKQEFLRFDLKLYEELSLYFYEDAICFLN

>ETJ82599.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFFIFFLINLYKKYFSIIMLKLLILKRIFLDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLA

LLIGFPLGFILGFFEFKLKRFIKLIVDTSLSFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFIL

ALPIVIALFSNLIENMNKKHFLLIKSFHLSPLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGN

IKYDTRTITTAISLETNKGEFASGIALALVLILIAFCLNFITHKLKRT

>ETJ82598.1 tungsten ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIISLALALALSASAAELKMATTTSTDNTGLLDALKPLYEKESGNTLKWVAVGTGAALKMGEDCNADV

LFVHSPKAEKEFMKKGFGVDRTPVMYNDFIIIADKSLASKFKGKNLKESLELIKNEKLTFISRGDKSGTD

NKEKSLWKNLGGVPEKQSWYQQSGQGMLASIKIAEEKRCDFNRSWYLYQI

>ETJ82597.1 hypothetical protein X908\_02545 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILTDRGTYIKYEANEKGKPNLVIVNEGDDSLKNFYSVIATNPKHCKNVNYTEASKFIKWVTSDKTLNFI

ADFKLLNKPLFVIDAKTRKD

>ETJ82596.1 LamB/YcsF family protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDETLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKGMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLRYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNAKALEFVKKIKENLKKEQIQICALENFI

>ETJ82595.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSVHFSGSKALLLRFEQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLAEQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFDIQEQVAKKVYQKEIYEYKNH

>ETJ82594.1 allophanate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIKIIETSINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYEFLDENY

FVLSGAEFEAKLDNQKIKTCKVYQANKGDILELDLAKIGFRGYLCVAGGFEVKSFLNSKSSDAKMGAGVF

EGRALQKDDILNTHNTFIPFNLEARECENPLFKSPKEPIIRVILGTNEDAFTQKGIETFLNTTYKVGLKS

DRMAIYAESSESIEHKNSADIISDPAVFGSIQVPKSGIPIILMAGRQSTGGYTKIATVIENDLSLLAQAK

LGSSFKFQSISMQEALELYKQREMKFKAMDQKINLDFENLI

>ETJ82593.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTRTKYLYILLVIAMFLWGSSWPTSKILANYTDTSIITFWRFFFVVLGSFFVLNFLKIPLKIEKTALKWV

LIAGVLNGLYAFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAIFFQKNKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALMAVFNHKAKGAHPLAINFYINLISILMFSWILFDVKSY

EIFHFEFKFWISMFVVAFLSTIIGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CALAIGAIYFINIYGKKA

>ETJ82592.1 NADPH quinone reductase MdaB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKIF

>ETJ82591.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKENSPCNFEECGFNYTLALINGKYKMSILYCLFRYEIVRYNELKRFLSSISFKTLTNTLRELENDGLI

IRKEYAQIPPKVEYSLSKRGQSLIPILQAMSKWGKKDKKGKKCLN

>ETJ82590.1 Blc protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLELIGELSLQNYMGEWLEIARKPAFFQKSCLNSKAKYELKYKNGIPYVEIENFCSKKMKFQV

>ETJ82589.1 biotin transporter BioY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILARNIIDEKNIKELLNIAKQRGFDISDVVFDKY

>ETJ82588.1 NADP-dependent alcohol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGECDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNNIVVSEKFAVCVPKDAPMEKVAPLLCAGITTYSPLKFSNIKEGSSVAVAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSCDKNAVKERFDLIISTIPTPYNPAIYLDLLKFGGEMAIVGLPP

HEVAPSISVITFVHKAGKKVYGSLIGGIAETQEMLDFSLKHGIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>ETJ82587.1 restriction endonuclease subunit R [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MWHTQGSGKSLSMVFYSAKAIKALNNPTILLITDRNDLDDQLFGTFASCANLLRQEPKQANDKEHLKELL

RVASGGVVFTTIQKFSPENDNVFECLSLRDNIIVIADEAHRTQYGFDAKVVEEKSKSGDVLGQKIVYGFA

KYLRDALPNATYIGFTGTPIESHDINTPAVFGNYIDIYDISRAVEDGATVSIYYESRLAKIELSEEGKRL

VNELDEKLENQDSQKAKATKLEALVGSTSRLKQIAKDIVKHFETRSSKLGGKGMIVSISRSVAIKLYDEI

IKIRPSWHSDELSSGAIKVVMTSSSSDGVEFSKHHTSKIQKQFLANRMRNIDDELKLVIVVDMWLTGFDV

PSLHTLYIDKPMKGHNLMQAIARVNRVYKDKPSGLVVDYLGIASDLKKALSFYSESGGKGDIITTQEDAV

KVMIEKLEIVEQMLPNDYEKYFELDTGAKLEYILDVEEHILSNEDGKNRFIKEFAALDKAYTIAMPHEKA

LSIKNKIAFMYAIKARFLKFAKENENENLLNQALIKQVVDKAIVSSKVVDIFDASGIKKPDISILSDEFL

LEVKNMKRKNLAFEMLKKILNDEIKAREKLSLTKAKKLAQMLSDAIKKYNNKLISSSEALDELINMSKSI

VSMEDEAKKLGLKDYEYAFYSALACNDEYEKILGNEKLLALVSEILQIIKNNVSIDWMIKENVRARLRVA

VKRVLNKYGYPPDMQQLAIDGVLAQAEILAKELANE

>ETJ82586.1 hypothetical protein X908\_02490 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKAKTSEFDLEQFVISSLLEHGWCYEKPVRATDEVLLETSLVNALCRLNPQLDLSKANEIYKELKSKNH

LSLLDSNENFHYKLVNGVNINTTKDGESRADIINLIDFNNASNNEFIATNQLSITEAKENKIPDVVLYIN

GIPLVLMELKSPSDENATINSAYNQINTYKQTIPSIFTYNAFCVISDGYFARAGSISADFSRFMAWKSSD

GINYAPNKSLEIKTLIDGMLNPKTLLDIICNFIVFEKEQIRDLNGILSIKTTKKSLAIINTTQ

>ETJ82585.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEIFKNIVREKKQPIIMTTHSQYFVDFNNLVNTHLFKLTKEEKIYARKKGRVFQEINTKPIYIGTAFEKL

SVIKKHLGIETNDNWDIMPYNILVEGEEDKKYLQMLIEILNLSMPNIIHSGGATKIAGFLEYFNNQCSYT

SFKPYFICIFDNDEEGRKQYNKISKDNLYPNIKLDAKKLKRYGESIQENNRDIWEIEDFMPIKIIVDAVN

IILKYKQYNTITNSQISDRKKLAFKNMSILDYLEKCIADRNEEKERFILNTESRKKEICQNAFRAREKYT

KNDLEDYHVDFMNELIDSFNKVDLIKKDN

>ETJ82584.1 hypothetical protein X908\_02480 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKYKFVKFQVKNFRSLLDITLNIDNNNINTICGENNIGKTNFLRALNLFFNHNNGVEYNQNEDRPYHIQ

KGSTGGRKTELIGYFTKNNVTHILKVEFHKDKIVYILNGKMVEWKVARDIVESFKLLFIEASNVNMPSVI

SAILENDALLALDNKRKKQSEPLRTLKLFIEQSKKAIEDIEKDINIYLKQMLDFDNTLKDKEIKIRFAEF

EKLRDVVKTMTSVTLDDGNDHLMDHKGSGAQRIVLLSLMQYITDKITTDIIWAIDEPEAFLQPKLQKRLW

KYLKIL

>ETJ82583.1 type I restriction endonuclease subunit S [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNWKKCKLGDIAEITMGQSPKSEFYNFDNIGMPFLQGNRTFGRKYPYFDTYCTEYKKIAKKGEILFSVR

APVGDINFANNDICIGRGLCSMNAKNGENEFLYYLLHNLRSVIINNESGSVFGSVNKNDLQTIEILLPLL

EEQRQIATILSSIDDKIELLHEQNKTLEELAQTLFLNWFKDREFNSTISDFISMQNGFAFKSKDFIDYGN

NGVIKIKNISNGIVDIVNTDKISQNTINEVNNKFNINSGDILFAMTGAEIGKMGIVPSTNKKLWLNQRVG

MVKERFLGARFLAYIHLTSEFGYDYVINSATGSAQENISATDIENCPFVKLTSEEIVSYSKQLNDFFEKI

IFNLGEIQTLENMRDILIPKLLNGEIKITN

>ETJ82582.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFKFVLRLLEANQFENEVVEYKKNNKDFIVLGKNISALSNTAALLGIDKAYIIFGIEDGTLNIVGTNFK

PKQEKKGNEELESWLHKVLKPNIEFKIHEITEKEIRLVVFEIEATKISPIKFEEKAYIRIGSNRKELDKY

PEKEKKLWQVLSGFSFENEIAKSNLNIQDIYDLLDYSKCFDMLDISYDNYSSDEYIIEKLIEHGLVKNLN

DSFAITNLGAILFAKDLTKFKGLNRKRIRFIRYQGKNKIHTLEELEGRKGYAIGFQGLISYIMQYVPKNE

VIENAIRKDTTLYPEIAIRELVANAIIHQDFTINGRNPMIEMYSDRIEITNNGKSLIDIKRLIDMPSKSR

NDKLANLMRIMGICEERGSGVDKVIDSVEAYQLPAPDFINNEDYFQAILFSHMPLEDMTKQDRIRATYQH

CCLKWASREAMTNASLRARFKIGDKQHSKASKIISDTLEAGLIKQQDPENKSTKHVKYVPFFV

>ETJ82581.1 type I restriction endonuclease subunit M [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKKKEIKLEDALWKSADKLRKNIDAAEYKHIVLGLIFLRYISDSFMQKYEELLKEQDDGADPEDADEYL

ADNIFFVPEKSRYNYIRDNAKNPKIGKMLDEAMDEIEKHNDTLKGVLPKVYAKDNLDSKCLGELIDLIGN

IAFDTGKSTDVLGHVFEYFLGEFALAEGKQGGQFYTPKCVVELLVTMLEPYKGRVFDPCCGSGGMFVQSE

EFVKSHQGRLDDISIYGQESNQTTYKLAKMNLAIRKIESSQVIWNNEGSFLNDAHKDLKADFIIANPPFN

DSDWSGELLENDGRWKYGVPPASNANYAWIQHFLYHLSPNGGVAGFVLAKGALTSNTTNEAAIRKALIED

DLIDCIVNLPAKLFLNTGIPASLWFIRRQKLPKTVKKTLFIDARDLGTRINRRNKTLNKDDINQIANIYK

AWKNGTDYEDIKGFCKSVSIDEIRELSYVLTPGRYVGLADSDDEFDFDTRFNELLAKLKSQIKTEQELSE

IILKNLEKIK

>ETJ82580.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIAILCASGKVGKEISKEALKRNLEPVCFVRNSSKMNEFLPQAKIVQRDLFELDSKDLIDFDIIIDAFG

EWENLSLHKKHIECLSVILQGSKAKLFVVGGAGSLYMDENHTTRLMDMPDFPKEYLDIAKASAEVLEFLR

NEKGFKWVYVSPSAIFSPDLPKNNHYKIIGEKFEVNANNESKISYSDYASAMIDIVLNSCYENTRIGVIS

L

>ETJ82579.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKYHSLCPIETTLNLIGNKWKILIIRDLLQGTKRFGELRKSISFTKNQNISQNVLTQNLRELEEAKLIK

RKVYAEVPPKVEYSLTSLGNSLESILKSLENWGNSYKNIV

>ETJ82578.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQSFLNTFKEFLYLFTELSVLFIAISFLVSIINQKYEGIF

>ETJ82577.1 hypothetical protein X908\_02445 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLSFTFASKKALKSGMVEQEQNGVKAPKNIALK

>ETJ82576.1 permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYVVFLIFLIFIISFVFSKFKEDSFLKHIPKNTKSSIFTQSAHNPSNFIFKQKSCCANTQDKSKNITIN

YKELFKESLKNYKKLLPYIVVAVFIGAFIHGFIPQEILQKYLNGNEILSIALAAFLGIFLYLRVETIIPI

GLALLQMGISQGVIMSFLIAGAGCSLPELVLLKQMFKMKFLFLFVMIILGVAISFGIFINLI

>ETJ82575.1 ArsR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKFLAIISAINDESRVLILHHLLRYKELCVCDLQELLNMGQSRLSRHLKILKDAGFCM

>ETJ82574.1 arsenical resistance operon repressor [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYVRRQGTWAYYGINNELLKLHLDLFENIKNLELKNAIKKNENIITQICP

>ETJ82573.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYTIKKVEKETKISAHTLRFWAKKGLFPFVQKDENSVKYFSKSDIEWVKWIEWLRISGMPIEQVKHYIK

LCSLGIKTAKERQEMLKQTKKKLQNQIKTLKESEKVLSKKIKIYEEMLANEVDGFNPESKDYQPCDKLHK

FKG

>ETJ82572.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSIKIKLSLIANLIAIFALIVLGIVSFYFTKTSLYESTLKNQTDLLKVTQSTVEDFRSTNQSFTRALEK

DIANLPYQSLITEENIINNVGPILKYYRHSINALNVYLGLNNGKVLLSQKSNDAKMPELRDDLDIKTKDW

YQEALKTNDIFVTPAYLDTVLKQYVITYSKAIYKDGKIIGVLGVDIPSEDLQNLVAKTPGNTFLFDQKNK

IFAATNKELLNPSIDHSPVLNAYKLNGDNNFFSYKLNNEERLGACTKVFAYTACITESADIINKPIYKAA

FIQALFKPLLSLL

>ETJ82571.1 amino acid ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLFTQKNKDFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAIATYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIVFLRFLSTFYIELIRGTPLLVQVLLMYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQVFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLILTLPISIFSRYLERKCQNDLKKLDK

>ETJ82570.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKTFLIFFIFIGQLFALELNFNTFSSNFTQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKN

QVTIVEHDLEQVIFSHLDNIPNLNEIFKKASLIDKDKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVI

INLNNQIKNPKINSDVFKAKIPQNYDIVR

>ETJ82569.1 hypothetical protein X908\_02780 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLSVFLVLSLNAQNLEIDKIRTDLYSKSGTNVLKKVEISLEFDGNNLKENENKLIDAVNTVISGFF

YEDIFTEIGKNNFKKTLEKFLDKKYKIKLDDIYIISLSGVEKFDLEEFKRFLESTEAKEKGMGSEVKKAL

ENLEVPKTQVPSVEKITAPSVPNLEAKQVEQLFKDSDEENKNDNGEINIDNLNTPKMTPDIEEKIKRDLI

ANPPQIFKENNASKPYHLPQIGYDIKLDENSTQN

>ETJ82568.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLQKKATLVASLCAIVLALVKFIVGLTSGSVAVLSSAIDSLMDFAISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGIFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALVLIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICTLISNNPEIISYHELKTRKTPSCNYLSVHLVFCPIISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>ETJ82567.1 agmatine deiminase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKVVSEFQKVLLIAPKQSDFENFKDIKNVEF

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEELKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLLELPIPKPLYYEERRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPNHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>ETJ82566.1 hypothetical protein X908\_02750 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKMLQIALAATFFAGCASTSLTSSTSKGNNELVQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>ETJ82565.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKTIGFKVSAAIFVVLLISFIVMQVILNLDFKNTANKMSRANLDTVSTSVFQTMRMAMNLGDPEKIKEA

IEDAKSIEGISDIKIYPSKDTIDLFEMKAPQISNDKRIIEQFSNPKIQALEENVNGVVHLRLIRPLIADE

SCVACHANANVGSVIGVMDISHSLEGVQKDISKTSQSYIVIFTIALIFTLCVVLLMLKVVVGKPVLELLN

HAKELAQGSGNLKARISVKGQDEIALACGYINQFIEKTHKAVSGASHNSKNVEKQSNLLNSNAISLSDIS

SQSHKQIDQSFKLGANVGNELGELASLSNKANSANEKSFLLLEQMLKSLFNVANKVSTVSQNENELAKKV

ENMVNQAGNIQKATQMMDEIADKTNLLSLNAGIEAARAGAFGRGFSVIAEDVRQLAQNSEEFLGNVAQIT

KELLQSINEVSAELKKNAQSVQALNDDTALLVDDANEVKLCNEDARALVTQCTEKIKISQENIQNLLSRM

QENVEVSEKNEEISKILLQVADELKIVCHNLESELNQFQI

>ETJ82564.1 phosphoribosylaminoimidazolecarboxamide formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGIKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRSDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDPLDYEKVIETLKKGQNDENFRLNLMIKAYEHTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNPCGFAIKENLV

QSYIHALKCDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEVGEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAAIAKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>ETJ82563.1 molecular chaperone DnaJ [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLVLIILVVLVFYWYYKTWGKQDFLNSATRGAKGFAKGFARGVMEERMDEFKRRMNYYVIALLAKIAKS

DGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAFYVAKDFLKEVPLPKNERFNVLRVLVF

MALIDADFNAKKREILEQIAKAFDIAKSELDAFIASLSNLKSTKKELSLDEAFAILELPNNADLNAVKKQ

YRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHLER

>ETJ82562.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKETIKAHKISDEEYAQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMAAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHDEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGVCKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVMGEVTNTGKME

LFWHDELVGLIPIEPLSEKAPILSRPTSEPKYLSEIKNYKFELKSSVQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGRLGASVIRIKENGASVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFSGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSDFDDEKMIFDESASRAIIGLSKENEEAFLNLAKEFGVKAYKLGVSTSQ

KHFKLDSIELSKAELDKLYFESFKEQIQ

>ETJ82561.1 tRNA modification GTPase TrmE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDTIAAIATAHGVGSISIVRLSGERALEFALKLSHKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARLALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEQISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIVGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEENFKLGTHLLRIIDTAGIRESKDVIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFDLLANTDKKIFWILNKSDLENVFKNTQNKNFIKLS

AQKDITLLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKGLLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>ETJ82560.1 insertase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNTPNIQNTTTNTPSAA

LVSQDSVISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYVANASNLFVDENGSQVLKLTQNLSGLKIEKDITFYPKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVMDNKETIETYKDGDVEKDESANNVVMTSAFDRYYATFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFLHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKQAEHEK

>ETJ82559.1 ribonuclease P [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFIAKNEITELSFSRLEKNLKWGLKKLECFK

>ETJ82558.1 50S ribosomal protein L34 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>ETJ82557.1 diadenosine tetraphosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEFKIIDLRQEDLDILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>ETJ82556.1 family 4 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRSLYYLKAMGFNFVDTHINHFEQVQNFQELKQLVSSCTLCQFSKTRKFSLMEPKIKNAKLLILDVFGQ

KSENESGILLNSKKGEKLKRYIYQILGLCDEDFYFSYLFKCFCNGKFDDFSLQSCLPFFWNELKLIQPAF

LLCLGEYTFKSLGFKDYHILKGEVFAYKNFFIMPSYDLDFIEKNPSYEKNFIQDLKKIKGFL

>ETJ82555.1 hypothetical protein X908\_02685 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLIFFLSCFLLNAKEQKLVDVKPVENFYPKLSVQECNTNCLFDLLESRLYLSFLSEFTDQNDQFLS

NVYAKLLNSITDFEKNVQKITSVKLAIIIPEKTIKSYSNTIINSSIAYLLRQRAEIKVKVFLTGTEDSDK

IRAALDAAQAQGYQYAIAGFTLKGANELKNYSGNMKIFIPTIHKNNIQISNQNIIFGSIDYDAQIATLLS

KSNANIAIFSDGSALSSNLNSRILAQNNNARIYTIEGEKLDFSRLLRSQGGVNNASIFFNTPLIKTALAS

SQLRIYNIHPYVLLSTQINYNPTFLSLTQQGDRENFIIANSINNHDDNLVYLNEIFNQSIDYNWIAYATS

IGVDYFYTEFLNKKSESLFDEKIKNSQVDYKVRLMQGKQASFEELK

>ETJ82554.1 acyl-CoA thioester hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKMRVYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILEVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDTQLKKLFEELF

>ETJ82553.1 flagellar biosynthesis protein FlhA, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKNKIVDLVFPFLGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYI

PKPTDLTTFPTLILIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVL

INFMVVTKGSTRVSEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFI

KGDAVAGIIITIINIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDE

ENFAEGTLTQLLSEYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSK

PSAAVASQSGAGGTTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSI

AESLGFLMPKIRIRDNLRLKPNEYSFKLKGVSIASAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDAL

WIDANLKDEATLNGYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIVEGALGVAPVS

LIQKILKDLLKHHIPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSA

SSAVLMENVQFRDGSYHLPLSVAQTGTLVDTLRAEVAAVANGRIKPFILCVEPQQL

>ETJ82552.1 Rrf2 family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>ETJ82551.1 lagellar hook-associated protein FlgL [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGAGTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLTQNPDKTK

YLTGDSKWQQLIGQGYVKDNSLDADKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPEDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQADDKTELNNIIQAAQNEGITME

DVTNRVMTAALGNPNNGDITNLNNPVTIQINGQNFEIDLKQTDFIKSKMTDTDGNAANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSYPDPNNP

GQTISFPIMHTNPATGNSGVVTGSNDITYGQINDIIGMFAADKIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIEISLSDSQSGQFPAPPFTTTSTVQNGPNFSFSANNSLTIDEPN

VDIIKDLDSMIDAVLKGNMRADSESENPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIEGVNTRTSF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>ETJ82550.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLFELKNISKNINDKNLFKDFSTRILQGERIAIVGRNGCGKSTLLKILLGQIKQDSGEIKRGELKIGYFD

QARSLVNSDKSLLEIFCPNGGDRVEVRGKNMHVYGYLKNFLFPKEFLDKSVALLSGGEKNRVALALLFTK

EYDVLILDEPTNDLDIATINILEEYLLSFEGAILLVSHDRYFVDKIATKLYAFEGDGYINILHTLYTEYL

ENEKEIEELDNFALELQTQEQNNNQKEKSSKKLSYKENEILKNYPEKIDFLEQKIAKLNQDLSDPNVYQE

IGINKLYQELEVMQKELEILENEYFLVLEKSENL

>ETJ82549.1 hypothetical protein X908\_02905, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIGGFGANVNISFLDFDREYIAKNFDVV

AVHVFYHCFC

>ETJ82548.1 hypothetical protein X908\_02900 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTTHIYDFLEKSLIKFSEKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQAPVLIILPKG

INCLISFFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLKFNLDLPTLYTQDFESFNIDESL

IKNAKEKHIDTNLLYVLFTSGSTGIPKGVSIAHKSVIDYAFHFCEAFEVDENEIIANQAPLYVDASLPDI

LATIKPSATLHLIPNHLFAFPNKILDYLEQEKITMIFGNLQS

>ETJ82547.1 hypothetical protein X908\_02895 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYFIKDQDNLKNYPLKNLNKILIGGEIMPIKQLNIWRKHLPNALFANCYGPTEITDVCCYYILDREFSE

NEILPIGKAYKNTELLVFDENMNFISPKQIGVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDL

LYKTGDIVSYNEFGELLCYGRNDNRIKFMGHRIELGEIESVINSHSKIILCACIFKEKIICFYESDEELD

FKAFLKDKLPSYMIPKHFIKIEKFKLNQNSKIDRKALHELI

>ETJ82546.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSFEKAFYEGFKLSNCYDNFNLIREKILKQELILEKHENNNFFFFNRTDGLLYYFINDLQDYDLKACYI

KILSKAPKHALHDEFLKLNHFKKILNHKQMVLNKEIKPSKFCFISKALHEDSKELYSFFRKYFDPYLFYF

SQKNLEEKIPNILVYKENEKIHAALIYTQTLNANFLDFIAVDRNLKHKNVAFALLNHYFAANTQNKFFKL

FVEEKNQKAINFYKRAGFCFNHINLKFYRNF

>ETJ82545.1 hypothetical protein X908\_02885 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIYNGIILHTFFFENIRIICTNNKAIFKIFTKITSCLKKSLAIFGIL

>ETJ82544.1 formyl transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVEESIDTGAILTQKEIKLDDNFTALSLLDTQHKLAIASFKEALKNLENKIFKIQTLGGGYHKKLALPNE

GYLDLTWDKEKISRFLRAMDCGALIGVPKARLKILGEEKEILFYEINELDLILNLSDNTILKITKE

>ETJ82543.1 acyl carrier protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFQAIKNMIE

QAFI

>ETJ82542.1 carbonic anyhydrase, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

QQCYELLNQNITTLKSQRKLAQNYQAKFTSTFIPPNGDYQNYGIMAALDHINALKDLVKRFPKLADLPKI

YGGGSYGGYLSLLIAKIAPWYVDGVIDNSGTVLPLLRYIIGRDLEQFDFIFNDPNTLIEMFTKTYWTRED

ENSPYFFANENYMIRSLLNSSHLIIQVNVNKNIVLVSYHSSKDEFNTSKDKQTLFLAYKELGYDATLHLI

KDESEIDGRFIKDLNHGMRITDRALFRKELPLMLEKLQKRKSFMQENSISYPCGNKVFTFKDVGDKFVLC

IK

>ETJ82541.1 hypothetical protein X908\_03410 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLELITQKDQDFLQNIENLDEEYIQKFINKKISEIAIAIETAAENADKAKDRTQKAKNLNTDSDWQTYIP

IFGRWLGETSEEKKKLNPI

>ETJ82540.1 hypothetical protein X908\_03085 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKDIVTTEEELQGFYIVKSILASVSANLEDVSYKDTLSYFSILYQGKVTKWICRLYFNTSKKSISFPDG

ASYNIEKLEDIYQYKADIIKAFESRK

>ETJ82539.1 hypothetical protein X908\_02945 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKPVCWNFPIKNISICKILRKKIISGRFLFKSAPKKVATKNKTIKIVNCCFSLLFKVLKTKRYMK

>ETJ82538.1 hypothetical protein X908\_03735, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

ASETITALKTVLDKAYNDLKNAEANLESTTASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKTVNKP

NDNNSGSNNGNDGTDSGDINNGNNNVSNNNPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASIDEAS

TQLSGNTCIVSDNFKAGNPCSR

>ETJ82537.1 ferrochelatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLVLFLNMGGATNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCNKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNESDEIILFPLYPHHSCTTVTSSLEVLQNEIS

KQKIQAKVKTIDIFYKNELYNEMIVSHILDKKSKFDAKILIFSAHSLPQSIIDKGDLYEKHVNDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFMEFILNSINSPLARKTSC

>ETJ82536.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNRNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSLYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCIASIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFSEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>ETJ82535.1 alanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDIRKAYLDFFASKGHEITPSSPLVPDDATLLFANAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYVTVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGEEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSADGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYIYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDFIKEQIRLEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTASGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFVKAGEELKVGDIVHARIDTEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALNKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEELSK

VKDELKNNDILNGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRIDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKINEALKQSLETIEK

AL

>ETJ82534.1 septum formation protein Maf [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLILASSSISRANLLKTAKIDFRQVSFDYDENLNKNISPFLYVQKIVLEKERQFLSTLGKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALRDYVE

NDLYKGKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>ETJ82533.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILKYIFSFFTLLFIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYAPYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAALGYFHKNLNELSLKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYNLGWISKADYDTAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPNIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYDEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGGKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGTIKDPQIIRQVQDK

TGKTIMEFNSNERKVSDEAQSFLVLDMMRNVVEKGTGRNARVKDIEIAGKTGTTNKSVDAWFCGLTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPNGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>ETJ82532.1 hypothetical protein X908\_03690 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCQEKHTHTHSQKHLKAVCNRLSRTIGHLSAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAIEENDIQSIEELNKAIDMFMK

>ETJ82531.1 peptidase S41 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTKRFFAGLAGFATTFILCLFLTSHLQAKVDQKEEQVQKRLEALDKLTKTLAIIEQYYVDDQNISDLVD

KSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVGMKDGALTVVSPIEGTPADKAGIKSGDIIL

KINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENILYLRVT

NFDKNVVDVASKELKKYPNVRGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRITSENQEYKADPK

NKISDVSLAVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSVQQIIPINKTEALRLTIARYYLPSG

RTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKKEDKQENKDNKNLISQKQINDD

AQLKSAIDTIKILNIKQGQ

>ETJ82530.1 phosphoribosylaminoimidazole-succinocarboxamide synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKKEMLYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGALNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIVRNVATGSLTKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNELVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>ETJ82529.1 phosphoribosylformylglycinamidine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVAIIRFPGTNCEIDTAYAFEKLGVKTQIVWHEEKEFDADLVVLPGGFSYGDYLRCAAIAKLAPAMQGV

FNHAKKGGYILGICNGFQILLESGLLKGAMKHNNNLSFISKNQSLRVVSNDNAFLKNFKKDEIISLPIAH

GEGNYYADETTLKELQDKDLITLKYEPNPNGSVFDIAGICDENKKIFGLMPHPERACEKILGNDVGLKML

KGFLF

>ETJ82528.1 hypothetical protein X908\_03665 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILLTLIFSVVVLFGRGEISVFSGQDENMQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGS

LVLTNDEYPSKVYVGEVFPITIYARTTENTKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNS

NASLSKISIKLLRNNEAFQEADINLNPIKFENTLFNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNA

TNTNLKSFFIEGIQKQGIENLKGDFNASSAFYYAILPLSKTNFEFSYFNKDSKKLENINLKLKISDDEIS

TQSDLNPVNKDLNIYKQYALWFLAVLFGVLFVWRKNYIILALAVVCFALSFLVDTNTQNAIIKAGSRAKI

LPTEPSTYFYTANADEKVEVLGKRQNYIKVLFSDGKIGWVNKDDLQKN

>ETJ82527.1 chromosome condensation protein CrcB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNTLLVVGFGGFIGAILRMLSINLVNKFFPYSISFGTLFVNVLGSFIIGLLFSYAQNKGLSPLLKSFIS

TGFLGAFTTFSTFSYQNLLLLQSGNYLHFALNIILNVFLCLFAAWLGFLIFK

>ETJ82526.1 rhodanese [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIENIPASLWTKQDLNAYQIFDVRTPLEWEEGVLPNAQCVALYDNQGLLNAKFLDEFQSKRDENKKLAFI

CRSGHRSMVAAEFIAEKLGLESINLDGGMLALKGY

>ETJ82525.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENVQNANLALKISD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAEILREFLMNEFE

KLKG

>ETJ82524.1 penicillin-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MALLFMIIFISSTFFLTSKRHIPNTEKDQYALALRGSIITKDNFTITSSKQIYRAEIDLRSINKDKFDLF

LKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKLYIQGFFKAFTNNSGRVE

TRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYDECLSPVQNEKIQGLKDIG

GNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVMESKTGRILALASSRRYD

PQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSYKLGRFTIKDDHKMDKMT

MEEVIRYSSNIGMIQIAKRLNNIEIVSGLKIFKFGEKSGIDLPYEQKGEIPNPKRLRDIEKSVLSYGYGL

KTTFMQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAAKTMQNVLINVIEKGTGK

KAITQGIIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHPTKPYSYYAAQSALPMFK

DVVDILINEEFLTPIQDNNQTSTNN

>ETJ82523.1 flagellar hook-basal body protein FliE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNINDLRLNNNISNTNKSQNSTGIGDEFAKMLKNEIDDLNKAQESGEAAMTDIATGQVKDLHQAAIAIT

KAESSMKFMLEVRNKAISAYKEITRTQI

>ETJ82522.1 flagellar basal body rod protein FlgC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYLSDFDISGYGLSAQRFRMNVISSNIANANTTRTAEGGPYRRREVIFKATDFDKLLNEQINKDNNFLK

YENPLNDPSSPEEAKPPIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>ETJ82521.1 hypothetical protein X908\_03600 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKKILYIVVFFVVLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQ

THSSDNASTEILKITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQRQNKELI

ADIKKLLLKDYDLNIDGNLSINTKSEFYYFQGRASGELFDFNASISYKDKNLAYKIEDLNIRNITEIFKR

VNKRIELPQSLNLWVAYRAKGEFYHLDYLQGFIDFTKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKL

DLNLNKQKLDFVFNKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFY

QKSGKIKSDLELKIDFHDKGEISYSGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADF

NAKFDLQKQQGNFNTQISRLYFDNGELLDLKNQNAEVKLDYSQNVNISIPQWNLILNFKDGLEANLNNPK

ILFSFSPLLKKFGFIDAKNVYYKTLNFEDFNASVNDAYFKNNLLINGQTPYENDSFDIVKNKGIMEIHTQ

SDTASAKISSDNKEIHLKNLSYIYKKDSNSSNSTFDISTNTQNISFGGANVALILPDSNKTLAFDRVEAD

LKGNALDLKGSRGNAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLSIKGSGLEYFDGQIDF

KNTYVKDLRGINQLISFIDTVPSLLMFKSPTFNQKGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGL

GSANLRLNTVDFSLELKTLKSASEAISKVPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTP

FNLIKNIIQLPANLLN

>ETJ82520.1 isocitrate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTSDISLSGRILATFSEYLKEEQRCEDALELLGELV

KRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNYPDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNS

DRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGDFFSNEKAVLIDQDCVANIEFTSVDGKNEILKEG

LKLEKNEILDATFMDVQKLQEFYAKEIKASKDDDVLFSLHLKATMMKVSDPILFGYAVKVFFKELFIEFQ

DEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEILAKSADISMVNSDKGITNLHVPSDVIVDASMPA

MLKNGARLWDKEGKEKDTNAVIPDQTYATIYEAVIEDLHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDK

TFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKFDAVLNWIDLGIERSELSGAEAIFWLDSKRASNK

IMITLVQNRLKEKGKNIAILTPKEACLRSLELIREGKDVISITGNVLRDYLTDLFPILELGTSAKMLSVV

PMLKGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGEFLALQASLEFYANKCSNHKAKVLAECLDEAIGE

WLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQASDMELQSFFKDIALELSSNEEKIRAEFNNAQGVK

VDLGGYYKFDDEKANKIMRPSATFNAILEKIGQR

>ETJ82519.1 malate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNIDLLCAKDYTHTKNS

DIVLFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMLESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SLQEKDKLEKSLIKYQYKGE

>ETJ82518.1 malate--CoA ligase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNIHEYQAKAIFADNSIPTLKGKVAFSVDEAVANAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PEKIAKVGIDPQIGFKMFHGLEVAKVLGLDKDESKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASAETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>ETJ82517.1 succinyl-CoA synthetase subsunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGVTPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIKENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESAAAKKEALKSYGIHVVDSPALI

GEEIQKILG

>ETJ82516.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>ETJ82515.1 2-oxoglutarate ferredoxin oxidoreductase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASVAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIEIINRKKFTGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGAIVKKNMERLIGKIKNNQDDICTYEEYMLDDAEFLIIAY

GSVSRSAKEAINRLREEGIKVGLFRPITLYPVAEKKIAEVVNKFKKVMVSELNMGQYLEEIERVSSRRDF

ISLHRANGRPITPSEIIAKVKENI

>ETJ82514.1 2-oxoglutarate ferredoxin oxidoreductase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAFNYDEYLRTDKLPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVVDKSKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>ETJ82513.1 2-oxoglutarate:acceptor oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKDTMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>ETJ82512.1 hypothetical protein X908\_03555 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEERQNDIYI

ELGAKILGHEG

>ETJ82511.1 exporting protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKISPYLICIFFIFSNVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVH

SKFRKYPRQFVMSLRRNLDWVTQTLIPDYTNPHIDRARLILEFSGYNKGLATFTVYIEDKESRLMVEFLD

PRKKALQNPPQNNQVVPMINFNEPQVKPLTSKENNNSN

>ETJ82510.1 octaprenyl-diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAAIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEKDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNENEKEWLKTKFEEQKALEKAILEAKTYAKKARKAIEKY

DNNKLNDIIKAMIDREF

>ETJ82509.1 prolyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEVN

LSFITPASLWQESGRYNVFGKELLRFKDRKKNEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKFR

DEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKEF

MVLAKNGEDDILICENCDYAANVEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKINAFYTIK

AVVKKAIYENESKLVVFFIRGSDDLQEIKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYID

FELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQKY

SKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEANHDEKGCIWNKTLAPFVLEIIVSNLKDEKALEF

ANKLYEDLTNLGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIELIQREDLVKELIKTDELM

EILKKKVL

>ETJ82508.1 integral memnbrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNYKLSLSPLFVLEIIASILFIVFFGFGNFLFFILLSMIFGAVLLGIFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLVFPGIITSVFGIFVFFFGIALKLITKSKYQYTKQEYQNSNEEIIDVEIIEDRK

>ETJ82507.1 porphobilinogen deaminase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSNDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLD

IISLRGNVNSRIEKLKNNDFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESINDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGESLAKEFIAKGAKELLKKAESMI

>ETJ82506.1 flagellar protein FlaG [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEISKANGQMDTALANISQRTSETQASLNIQTDRSQGQEGDDGQQRGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>ETJ82505.1 flagellar biosynthesis protein FliS [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNNLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKVAIRNEDIEQRVYFVKRTTAIFIELINTLNY

EKGGEVAHYLSGLYTREIQLLSLANLENNEDRINEVINVTKGLLEAWREVHNNETVAQ

>ETJ82504.1 hypothetical protein X908\_03500 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQWLSDFKLALIQEDVNKLENLLDELDMKAFIKNLAKESPSEDFLKENANDVFYQVQALLQEAVILIEQ

KKKTKAVEIQKFQKALTYFKS

>ETJ82503.1 elongation factor P [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>ETJ82502.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMCYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILFIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLSDDKS

>ETJ82501.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISLDLLYYIVGILFLVFGILSFSNQAKDIKSRISGGVFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAVHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIAV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>ETJ82500.1 hypothetical protein X908\_03475 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKPPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLTLEINLLAKENDKAEIWAKNLEGI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLHKNDFVKFFKAYLPNLEAKEPVTLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKILSNFCDENLKILLRNNATEHFDKAIAHIEDDYLGSHWLGSFALLALDVDIL

>ETJ82499.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVFLIISSIIVAIILGYITRHNVGIFAMIFAYIIGAFFMDLAPKKIIAFWPISIFFVIFAVSLFYNFATV

NGTLEKLAGHLMYRFANHPYLLPFVIFVVSAIIAALGAGFYTVLAFMAPLTFLLCDKIGLSKIAGAMAIN

YGALGGANFMTSQSGIIFRGLMENSGIEANEAFANSSIIFAFTIILPIVVLSFFVFNAFKNNIKISVISK

PDPFDYKQKTTLILMFMMIVVVLIFPVLNIIFPHNEIISYFNKKIDIAMIAMIFVAIALFLKLADEKQVV

ALIPWGTLIMICGVGMLISIAVEAGAIKLFSDLVENEINVIFIPLIMCAIAALMSLFSSTLGVVTPALFP

IVPSIAASSGLSEALLFSCIVVGAQASAISPFSSGGSLILGSCPDKYKEKLFKDLLIKAVPIGFIAAILA

TIIMSFIL

>ETJ82498.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIDTHAHIFLKKLNTVANTRYKPDYDASFKDYKANLDHYDFNKGVLVQPSFLGIDNEFLLQSIEKDENI

KAIVVVDENIKFDELKKLKERKACGVRLNLIGKELPNFKSMVWTQFFENLSKLKMQIEIQRDLDNNLVDI

VENLIPYGCNIVIDHLARANANLTNLEDLICLKNSRIFFKISGFYRAKIDYANNEQAVKFAKKIYEILKE

HFPLSNFVFGSDWPHTNFEANINFSSALVAFNEVVVSKKEQEQILGDNACALFGF

>ETJ82497.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKIEILKQYLKEIAKLNSSEQVWQMPFFAALGVGIVLGLSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPAIFAFIPIGIMAMGSSILIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAVFVDSLIMGSFVAFSIFI

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELILLMMSLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADKLILARLIDVVIGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>ETJ82496.1 gamma-glutamyl phosphate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRNLLENIKKNSQKLLNLTPKDKEKIILKLAQILRENFKIILEANKKDMANFTKSGAMKDRLLLDEKRIL

ALCEGLEKIAYIEDPIGKISKGWKNYAGLSIQKMSIPLGLICVIYEARPSLSAEIAALMIKSSNACVFKG

GSEAKFTNEAIFTLVNKVLKEFDLQDCFAMFTQRDEILQILAFDDLIDVIIPRGSSNMIQEIANNTKIPL

IKQNKGLCHAFVDQSANLDMALKIILNAKCQRVSVCNALETLLIHEKIAKNFISLLIPEFKKFKVKIHAH

ENALAYFNNSNLKIFKANENTFDTEWLDFALSVKLVKDCDEAIEHINKHSSLHSETIISNDASNIAKFQR

LINSSCIYANASTRFSDGGEFGFGGEVGISTSKLHARGPMGIEDICTYKYIINGEGQIRE

>ETJ82495.1 pyridine nucleotide-disulfide oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIDLIVVGAGPTGIGCAVEAKLKNKEVLILEKSNNICQTLMQFYKDGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFGSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSVLGNEKILVVGGGNSAAEYAVDLANSNQVSLCYRKKEFTRLNDINLKDIHEARNSGK

VELKLGIDINEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>ETJ82494.1 multidrug transporter MatE [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSSIFSTLSPFRLFVKCAVPNVISMAFISFYYIVDGIFVGKYLGSDALAALALIIPFIMMSFALADMIAI

GSAVQISMHLGLGKKNLTRKIFSSSMLIIFIISCFIGILEYFLGPVLIDCLNVSDEIKTMTKECMFVFAL

FAPFTMLSFALDNYLRICGKTAYSMVMNVIIALSNIVLDYIFIVELGWGLFSAALATCLGLVLGGIFGIF

PFLFQNLELKISSLYMNLKIFKNILYNGSSEFFGNISGSLYSIFANFVLLKISDTQAVAAFSIVLYIDSF

IIMLIIAIGDAMQPALSYNYAKKDFSRIKAIIKVVFFAGGFLSLFSIVLILIFGENLITLFTKENNQEFK

TFAYTALMLFAFNYFFAWFNVLSGSFLTAFNKASFSLVLSLAQNLFIPLFFLLFLSCFMGLNGVWLSPFF

AEFCVLILAWIFLKRIFKDLSL

>ETJ82493.1 hypothetical protein X908\_03440 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKYLFSCVLASILTQSATAVEFQEGFSGNLSIGVGARDIKSNISTLANSDYLSSYNADNSDSSFIPFIG

AELYYGNLIDNDRIFIKNYNGRDISGIALGYERAYLERFSTSFSVISSLREKAYANPYAIGNREETDVDR

YGFKISQLYESDFGKFTTSYLFSKNKYDKDTIAQSSLKREGYYHEIELNYNYSLLNLGLNYDYNDADGKA

QSYSRYGFSIGTNLAFANDYIFTPNLNLSKYEAVGTDPIFHKKQDGNIVKLNLKVVKNQFLGYNGLYGFA

NYGIEKRNSDIGFYDETYQIILTGIGYKF

>ETJ82492.1 replicative DNA helicase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDISPKDFSLKAHQDIFKAVIACSNNKEPISVSFLRKHKKI

DEQILAEILATPSMIDLPAYVNELHEKSVKRQLLSFAHLLPTRINEDRAVSEIADEIGKEIFSITNRVNS

RDIKDVDIVISELFEEFKKQKTLENKGIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KVLRQKKGVALFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKAYQRLFIPNPMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYETTEFTG

>ETJ82491.1 hypothetical protein X908\_03430 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKQIAFGSIALTATGYGIKKLYEKLSKPERKFDTHAIVPSCKDMINIEEYKLKRELEVEQKKNQIQEFL

CECMECYSGFSKYFNSKEFLEFEQNFTSKNNHKTEFLLSSYKDQMIKVIDYAKKFECLSAFLETQSEKND

LAVVKMISESMERKTQRFYLQTKFQTFPQYIFPSVWSSPMWGKQWE

>ETJ82490.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGIMLGILSLIAGFVAIVLMCSLYFIVFMVFVGIAILIFLSMQPYPYNIIFCAIYLITILALVLWRKT

>ETJ82489.1 hypothetical protein X908\_03420 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDAVTGHFGLASTILNAKDGGNVTTLHNFEKGIVATEEDLQKLTKYQQGYKRDSNYDKIKDNIRDNFPKI

VRSEYTGEEMERGAGKNKAQLDHVISLKEIDRDPNMHLFLDDAIRAEIANHPDNLKWLDASANASKGDRD

LMEWGKEIDLKTGKTNFEKYGIDEKKLKKFTIQPNQT

>ETJ82488.1 hypothetical protein X908\_03415 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIFVYSAFGVVLKDFIEAVVIELKTTFREFGKENIKEIFKRFARRMEKVWEKIKAKWKDIFKGSLEAGI

QAFFSNLLVFIINTIFTTLKKIVQIIRAGFTSLYQAVKIIINPPKNIPKDEIYFEASKIFVSGMISAISM

LGSEMIHKFLLSIPGFNVFLSLPIPFTDETIGDALSLCISAAGGAVLSTIAIFYMDKWRSNSKIGNLQIQ

IVTQKNLIAQYKIAKTWFALNDAYHIVKNETLATIQQIKKDNQMREQSSQEVETAIEEFENCNITKKLYK

KLNQTKEN

>ETJ82487.1 hypothetical protein X908\_03405 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILEVAELQNESMNQMTTILKEVVIFFTSSFCIATRMNQALSLIIAQGFVKSDGKVIRLSKAAKEQFQQI

QKFTLSFIEDHEKHKDTINNIQVELDKKNQIDDEQYKLIEKHYQEFIQYKNYNDKIVQEQECKINELKDI

LNKRKNVFTNSISILALIVSVASIVLYFIGR

>ETJ82486.1 hypothetical protein X908\_03395 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSKIFSSLSLANAFKGFLFKRISSPMQSARIISMVLDIKNAFNDNKDQTSSICKTLDLIVNFKKEHPQD

FNELFEILKDLIQEYEQNPNEIKQNLKEILK

>ETJ82485.1 ATP/GTP binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKISCNFFLSDYANLFVAKVVKISKNVDESLIPSYYKEKNLEVEDFFIISDLRELVREDFSLLRDKFLA

NFITPNDHTYAIYGNNYTYPLPVRLKEECSYFLGDEKHYLSVYKSKEYLAMQENFIRFVFGKRIFYLLHP

DSISNIIHAELELLQSENDLLNDFTSIVVKYSKTLEYEIYAFAKKVLLKACMKDPSLYDLTYNVQGKSFI

LKDFFTQKPNLGSIKFLLRHENIQCHLGKSLTQFINYPFSKSLTLIQEIRNEAVHAKAPSLNEVKKLRNE

ILGIEGVSLLKSILTHKEIS

>ETJ82484.1 aspartyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLKEQILNDIKEAMKQKDDFKRDSLRTLNAAFKQIEVDERIELDNERIYKIIASEIKKRKDAIELYLKA

NREDLAQKEQNEISLFEIYLPKQLSDEELTLALKQLIEELGVSSLKEQGLIMKEAKIKLGASVDGKRLNL

ALKELLQ

>ETJ82483.1 acetolactate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKELSGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNTITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPC

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKFAELLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSVGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENSNTTFKEWHETLK

RYNELYPLSYEDSNEILKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNIQELMTAYEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISNKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>ETJ82482.1 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFTELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

ALITQSPHLSFAFLSKLFAKPLISTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAINFKEKSQD

>ETJ82481.1 preprotein translocase subunit TatC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFEELRPHLIELRKRLFISVACIVVMFIVCFALRSYILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

VSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITIGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPAPKDKESDE

>ETJ82480.1 preprotein translocase subunit TatB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSFGEIIVILVVAILVLGPDKLPEAIVQIAKILKAVKRNIDDAKSSIEKEIRINDLKEEAKKYKDEFSST

NENIRKKLSFEEFDDLKRDILDKTKVDLTFDSRDDNTKNNLSGQNLNTEEKPNLSKLETQDKTEK

>ETJ82479.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFQALKEDIVFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKVGFKNINLDLIYDTKLDNKKMLEFELLHLKQIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LMKFFIKQLLELNFFQYEISNFSKTKAQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>ETJ82478.1 RNA pyrophosphohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESVKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPSKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>ETJ82477.1 hypothetical protein X908\_03310 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAA

RPMLPFVSLNSLCKKKVQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSRVQLG

>ETJ82476.1 dihydropteroate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFFKINPNTDFNLLCSFINPHKMGQKIMSEKTKIHFIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEE

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKVLDLIYEKNYYEQAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYGAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAGHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALAQAMDNIGV

>ETJ82475.1 NAD-dependent DNA ligase LigA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDVLIRELRVFEEQNKDEISKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKERIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFIRELGFLKDDFIKLCANLDEVLKAYDELLALREKKPMMMDGMVVRIDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGVNLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKDRREGLEMEISRPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYANLEGFGEQMALSLCEFTRVNHVRIDEFYKLL

NLKIEKLEIKSDGVIFGKTFVITGTLSRPRDEFKALIEKLGGKVSSSVSKKTDYVLFGEEAGSKLIKAKE

LEVKCIDESAFNELVKE

>ETJ82474.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLLKNSSYILTLLSLFGFLLTWQRTVFSLFFLIPIFLTLFWEFFLFLKLRKNIIKEATLIKGSLFYRIS

IGDFYLYIFSFFLAIFGLISLFLNFLNLEKIDFVFIFIILPLLMIFLKKELHLQFVDNAYNDFRIVVIAS

FFTALFYAFYGLFFTYNEILNLELFSRKIIAYKSASFVYFDFLSEFLHFISNLKFFIFSYFGYLGFRALN

FIFDFFNFFMFCSLLAFVFNFVLKIKIKIIVLFLCFIMVLASYFLKEQRNNALKSEQEQILLWMNNFDFL

KDHNLSLIQKEKDLFEKDLKDLREIFKKNAFEIGIWWFSKEKEDLEKRINESLK

>ETJ82473.1 riboflavin kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNIFTTISKINITSLAIGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIEVD

FENIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYDAKDIESLSGIKTIIVDEFSIGGVGVHASL

IKDFLSKANLQKAKEFLGRDYSIKGKMIKGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGEKFTQGEFFELEFISFLRENQKFQDLKKLKNQIAKDIEQARELLRK

NDER

>ETJ82472.1 tRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKDELFKQSPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILSTNASVCDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFVCDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>ETJ82471.1 hypothetical protein X908\_03270 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAYKVGFPKDEWEDENISN

P

>ETJ82470.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEINALTITTLYIIGISAEGMTGALAAGRHKMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIIAGAIYYSLIIWLELNALVCTLLTLFIGVFARLLAIKYQWSLPIFSYNEEK

>ETJ82469.1 endonuclease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIFIFLLAISLNIFALEPYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEASNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQIAQINNKIWN

EIEQRERNLAFKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYVKIIKTPKFKECYQVPNHEVNNENIKQYQ

INCDKF

>ETJ82468.1 endonuclease III [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKAYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFGGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTGIFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>ETJ82467.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDAEVSEFFAPMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>ETJ82466.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVIMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

GEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETSQMMSKLSGDENQNKGNETKQIEDFSESKTEENQDEIQAEISKQESNDELKNEDKENK

>ETJ82465.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANITNYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGFIRENLSKELQSKLDNNITIDEKTGSISLPAEVLFDKDSYVLKNEAKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKLQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>ETJ82464.1 1-aminocyclopropane-1-carboxylate deaminase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFVSYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKNNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGTGTSAAFLAKYSKFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEFLTSDKKYHFAKPYKEFYELYMDLKLKCNIEFDLLYDILGLSIALKQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>ETJ82463.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLGNFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIINYIILKRGIIDGIEKSVKFLMPLLFICLIIVVGRNLTLDGAMAGVKFYLEPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFVLLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>ETJ82462.1 sulfurase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIQSLQIGKIKNYKNFQSAFIKDTYLEETQIDFLGILDDQIADKIHHGGYHKAIFANSCQNYPIWERFL

NKKLNFGSMGENLSIDGLCEQNVCIGDIHQISNAILQVSEPRKPCVKISKIHNNSNFTHEIFKTGLSGWY

YKVLQVGQIRKYENIKILEKNSTSLSVFELNQLFYSPHQALRQNPILLDKLEKLNSLISQNWHETIHKRL

KNTYDISYMDSL

>ETJ82461.1 thiol:disulfide interchange protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRIFGIILLSFCLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKLKLYINEKDISSLINLPQ

SSTRGNENVYYQKLNLALPNLLLEHFAKNTTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKDAFEISKPY

KTQKTDKKTKIESEESSIANFLATDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIVAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGASIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVLGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFGFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFTIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISASKSALSYDYINNFEQLKQEIQTNTKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSENNNEQIKTMKEFNVFGPPVLIFFENGKEKLKITGFISADD

LLKKLEP

>ETJ82460.1 amidohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKLVENLALKYYDKVVDLRHQIHMHPELEFEEENTARLVCKILDEFGIKYQKNIAKTGILATIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGAALILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGSLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVVSRRLAPYEAGVITVGQICAGTTYNVIPINAYLKGTVRFLNDKTQDILKSSLE

EVAAATAKSNGGDYKLKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>ETJ82459.1 macrolide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYVFDEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKKLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALMNGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKEKAQEKLTLKTMSKEKKTLTLLKNQAFECFKIAYSSILAHKLRSILTMLGIIIGIASVVC

VVALGLGSQAKVLESIARLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGVNNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKDTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTIGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVVFGFFPARNAA

NLNPISALSKE

>ETJ82458.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRVIFSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALTRADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIEQSLLR

AKQNLLSNDQNRNLLIKNLQDLLAKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFTYEQL

LISYEQALQSAMNEFALNYKDYQSNTLLLQNLQSINIKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYQITALSFNDENLEFLKY

>ETJ82457.1 hypothetical protein X908\_03180 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVNKFKVILLFFIIFTSSYAQNLNTNDTIDSILNQNKNHSALTSYVSKKDLKNLEKKLEKNQNIGIRIY

GDSHMAADFFPRVIRGYLIRSNSIGFAYPLQPKYQQNLNLVYSYKNFEILNSRNPANAGHNFPLGGIIAK

AKTKGAKINLDTTLDKKNFKIGFLFKAKQNTNAFSIKDAKNQSYELRTTQINKWSYKELELDLPLQISAL

QKDAELGGYFITNKDNNVFLDTIAINGAKSDLWLSWNQTVVKKELGLLHNDLIILAYGSNDALFKGFEKQ

KFKNNLKKWISILKTYNKNAVIMLISPPTVVQKQGKNYKLAPDFFTIRKALYEVAKEEKTLIFDMHQFMQ

DSGGKNKWIEQKLSLNDVHLTIKGYELMAKKLLEDLKNIIDY

>ETJ82456.1 hypothetical protein X908\_03175 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVVRFFFILIIVLGLVVVVMNQSISSYIEQKYHFAFYPHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

EETTNQENKSIDENLSKIDKVLNTLENDENTSHKETNPTLIQDANISFIDNTKLELQNGDEFLFIGDSLM

QGVAIALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFIKNSNIKYLVVLLGANDPWDIKKGGN

YHRFGSLSWIDIYTSRVDEIIKIAKKHKAKVFWFEIPPVKKEDLNKKIQVLNKIYSDEILKNKEIFINTK

LFFSVNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>ETJ82455.1 acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTYFSLEFSILMIAFFAIYWTFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKREFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYVDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYIYIPLGGNRKGIPRTVANILIAFILSGMWHGNTLAFIVWGLLHGIGIVFIHLLTLSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLEDAIEYFKACYYNFFQIPSYNDIYMLVAFGVLFMIYPLFINFKEYCI

KILNLTPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>ETJ82454.1 ferritin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHAKKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALSRKK

>ETJ82453.1 phosphate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILSLSVTSLALCGALNAVDLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKAGVTDIVGMMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>ETJ82452.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKEKIIKFALFLCAFVSVIVSFAIMLTILIEALKFFQKESVVTFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGIQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACLLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FVITLIINMFSVYLINRFHKRKNL

>ETJ82451.1 phosphate ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGFPAFKQTYIFVEANRNSPSYDLLSRAEQR

KIRTGQIAEKSWLLANSEVDQYMKQKYNRLSEKQRTLVDDLVQKGEIELKFNSNFFLNGDSKSPENSGIL

SSVIGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>ETJ82450.1 carbonic anyhydrase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIINQIYSIDSCDDVELNIKRGSKLEFRLTYDDSKEIEAIICIIPGGAEDMNSYIYIDDYLTRNYKVAVI

NINYHCIGNRPHLGSSFYLDDIDKFILDTSLKAINLKCINVYGINSYENLNNAFIRIDQEIQKLKLNQQL

HQNYKLKTHVSFLPFKNEYQNFGIMQAMDILNAIFYIKENSPFKLMRGGVLERFCLEIHMVDI

>ETJ82449.1 hypothetical protein X908\_03135 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFGNSYGGYLANLCAKIAPWSIDFILDNSSFVNLFGNIFRLIGFGKEIDFTRYHGTYDDTLFKNIFLYLS

DKTYWNNNKFSKNYFSNARKIIREPLNKEHLIIQSLYPNPKYILYHSIFDERSPFKNKENFVHILKELNF

KVEFFAISQVDNKFIKNLNHGMGLSTKLFFKKHLLQILKEPLQDKICKKEVSYKCDELVYTFKEENHQII

LNITN

>ETJ82448.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCKDCGCSINSSHTHDHHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEANTLCINLMSSPG

SGKTTLLESTIKALKNELKIAVIEGDLETNNDAIRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDD

VDLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADIVLITKADLAHHFDFDVKEAT

RLIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>ETJ82447.1 hydrogenase formation protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDLGLNEFHR

>ETJ82446.1 hydrogenase formation protein HypD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNLNKNIIFFAIGF

ETTTPMSALLLQKIIEEKINNVFFHINHITVPAPVEAIMNDENVKINAFLGPSHVSVITGYGIYEPLAAK

FKTPIAVSGFEPVDILESVLNIIKQSNEGTFKVYNQYKRAVSKEGNIKAQNLVKKYFRVCDFEFRGLGLI

KDGGLELKEEFSAYDASKKFDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNV

>ETJ82445.1 hydrogenase assembly protein HupF [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNISLAHGGGGEEMNELLTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELEKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEIISKKESKNIKAGLSILLSGDIGRHGASVLIKRNELEADVKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>ETJ82444.1 hydrogenase nickel incorporation protein HypA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHELSIVESLIELCEENALNNKAYNVQEIYVKIGRLSGIEADLFKRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVFKCPKCQSIEYKITQGEDLHLMRLVME

>ETJ82443.1 hypothetical protein X908\_03080 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTFIMPFLKTLGYDVFNPSIVVPEYTADIGTKKGEKVDYAIFKDSKPFILIEAKNHTENLDNHNNQLVRY

FNTNPSIKFAILTNGIEYRFFTDIEQQNLMDKIPFLVVNLEKLKPRDIKDLKRFICTDLNLDEILSIAME

KKYYRSIQEIFKSEIENPSDEFTSFFAKQMTEKRMTSAVLEEFKNYIKKSFKEIINDLAYEKITSIKNNL

QNINDDENDEQIDEKRYCHNRRRITRFLYSKINSC

>ETJ82442.1 ribonuclease R [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKSKYYLNNGFAFGVLDISSKGTGFLQCFDESFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKRANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDIQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLAYCFKIALDHENKVIKEELFEGIINSKRRFNYDEVDEILIQKPDLKE

LSWLYELFEITKNLRKMRLKNAFEFRTEELRMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGVFRNHLSADARKIDKLLNELRELGIDVNFKPNLPELIRDIQALSDELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKNDEKLFNYLLLNIESTCESLSTLEREADKVAF

DFMDRKFARWAAKNIGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIVMAKI

YAKITQRLIKEENV

>ETJ82441.1 ketol-acid reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAITVYYDKDCDLNLIKSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSVSE

ASKTADVVMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVAPKGIDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGPKIVTEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>ETJ82440.1 hypothetical protein X908\_03060 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKKLVQIQRYLIIAILFLLCIALALGILVKYQNSQDVFSVKPDYFIDKQEDLISSNKDHYEIGIFQEN

EFDNNKSVSILEQKIQEIDDLNTSLNEQNLSSVEQNLSLEQNQSLEQNFIPKDTNLTQDQNLTFDEDIHL

NKISKKPKLAIIIDDMANASQVRGLKALNLKLNPSFFPPDKNHSETPKLALKFDFYMVHLPLAAINYNKP

EIDTLNPNDSKERIFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSK

ANKIAKELSMPYIQRDVFLDNEDDVNYVKKQLESAVKLAQKKGFVIAIGHPRKNTFKALEQSKDLLKGVD

LVYLSEIYGK

>ETJ82439.1 DNA processing protein DprA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCVVS

GGALGVDITASIAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYLPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELNKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>ETJ82438.1 Holliday junction resolvase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRALALDVGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSREEEMTR

RIKHFVSLLEFDKEICFVDESGTSKEALGYGVANTRKKDGKLDSLSAFIMIKDYFAL

>ETJ82437.1 methionine sulfoxide reductase A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQISLLEILTL

FFKIHDPTSIDKQGGDIGIQYRSIIFYENEEDKILAQNFIEEQQKIFSKKIVTKISRLQTYYKAENYHQH

YFINNPNQGYCQAVIAPKLQKIQSD

>ETJ82436.1 inorganic pyrophosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDLSKIKIGDIPNKINAVIEIPYGSSIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLNKIKNFFETY

KILEPNKWVKVQDFKDEKAAIEILEKAIKNYK

>ETJ82435.1 adenylate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAEVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKERVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>ETJ82434.1 inorganic polyphosphate/ATP-NAD kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNKIDHKNIKTIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQASMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRPIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>ETJ82433.1 diguanylate cyclase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIVLTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIVKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVRERFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLVDKASKILSQAKDNGKDRVEVCS

>ETJ82432.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILLCFLICFNFLFAQINTPEFYERQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSMQNFS

KVTPMIRKILAQQEVPDEILYLAMVESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQVIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSASLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIREFNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>ETJ82431.1 RlpA-like lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>ETJ82430.1 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTELIFLDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIKI

LYQGIKDKLACAKEILQKLNLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAV

AQMIEILVEKNHLEEEWNKLWL

>ETJ82429.1 hypothetical protein X908\_02985 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAIKIFGILIALFTITFTILSLQDPYSLNLQTNALNFKNIEAKNLKAYESNTSIIKAYYKANSWVRYADR

DEFNDFITLNLDFNLSANRLEFFNKDMSKVLFEGNVTYIGSNNVKIISQEVEYQPKDKILHTNTNFKALI

NGSIINGNTLNYDVKNKILNIQGVNAWLQDK

>ETJ82428.1 organic solvent tolerance protein OstA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNRKPIRY

EAMQNARFKIVLKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDK

>ETJ82427.1 GTP-binding protein YsxC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIGAKFITSLVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCKR

NEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKLRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRFL

RPDQKILKVFTKCDKLNQSEKAKLKNEFKDSILVSNLNKFGLDSLEDIIINQTLGLDK

>ETJ82426.1 penicillin-binding protein 2 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKIEFLPPVRGQITDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELTNLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLLEGNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSVVKMGVGLSFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKHAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPHFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDKNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>ETJ82425.1 peptidase M24 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFALLPLSLQKDLKINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNSELEKKLNLDGFWLKNYDEIIMELEKLANTNLLIEPSKMTALLINSLDKS

VKIIQEINPSTHLKAVKNTKEIAHIQDAMIEDGVALCKFFAWLEEAIENKELISELDIDAKASEFRAQSK

HYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRAPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KVKEGMLTSIEPGIYKVGKWGIRLENLVIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>ETJ82424.1 di-/tripeptide transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMMTFASQNLINNNGLPISMAWIIISIFFLTLGELCVSPVGLSIMAKVAPDLIKNQIMGLWFVASALGNF

VAGLIGGNVNIKNIDQLPNIFEQCMWMLFVVALLLFIAKKPIYKILNEKNKQLSN

>ETJ82423.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKQEIQKLDTNFLGHPKPLFSLSMVELWERFAFYGIRSLLVLFMATTISKGGLGISTEYASAIYGIFAG

CLYLAALPGGWITDNYLGQKKALFLGSFIIALGHISIALSILSTPIFFLGLTFIVIGTGFFKTSASVTVG

MLYKQNDTRCDTGYTIFYIGINIGAFIAPLICGFIQAKWNYHLGFGIGGLGMLISLLILYFKAIPELEEF

HKNCTLRQNWEQPFKKSKNLTLILSISLLSIIGFFLIFINLADINPIILSKNF

>ETJ82422.1 hypothetical protein X908\_02935 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKIEVFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKTLVEHNYLALNEAKIENSHLKEIET

KLTKQIKTEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGNFK

DLLNFIQNLENLPIALKIDKIKLYNTQGLKLKLDLMFKFVNL

>ETJ82421.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKINSLNKINFIKSTDLLYAQRTGISKEDELFNNLTADFKLSKPFDYQIAFFKHNEIYHCFLAPVYKLKK

SRFCFPEPLIFQALFDERFIEESDYCVLNLYDQTLYLYFYQEGKFINLKKIENFNPSNMDLFFKQNRFIE

LLKHYESKLLLYQDLDTIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISFK

IILIFIFSFSLSMMILLFKDFIEYKQNKEIQNKNFIIQEEISKLKQDKQKLLTNIQDLNFTLSNKISSTQ

QQFHILSTITKEINLDKNKAIILNQIISWLNSNELKITNLEFKQTKIILSFIDENHFKRALENLNSAFKI

LDKNEETLNIILEVIHE

>ETJ82420.1 GTPase Era [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVMHEKNQIIFIDTPGLHESGATLNQ

LLVQSAIKSIGDCDVILFVASVFDSTKDYENFLSLNPQVPHIIALNKVDLTDNATLLKKLSEYAKFSQHF

KAIIPYSSKKKSYKKGLLDEIVKYLDEHEYFYDPEFLSASSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMLIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>ETJ82419.1 hypothetical protein X908\_03740, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEELSESQDDNSNKTLETQNLEHDNLEQETIKEQTQEDTQIDLDLTLEDGESEKEDLSQEHTALDTEPS

LDELDDKNDEDLEIKEDDKNEEIEKQELLDDSKTNTLEM

>ETJ82418.1 hypothetical protein X908\_04360 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLGLSLVSLGALSFDELIYKDEVKPSFDCSKVKDDGKSDDELMICNEIGVRNEFENKKLALVDNIYSSLY

>ETJ82417.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLYFFPLISYQQILGIILSGIFVIFYPLVLFLHLINYGDLLNFILDEFFKFKIYGTNIHIPFWIFISYLI

ASLISVRFKYLAFLCIFANFIPFIMIVI

>ETJ82416.1 hypothetical protein X908\_04200 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAFWIFYLLCKNIKIINFVTLFCSILLCISLYPRLLFSIGFLFSILGVFYIFLYMHHFANKFNNLINIIL

LNIWTFLLWFYLCFIFFHL

>ETJ82415.1 hypothetical protein X908\_03765 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKNQKH

>ETJ82414.1 RDD family protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKENLQDRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDRLIQAKDLFETTQIIGNFYLGFILLHF

SYQAIFTYLYGASLGKILCKIIILDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>ETJ82413.1 phosphoribosylamine--glycine ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIKETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGAEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIEDPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLEDGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>ETJ82412.1 hypothetical protein X908\_04405 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDDELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNAANADPEKLKARQER

LTKLQKEAEYYRTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIVTGLNLCATIMDFKIWHLSLKS

SGIKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>ETJ82411.1 GMP synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEIKKDSALFKNLPKKQTVWMSHSDKVENLPD

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEVFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKMNLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKVDVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>ETJ82410.1 hypothetical protein X908\_04395 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKRNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDENLSKNSYLELSKGEFKNC

FKDEKLFKKFEDLRELIKKGSNLD

>ETJ82409.1 excinuclease ABC subunit C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKENLENELKTLPNSAGVYQYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPRNSLRIQKMIEETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVNFEEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYLEILDEAMHALLNPSILIKNLE

KQMLVLAQNENYEEAAKVRDQIVTIKDLEVKVEMDVAKLEDFEVFALAFEDSMLSTLRFVVQNGKIISAN

SKITPIKNDIQWDQNEIYKQLILENFSMDIPLLANVIYVYEEFEDRVLLEEILSQRFDKKISIKIPKIGE

KRRICDLAFQNALLNIEKEQKNHDFTIQKELKFYFELENLPNDIEIFDNSHLQGVANVGAMVTYRINSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKKIIVSSGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSINDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

SGVIQKLLAYYGNFESIYKADFKDLTMLVGRKAAQKIKEN

>ETJ82408.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILAGIIFIFNLILAYLSIDISKLDSVAEQLKIGMFSSIFVLSLTLFIFAFRQNRNINKIYQKIFYMQND

FLNFQKKIDVDSVLDLLKEKFETTGQNLTKTSHEKDRYLHLLEENLYQLGNISNAMRCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKIFNKNVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLITLLRKYLPKA

>ETJ82407.1 uroporphyrinogen decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILDVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYDALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFNYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYTLQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>ETJ82406.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNYKKALFALALSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSQNFYLTAFARFVAGTQHGVFFVIATLAVSAIVPNDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFKVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLTMHSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGIVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSLKKI

>ETJ82405.1 hypothetical protein X908\_04355 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKERKICIKNMQNTKAGENPILPLLNASDCMQEAYAKALLELTQRAKKDIKTKEVLEQIFKNKVDKYEN

LLTQSLNTNKDLQDFIDSLAKEDLIDSRAKFKLWNLN

>ETJ82404.1 pyridoxine 5'-phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKHGDQITLHVREDRRHAQDFDLENIIKFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHAKLKQSIEKLQNANIEVSLFINPSLEDIEKSKI

LKAQFIELHTGHYANLHNALFSNISHTAFALKELGQDKKTLQTQFEKELQNLELCAKKGTELGLKVAAGH

GLNYKNVKLIVKIKEICELNIGQSIVARSVFTGLKNAILEMKELIKDEKTSH

>ETJ82403.1 exopolyphosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALSILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGIDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFGK

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKHLAFRAFDEVAT

IKKELHSLGVKTVVLNSGVPTTLSALKQNISYEKYEVTRVNGKKLCHKDFLNYAIKLFHMEEKKAIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>ETJ82402.1 hypothetical protein X908\_04335 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFSDFFHAWLHESYYKNAVSIGKNGDFFTAVSVGNLFGTLLAKHFLNLIDKKILQPPLELVEIGANEGY

LSRDFLAALLELRPEIFSQISFFVIEPHEKLKNLQKKTLEGVEFTHKNSLKECHFKNAFFFCNELFDSFT

CELINHDKIAFVENFKLIFKNMDENLITKCKALNLTKGELSLELEKFFKDLDQACERFIFAGFDYGTFNA

QNFSLRIYQKHEVFSPFEVSLKDFFGKSDLTYNVNFTHLQKLIKEYDFKPLAFKKQSLALMDFGFEDLLE

YTKNKNIKTYESFLSQAKILFFNFDEKFHFFEFQKN

>ETJ82401.1 peptidase M23 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKALWLFLSLTLWLFGAQNLELIKGQALFLELDKKDFLSLKNNDKNIPTFAHPKNQEKILAIFSLPYKNP

PQNTKLIAFYKDKKEEIFIKTLEGNYKSEKLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKALFNG

AFNIPLNSFITSDFGKARTFNEKVASYHSGTDFRAAIGTPIYAANSGIVKIAKDRYFAGNSVVVDHGFGI

YSQYYHLSKIDVKVGQKIKKGELIGLSGASGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFR

>ETJ82400.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSREIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFVKHYEQSVVLFEGVKELLEFLKNKNCFLAIATNAPQSSLSSILKKHQIIPYFDKILGVSLGIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLQKYL

>ETJ82399.1 potassium transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDNFLEIFLITVAIAIVLNVIFKKFEIPTIIGYIAAGEIISEIYHLSGKGEITHIAEFGIVFLMFTIGLE

FSFKHLMAMKQEVFLNGSLQMLTCGFVFMLLAIGILGLGDKSATIVGFALALSSTAVVLKILNDNGDINE

QYGRKALGILLFQDIAVIPLLLLVDIFSSNNQNIEKLLFTTLISALILITLLFFIGKYLVDRIFRLIIHT

SSQEIFISTVLFMVIGASFLANYFGFSYSLGAFIAGALIAETKYKHKIEADLIPFRDLLLGLFFITVGMQ

IQLDVVAQNWFLIIVLTLLVMALKFGIVFGFLFLYTKKRVALKTAFAIAQIGEFALAIFSLLQAKNMLDI

KTSQILIVVSILTMIITPFILNNIRKITNVVEDIALNTNAVQNIDSNIKLKNHLVVFGYGRLGQEVVQKI

KNTGVPYLVLESDLNLVELGVSRGENVVFANAAQEETLKIANIEECAVAIITVTNEAKLEILCQVLANYP

KPIDTIIHVNGTLKKMLFSSIDENIRIIRSEKVIARNLVQEALECRIHKNT

>ETJ82398.1 MerR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEQHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRSELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>ETJ82397.1 serine protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLSLSLASALFAASINFNESTATANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDIEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKIDRGFL

GVTILALQGDTKKAYKNQEGALITDVQKGSSADEAGLKRGDLVTKVNNKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQASFILKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGVGQSEIKNLKDLEQALKQVNKKEFTKVWVYRNGFATLLVLK

>ETJ82396.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIVSSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>ETJ82395.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKSSIFYTITFIFIFAGVSVILGFLWLIEYDQQNYTRELNTKYSLIANARLLNFAGVISEKEFEEQTKN

YNKMDEITEAKQIRKILFRGDVLARVEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKA

IAVAVICILVLLYIYIFKKLKPLKRLKKQIDKFAQGKLGDIEDVSTGVDEISQVSEAFYQAIVQIRKLNQ

SRQFFLRNIMHELKTPITKGLLTLEMIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNI

LDVLDEAKEIAMRDDSNIRIFMEESFFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRG

PELNNTLEYYTQAFTQGSKQKSSFGLGLYIVNTILETHGMKLDYLYEDGVNLFYFRNLKSVIVKE

>ETJ82394.1 CopG family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKRNVKTYSFRMPLELKERLDNLSKNLSKPKSTIVKEAIEAYLNEVEDFSFAVNALEELKDGDYQKASKK

IDKIVKNLKQTK

>ETJ82393.1 iron-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLPKWDNSYSVHNAKIDEQHKKLFKLAAKVEVVSDRSVSKNEVKELLAEFFNYMKDHFNDEEKYMQLIGY

PNLEEHRKIHKEIIQTMINLIKDIKSTNDLKEKLYIVAKKWLLEHILYEDMKVEKWRSSSLSTDDGGDIS

FEAAEDEDNEHPQFYLYTCNCPGKIHDVPYSIHQKIELQGHKFTCKTCKQAIKFYKKYS

>ETJ82392.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNAQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELAELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSELSLRAYVKNLRKILGKEKI

INQRGRGYCYG

>ETJ82391.1 molecular chaperone GroEL [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKITNLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTIVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPTMPDMSGMGGMGGMGGMM

>ETJ82390.1 molecular chaperone GroES [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIVFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>ETJ82389.1 hypothetical protein X908\_04245 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFYGVIAFVVVLLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLQGALSPFKLGFDLDYLISLKQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGRGYLLGSNVLLNAR

MYNYSPVALNLDAQNLKIEEILHLLSYPSYAKGFLNAQAKISAQNLKPDGNIIIKLDTSYINYEAIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDMSKNILSTDFNLNIPSLAKLEKLTKT

RLNGSLGVIGETSVVNNALSSLNAQVIGLGGEVKASLKNNKIFADINEASLEKLLALAGYGALVSGNLNA

KLLNADLDFSNFDLEAKINNAKINTNELKKIAKIGLPNTIFSLDAKANAKNSNISYNALLASNLLNIKKL

QGTYNLKNSELNTDLNAFIDDLSQFSAIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVIAGMPNYASGVVNAKVNLDNIDFNNLNGKANLEAKGILNAATLSKILNKNFPN

NISYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDISKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKNLNFVVNSPNLFEGRLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKTDVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDITNDVYRTANAKALIKKENIKLDLNMQADRSYILVQSGA

LNSKSGALNLPFDIKLDRANFKGSITGTTENPKVNLNAGSVLNSIKNVVGGGVSDGAKSTGDKVDKAVNK

LLNKIF

>ETJ82388.1 riboflavin synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFYISLPKEAMKFIAEKGSIGVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLARYIYAQLQGKNKGLSWEEVERISYLY

>ETJ82387.1 laccase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKIHNENLFSHLGFKDIEKCVFMDQIHSHKVIIYEKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHENGIIAALHSGRKGSFENILKECVDQITMQNSHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFKEFVQDNKLDLKALVKFQAQNLGIENIKDCGICSFDDESFFSYR

RDKTPKRFVSVVYLKD

>ETJ82386.1 hypothetical protein X908\_04230 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEISEKEKEELATLLNSLINAKDKALLSN

>ETJ82385.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPISDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEVTLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYRAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVVKIAKSELSGKAKE

NFKHIIAGYEQVVKEALVSNQPNPPKEEDFENYIEF

>ETJ82384.1 FAD-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKEFEQYFKRFLGEENAYFDEIHKRAYSYDATKKHYLPDGVLFPRNEEDIAQILKFCNENNIIVIPRGS

GSGFTGGALAVNGGVVLAFEKHMNKILEIDLENLVAVVQPGVINIHLQKEVAKYGLFYPPDPASMEYSSL

GGNVSENAGGMRAAKYGITKDYVMALRAVLPSGEIIRAGKRTIKDVAGYNLAGILIASEGSLAVLSELTL

KLIPLPKFKKTAFAIFPSVKSAMNAVYKSLASGVSPVSMEFLDNLSIRAVESKFNKGLPIEAGAILIADV

DGNVKEAIDEDLRNLEYYFLEAGASEFKIAKDEQETADIWFARRNCSQSIAMYGTLKLNEDITVPRSKLP

TLLEGIDEISKKYGFKIPCFGHTGDGNVHTNVMVPDKNDKEQVKKGYEAVEEIFKLTVKLGGTLSGEHGI

GLSKAPFMNLAFSEAEMNLMRNIKKAFDPNNILNPFKMGL

>ETJ82383.1 ribonuclease BN [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDVVATYIDTFLK

NSVNLGIVGLIAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLSFYISGFIQQT

LDDYKIGFNFFEILPFVIIWGLFFISYSSSVHKGTLKSLALVSFGAGTIWYIGKNLFVYYVVYNKTYASV

YGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKS

>ETJ82382.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGVLSSQGKMDLSFCITLAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKIALAMIKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFIKFFIINTLASLAWAIVLG

FTAYTFGYVIEAIFDKLSLYPYAAPLFLLFLAGIIWLYLSKFSKK

>ETJ82381.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGGSISVKKENTVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LAKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>ETJ82380.1 DNA repair protein RadA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKNKALFECQACGNQQSKWLGKCPDCGAWDSFVELKAERIKVLKELAQVSMKTSEAVCIEDVELEHFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQGKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTAKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLGIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

IPSKPLEDIGLKCFVAKELSQVLEWM

>ETJ82379.1 F0F1 ATP synthase subunit A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLGEAFLEGVLSMGRDTMGSE

KGARKYLPLVATLGIIVFFSNIIGIIPGFHSPTASLNLTLSLAIIVFVYYHFEGIRAQGFVKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEEGH

>ETJ82378.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYILEFFKGASLALMLFGALFFFFKYNSFFYLCLGIIPGLLLSLIFVLLIENHKLKNEIKLR

>ETJ82377.1 5,10-methylenetetrahydrofolate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCSFSFEVFPPRKDENIKNLHAILDDLGQLSPNFISVTFGAGGSINSQNTLEVASLIQEEYQIPSIVHLP

CIHSSKEKITQILQKCKEKNLNQILALRGDICENLEKSKDFSYASDLISFIKKQEYFEIYAACYPEKHNE

SKNFIEDIHYLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFVKILEKYENNALALEDAGIAYACDQIVDLITSGVDGIHLYTMNKSKAAIKIYEAVKHLLKEEL

HA

>ETJ82376.1 5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNSIISYPRIGANRELKFAIEKYFKNQSSKEELLKSAKDLRIRHWQEIQKAGIDFIPSNDFSLYDNVLD

AAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDNADIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDEKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALIQKYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIVLNTSCSLLHVPYSTEFESKLDSSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFRANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSTDVRSNRLAFKQEKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPVIWGDVSRTKPITLAWSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFGDILKEIDAMDADVISFEASRSNLSLLDTLKAIRFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIREQL

>ETJ82375.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSVLQKQGYDLKIYEFNDGVIPNVMVENGE

LDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRALRIVAS

KGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLNDVDYSLINSNFAILAGLNPVKDGLYTESKYS

EYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>ETJ82374.1 2-oxobutyrate oxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLPILDLQAYEKDKSTFLKNLREIASKIGFFYLINTSIDKNLNEKLFKLGKEFFNLSRSSKELISMVHS

PQFRGYTSEGFEYTAGTKDYREQLDIGTERDALNWNLNSPLWQRLEGPNLWPSEIPELKKTFLTWHKQTK

KACLKLLKAFAQVLDLPSNAFDKLYGENSYEHCKIIHYPKSSKNITQGVGSHKDGGLITFVFQEKQSGLE

AFIDGKWLSIPPLENSVVVNIGEFLELATNGYLKATIHRVNLSPKERFSIAYFLGVQLDKDIPIFKLNPE

LAKESKGVDTDPKNPLLRNVASNYFKRMIRSHPDVASIYHSDLIEKFSFA

>ETJ82373.1 S-ribosylhomocysteinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPLLDSFKVNHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMRDHLNS

DSVEIIDISPMGCRTGFYMSLIGTPDEKSVAKAWEEAMKDVLSVSDQSKIPELNIYQCGTCAMHSLDEAK

QIAQKVLNLGISIMNNKELKLENA

>ETJ82372.1 glutamyl-tRNA amidotransferase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVKGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIEYEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLDIKIPELPDEKKARFIDELGIKESDAEVLISSLEMSRFFESLISQNLNPKLCVNWLNTELMGL

LKGELTIENSPVDAQKLGVLIKRIEDGTISAKAAKDVLAFVFENTSVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANANKVAEYKSGKDKLFGFFVGQTMKEGKGAFNPAKVNEILKTKLG

>ETJ82371.1 glycerol-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRIAVIGAGKWGSALHLALKENHNCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDNDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGTKEETFLGLS

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>ETJ82370.1 dihydroorotase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSVRVKDTNGKLKNLATLLNKGACALELDSSLD

ANTLKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

IFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFDEAAFGIHSVCEFISLCYTFLIKEGFLNWQELCRFTSKNPSEFLGLNSGVIEVGKE

ANLVLFDENEEIFAPKSSLYSEDKLFGKIKMHIIKGKNILEK

>ETJ82369.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

METLSQTLAERKPPLYKRIIKSLGFWVIIGIIAGIVLGYIDKELAIASKPGVDYFIGALKVLIGPIIFVT

LVLGIISLESLKKVGSIGAKAVIYFEVVSTLALAIGIFMANVMQPGHGMNLNPSQLDTKSVQKYISQTTE

VSASSEIMHILKDAMPTDIITPFTEGKTIQVLVIAIITALIISLMRTEDKQAIQRVFEVVQNFVFKILQI

IMYFSPIAAFSAMAVLIAQYGIGSLINLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVL

IVFATSSSESALAPLMRKLEKAGLSKATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEIS

ILIVLMIASKGAVGVTGSGFIVLGSTLAALGNMEISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNL

CGNSVAALIVAIWDKQIDWEKFRYAMDNPEKFHNAGMN

>ETJ82368.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEIVLSENALITSKTDLKGNIIYANNDFLKYAGYKVDELLYKSHNIVRHEDMPRTVFKCLWDYIQKGDE

IFAFVKNKAKDGNFYWVFANVSASFDTNGNIINYYSVRRAPNRKSLSIIEEVYKILLEKEQKSGINAGVS

ALMDIVSSYKMTYNELIFNLQENN

>ETJ82367.1 PAS sensor protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYTMGEVLNKPHNIVRHEEMPKTVFKYLWDYMKEGK

EIFAYVKNKTKDNNYYWVFANVTPSIDVNNNIIGYYSVRRMPNKSAISTIESLYSDLLRAEQQQGLNKGV

EMLKNFCKDADKTYNELIFSLQEAK

>ETJ82366.1 tRNA uridine 5-carboxymethylaminomethyl modification protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGLMGEITD

EAGIQFRILNESKGVAVQGSRAQIDMDKYRIIARNKLLKLPNLEISQEQASVLIVENDEVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDAKSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLRSVEGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAAQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYDLGLLSEQDFTYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNLQKIVARASFDIEKLKKLDPIFETMDHYSLREILNEAKYYHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>ETJ82365.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNAAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEEGPEYKKMIAEA

>ETJ82364.1 ubiquinol cytochrome C oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGPELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIIAIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWIGFYASIVFLLLLIVVLPVITIMERKGAKQ

>ETJ82363.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MREIKIFLVVVVFTTLVYWGVEPYAHSVMKPHVTPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFVKGDAKKGKEFFENNCFACHGIKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPALALKVDHKFGDAFIMTAYNKDTSGESEEATNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQRVALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>ETJ82362.1 SAM-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVSDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>ETJ82361.1 30S ribosomal protein S2 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGAIKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALANEEKEITDEEKKEVLDEAMSEEDFGEEQE

>ETJ82360.1 flagellar biosynthesis protein FliR [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITSQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNMGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>ETJ82359.1 arginyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMLIASDLASKFQNHDCFELVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGDTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQVKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSDVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IHQVFAKAGKKIDDVMKADLQSLNQDGVNLLFEALNLKAVLNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>ETJ82358.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYIFIIVLSALLDIVANLLLKKSDGFKNKIWGLAAIVNAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIIIVIIAVFLLNY

>ETJ82357.1 transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGTDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGLEELEQNEEELVISGDYTAFGELSSAIETKGLVLKKAGLEYIPNNPVSFSEEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>ETJ82356.1 peptidylprolyl isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKTIDTSKVNEYKFALIETEKGTMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGVGGPGYEIICECDDQEHKHERGTLSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>ETJ82355.1 hypothetical protein X908\_03995 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTKFSLILSACLLSSSLFAKNADDEITKLQKQLAQIQAELAQIRKEREAQAKQNEAVKAELADLNDRAD

ETEFQAALSKVKFGLEFSTAVSNTNYKVSGQDYSANNKWMNELHLNMNADINDKTKFYGRLSMAKNWSQM

DWSGSPYDLDAGRNTRSSGPVLYVDRAYLDYYITPEWIATIGRQPGTDGPGSNLRNNALRQSTYPALAIN

ALGDAAVITYKPESLQDHKVAIRAAYGKTYQWDEEGKVRDWMSDQKDADANLYYAAVEGELPIEGMGDNL

IIFNVAHMTDFALPLPSIPSILNQGVYNLGDLTLANIHFENYNAFGTNFNYFVSLGYSNGANAHTLSANP

VAQSQLEFNEKDGYAVHVGGRYDFTKALKVGYEFFWGSRYWYTMSRPSINDPLNIRMTRGTAHDFYVIYQ

LDRYQFLRLSYTNIQNIWGNRGIPFGGAKKDKARADNIMLMYNVKF

>ETJ82354.1 hypothetical protein X908\_03990 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKILFASLLPIIALADCASLMAKYEAPEPESKTMKQVERWINKKVSDPADAAVLKECMIARAADNPNQV

SVAGK

>ETJ82353.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEIISFVVETASAWGYLGIIILMTLESCFIPFPSEVVMIPAGYLAHKGELDITLCILSGTLGSVLGALI

NYYICFFWGKNFVLKWGKYFGINEAKFAKFEEFFNKHGEFSTFTCRLLPGIRQYISMPAGLVKMKLVNFI

LFTALGSAIWVAILVFLGYYIGQNEELIKTYLTQILIIIIVFVILASLIYIKIKKPFKKA

>ETJ82352.1 lactate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKIGIVGLGYVGAASAYSIVTQGICSELYLYDIKQDLALAHARDLEDMSAIHFSYTKIFHVSNLENLAS

CDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIVATNPNDTITYYTQVLSQLPKNH

VFGSGTNLDSSRLKKFLAKDLNINSKDIFACMIGEHGDSQFAALSNASVLGQNLLDFYKQKLGKDLDIQE

LEKAVISEGYFIYERKGRTEFGIGTSCANLAKAILEDRKSLHPVSVVFDDIAFSMPAIIGKDGIEKVFEL

KFNEKEKIKLENSKQQIKNAIQSVKDKI

>ETJ82351.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIEFILRDMFFAAVAGFGFAYACNPPLKTLILSALLAAIAHGLRFTLVEYFHFQTLAIATFVASFCIGCL

GIALAKIIKTPAEIIAFPALIPMIPGIYAYKAILYLISFIRSDDLKAKSEFLVQFFDYFFTTVSVTLALA

IGVSVTLLIFFEQSFMMTRHAKKH

>ETJ82350.1 hypothetical protein X908\_03965 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQAPRQESRYNDSAYHQHND

YYKKKKKESWLGELFDF

>ETJ82349.1 cation transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYKFLSHEPLANKSCHHNHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IVLSILLLKWAIILLKQSANVLLESSPVDIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRVC

DLKEFEKLSQDLSHKLLHEFEIGHITIQPIRSENEI

>ETJ82348.1 heavy-metal-associated domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFKVKNVNCMNCVNLIKNSLEDEFGNIEVDLDQKILSLNLEENQVTNFTKEFQDLGFEIVERL

>ETJ82347.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEELRIKIGKMTCVNCSNAIERACRKIDGVKDASVSYVNSSGVFLLENQEKRKDIIAKIQNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLKIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

AVVLNGALRIKANKKAMDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFVFWVLKADL

NTAFLHSCAVLLISCPCALGLATPIALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLN

IFKHNLSKDDFDKLCQIESLSSHPVAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAKFLHENE

IDTKESDVFFDTFKEYVRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIA

KELQIDEFYAQLKSEEKLQIIQKFKKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPIAAGFVPFITLSPHIAALAMCFSSITVVFNSLRLKRI

>ETJ82346.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRFSKIIILLTVASLAGIVVFGNVTDCNSNFQFVSHVMSMDTKPDYLGNAIVYRAITSPVIHHIGYIAI

ILFETFITLTALKGAYDMFKARNLDAQSFHNAKIFGIVSLTCCCILWFFAFQVVAAEWFGMWMSKVWNGL

PDATRLVTYMFLALIFISLKNDD

>ETJ82345.1 transcription termination factor Rho [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPREFRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRVLDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNIADRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>ETJ82344.1 cation-transporting ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKCEHCKLDYKQAQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFITK

TKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIGYK

ASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPVLF

YTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYIYSLWAMFFRVGEVYFDSVAMIICFVFIGKYLEMFSK

KRALDTIDGLNDFLQNEVLVFDGKEFAPKEVQKVCLGDRILLKTGDKILIDGICKSGEMSVDTSSLNGEN

IPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIQLLELASSKKAKLESLVNSLSAYFSRTVLLI

AFICFAFWFFYKEESFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSKCD

CVVFDKTGILTKIELELKEVFLDKALDLNELYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSIQA

KGLSAELNEGLLLGGSSKFLQEKGIVAKEFDNTHFIFAKEGKILAFFEFDSVLREDAKELITYLKKEKKE

LMILSGDHQKAVEKIARKLEIQNYQASCLPEDKMKTIEKLSKNYKVLFVGDGVNDALALKYASVSMTLRE

GSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMSFS

SIIVVLNALRIKE

>ETJ82343.1 cytochrome C oxidase subunit II [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALDKKRLS

>ETJ82342.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGLTEEDFKAIEAHIETLK

>ETJ82341.1 D,D-heptose 1,7-bisphosphate phosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARSYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYHCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNANIGTLILVNEEKKEGDFFRQFKNLKEILSFFKEKDI

>ETJ82340.1 ADP-L-glycero-D-manno-heptose-6-epimerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVGK

DEEPKNPYAFSKLMMDKLAKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPRLFEGS

DQIYRDFTYIKDVINANLIALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>ETJ82339.1 cytochrome C biogenesis protein CcdA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKNLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSAILLENELIALFDEKIKDFKA

VVLSDYAKGVLTPKVCKAVIEKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGKNLE

KGIKKLKEDFALRYSIITLSEAGIALFDENLKIAPAKALEVYDVTGAGDSVIAVLAFCLANEIEIFKACE

LANEAAAVVVSKIGSVSVSFDEIKSFKHVDFEKKIKSKEELLALLKQNDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLVVGLNSDASVKSLKGESRPVNSEFQRACMLAAFYFVDFVVVFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>ETJ82338.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIIDEGF

>ETJ82337.1 lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVFIINLERSLDRKEHIQKQIQKLFEKNLSLKNKLEFIFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSKYEYIRLCYLTQGKMLKL

NDNFLFTLDSIGGTQGYLIKPISALKFIDNLKFWIKPVDNVMDMYYYSKVFTITYTPLLLKTTDINSTIE

ERKKDKRPIFKRIIKEICRLYFIYLKFTYKQKAIKFLRREV

>ETJ82336.1 ADP-heptose--LPS heptosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIFIHLPTWLGDAVMASPALYAIKEHFKNAQFILYGSLVSTALFKEFPNSKIIIENKQSRYKQALSLRK

ELGKIDFSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLSIKAHFKDLKLPFKLK

FQNPLVLKNGKKILGLNPGASFGSAKRWDVSYFAKVALNFSQSHEILIFGAGKAEQELCNEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDLFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENAKLVHLDL

ACMPCMQKTCPLKHHKCMKDLKPEIIIEVSKQLLFLN

>ETJ82335.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRNLGVLHSSSDFIMFLDSDDFLTPGACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKNFEKVKFEKVKIDERLSYGEDVLFCYIYFMFCEKIAVFKTCI

YHYEFNPNGRYENKNKEILNQNYYDKKKSNEIIKRLSKEFLHDEFHQKLFEVLEREEVGVKNRLK

>ETJ82334.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKITLKCNKNILNLLKQYNIYTKTYIENPRRFSRLKTKDFITIPLKNNQLESAAGLGIEEYCAFKFSNI

LHEMGSFSFSGSFLPHYAKVGRYCSIADGVSMFNFQHPIDRISTASFTYETNHSFINDACQNHINKTFPI

VNHNPSSSITHLIIQDDVWIGKDVLLKQGITLGTGCVIGQRAVVTKDVPPYAIVAGIPAKIIKYRFDEKT

IERLLKIQWWRYHFADFYDIDLNLKINQYLDLLEKNHKKSISYYNPNKLYFRDILELKSKKNFNLF

>ETJ82333.1 N-acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLAIIPARGGSKGIKNKNLVLLNNKPLIYYTIKAALNAKSISKVVVSSDSDEILNYAKSQNVDILKRPI

SLAQDDTTSDKVLLHALKFYKDYEDVVFLQPTSPLRTNIHIDKAFNLYKNSNANALISVSECDNKILKAF

VCNDYGDLAGICNDEYPFMPRQKLPKTYMSNGAIYILKIKEFLNNPSFLQNKTKHFLMDESSSLDIDCLE

DLKKVEQIWKK

>ETJ82332.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILFITGTRADYSKIKSLMYRVQNSSEFELYIFATGMHLSKNFGYTVKELYKNGFKNIYEFINYDKYY

QTDKALATTIDGFSRYVNELKPDLIVVHGDRIEPLAAAIVGALNNILVAHIEGGEISGTIDDSLRHAISK

LAHIHLVNDEFAKRRLMQLGEDEKSIFIIGSPDLELLNDNKISLSEAKKYYDINYENYALLMFHPVTTEI

TSIKNQADNLVKALIQSNKNYIVIYPNNDLGFELILQSYEELKNNPRFKLFPSLRFEYFITLLKNADFII

GNSSCILKEALYLKTAGILVGSRQNGRLGNENTLKVNANSDEILKAINTIHKKQDLFSTKLEILDSSKLF

FEYLLSGEFFKLSTQKVFKDIKHA

>ETJ82331.1 polyhydroxyalkanoate synthesis repressor PhaR [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEIKIQNIIISEEKAPLVVPEIGINHNGSLELAKIMVDAAFSAGAKIIKHQTHIVEDEMSKAAKKVIPG

NAKISIYEIMQKCALDYKDELALKEYTEKLGLVYLSTPFSRAGANRLEDMGVSAFKIGSGECNNYPLIKH

IAAFKKPMIVSTGMNSIESIKPTVKILLDNEIPFVLMHTTNLYPTPHNLVRLNAMLELKKEFSCMVGLSD

HTTDNLACLGAVALGACVLERHFTDSMHRSGPDIVCSMDTKALKELIIQSEQMAIMKGNNESKKAAKQEQ

VTIDFAFASVVSIKDIKKGEVLSMDNIWVKRPGLGGISAAEFENILGKKALRDIENDTQLSYEDFA

>ETJ82330.1 alpha-2,3 sialyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVIIAGNGPSLKEIDYSRLPNDFDVFRCNQFYFEDKYYLGKKCKAVFYTPNFFFEQYYTLKHLIQNQE

YETELIMCSNYNQAHLENENFVKTFYDYFPDAHLGYDFFKQLKEFNAYFKFHEIYFNQRITSGVYMCAVA

IALGYKEIYLSGIDFYQNGSSYAFDTKQENLLKLAPDFKNDRSHYIGHSKNTDIKALEFLEKTYKIKLYC

LCPNSLLANFIELAPNLNSNFIIQEKNNYTKDILIPSSEAYGKFSKNINFKKIKIKENVYYKLIKDLLRL

PSDIKHYFKGK

>ETJ82329.1 glycosyl transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKISIILPTYNVEQYIARAIESCINQTFKDIEIIVVDDCGNDNSINIAKEYSKKDKRIKIIHNEKNLGL

LRARYEGVKVANSPYIMFLDPDDYLELNACEECIKILDEQDEVDLVFFNAIVESNVISYKKFDFNSGFYS

KKEFVKKIIAKKNLYWTMWGETYKKEIVFRSFCEFKTRERC

>ETJ82328.1 benzoate transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEDVLLYYPMLSQAQKIAYMNCNLYHYVPNNNSICNTKNEVLVKNNIQELQLVLNYLRQNYILNKYCSV

LYVLIKYLLYIQIYKIKRTKLMVTLLAKINILTLKILFKYKKFLKQC

>ETJ82327.1 beta-1,4-N-acetylgalactosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQINKYNNEDLIKLNKAITGGGHKGYFNYDEKSKDPKSPLNPWAFIRVKNEVITLKASLESILPAIQRGV

IGYNDCTDGSEEIILEFCKQYPSFIPIKYPYEIQIQNPKSEENKLYSYYNYVASFIPKDEWLIKIDVDHI

YDAKKLYKSFYIPKNKYDVVSYSRVDIHYFNDNFFLCKDNNGNILKEPGDCLLINNYNLKWKEVLIDRIN

NNWKKATKQSFSSNIHSLEQLKYKHRILFHTELNNYHFPFLKKHRAQDIYKYNWISIEEFKKFYLQNINH

KIEPSMISKETLKKIFLTLF

>ETJ82326.1 glycosyl transferase family 2 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESIDNTLNIANEFKKDFANLYIYHNAFIGFGAL

KNLALSYAKNDWILSIDADEVLENECIKELKNLELQEDNIIALSRKNLYKGEWIKACGWSPDYVLRIFNK

NFTRFNDNLVHESLVLPSNVKKIHLKNGLKHYAFRDISHLINKMQYYSSLWAKQNIHKKSGVLKANLRAF

WTFFRNYFLKNGFLYGYQGFTISVCNALGTFFKYMKLYELQKQKPKTCALIITTYNQKERLKLVLDSVKN

LTFLPNEVLIADDGSKEDTARLIEEYQKDFPCSLKHIWQEDEGFRAAKNRNNAIRVSKSEYIILIDGDMI

LEKDFIKNHFEFAKRKVILQGSRVILNKNESEEILKNDDYSLAFSKKDFKSYKNSFLAKIIYKISKIDQK

FFNTKEIIKGSKTCNMSFFKADFDELDGFNENFIGWGREDSEFVARFLFNKGIFRRLKFKAIAYHIYHEE

NSKKMLESNHQIYLDTIKNKKISWR

>ETJ82325.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEVSLKALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDVHGDEVMKLFYENELEKIYEYCESDVLNTYM

LFLKYELIKANVSEEDYVDFLSYMRDFLREKKSDRSYTEVFAKACESEISKVRS

>ETJ82324.1 UDP-galactose-4-epimerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYINNTVNTTNLIETCMQTGVNKFIFSSTAATYGEPQTPVVSETSPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECAAGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLKENESNVFNVGYGHGFSVKEVIEAMKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>ETJ82323.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVKVTSLEQFKFDTLYHKIASR

FKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCDA

LSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPVMFLKAIAHLDKNL

QENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRIENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEVC

RISSSYYNGAKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWLK

LIAEVKNA

>ETJ82322.1 glucosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQASGEFVTFLDDDDELLSGALSTLMQKASEGYAHVFGNCLMEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSVFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQDSVTL

GASKNAYRVYLGYLELAKILENELRMSKDKDYKKTCASYYKMAAYYAKLAKNYKALYKCLFKSLSIKINA

PALILLILSIIPNNMIEKLSKIRVALCKN

>ETJ82321.1 glycosyl transferase family 1 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVHLILMNDKISYEIPECQIHFLECSKPSENPILKFLKL

PFLALKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTHLVINECTTPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTDLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>ETJ82320.1 peptide-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKKEYLKNPYLVLFAMIVLAYVFSVLCRFYWIWWASEFNEYFFNNQLMIISNDGYAFAEGARDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLVVIPIILLANEYKRPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSTIIVILFALFALEQKRLNFVIIGILASVTLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIMALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILVKKYSQLTSNVCIVFATILTLAPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLASLSKPDFKIDTPKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMDKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>ETJ82319.1 UDP-galactose phosphate transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYEKVFKRIFDFILALVLLVLFSPVILITALLLKITQGSVIFTQNRPGLDEKIFKIYKFKTMSDERDEKG

ELLSDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLSLYNEEQKLRHKVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLLDLKIMFLTALKVLKRSGVSKEGHVTTEKFNGKN

>ETJ82318.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLQQRNLMARTEKIYIYGASGHGLVCEDVAKNMGYKECIFLDDFKGMKFENTLPKYDFFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINAKAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVKSQNEKGVFVGVPAKRKI

>ETJ82317.1 hypothetical protein X908\_05110 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFLLKESKHEKSENLKWSDFLSLIKNPALWLVVAITFCTYFFNMSFYYFTPYASNVIGTSAVFAAILAVL

TSYIRPIVSIVGGFVADGFGKAKVMLVGFVTMGLGVVLLMFSAYWGVLYKWWL

>ETJ82316.1 hypothetical protein X908\_05070 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIRLSIRFFKIIQEDFVEFLISTKILIKFY

>ETJ82315.1 hypothetical protein X908\_04795 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVLLAIVLSISTFIAYGKIQISLPSSENATNISNNKKNFL

>ETJ82314.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>ETJ82313.1 hypothetical protein X908\_04420 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNVSGKTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGDMVEALQW

>ETJ82312.1 50S ribosomal protein L14, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

DNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>ETJ82311.1 50S ribosomal protein L24 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAVKLKIKKGDSVKVITGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>ETJ82310.1 50S ribosomal protein L5 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPVGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>ETJ82309.1 30S ribosomal protein S14 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>ETJ82308.1 30S ribosomal protein S8 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINDIISDSLTRIRNAGMRKLETTKLLHSKVVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINELKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>ETJ82307.1 50S ribosomal protein L6 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPEGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>ETJ82306.1 50S ribosomal protein L18 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAALAESLRENGIRL

>ETJ82305.1 30S ribosomal protein S5 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>ETJ82304.1 50S ribosomal protein L15 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>ETJ82303.1 preprotein translocase subunit SecY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIVITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>ETJ82302.1 transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLADRFAPKKLLIFS

LVLQDVGVCFIFILLRLRLL

>ETJ82301.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIYGLWGITSLLTFWPSLMKIIRTLASKQEQARAYGVFEGGRGVVSTIYLAIATAIFGYFQTKALASKG

IEMIIIFYSLAL

>ETJ82300.1 hypothetical protein X908\_05105 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVALTLACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAIGIVSTFGYLPEVFAPVLAGDLLDKYQGVKG

FHIYFSIMIAMAIMGANFCLFWIKKYNKKRKKI

>ETJ82299.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIIKDFKFKVKVIENIWITLKDGTRLSSRIWFPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRVDMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLHRLENMPLWPALW

MEHNLKDKYWKHGSVSENYEDIQVPVFALDGWADSYTNPVFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLDCPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYHTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAVVLGESPADQRLDDGLAVVFESEILQDEFDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKNEWIQRELRLDCCGYRFAKGSKI

RLSLATTFWPMFWLMPENVTLTLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLLKEGRVDRSITYD

ILSDTYACITDGVGGVFGEGIYRFDEIDVLVEHNLKRELVLQNEDPLSAKHTITQKMKIGRENCMMDADI

ILTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>ETJ82298.1 multidrug DMT transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGVSGFFLNDIYAILTSRA

IFGMATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRYIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIMCIVFLFLKQKP

RIN

>ETJ82297.1 DNA topoisomerase I [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKNAIENALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTIANKDRAKLILEACKNEAYTISDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIAAKFLDKDELKLYTLIYNRFLACQMNPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNFKIGENLKIQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSDVAFNVTEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKSESKNESENTAAKAKANGTGITCP

SCQKGEIVERFSKRGKFYGCSAYPKCNFISKYKPSEEKCEECGETLVIKELKKGIFLECLKCKIKKEMKD

>ETJ82296.1 biotin synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIMLCAISNIASGNCSEDCKYCTQSAHVKTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEEDRLSFRKSLQELQPFSTPINFFIANENLKLQVPRLNADEALKIVR

DTKEALPQSVVMVAGGREVVLRERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>ETJ82295.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIARILRLPLSATEIILGAIIAYFGFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYTLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKRIGFKNMILFGLSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAVIVMSMIKFLSNSKK

>ETJ82294.1 type II citrate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYMEMAARIVAKIPTIAATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWIEQKEQESLKIVRPRQLYLGETS

KI

>ETJ82293.1 CysQ protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNLDKFLEIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCIMISLVHDNRPVLSLIQNPLKGDIFYAHAKTKVYKNDKPL

QIDQQEYEKNKYKALLSVNHLSKEDEDFAKEHQLEAINIGSGLKFCAILEARAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYNPLNYKSSPFICVSSRNFLQDFL

>ETJ82292.1 UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIDFKKYSSVRIGNEFEVLVLDQICDFDGFLIGGANNLLISPKPKNIGILGDGFDFIQILDQNKDFIHL

RIGCKTKSSKIYRFTKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSQGEILRENINFD

YRFCPLNMPFFWAEFKLNFGFDTLKDEALKNARSNQPSGASFGSIFKNPKNDFAGRLIEAVGLKGFSKGD

AMLSDKHANFLINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>ETJ82291.1 flagellar biosynthesis protein FliQ [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDESTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMIDFTENILNQIPTFIK

>ETJ82290.1 succinyl-CoA ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKITIAHSPDADDIFMYMAIKFGWIGNDFAYENTALDIQTLNEFALKNEFDATAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKDTHLKRNFKVALSGANTTNALIFRMKYPEARIIYKNFLDIENVVLSGEVDA

GVLIHESILEFDQSLCVEAELWDIWLEFAKENLPLPLGGMALRRSLPLSDAIKIERDLTNAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIHVNDYLIPSEY

EEARNS

>ETJ82289.1 recombinase RecA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGVPKGRIIEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRMKIGAMGYGTPETTT

GGNALKFYASVRLDVRKVATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>ETJ82288.1 enolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>ETJ82287.1 hypothetical protein X908\_05030 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFWAFLVVIGAIYFGNMFFGQYSLDALLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>ETJ82286.1 hypothetical protein X908\_05025 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTRILAIFFIFTSLLYADENPFKTDQNITLVAPPEFQKEEVKFNSSARILKSITFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDISVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVYKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHKGYYRLVIYLDGTYNYNIQK

DATGYMINLL

>ETJ82285.1 DNA ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRFVFLICCACLVFANEILLLSKFDKQDFNSKDFNTYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFTIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFKISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>ETJ82284.1 hypothetical protein X908\_04990 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLASALAALVALNVSAFADLIVINKKI

>ETJ82283.1 hypothetical protein X908\_04980 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIILTILFLLTLTQAKEIQVYESPTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYSEKYPVILMKKDGSYELYGYFI

GDKKL

>ETJ82282.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGIFRIQAYFFALIIALFFVACDSGENFKALNSDKTYNFAYNGFEKSLKLNDKAQNFALIFFTKDCGVCK

EQIPILQNLAKNYDFNIFVVLGDANDANDAKAWADEKGLSNLAMFYEKRAAKYLSSAIGEIYGVPVLSFF

KEGKMDEKFIGLTPYSILEKEIKKVKS

>ETJ82281.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVVKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>ETJ82280.1 GTPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENLE

QMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQLS

GGEQQRVCIARALINNPELLLADEPTGNLDEANEQIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLIL

QHGVLK

>ETJ82279.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLSIEIG

NELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDFI

TGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSNK

IIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRMGEEKLDQLEYDKWYCSAYVGSIASQISDGL

PGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQIY

LIFAGENLIVALFAALFGFIFGTAFSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQL

SAAGVLYGR

>ETJ82278.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIYFVHFLISVLPLSILMAFIASDKKYIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFMLFLLLILIESDKALANILLTLMRNSIIETHTFLVSFVGKSNYFGVFGIYIYLIFI

AFLAFLSLKIRKKNISKKQILDINYRKNEAKTSLINRYFSSVFISCVISFCIILYFFMVSSKPLTIDEPK

EILPDKNGKFIFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDRDSPVAVFDACMICGDMGYIKKDGQ

LICISCNVRIFLPSVGKSGGCNPIPLKYEYDGKKITIDVKDVIAGSNYFSQIKEIEVQDPVSKTKVINTQ

APFSYSYKGITYYFSNQNNYEEFKKDPTKYVEENEAQFLIQRRNDVG

>ETJ82277.1 iron transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHALKNNPNGFPEGFWMPYLTIAYELK

NTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFYISNPEKQGFGRHVDEETGVGKWF

EPFKVDYKFKYTGTPK

>ETJ82276.1 iron permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIFKIIFLIISIFLSSSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQINALIDSLYYDLDEVAPILQNGYRLKAEASDTNYDKAKA

EKSSLEANAKREADAEALIAQMMGVDKKDLAQSSLTTQASTPANNDTSKLTDDNAGTDLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNYQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKGLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALSIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGIAMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSAKTLWITVFLAVY

REGAETVLFYQALLFDAKTSTDFGAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLTMLIIGILITKQISKKGVKS

>ETJ82275.1 hypothetical protein X908\_04935 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILVTPCGVMDTTNFGKSEVNKRTIDFSLKFQEKKEKVEAKAEKEEANKDNSNSTNTDTNKKDKLLDISA

>ETJ82274.1 hypothetical protein X908\_04930 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVSDVSMGNANLMTAVNTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>ETJ82273.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQMIKKMVLSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFDHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSHDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFTFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>ETJ82272.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFVLVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLVLNILGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAIFSGVSVGIFLGLFVGKQAGVFLFSYLAIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFATRS

>ETJ82271.1 hypothetical protein X908\_04915 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRHIFFIIAIIFFISGCSFYQNLNYTRPIYNTNKETKLKTIANEWKKTPYVLGGTTKKGADCSGFTQSAL

AQLNIRIPRTTKTQLGSGRKVSKSKLQTGDLVFFKTGRGPNGMHVGIYMSKGKFIHLSTKGGVKEVELNS

SYWKARYIGARRY

>ETJ82270.1 glutamate racemase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQIDMLIIAC

NTASAYALDALRTKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLSQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGCSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>ETJ82269.1 methionine aminopeptidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGAICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIRDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGASAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDAGSIDGLNAAHYEHCVAVINGRAEILSMI

>ETJ82268.1 hypothetical protein X908\_04895 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKQLFYILTFIFMLCGCSLRHETINKNENIILKDEGIDSNIFFKKTGKILKIRNANAPLYLNSRAIVYI

DNGFSNKYAHYFWGDLPSNLYSFLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>ETJ82267.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENRANYFFVGLFVFGVFFASLGFILWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIQGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEILLQNLAELSANLNANSKNLSLNLSNASLKIGKMAN

NISLSAQNFNSSLKDIKESTMILKKFIKKADEKLNTYDDIKASLMQNLELFKRVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>ETJ82266.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNANFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKAIDTAGVRFFLALENDLKDKNI

KITKEGLNSSFQTLFELCEKNYQRLSKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLAKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>ETJ82265.1 geranyltranstransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKKLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPTNNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNKKLAQMIQNLIIQY

L

>ETJ82264.1 hypothetical protein X908\_04860 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMVAQNRSSMANDVLGGFGGMKL

>ETJ82263.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNYKKLGIEHFYKKDFKTAKMYFSMAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILSTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIINSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>ETJ82262.1 nitrogen-fixing protein NifU [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>ETJ82261.1 hypothetical protein X908\_04835 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFFFVEYRDPLVGLIILTILVFVVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIALEKCKDKQEREFIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIEDNPMLG

RLVFEKYHMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>ETJ82260.1 ribonuclease H [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKHIEIYTDGSCLNNPGFGGWAYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKALKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENDEKH

>ETJ82259.1 ribonuclease III [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNIEKLERSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFAKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLIE

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGAL

>ETJ82258.1 chorismate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNTFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYGIRDHRGGGRSSARESVARVAGGAVAAM

LLCEFGICVQSGVFGIGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGVNAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVANAMVRLVLADCLLLNASA

NLNNLKNAYGLK

>ETJ82257.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKALALFSGGLDSMLAMKLITAQGIEVKALNINIGFGSTSDKSEIMKKRAAMVGADFEMIDVRNSYLQEV

LFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRPMSQRSDAMAKVKKLALDEEDLI

LRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAVKFGLEDFESPGGGCLLTLDSFAKKIRDFI

EFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKYEVIELGDLIGAYSLVDEKISEK

DLELALKIALTYTKHEVGKSYELKFKNQAYTSIAFENKADINQFFIS

>ETJ82256.1 hypothetical protein X908\_04810 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKIILVLSILSSFAFANSCANYEQELKKCNSLKNSHERKMCRLGLFAKCKKG

>ETJ82255.1 hypothetical protein X908\_04805 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIDTSTSLTHSLTNDVDKKELSVLKKEDQDKIPVQDLSSLNSDSVKVVFENKQGELIALNLSNENYSSL

QKNFSSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGSLNSNLNNKQQSVKLNFNTSTLQQSMQNLG

FKTSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPTMREILSDIKEASGGGANAMKTIDPQKINK

KDDRENNIKEKEDEDLLQKAQEKGLSALSADEQAKLEASNPEEFEKLKQKSLQELSQNLSKDFKDKIENQ

EAQIVDKRV

>ETJ82254.1 biopolymer transporter ExbB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFLKDYIDLIIFLILGIMAFIAFWCVIERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKVSLLSNAYKANKN

A

>ETJ82253.1 hypothetical protein X908\_04785 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTIDLNHNFTSFVLLDEVDFDFLELKSILEDKFNIKITDENFTKEGVIFSYENMLITLNLIKNPIPNHEA

EYYANFNFMWKDALEQTKKHKAHLLIAVLSQDQSKLEQAKMFTKIAALCLDNKHALGFYTGAVVLEPSFY

IENAKMLDDNRLPVYNWIYVSVYPSENGVNAYTYGLRNFDKLELEVCDLNIEEKELFFCIYDIVLHILTY

DINLKDKDILKFEDGKEIKFIKSQGISVENESLKIIF

>ETJ82252.1 hypothetical protein X908\_04780 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAKLTLLALLGATVLLAKDMVVPASELPNNAKEFISKNFKTAQIGLVKKDIDSYDVILNDGTEIDFMIN

GDWKEVDGKYKALPHTILPSVMKKVSATQPNAQILEIDKEINGYKFKFNNNMKVYTDMQGNVLGQKLD

>ETJ82251.1 serine/threonine transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNTPKWTSHDTRWVLSLFGTAIGAGVLLLPISAGLGGLIPLLVILVLAFPMTYLAHRNLCRFVLSSSNPK

DDITFVAESYFGKGGGFLITLLYFFAILPILLVYSANLTTTLLEFLINQFNFNADLTHAARWWVSFLIVG

VLVLISILGENVVTKAMSFLVFPFIIFLFIFSLLLIPQWNSSLFTNVDFSVISTSNFWVTLWLVIPVMVF

SFNHSPIISSLACYCKKEYGDYAEPRARKIISLAIILMVFVVMFFVFSCALTFTPEDFASAKDQNINILT

FIANKFPEVSLLAYVGPIVALVAISKSFLGHYLGSQEGLNGILYKASNGKIQGKFAQTLTAIITFAIAWL

VAYKNPSVIGIIEAIGGPVLAILLFLMPLYCIYRFDILARFRNKFLDLFILVMGIVAISAAIHDLL

>ETJ82250.1 serine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNLSIFKIGVGPSSSHTLGPMLAGNLFCKKVAKKLDEIDRVEVTLYGSLSLTGKGHLSDKAVIWGLNGL

EAKNLSAAIQDEVNKNAIENAQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGGLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNKKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANAFKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMVSL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>ETJ82249.1 hypothetical protein X908\_04750 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNNTSVLLFLLYPKKLRKTITNITKNKKYKWKI

>ETJ82248.1 hypothetical protein X908\_04725 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLAFFKGLGIGFLCLLLFVAGVVFNVEFLGKKDSNHDLYFSRNIEVSNTLKPDILYANINFWANENLSSK

ITLDNSEKAEITNTFNQILERSKKENFCSGGSFSLEPNFSYKDGIQTPKGQRFDANLECEFKENQLADFN

KLLNDINSIIAKNNFISVSTPAIQTKFSKDTLNNNKENLYKELLKTSYEYEKTYSLDLNKTCVLKNLQVN

TNANITPRMLNAKSDNIELSSPIISEKEQILSAKALFICK

>ETJ82247.1 adenine glycosylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFEAKLPKEVEDLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNLNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFHTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDKLYKGMYNFPFFKEGEYKLSK

DMGFVGEFKHSYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>ETJ82246.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRILFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENTGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIATLCLPKKSELN

>ETJ82245.1 radical SAM protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFKKIYIELSDICGLKCDFCPSRKGIRGVMSEEKFQNLAHEISNKAELFTFHLLGDPLLLPNLENYLKI

AKSEAMKLEITTSGFYLNSKNQALLLGYENIHQINISLMSFLSQSKISLEQYFKPILELCKKHLEQKSLS

FINLRLWNLDANFKAPKSNLKIYEFLAKEFEVKIDTNLSKNRLQRHILLHQNKLFKWPNLKDEPLYKKGK

CHALKEQIGILSDGSLVPCCLDTKADINLGNVFENNFDKLFKSPRIKMMKKAFEEDKRIEKLCQTCEFFK

ARLGD

>ETJ82244.1 hemin transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMLKAEDQIVGIATLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKAERLEDITKNITTLGQITKKEKEAELLKQEFTQ

NLKKLSDKPLNKSVIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GINAKNNLLDTNALLKNTKAVKTGSIYFNKDTHILLRLSPKIIDRIQEFKTKLENNNF

>ETJ82243.1 heme ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLSPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKEFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKLVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYKNSKPYILALKEKK

>ETJ82242.1 iron ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLNTHSKILVIIGLLVAYIIASFTALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIGM

LLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKASI

ATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNELN

ILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCTA

FGGLFLLICDTLARTLLAPVQIPIGILTAFLELLFFIFGFKR

>ETJ82241.1 ligand-gated channel [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHPNKKAFKLSLFALLLITNLNAQESNKAINLQKVVVSTTGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGHAINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGGLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWEFNLEAFWQNQKINYLKDEISMKGTTAYQNGSGFEDTLTGISLKNKLNYANNSYFIFGY

EFANHDAKRTSIIHYDVNAGRFQMSHTMTTLMDMDKQSHSIFALDSHEFNDIFSISGGARYEYSLYDTNR

NYTSNMIIPGRPNIKTELFSTDDTSHNFAFEITPNFKYSDTGKLYIKYERGFVSPSPAQFVNKDKNLQKY

YSANLNPEIFDTFELGIDDFWWDFYGFNLTLFYTLSKDEISYLGNPHSTSGSWWKYYNIDQTRRLGVELS

LSQNFLDDDLIFRESLTYLDAKISKGVNDGMRIPYVSKIKATAGFEYAWNKNFSNFIDLTYFSRAKDGGA

IDENTGKMSKNSWIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLVGNGRNYYVEFKY

AF

>ETJ82240.1 hypothetical protein X908\_04685 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFESIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNTNGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KVNPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVTHVGASGNPHKFPHKH

>ETJ82239.1 peptide chain release factor 1 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKAKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDPNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQES

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>ETJ82238.1 30S ribosomal protein S20 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSRGFIKKQ

TASRRVSRLALLVNKIA

>ETJ82237.1 sulfate adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSARKNKNITIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLMLDEKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIEKIKENFQ

QIKNNLNAQKITAIVSSFDPLHRAHERMFRWTIDKADLVVIFLVESFDVNGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIYQMSYMV

>ETJ82236.1 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNISYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPTPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAGLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>ETJ82235.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDDGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISMAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSRRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>ETJ82234.1 2,3,4,5-tetrahydropyridine-2,6-carboxylate N-succinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDDEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLSH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISVGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>ETJ82233.1 phosphoribosyl-AMP cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNFKELNEKIAWQKVDHLLPVIIQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDISCFEKISKNADFVFLARLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>ETJ82232.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKYSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKVPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>ETJ82231.1 HrgA protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSSKLSYKELTLEILKQSDRPLSVNEIWQKALEQGLDKKLSSIRQTPIATLGARIYVDIKELQHNSLFIK

ASQKPTTFWLKERENELLKLDNKNEITNEKQEKNKFHERDLHPLLVKFLYENLDFNLNCKTIYHEQSKKG

KGGEDKWNYPDIVGVYFPYDDYEKETITLLENIKQNSYKLFSFELKIALNFSNLKECYFQALSNSSWANE

GYLVVLQEIDSEVLSELRRLNQSFGIGVIKLDIQTLNMLINKNPNFKEFIDDINKQIKVGKEAKIQANFD

EIKSDEEMEKYLKEKCILEK

>ETJ82230.1 imidazole glycerol phosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIIIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHMGWNQVHSSHALFKGLEGAYFYFVH

SYCAGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGENLISNFIKDIG

>ETJ82229.1 imidazoleglycerol-phosphate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKNFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLRYGELSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKISIKTGIDFFDHMLEQIAVHGG

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFALPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>ETJ82228.1 bifunctional histidinal dehydrogenase/ histidinol dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIVKEVQEKGDEALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQDAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCEKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGATIDMQAGPSEVLVIADDLANEKFVASDLLSQAEHGADSQVILVCLSQDFAQKASN

EVQSQLELLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>ETJ82227.1 50S ribosomal protein L17 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRGYVERLITRARLGDFNAHRAVFASL

QDKNATNKLVTEIAPKFKDRNGGYTRIIKTRIRRGDAAEMAFIEFVA

>ETJ82226.1 DNA-directed RNA polymerase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRNITTSAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTIGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKGESNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELK

FTLIVEKGIGYVPSEEIKELINDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMESIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>ETJ82225.1 30S ribosomal protein S4 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>ETJ82224.1 30S ribosomal protein S11 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVTVTDEMGNAIAWSSAGGLGFKGSKKSTPYAAQQAVEDALNKAKEHGIKEVGIKVQGPGSGRETAVKSV

GAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>ETJ82223.1 30S ribosomal protein S13 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYNKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>ETJ82222.1 50S ribosomal protein L36 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVRPSVKKMCDKCKVVRRKGVVRIICENPKHKQRQG

>ETJ82221.1 translation initiation factor IF-1 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>ETJ82220.1 metallo-beta-lactamase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNFITTLLKTNLYFLEEKTTSKSSNQTHIISLKQSDDEFLNLLFSFLVPQSDEDKNFIGKTRTKIKRNE

HNIALIKNPNFNALIDTGFLDTIDTLKEKLHIHKTDFKDITHIILTHAHPDHIGALMSEENLFPKAQILI

DKKEYDFWIKSDRQEIKNTLLKLKNIEFINHSKDLIFQNSGIKAIPAYGHTPGQNAIIIDDKIVFWGDLL

HLYDIQIPKPKIAIKFDIDQNEAIQTREKLLKQFKERKLKVIGTHVPFIEPKFLD

>ETJ82219.1 multidrug ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPFIIELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVTLLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDTLIDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>ETJ82218.1 Cj81-083 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTSFNHILSEMPLVLFTILVQAVIGLSLVYAPAFINGYKNYANLKSFGLALGIAMVVAFIPSFFHLNDIT

HIFNVLNRMGVFYANNEWHIGWMNNEILFVSLVCALDFLLYLKTSNWVFYLTLICGILGLFFMSGAYGSM

QESVPTWDFKITLLYFFASAIFLGAIVYYCFFENSKHERKMSFFTGLIGIGLLSTAIVLQTLHVGQTWIM

GLVNPFELLGGTYDWFISLSFAFLGLGIVTWYLHNYLHEKFKSKFFACFALLCAFLGVFTTRMLFYGLIS

TQIMLGHS

>ETJ82217.1 dimethyl sulfoxide reductase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLEENSQFGFMLDQSKCVGCRTCSLSCKDYKNMPVGINFRRVFETEGGNWTAKEDGSFEQSVFAYYTSI

SCNHCSNPSCLKACPTGATMKIKWGIVAIDDSMCIGCKACAMACPYGAPQFNHESGHMSKCDGCYERLKE

GKNPICVDSCPFRALKAGDITKLREEHGNLASITPLPDASITHPNLCIVPEKHSLPSGNKSTIFHLPQNY

QGVKNDII

>ETJ82216.1 peptide ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLRFLIFAMLLFVNLEAKIPKDTLIIAVENEIARINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLAKS

WDVSKDGLVYDIFLRDDVLWHDGVKFSADDVKFSIEAFKNPKNNSSVYVNFEDIKSVEILNPSHVKITLF

KPYPAFLDALSIGMLPKHLLENENLNTSSFNQNPIGTGPYKFVKWKKGEYVEFKANEHFYLDKVKTPRLI

IKHIFDPSIASAQLKNGKIDAALIDVSLLNIFKNDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKESIVKNLLHDYAFVANHPLERSWANSKNFKIYKYDPKKAEDLLVSAGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KTRILGHHGVGFTWNVYEWNK

>ETJ82215.1 peptide ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKRLVFSIVVAFFSTFLCFVLLYFSKGSIAYTNGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGVSFLSGESVLKLIKERIFNTFILGFNALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKILPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSPIVAYFGGSALSFMMGTYVVESVFAYEGLGSLLFKSIIFKDYPVVL

ALIFFSVLLAAFFTFLSDIVARILNPRLRRLDFV

>ETJ82214.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVRNLNISLKNNLLLKDINLDIKTGKTLMILGQSGVGKSLLGKVLVRLLDSNFTISFDELSFHNSCIFN

FNKEELRNFRSKVALVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWH

SYANELSLGMARRVSLALALLNQPQILICDEITASLDKENASKIISILKELKNTTALVCITHDLNLVNSL

ADEILMLEKNSSNLYSLDEFLRYYNA

>ETJ82213.1 peptide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLIILGKSGAGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKSYELSGGEATRVGLIRALVLNPKLLILDEITSAFDIKISKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>ETJ82212.1 NADH dehydrogenase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLI

>ETJ82211.1 NADH dehydrogenase subunit C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKYSDKKNAQTQNYYKDRFYHAPHTVKSDVNESVFKEDFEVLKTQVEILNSFVELDFWVIEIKKEDNVK

TLQMLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRIKTFVGVKERLQSVAHVFKGANWSER

EIYDMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFAD

DKDTLNFARLYHEVPKGGQKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>ETJ82210.1 NADH dehydrogenase subunit D [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLAFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCAMLYKDTSPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTERPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>ETJ82209.1 NADH-ubiquinone oxidoreductase chain E [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRRVDLRKSKELFEDLAQIIKEAKQGEVLVVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVI

KKERV

>ETJ82208.1 NADH dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYDNALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEVKYLIIDKNIHSYKDSENIKYFLNFLSVKYGLKILDSDEEECDFK

KAKLNTLKELDNYDGLVLFRANLQDKNLHCSRQFLQIAKCKDQSEVEILAKDFSFKTKLCLDENLQGTIA

FLNYENNGFDFTPIRIKEAK

>ETJ82207.1 NADH dehydrogenase subunit G [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTVKINGIDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKHWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKESMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISNQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGMLLRYDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFIPHIHKNGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESINEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIIEVQRSVFAKNLGIDEDKLEDLLLKKANFTLVVGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDNNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINKGFSPIDFDHLDNFYTNAGDCKRGYELNLECFKQV

AKKEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASAINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>ETJ82206.1 NADH:ubiquinone oxidoreductase subunit H [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDFAFFALETLIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVSIISYESVGALALIAIIMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGIFFIGEYTSMIAGAILVTLLFLGGFNSFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVLNLLITALTVLL

>ETJ82205.1 NADH dehydrogenase subunit I [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVENYSINLGRCIYCGFCAEVCPELAIVHG

TEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMIERALENQNTQEQG

ENK

>ETJ82204.1 NADH:ubiquinone oxidoreductase subunit J [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALAGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSTILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAIVLTHKELTKEKQ

>ETJ82203.1 NADH-quinone oxidoreductase subunit K [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIEKYFFVAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>ETJ82202.1 NADH-quinone oxidoreductase subunit M [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGVSFDYNLSFKILKFFSFHVGV

DSIALVLILLSSLMIFLSFLFLKLEQKALISCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFRAGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNASAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPILVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYRAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYMFAVFRKIF

FMQKQSFIEGFSLLFREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>ETJ82201.1 NADH-quinone oxidoreductase subunit N [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNNFLNLELLNISLSYPFLFLITTAIVLLLCSGFWKFHRSFYIGISSLSLIVSAFLILNNANAQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMVSSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGAGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFAALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFMKNDRVHNIKFSFIQNFILAFCVCVSTFVILLML

>ETJ82200.1 3-dehydroquinate synthase, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQVEVKLKENAYKVYIDELEELEFDSKVFILSNPKISGLHLKTLLSKIKAKEIFIATVKDGEEYKNLSTM

EEILNQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSFRELAAGMAEFIKMAAMFDDS

>ETJ82199.1 hypothetical protein X908\_05575 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MASFKKIFWIIVIIVAFNLRAPNYCSGAYY

>ETJ82198.1 hypothetical protein X908\_05310 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNFFGIKEKYGRKFNFNFIVTSCSVICNFLFLGDQTATKTSKST

>ETJ82197.1 aminotransferase DegT, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

QSENALALNSATAALHLALRVAGVKQDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLA

IKECEKKPKALILTHLYGNAAKMDEIVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKI

ITTSGGGMLIGKNKEKIEKARFYSTQARENCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREI

YEWYKEFLGEYFSFLDELENSRSNRWLSTALIDFDKNELNACQKDVNISQKNIALHPKISKLIEDLKNEQ

IETRPLWKAMHTQEVFKGAKAYLNGNSELFFQKGICLPSGTAMSKDDVCEISKLILKSIKA

>ETJ82196.1 potassium transporter TrkA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRGKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGVMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGEASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNTTDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGRNLSTNLNRHYYKMRQNYQLFIPVE

>ETJ82195.1 queuine tRNA-ribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSHHLFTPKSVLDTQYDFNSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIDPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARK

MREAILNNSFTQFKRNFYHLRGK

>ETJ82194.1 magnesium transporter CorA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFNDEKIYKLQNEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQNLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSISILSKNTKEHLARVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQTK

>ETJ82193.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVIFCAALALLLFLGMIAYLITSDGKKTIKKQKTSQKQHVTEKTKKFDTDLDKMIIAASDVKLTDIELKE

LAKLYVQTHKLGSKTSKELDEATKKKLEFVSALAANINASAQTVSYLNKELKKISGSYKKEIDAYEHMGL

AKRKIKEDK

>ETJ82192.1 amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIVKDLHVYYGLIEAVKGIDFKVETGHIVSLIGSNGAGKTSTLNALLNSVKRTGEVNFLGYDTKRHLTH

TLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLTSKKHALAGTLSGGEAQML

AISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRIV

MENEAKNLIGDDEIRKKYLGL

>ETJ82191.1 branched-chain amino acid ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILELKHISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYAILEELGI

AEFAYEKAASLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>ETJ82190.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>ETJ82189.1 branched-chain amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDVIKLITIDTKG

DKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLKSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYSNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQDQKQNYKTIINP

>ETJ82188.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDMS

PEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHNI

FLK

>ETJ82187.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDAFNLKRVDVSTYQAASGAGKEGMQELVEAMQSFFAFKLDEFKSQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEIDVKKAKEILEKAPSVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>ETJ82186.1 hypothetical protein X908\_05660 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MERIVCLLIFLSFKLFAQDEFIFWAELSSKNFILFHQNQNLSLAMTQSENVEEQWVCEISYSDQDLKVLP

RTSLALIDDNMPKTIKFNFLNSHKDELSDCFIGARISVKDIVNTDLLHAQSETYVKILPLRFTVEFGEQN

AIIYYLKKK

>ETJ82185.1 hypothetical protein X908\_05655 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIYFMLAIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>ETJ82184.1 DNA gyrase subunit A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDSKDASLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARARAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSVGVRAINLDENDELVTAIIVQRDEDEIFATGGEENLENQEIENLDDENLENEESVSTQGKMLFAV

TKKGMCIKFPLAKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSISAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>ETJ82183.1 phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRCINCGAFALLCFCELCELELSEFSLNVRKLDNNFKVYSFYKYHEIQHLLHSKHYFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVIALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>ETJ82182.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPGGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEEQKVLNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDAIGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>ETJ82181.1 elongation factor 4 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNE

NFVLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNAD

VEKVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALAL

VRIYEGSIAKNDEVLVMSTDKKHIVQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITLVK

NKAKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHM

EVIKERLEREFNLDLIATAPTVTYEIYQTDGELIKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNL

ITLLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKV

AGENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGD

ITRKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>ETJ82180.1 multidrug transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEKYLKSAIFLALYPLAMLASNLHEFIALSQNNESYLIKQMQSEQANLDKEQAFRNYLPSLSLNSAYVA

NNKDRFIIDPQESLFAKVSLNFLLFDGGAREANLRALESREKLSFLDKEQNKNYLALNAITLYFNTLSLE

KILLANQQKVSFLKSTFKRLQKFYDAGLSSKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSDTDF

KVQGNAFLENPQQEKSQNYEVMIAKEQINLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFANL

ADQFLEKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARFSERKNKEELNYLDKSLKVLQEQ

ILALNLSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNS

KVKE

>ETJ82179.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILFLLLVFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVSKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSRMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYNNIMAKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVRLGDDFFYKIDQNGTELKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>ETJ82178.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLIFEQNNMLKPMLFIKIDFVAGRILMKLSSNEKLFITYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>ETJ82177.1 arginyl-tRNA-protein transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCSKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYNFSRSERRVVNKNINTKVILRTPNLSNEHLFLYDKYHRFMEEKKNWKRYDLSFKQYYNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPNEILKGTKELFENEVLWEK

>ETJ82176.1 hypothetical protein X908\_05605 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFLDSLKSIKKEMQANTNTSKLAKKSSKSGASVKNLEKLAKDIREKNQETNIDKEMQEIFLKQEKLQDE

FSEFIKNTDIKKI

>ETJ82175.1 acetyl-CoA carboxylase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVARIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIHKMGNKNIARKLMAKNGIPIVPGTEKLNS

YSMEEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKVIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>ETJ82174.1 cell division protein FtsW [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVADKRLFYLSCILITIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNTEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGVICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>ETJ82173.1 UDP-diphospho-muramoylpentapeptide beta-N- acetylglucosaminyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEVRFKEKFFLSSKGVVNQSKFDK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEISPYPVADKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADIFDFSLNLEEKMKNADLAISRAGASTLFELCANTLPTIFIPYPYAAKNHQYFNAK

FLQDQALCQIFMQNSINLDEFFKSILKLNLENISTRLQNITQKNGADMLIQKALFDNLTFIR

>ETJ82172.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKYVLSLALLGSLLGASELKYQEFDGFKSPESIFVDKNYVYISNVGEKLEPLAKDNDGFISKLDKNGKV

LEHKFLTHLNAPKGMMEIGKTLYVVDIDVLRGFDLKTKKEIFNLPIKGAIFLNDIEKLDDNTLLVSDTGT

GLILKVDLKTKQYDELLKLDLAKFGGPNGLYLDRKKHKLFIAGYHPDGVSGGVVMAYDLNTKELSIIKNE

KESYDGIVPYKDGLLVSSWGNNLNGYIYNLDNVKSVKLELPLMKGPADIFIEGNILWIPKMAEGKIFKVE

LNK

>ETJ82171.1 AraC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKILSLPEDLKQLKGVNYKKIKSCTFAKYTQTDTSHSTFVNVGSHLLTFVRKGYKILHTASKDYKINSY

ETLFLKAGSYTLSNVGLSKGVYEAYLFFFDNAFLIELIYKYKDFFKLDQKFQNYEIFWVKNDKILQGILE

SFSPHFEENTQILDPIVSLKFEEIFLHLLLNKNIYFISFLSGILKEFRLDLSQLFEYCGREFLSVNEMSN

FAKLDLATFSKEFKKCFGQSPKKWLDEKRLQKAKILLKFSKKNINEIANECAFSSVAWFIERFKEKYEQT

PKQYQKTKNLYFLSKN

>ETJ82170.1 thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MWDKKIIAISDRKCVQIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLTKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKMGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINVVGVCMREILMKEKDLKKYLLECRQNLR

>ETJ82169.1 thiamine biosynthesis protein ThiH [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQDYMQYLPHMQEIKSEILNKVLSQVQSYDESQFSAKDVENALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLNEAEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEDEYKILHEKGCDYVTVFQETYNPLKYSKIHLAGEK

RIFPYRFNAQERALKAGMRGVAFAALLGIDDFRKDALATALHAHFLQQAYSHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDEQF

EISDDRSVDEILAMLKRSNLQAVMSDSIYVG

>ETJ82168.1 thiazole synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSAIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDAGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGSPSQACEAMQMGVSAVMVNT

AIAEAKDIALMAKAFSLAVNAGRAAFLAGLASVSKAKASSPLTGFLRD

>ETJ82167.1 thiamine biosynthesis protein ThiF [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNENDELFCIEKNTLPPKDALDAMMR

ARHTPKLHDKLKNGRVAVCGLGGLGSHIAINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTEA

LKEQISEINPYISVEICTLKIDEDSLKSLFKDIDIVCEAFDSAIAKAMIAQNFHRFYKDSVLICASGLAG

YGDSNSIQTRKIAKNFYVCGDLVNGAKLGNGLMAPRVNICAGHQSNLVLELLANKE

>ETJ82166.1 thiamine biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIINGQKLELKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>ETJ82165.1 succinyl-diaminopimelate desuccinylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSNNAFAPVEKEGFIYARGAQDMKSGVAAFVDAVKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQERDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVITDIRGGMEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>ETJ82164.1 NAD-dependent deacetylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNIMILSGAGLSAPSGLKTFRDNDGLWEEYDVMEVCSATGFRKNPKKVLDFYDARRAQLQNVKPNHAHE

KIAQLKEKWGKNLFVITQNVDDLLERAGCKDVVHLHGFLPELRCLKCEGIFNIGYEKIIDKQCPKCKSKD

LRHNIVMFEEQAPAYATLYSLLNQTSLFISVGTSGAVLPVGRYASMCEKSILNIYEKDANLERYFDKIYT

EDIISAIDKIALDIENFMKDGNV

>ETJ82163.1 DNA strand exchange inhibitor protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDTKEELISKLDLNSYLEEFKALFARDKEIFLQGDSNLHFKRIHELCEVEFPTMPELSNLDKALVHLSK

QGILHLDEIFEFVKIFRYFEKLKKLKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDERLVDLNA

ALRLKNENIIVEFKKFCHTKALMPYLIDTQIHLISNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLSV

ENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQST

DLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGAFK

EFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLITNNLKII

ITTHHKHLVMLLAKNEQVELIAALYDEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGDD

KENLEELVGKNINLELELKAKLENVEKKEQKVDEILLSLKDQKEKNEQEFRTSLRNLEFKFHKAIEEAKK

TIQLKDTKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRVP

LKLLKKSTPTPKISPKTSISVAKPTNLSVSLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTGK

LAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>ETJ82162.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSRVFLYFLIILILALITFALREKLGKKTKPFFGILLVIFIVLAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>ETJ82161.1 UDP-N-acetylmuramate--alanine ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLVFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYTQFLDVAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKVFGMGYHLALDASLAILAALNFLDIETI

RTRLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYVKLGGYKKITAIFEPHRYTRLATN

LKEFAKAFEGVDELVILPVYAAGEEPIELDLKAVFPKALFVEDIKREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>ETJ82160.1 sulfatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKILLQIFIFSVLFIVTFAINRILMQNSFIPTGLISDKNEIFLMYLLGVFHDIRFLSAAFLPFLLCGFL

SLIFSNIKINNKLVIYSKNFYFIFSSVYIIVLSCLCIGFSYVKYYYYEIYKTKFDIFMFTLKDDNTKTIL

SIIYHDYPILKILALMLIFGVFVFFLNLKILNLKLKPVNLRLFPLIALNLILIIVYVIALRGPFKHVAIN

VQNYSFSEYSVVNDTMLNPIMAFSWALKQYKEEAALKVITPLKAQELKEKLFDYLHQSPINLKAEKNHPS

VFVNLMESFGLNLADFTNTEHNFLGSLDKHFKQDFLFKRFLSSSNGTIPSFANLFFVSPFSNISTSKFQK

TYLDLTPIAVYKKAGYKVIFVSAGNGSWQNIKNYLSILGVDEIIDENILMKEYNGAKDSENGYGIADEFL

YKKVYDLLQKNPHKTLIIALTISNHPPYKIPQNDLPKLQNIPQTLLNMLPYEKDKQDNIIKAYTYANNEF

GKFLDKVKQSPFKNSVIIAATGDHRVREMSMDLNSQKAFAYSVPFYLYIPKDLQDNIYYDKDRVGSHKDI

FPTLYALSLNNVKYLSVGGRNMLARPSDEKLEFGINDAVWIDKKGIYSGGKGYYFESNDTLKDMNKAFNL

DGYTKDFDKFYRELNLYQLAERLGISK

>ETJ82159.1 carbon-nitrogen hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVSVEAKSYKKLCLKVTPNGVKSYEQQILMPYEHWNEEKFFSNKTPSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMAKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>ETJ82158.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>ETJ82157.1 inosine 5'-monophosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVVVLDSAHGHSKGIIDTVKAIKAKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGVGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>ETJ82156.1 aspartyl/glutamyl-tRNA amidotransferase subunit A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFSPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTVPNLNANKKLKIAVIENYVNDADSEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTTAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>ETJ82155.1 hypothetical protein X908\_05480 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLENPIPNSIIITTIAVVLAFSALAVFLIKKQRKINDNFKRSFKILQRRT

>ETJ82154.1 isoleucyl-tRNA synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDYKETLFLPSTTFAMRANLAELEPQRFKKWFEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKDLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDVKACEKLGVSKASAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

SGCYDETLRAKGLLPSHLLEEFIGLHIFKANEKILELLGEKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIGSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFDFVAAIFEKHGADAWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNAVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIASEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVKEFSFIDKWILSRATKVF

KASKEAFFAYEFAKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALMAKELLNLLAPN

LSYSVDEALEHANVLIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDILKKDKIIKSTLELN

LNISFNKFPNEELADWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKLQSKNEETPCLRCEE

VLKGVQC

>ETJ82153.1 acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEIKLKEDLEKIYPLIKQLRNNLSLKDFLDKIQLATQTQHYKLFAYENEGSYKAACGVMPFNVLYHNHC

LYICDFVVDEALRGKGIGQAFLKKIQIWAKDQGYEELELSSSFFRTQAHEFYIQKMGFEKSGFVFKKNIK

L

>ETJ82152.1 NAD(P)H-flavin oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFKELISKRRACKLFNDKKINEKDLHFILESGVLAPSSHGFEPWKFVVLEQKEHNLKLSTLCYNQQNVA

SASHNIIFLARKDLQSKDEFAQKQVRRFSGSSEENFQKILEIYTHKTNAMNDNELYHYAQLQCYLAMMQM

SLAAMSLGIDSCMIGGFEKARVDNFLNLTYPFETAVILSLGYKAHEPKYSTQRLNFNEVVEFYKEK

>ETJ82151.1 zinc metalloprotease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRSLLLLIVILILGIKFYSIEFLATVLVISFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIGNIAPNSAAQEIGLQKNDTILEINGVKIQSFDEISKHLSLEPLKILIDREGKNLEFTLTPKIGQG

YNDFGQIVEKPQLGVSPNGTSTLVKHQGLESFKYAIQESFQASTLIIKGIIKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRRKVPQRAFEYLSYAGMAIL

LSLMLFATYNDISRIAGE

>ETJ82150.1 30S ribosomal protein S6 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>ETJ82149.1 single-stranded DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNAPQQGGFGNNSFSNNNYSGNYENQSYDPYMSE

NQNFNKAKANPAPQRNQNPQHEEKLKEIDIDAYDSDDTNLPF

>ETJ82148.1 30S ribosomal protein S18 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>ETJ82147.1 hypothetical protein X908\_05415 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKYEKRYFFIGFLSVFFSACSTKNDEGLYNLSASEWYKQIIKDLQDKDLEKADDHYNGMASEHVADPLLE

TTLIILAQAHMDEEEYKLAEFYLDEYNKKFGNSRNADYIRYLKIKAKFDAFAVPNRNQALMLESQKEIDT

FLKDYPYTEYEPLVQTMLTKFNLAVFYLNSTIENLYQRIGHDESAQIYKQRLQESEFYQQSIIKPELPWY

RSIFERF

>ETJ82146.1 flagellar assembly protein FliW [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMVQVILDTVNYPDFFQADQIANYIKK

>ETJ82145.1 pyrroline-5-carboxylate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALAKEGFKTLLYKDFNIEGKDVILAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIIPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEIQMNAAMAISGCAPAFLALIAESIANAGVYEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSAK

>ETJ82144.1 transformation system protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKAFILIESISAITIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIILQTSALKPI

VLQEQFVNDGIFQFQKLYFQDQNYSVYFKE

>ETJ82143.1 hypothetical protein X908\_05395 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTALHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISTNFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLNQQGLISKNISSFNLQNNKLKICLKRQT

KYCLEKRILL

>ETJ82142.1 hypothetical protein X908\_05390 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQAKQENKECL

DNIYFNYAKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>ETJ82141.1 uroporphyrinogen-III synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIYLLNETPFKGVENLILNEIIFYDFSIDLSLYDALICTSKNALKALQNAKITLNFKLNLYAVGQSTAQ

YAKNLGFKKIKIPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNVGVDLDEVIVYENVFKKG

DKKLTHPAIFIFTSPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>ETJ82140.1 phosphomethylpyrimidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFYAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>ETJ82139.1 nuclease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTGARIFTKLLNLDLNYHDFDWLENQGLSEFELLISVILTQNTNWKNVLKALENLKKENIVSLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDSILNYLCKREI

LVVDNYSLRLAFCLGYEFENYEELREFFQSGIESEQENLCKILGRKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>ETJ82138.1 hypothetical protein X908\_05355 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAIFNKGGISPTSSSSSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGRFNGTSKIKEDTIKLIENNNEE

>ETJ82137.1 hypothetical protein X908\_05340 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIPNTNEIAKQTLIALKERKLKPTPENYTEIFEELSLKYGITSSNKAKLDKYKTLLLPIYQQELNSKTIR

SLEELISFLISVLNRQSGKQFSEFFDFLYTISKTLQISKDKKIRDLAKVTSIRISKTMDSESIYLLTKKW

KELERNYDENDLEEQARKYGISKYDDYDSVIKKLLVKLEERSYEHFSELLCLGLNPSLVEDLKIQGFIQN

LTQKPFVIGEENFKNELMEFINHRIMVDNMYVQKNLNFFNDNLKKIYELLVLLNKSNEKNMDFINTLKPD

ENGEVKLSFEDLKLKFKQLGEKITSLNNQIEFTQSLEEREAWSVLKELDKMDENFNKYKVNYSLALFSIV

NYRFIMEKYGMGSLNEIFVRFKKILKDSCSEFDELWMIDEKSYLIVSPGKSKDEITQLVNTNLKTIENFR

FIYKQDIITPKIHVAYLDKQSKPSINILDELIKQIAAVNEQYNES

>ETJ82136.1 hypothetical protein X908\_05335 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILIFCIGLFLGACGYIPTSKIANNIFDEKVYVNVELSQQDPKNSIYVADTLKEMVISKLGRKLALKH

EADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYNFEISPNSIISDSAR

YEAIRAASSEAFDEFISVIAIKGQKRDSKY

>ETJ82135.1 leucyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEFFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVAQKKMPGYYVKITAYAEELLKDLEELKDK

WPNQVLTMQENWIGKSEGLEFSLNLDEESKQKTKESSLEVFTTRADTIYGVSYIALAPEHKIVQNLLSQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFILADYGSGAVMAVPAHDER

DFEFATKYNLAIKQVIQTQENLPYTQKSGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIVPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFILFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNVKKGELVELKQENLNKEEKYARLKVYEALKKSFEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFEISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>ETJ82134.1 preprotein translocase subunit SecF [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQFFSEKKIYDFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPTLLWFKFSVLEFRNKEIEKAKRKQDKERNRAMYEKGTV

>ETJ82133.1 preprotein translocase subunit SecD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRNSKINYRLIIFIAVFIFGVAFSLPSFLQSERGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEAASYGLILVPDSRNPNLKYTLKSIPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>ETJ82132.1 preprotein translocase subunit YajC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNVTAKISREFIAKKIDA

>ETJ82131.1 S-adenosylmethionine synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKADYDNLV

KDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGETGAGDQGIMFGFASCEAEEYM

PAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMKIEDLR

SLVMKLILDSNLPKELFDPNKTRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQSSKDYT

KVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQNFSLTP

NWIRDQFHLDKPSKETFLYADVAARGQVGQKDYPWEKLDALEQFKKLL

>ETJ82130.1 aspartate carbamoyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRHLITAKDFNKVEIMELFKEASDFLDEKPRTFLKGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQGDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKHYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>ETJ82129.1 oligoendopeptidase F [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYTLDANEFLQALKDYENLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIMLYLSNTGANAFSRLFDESMSALKIPFEGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFNLVSQFYKRKKQILGYELKDYD

RYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFVL

LNYTNKRRDLFTLAHELGHTIHQKLSYHVSYLNQNTPLTTAETASVFAEMLVFDFIKDKLKKEELLSLYA

NKIEDIFATFYRQINFTCFERRLHAQENELSTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIHS

PFYCYAYAYAQLLVLALYGLYKSKKCENFKELYIKMLSLGGSVSPKELVGMFGFDIEDENFWEIGIKEIQ

KLINEFMELQSC

>ETJ82128.1 hypothetical protein X908\_05280 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLETILKNENFIHTMQKHCYEVISHLIEENIEFSIVANTNFIDFNPELPKELDIKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNDDFDSFVKVDLGAITQIQVENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>ETJ82127.1 carbon storage regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>ETJ82126.1 4-diphosphocytidyl-2C-methyl-D-erythritol kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSKRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFHSANVSGCGEIIEEFEDDIPNLKWTFPQISCQTKAVYDEFDRGIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>ETJ82125.1 thioredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILTLFLISLAFFLNACSKEEEIQNDFMFEEYHKGDKIVLNSVNGGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIIGLTHFEDVSDETVKKFADDYGAYYFLSNGGSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>ETJ82124.1 ATP-dependent Clp protease ClpS [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>ETJ82123.1 leucyl/phenylalanyl-tRNA--protein transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MESSNLYSKLLNAPKNAPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCILIPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDTRSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVSIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>ETJ82122.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFGAKKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEIKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLCLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

SAEVAKAMS

>ETJ82121.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSSMGSELYLMFFAAITLLAILNPFGNLTQFLAMSDGLPLMLRKKLFRTILYTAFTIVLVFLLSGPLFM

NYIFRVSLDDLRVSGGLVLIIMAIKNLLFSTKIATKDFSSYQDMDDKEILRQSLIPMAFPMLVGPGTLAS

VIVIAEDGGLDVALGGVMIAFIFMFILFHFAATIEKIVGKLILHVFSRIAQVFIAAMGFKMIIVGLKDIF

NL

>ETJ82120.1 methionine sulfoxide reductase B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIVCANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>ETJ82119.1 hypothetical protein X908\_05215 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKEFFQELQDILYEKNITIKFHSFQNFYEDFKSRKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFLN

STHALAKIIHSVAHIEFNAINLALDASYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGIVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNRYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQKECEVIEKFYS

>ETJ82118.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKDFIAKDGYLSLIILSLIFIFMWIFYSFSILLLALIVICIFLFRTPKRELVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSAKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>ETJ82117.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>ETJ82116.1 UDP-GlcNAc C4,6 dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFYKSKRLAFFLISDIVLILLSVYLAFSLRFSGDIPSIFYHGMMVSAIILLVLKLSFLFVFRIYKVAWR

FFSLNEARKIFIALLLAEFCFFLIFYFFSDFFNPFPRSAIVIDFVLSYMFIGTLRISKRMLVDFKPSRMK

EEETPCIVVGATSKALHLLKGAKEGSLGLFPVGVVDARKELIGTYCDKFIVEEKEKIKSYAEQGVKTAII

ALRLEQEELKKLFEELVAYGICDVKIFSFTRNEARDISIEDLLARKPKDLDDSAVAAFLKDKVVLVSGAG

GTIGSELCKQCIKFGAKHLIMVDHSEYNLYKINDDLNLYKEKITPILLSILDKQSLDEVLKTYKPELILH

AAAYKHVPLCEQNPHSAVINNILGTKILCDSAKENKVAKFVMISTDKAVRPTNIMGCTKRVCELYTLSMS

DENFEVACVRFGNVLGSSGSVIPKFKAQIANNEPLTLTHPDIVRYFMLVAEAVQLVLQAGAIAKGGELFV

LDMGKPVKIIDLAKKMLLLSNRNDLEIKITGLRKGEKLYEELLIDENDAKTQYESIFVAKNEKVDLNWLN

KEIENLQICEDISEALLKIVPEFKHNKEGV

>ETJ82115.1 sugar transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLSILNAMYLADKFYDIRNMRFFWNDEIVLFGNYYINNNSRKFENCNIIGQSVGKVESIFSSNFIKKHYL

ENKYLYTTNMAYDKNASYPSHTLDLLRMGFNKNYAYLLEQVLNNKYIYVHQHDLSLQFHGIESNNQYKNK

LKEMWSYIDFNQCLKQQILNANQKSNNLDKFIIVHVRSGDIIYNYSNARKFNLEGVYHATPLELAAAIIA

KNKYDNIVIVGDDLTSTQMLKDIFKSNRVFHISDFRDDNLSNLELLIFDVVFMSNSSKIYGTYSALVLLS

SIIGKNKILQNNYNVFNEQEQYQYFKKYNPFFSQTHNSQKAFSLFHMYLLSFKNKDTCDTSIKYLKKALI

YDLDNDKYRIHIIYMLLCNNKFKILERYLSIIMSYRKDIFLSTLFSTNWGGYVYLNILSDFLNYSQRIYN

IKYLYPNIFYIITEIIKLNLFAVFLVKQHLSYKLGKRIVQTKSILDIIELPLDLKNIVDSHKRNQLIPYN

IKIENCLDYGEALKIKNYFSYKLGLILIKAHKNWYKGGYIKFWFDLYKLKKEYKNKKGK

>ETJ82114.1 glycosyl transferase, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

FNNEKDLTNFTYPNIDYIIFLDSDDYWELNCIEECVPRMDGVEVVWFDHYFYYDDIEQPDIIPKTILESY

KFNHSCIIKQKEWLNRMLTFQYSSFWFGWHGMIDFNHLKSIHLKFLNQVLHEDHYFAKLLFAQANKIYVL

KTKLYYYRQRANSIMTSRDNPSFENTPVYIRKIYKNLNHDAKLVKEFYRSSSLLITACMVYQFTQTHQDL

PNIKLFEQIFMQKLKSWRNEILSFPEQYLEFMFENTLQRINFLEQNSCLHLLKFISMFFLI

>ETJ82113.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAIEFNIQESKILKGVYIITPNKFRDLRGEIWTAFTSKAVDKLLPNGLKFIHDKFIHSKHNVIRGIHGDV

KTYKLATCVYGEIHQVVVDCRKDSPTYLKYEKFIINQDNQQIILVPAGFGNAHYVTSESAVYYYKCAYKG

DYVDAPDQFTYAWNDERIGIDWPTNSPILSERDILATKNKG

>ETJ82112.1 hypothetical protein X908\_06185 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGYMSNIDAKALSLGVSDSSPWDLEMAQRGFKVIEYDASIEK

CPYSHENIIFHKKFIGNINNENTITLAQALKDNNLDESRPNILQCDIENCEWDMLENIDISILNKYFSQV

IFEFHGCNPEEQDGVEKRISLLKKLNEYFIPIHTHLNNHGKIFYSKGLFFSTTLEVSYLRRNELNLMQGL

HYRKECGNLQNLDFPVWPSNPEIPLRF

>ETJ82111.1 GDP-L-fucose synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKDSKIYIAGHSGLVGSAILNELKQQGYKNLVFKTHFELDLTNQKAVADFFEREKPEYVILAAAKAGGI

LANNTYRADFIYQNLMIECNVIHNAYLHKVKKLLFIASTTVYPKNATLPTSEEQMLSGDLEYTNKPYAIA

KISGLMLCESYNLQYNTNFIAITPTNLYGNNDKFDLEKSHVLPGILRKMHLAKLLNEKRYEDLLNDLKFD

SIEEAKNYLKKFGVDKDNVEIWGSGKPTREFLHSQDLANACLFIMNNIDFKDLKSDNIEIINTHLNIGPH

KNITIKELAELIKNIVGFKGKLVFNLNRPDGAMQKFTDCSKIHSLGWKHKIELEDGIKMMYKWYLKEQNI

RQ

>ETJ82110.1 GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESQRPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEGYDPVVHICSSSEVYGKA

KVGVKLNEETAFHGASPYSISKIGTDYLGKFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDCRDAIRAYYLLSLESEKGNIPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GRGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRNEIKRGRIPLNR

>ETJ82109.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKKVLITGGAGYIGSVLTPILLEKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVAK

ADIIIPLAALVGAPLCKRNPKLAKMINYGAVKMISDFASPSQIFIYPNTNSGYGIGEKDAMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANV

>ETJ82108.1 dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEYESKE

FLGNDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFAEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLAQILGKSWQSKKIISEIVSNDELERIYH

LAMQNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGYVQDFSFTKEGVKSWRI

>ETJ82107.1 phosphoheptose isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENLNSYIKEHFQESILVKEQILKDENLITLIKNASLEVIKAYKNGNKTLLAGNGGSAADAQHIAGEFVS

RFYFDRPGIASIALTTDTSILTAIGNDYGYENLFARQVQAQGVKGDVFIGISTSGNSKNILKALELCKQK

EIISIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>ETJ82106.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSYKYEVIKEYFKDEFLG

IKIKYSIEKEPLGTGGAIKEALKIIKNETYVLNGDTFFGIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKNQGLINGGIYLLTKDIFNEFDLEKKFSFEEFLRENYEKLKAKAHIFDDYFIDIGV

PEDYYNFTTNQSHF

>ETJ82105.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGYIALFKKLYKIKKQHKKEQKIYQQTIQIFPQLKYPSLE

TCGDYEQALRYKFHLSYMLGEVLIKADKTWHKGSGFKLKNDIKKANKEFKIFKEIFNNFAKLSPNIIKII

SKNKQAFLKELPRIQNILKIHQDYQPILDNIFHNFNYFIQNFNLIEEWLLSNDFNEKYKKENHPYPSLLD

PKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFNLFTFGLTGHSILLRALVYHGVRLQWYSNDYKMLYL

DNFEHSYDCIHILFLDRNDFNKSFKYINLLPRITTIFLIRDPISKFKTGLNHGGYKKGCNSYDIVDSNIP

IQKILDRVQYPFFEQITLEHMLNYWINHGVWRYDSIIKNICKEKIYFLDMEELMPNKILSTFVDLKFKFK

LNNIDNLEIMQNIIFGPYRYILPLIINFSFENINIKVYIELKDRVTNGNINLNCMLKYKHDLLQDIVFSI

SELDFEYLNNPLIKQINDFQKDFLDVLNKKIKDIENKKWSENDILSEFKNNKLIRNKVFNMLHKELKFIK

QYRPDIVASWKYYQEFEQMCKELDGDIQEKDL

>ETJ82104.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQGDFTKVAKHYHNRPAYSPFLLEKLVACINDKNKNFKDLNIVEVGAGTGKLTKMLGEMFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPDLARVSSGTQNVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>ETJ82103.1 methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKLVEQVWDYTKHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKVVSVEPN

DAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMDRNEALEEAYRLLKPEGYFSCMWNH

RDLNDPVQKIAEDTIVEFVPNYTRGTRREDQRPIIESRKGLFDNIVYIEEDFYFHQSIENYINAWKSVKN

PYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>ETJ82102.1 hypothetical protein X908\_06135 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAELNFKTKAQNLKNLQTKLKKAKVLPLVLTSLEELISNEDKVLQDIQTLKANRLIIRSSSLSEDSMKNS

NAGAFLSLANIEADSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVGFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEVLYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKAIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGFYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHNKDQFLKDFGHLRAGTYNILSPRYDENFDLYFDINQKDHKIYLQDKALILSEEKTKAL

NALLKEHGLEISACEFFDFLKQAIEGRELVKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSILNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>ETJ82101.1 glutamine amidotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFIGITQRLICNDSYHEERECLALDWGKLFNKDLFKNFTPLPLSYEIDFSYYKHLIKAVILSGGNDLSFY

SPNVLSKKRDLYEKQVIEICLEEKIPLLGICRGAQMIAHYFNSHMSPCENHIGKHEVFFSKEKFISNSFH

NFAIEKLGEDLVELCLAEDNTIEAFKHKYENIFGIMWHIERENGLNNIQILREWFSLIKE

>ETJ82100.1 adenylylsulfate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNNPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDKQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDMHELMQRDQKGLYTKALNKEIDNVVGVDIEF

DKPEADLVIDNSCRNNLEEKVELIIKKLGL

>ETJ82099.1 capsule polysaccharide transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKHYSISKKLIANARNFYTISLYKKNLKIKKDDLFFGWGRKKSGLKAMNLAKKYKAKFILLEDGFIRSLN

LGVENSPSFSMVKDDIGIYYDATMPSKLENLLNTCEFKDEEIKQAKKAIELIKKYKISKYNNNLDIPDDY

FQKDEKRVLIITQTANDASLEFGLAKGFKTIDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQGCECVCYGMPFYAGWGLTKDKLECKRRMQKRSLEE

VFYAAYILYSEYFNPYLNQKSNIFDTIQTLAKYKDIEKANSNRLLMLGFTLWKRHFIKPFFKAKNNEIIF

LNSLKSLARYKLKEDDKFFIWGKRIDYNTLKTTLIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDDKGLYIDPNKASKLEELLQNEIFDENILNRAKNIIKILLENRFSKYNGLKHEDLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRSKNQDAYIIFKPHPDVLSGNRVGLKDETRILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCKRRTRKLSLEELVAGALIT

YPRYINPKTKTLCEIEVCLDIMLNLQKAYFSKKYIKLAIDFKTFMLRKIRRFYEFLAKK

>ETJ82098.1 flagellar basal body protein FliL [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDEELENEETKKKKGGSLVIIIVILLFVLLLSIMGVIAWLISSSSSDESEVKEAPKEEAKADKPKVSAPT

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNSELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>ETJ82097.1 phospho-sugar mutase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIK

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKYLDDDIE

ENLEVEKYDILNLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKALNLKAHVMFAEPDGQFPNH

APDPTEEENLSAIREFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKDIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKALPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERAKELESMVFTLFNDIKARFKN

>ETJ82096.1 hypothetical protein X908\_06075 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILILLTLCAFAFGASECDRKIDRINKEISFSKAHNDTARTLSLELALKQVQNDCTKDPMFYDKKLEA

KKLKEQEVEKIEKELDALKEQKDYMSKVEYKAKKKALKEQKEKIKKEIEEYIDNL

>ETJ82095.1 hypothetical protein X908\_06070 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQERIDLIVKILDEKKAENIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLENLKKGRV

>ETJ82094.1 nicotinate-nucleotide adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIALFGGSFDPPHNGHNSVVLEALEKLDIDKLIIMPTYINPFKKSFSADEKQRFLWVKKLWGHLPKVEI

CDFEIRQKRPVPSIESVKYLYKLYNPSKFYLLIGADHLEKLHLWHDFEKLNSLVEFVIANRNDIGIPKNF

KDLKTNKKIASSFIRDTLNTNEVCEEIKDEVKKYYEKLQKIDTISKIKGQ

>ETJ82093.1 glyceraldehyde-3-phosphate dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKHGAQIVLECTGAHLTMAKCQEFIDMGVQKVIMSPAKDDTPTYVLGVNSELYKG

ESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGAA

KAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVSKDEINEAFRKAAATNLKGILMVDDDERVSS

DFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYIANKA

>ETJ82092.1 phosphoglycerate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDIISIKDIDLAKKKVFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVAKRLARLLDKEIVMAKDVIGEDAKTKAMNLKVGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDV

PMKFVPAQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>ETJ82091.1 triosephosphate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFAANLKCNHTRASFKIYAEILNKTIGVKCDDIIVFPPSVAFLEKENNFIQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEEFIKAKFDFAKEHGYKIVFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQSTDIAKVLEFLASLTKAPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>ETJ82090.1 enoyl-ACP reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIMKGKKGLIVGVANNKSIAYGIAKACFDQGAELAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKDKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>ETJ82089.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKLSNEELKNILEDRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDTFFL

TIGAQGESGYEILEKLAAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFDDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKTSWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEEQIKILEQ

IDFEFESNIKLILQNIAKNKLGALLVENYKKSFEKNYTFIEQNFDENPMPSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASPYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNITK

ISSLKAS

>ETJ82088.1 adenylosuccinate lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTGISVFDHRLLADSWSTQEMRAIFCEQNRIQKWLDVEAALAKAQAKLKIIPKKAADEIAKKAHYKFMDM

DFIFAEFKKTKHPLVPTVRGLEKACDNNLGEYVHFGVTTQDIIDTGLVLQFKEAMTLIKSELKAIAKALA

KLAKTHKNTAMMGRTLALQALPITFGHKVAIWLSELERHFERILELEKRLYVGSIVGAVGTKASLSDECN

EVEKLTLENLGLDVPNISWQPARDRFIELGFVLGNINTTFNKIAHEILILSHNEIDEVAEPFGKGQVGSS

TMPHKRNPAVSENAVTVSNAFKANLAILSDIERHEHERDGQVWKMEWKLLPEMFLMLSVVLANMKFALSD

LEVKKDKMLKNLNTLNGFVLAERVMFALSDHYGKQHAHEIVYENAMLGIEKQKTFKEVLLADKRVSKVLK

EKEIDALLDATSYVGYAPKLVDEFLAKIKNSAILK

>ETJ82087.1 cystathionine beta-lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRELRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDAHFLITDAIYGPVRTICELFLEKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGANGMITIEFAEGYSKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDWSARGPFVRFHIGLEDTKDLIADLTQAFDSIKK

>ETJ82086.1 endoribonuclease L-PSP [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVAFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>ETJ82085.1 DNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDEGQKQQFIKLTYFLGEVLGEQYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELMQNKKYLE

KDFLCDYKALVGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGDILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSIAQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>ETJ82084.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTTLSLEEEKRFEELCKMAFNFARNNEYENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNGLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>ETJ82083.1 catalase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIKITADLSA

YTKAKIFQKGEVTPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSFVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKEDKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRALKHFEKISPDYAKGIKKALEK

>ETJ82082.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>ETJ82081.1 hypothetical protein X908\_05985 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLFGFDDKQEFIPQIYRYLNNQELMLTFLTQYNASVDSALKIPLLYAKNTKSLKMIFGNFLHNIMHVSFG

KIQNINIKLNTYAFYFQKRKSLIFNTKISKNVDLLRLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLEIENEIYELLNLIKENNFEKFYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>ETJ82080.1 flavodoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKMNSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTVAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFEASDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>ETJ82079.1 hypothetical protein X908\_05970 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLIDLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKEAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>ETJ82078.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFAKLLKFFISRPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDTDLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKAPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

RNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNDLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKSIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKVERIVLETLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSMGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSILSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNEFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVAAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLSGSLFLLPSFLITIYSKKTKFPNQHKEHILKQ

>ETJ82077.1 toluene tolerance protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLILALFFNAFALQLDEISSTMQKNIDASLKLLQDSKEDKKQAADGIFKLFDSIIDYKLMAKLSLS

KNYSKLNPKEQEKFTTAFEASLKKSFTDKLSLYKDQVLKVKNGELKNEKRYFLTTSMVVDGEEKNIIFKF

YNDNNNWLIYDVDVLGVSIVQTYRSQFRDILANQGFDALLQKLESIVIE

>ETJ82076.1 hypothetical protein X908\_05930 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKFISFILIFFAIFAFAKEQNSDDFEQEYQNYQVNDPLSGYNKAMTSFNVALYDYGLRPVLKGYNAIT

PEFIRLGVRNFFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFGGLMDVASKMSLKKHPADLGTV

LAHWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSK

>ETJ82075.1 nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDDTKKLDTIE

IFNIPDLSKYKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDF

YWDINLD

>ETJ82074.1 guanine permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIFKLKENGTNIKTEVLAGITTFLTMIYIVPVNSHIVSNTGMPLEALITATALITIIASALNGLFANTP

VAMSVGMGMNAYFTFSVCIAQQIPWQSALGAVFLSGLIFLILSFTNFRLWIIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLVSSIIAWIFHLDN

ASFPVQIFSWPNFSMENGLRAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAMTGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>ETJ82073.1 peptidase S8 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYEYKL

SGKTIENNVRFKDFPNQDFVQYHRLNSNLITWGLTSYFIYPNSFFYGFNVVNEFASDQYNINVLGQFGFY

F

>ETJ82072.1 hypothetical protein X908\_05910 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNLITKLENEERLNQEEANALWDLDLFILGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

NFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEIRAKICKGKVSSENWLKIHKIWHQKARQSNATM

LYGHIEKREHRIDHMLRLRALQDETGGFNAFIPLVWQKDNSFLDVKEQLDSEEILKTIAISRLVLDNIKN

IKAYWATMSLKLAMVAQEFGANDLDGTIEKESIQSAGGAKSARGTSLQTFIELIKTSNLIPVERDSLYNE

LKIY

>ETJ82071.1 nucleotidyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKKLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKHVIFDLNLVFALGRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>ETJ82070.1 peptidase S8 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKFFCLTLVCKLFALSEFELHHIDKVHKLGYSGDTIIIGVADDAFNQDHISLKDKILKSTYPTDTAGKQ

LIPDLKKSTHGSHVAGIAVGAKIGDSKPYGVAYGAKFYGAGVFPNGSYTQIPDIYNFFKDVSIINNSWGI

NFYPYFNLKASNSGLVDCTQTNQGTSYNICNTPLEYVMKADKVANDMMRLSKDKGVLNVFAAGNEGILSP

ALHAILPSYDESLRAWLAVGALDANEITLESDGTLIIKSQGLADFSNGFKGATNFSLVAAGVNINNVDSS

TNDKFTKKSGTSMAAPMVSGTAALVKQNFPFLDGKQIADILLSTANKNYKAPKFTVKQVTDGTNQPKFLI

VYISQDPPGIEDEIKRDLKQLYNGIQVQVNGQWIDYSDYIWDNRDSAQSQKLNTSTISSINGVVRVEKEE

LFGQGILDAQKALKGLSILDANRLSDQDVLKYEQEPNTAYYTINTAGYDAEFSNDISQRKWDESTHLSSA

INKPTHLANLNIGLSKEGEGILIISGQNTYEGATLIKQGELKLKGKVKNNAYVEQKAILSGNGIVGQNLN

NKGIVRPGNEDLNDLTVQGTYTQEGVDSKLQLDFGNYKNSKLIAKTYDIKSGNLEYIPLPKYYILNKPVK

INLGDLEKSLSSFNHVLIQNTYALNFDFVLSDDLVSINKTLIKPNLKPNAYEIPNTSLGNALRQLRSRAD

LSQTYQEFFASLDNGIDVKTKLNRIEGSGYLSTFSNHNQSNLMQNNMLFTLHPLNINNFAQNNNILLAST

YLPRIFSNEEYFWHLTPSYKYYKDKDFSGQKTGANISLGENFSSGFLAYALSLSSAKFNFNNGSDLKSYN

MDLLLNYNHDLDFIKILSGLGIGVGFNTLNRFVVEQPIEGKYKTLQTSAQLGVTKDIILGQDFIFNPLMY

FTHSFFYQEDFKENKSPFAKNYESLKHHSINANLGFNLAKNIEQDDYQASFSTFVIFEKRIYGRTLENKA

SFVDFPIAFIQKYKLKDNILSQGFNSEFLYKNNVFWQFMLMNRFSHNAYELHLMSSVGKRF

>ETJ82069.1 hypothetical protein X908\_05885 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTTCMVLLF

FAPFVYAMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASS

FTKSGAKFLIDMVLICVFYFFANLYGTELVIYLKSIIPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITIFYGYDGILMGVIFAVSSLIPAIGGALIYMPVSLYEFASNNLNSALVIFIYSVIVISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>ETJ82068.1 histidine phosphotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAHNTAWAARRLNLEEV

TDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPLIVNVPNIISK

>ETJ82067.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKTSNLFTIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGPHSQKVKGEPRA

TCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFAQTAINATT

NPHADKSLNCASCHKDVGHKHGI

>ETJ82066.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDEANKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKTTEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGKKVKVMGET

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSVAHDQRTAEYAIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFEDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>ETJ82065.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFRQVHIYLSLFFLPCALLFALTGIAYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTNGLKVPS

NTNIIKSKDKGITIGGTHYSANITQNSTNEYNITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFGITLFML

YISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>ETJ82064.1 plasmid stabilization protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIVPTPKFKNELRHIVNFINLDSSFYAKEFLNDIYPICRNLSFMPYKNRKSLSFDNENIRDLIFKGYII

PYLIDKSKNEIVILGIYKSNLWD

>ETJ82063.1 hypothetical protein X908\_05840 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLEFSKETQHFLTNYCKDNNLSEKEVLELALSYLEHKIRIDGYKKDIELYKQGKLKTLDFDETFNDIRK

DLE

>ETJ82062.1 enterochelin ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILDLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>ETJ82061.1 iron ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKLKNITKFYDNKAIISDLSLDFHKGKITSIIGANGAGKSTLLALASRLIKPSSGEIYIDGMNLKDYKE

QILAQKISILKQQNNINLRLKVEELVAFGRFPHSQGRLNANDKIKINEALEYMGLSNLRNEFLDALSGGQ

KQRAFIAMIIAQDTEFIMFDEPLNNLDMKHSVQIMQLMKNLVKDFNKSIAVVLHDINFASIYSDEIIALK

DGKLLKQGSKDEIINQENLKQIYDMDIPVSQIDGKKICIYF

>ETJ82060.1 iron ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKKMLILSFLTLGMIGIFILAGLNGFDEYALKSRFLQIAAIIIVAICIAVSTVIFQTLCNNKILTPAII

GLDSLYMLLQSALIFSFGAANLSVYKNDINFLITLVCMVVFSLGLYKILFSSDRSIYLIMLLGLVFGTLF

STLSSFFEVLIDPDEFMVIQGRMFASFDNIAFDVLILAYIISFLSFIWIFRYMKFLDPLNLGKDLAINLG

INYQKISKQLMIIIAILTSISTALVGPITFLGLLVVNITYELFKTAKHSILLSACILISILALLGGVFFV

SRVFDYNATISVVINFLGGIYFIYLVLKGNKL

>ETJ82059.1 phospholipase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKIALFLNLCVFIWASDLQQALEYEKQGDYKKAMEIYKKLALKNSSVLISQEQNNSSQTTQTQNSITIK

KEEKQDFSRLALANYLGENESFNPLGISSYKMNYFLPFAYSFNSLGTNNNKSEAKFQLSVKKRLFENLLG

LDEKYYIAYTQTSWWQIYEHSSPFRETNYQPEFFIDFPLYLKDYEFFNNLRVGILHESNGKGDENLQSRS

WNRIYVSTAILYNKFLFVPRLWYRIPESKKDDDNPAILHYMGNFDVNLAYLGDDYFINLMLRNNLKFHDN

KGAIQVDLGYDIFNNGIYWYLQYFNGYGESLIDYNKHLQRLSTGFLISY

>ETJ82058.1 molybdopterin-guanine dinucleotide biosynthesis protein A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFSLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGLLFSEIKTKFVEFEDEDAFLNLNFYEEYEKFKSELK

>ETJ82057.1 ferrous iron transporter A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKYTELLQLQTFFSQFKKIDFIKRINDNILELSFDRERFIFDLTRAMSVIYTAKFNAKNYNAPFDFMLKK

YFSNAFIKEVKVLEGNRILCFSVKANKAYKSYESKIYFEFTGKNTNVILTDEKDLIIEALRHIDKSYRVI

KPNVILESLKPYKMDENFEEIKDFADYFSRKFTSIYESKIKQIKNLKLAQVDKKIQNLQELFSSLDEENS

LLLKALEYRKRADVLFANLSVLKDYEREFKLDDFEGKELEFKLEFSPKQSANLYYKNAKKLEQKAKNLNI

QRQNLKEKLDFTLSLKELLLQAKSEIELEILLPKKNSKKNQDHKQEDLVANFYFNEFKICVGKNEKGNEF

LLKNAKKDDLWLHVRNIPSAHTLIISNKQKISLDVIEFAARLCVSFSKLKKGSYWVDYTLKNFVKVQQKA

FVNYTNFKSINITKD

>ETJ82056.1 coiled-coil protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNETHEIKEEIKEKAEQ

EEKKKKHNQEAKTSDDEKNEEDESKDPNFKDAQSIHRLDISI

>ETJ82055.1 phosphatidate cytidylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSHK

ALLFGILALLLVVGSLVYKKASLKPALIYIYPSLPILALWQVYLDQGMFALFWLIIIVAACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFWLSLLCSFFVAIFAVIGDLLESYFKREAGV

KDSGDLIPGHGGVLDRIDAVIIAAFVMVAFL

>ETJ82054.1 1-deoxy-D-xylulose 5-phosphate reductoisomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILFGSTGSIGVNALKLAALKNIRISALACGDNIALLNEQIARFKPKFVAIKDSKNKHLVKHNRVFIGQE

GLEQILTECQDKLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPVDSEHAALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSLKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KEIDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAIDFSKIPALKFHPISTKK

YPIFKLKNTFLKEPNLGVIINAANEVGVYNFLENKSGFLDITKCIFKALDHFGVPKISSIEEVFEYDFKT

REYLRS

>ETJ82053.1 protein kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELDHSIYGGVVPELAARLHSEALPKILKQCNEHFK

NLCAIAVTNEPGLSVSLLSGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDIGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNIPLKHSKELAYSFS

GLKNAVRLEILKHENLSDDIKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>ETJ82052.1 hypothetical protein X908\_05775 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKAFTILELVFVIVILGILAAVALPKMSSSKDEAEVSKSLNNLKTLINDISIYTLKNDHLNSIKTMSNV

SGIENIDLSNFNGTKEVNFRVGDDKKCLKLVFINKVDFILMGISSNEASKNAIINAANQSHEDLENVNFT

SSSSNKACVILSKNENFKNLASKTYLLIGGM

>ETJ82051.1 motility accessory factor [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTILEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNIDENLNIFDKTHNVFMYENLEEEINFFYQSILEK

TPRYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSMIDLSEELCSGKIYLVDIKEERVNLQL

RILFDQNDMFLWLNIYEMFINHKFYEKYYYEEILNTDKIIYENINLVIRNLDPDSKISLSCYENFYKNIP

LMLKNIPFKRIIDERKGLFESCIVVCAGPSLQKQIPLLKQYQENFVIFCVDGAYPLLVKNNIIPDYVLNL

DFEEYPLKFFKEVNPENKTLFILSASTHPSVVDYLYKKQIPLSIALNDNLPYQNLHIDEFGYLEFGTHVG

HACYALAIALKFKNIIIIGQDLSYDKQGNSHFDSFDLGSDIDATLNIPTLKTIAYGGLGEVLTHLAWDDY

KRKLEDLFARNLELNFFNATEGGARIEFAKELDFKSCCKKFANLNNKSNKYLPKTLTTNRGAKILNKILA

TFKREKQNTLICLEHAIRLNDVLKIILASDRKFPIDFLKNTYESIAKFEIFLEENSFLNDGVLKGVIFHK

GKLLSEVIVSKIEDEREYLLIYLTFYKQWLEIFICRFQLKCDIYNFLV

>ETJ82050.1 cytochrome C oxidase assembly protein, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

ELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFGGAAFA

AFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAVSSFFS

GSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKLMINSI

LFLPFFLGFLAWIFLKDGFSVDTNGVVSMSANLYLYNFLNQMIFAVLLVIGVILVLLGMVQGTKGCSKAI

FTLGLGTVLTVFALLSSIGLGQSAFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYIIYVWN

AMDKVKITREEIANDDHAY

>ETJ82049.1 hypothetical protein X908\_06775 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLHALFLLAWPLVIYLSYKFIMLNINQLEKDSKL

>ETJ82048.1 aspartate racemase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSAKILLYSVNFEEIENLQSQDKWQEAAQILTQCAKK

LELAGANFIIIATNTMHKVFNEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMTQDFYKKMLIE

ENISVITPSDEDIKIVNDIIFNELCKGKIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>ETJ82047.1 uracil-DNA glycosylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIII

LGQDPYHQPNQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSSWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAIIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>ETJ82046.1 aspartate ammonia-lyase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKDVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMEAKK

>ETJ82045.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDIMIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVILGLVLGMKPGNIPWDVILIIAAAIAAISAMQQA

GGLDYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVS

SQIGITASPVSAAVVYMSGVLEPLGWNYPTLIGIWISTTFIACMLTAFIVSLITPMDLSKDSVYQERLKA

GLVKDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITW

LCKVEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEASIKEVAGDWVKQTPAMLAVAFFFASMLLY

SQAATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNH

SFFIPGVLAIAIAVALGFVLAPMLI

>ETJ82044.1 hypothetical protein X908\_06750 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKVGLIFSGIVCLFLTACVNQVKQNTTFENALTQKYCGDDFFNQNLEKIKKNDDVIYTGLNAGLIARN

CGDFNKSNVFFDAAEESYKYDVDLENVGSKAAKFVGTTLLNDTIVDYDGSLYERIMVNIYKALNYMEEDD

YENARVEFNRALMRQDKAKEYFAKEIEKNRADLDKAKEDKNYDKNMNENSKVIEAQYDNLFKEFDTTKNF

INPYATYLASIFFFMDKDYRKATDLFREVAIIYPKNKTIKKEAKIFKEYATKIKVKKAKKYVFVVYENGF

GVVKDEFALTLPFIVDKKIISTNIALQTLKKREASFANLNINGQNTNDFVDLDNIVATEFKINMPAMIAK

ALAQTIIKTTLNVAVANNDSTGGWLSLATAVATAATNKADVRSWRGLPKSIAMATIENDGNLEIKDPQGN

ILFQKSLDKNKNALVIVRSFAPYLPASVAIMEK

>ETJ82043.1 hypothetical protein X908\_06745 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIILFILMFLLSACAPSYQINSNQNTVILGSNLPKSLVKQFQKRINSNGYLEFEVILRSTFAKDVIYK

VDWLDKDGFVLRDVLNEDYQALRIPAGQEVILRKLASDIRAKDFRLEIKAKN

>ETJ82042.1 hypothetical protein X908\_06740 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKTKILGTALIGALLFSGCAQTAYTDGKASQVKKGDALTLGLDRQDFESAAETMINSMLSDPAFANIKP

GTRKVIAIGRVVNDTPQRIDTEKLTAKITSALRKSGKFVLTSAVAAGGALDSMSEDVRELRDNDEFNQKT

IAKKGTLVSPDFSLAGKIRQDNVKLSNGKTQVEYFFLLRLTDLTSGLVYWEDEQTIDKTGSSKTVTW

>ETJ82041.1 hypothetical protein X908\_06735 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILFIGSLVMASLLYAQGSQPVEITQQDINTQNEMSDASTKDITPKSIEDFFEEFADNFGIEYGITKD

GKTFYTGKSTVAVNDTDPQFAQALQNAYQKAMLNLQSEFIRDVFGRIATSRIQNYEADNSTNAKEFDELP

KGDKVDQILNKLTQLAGAQLDKALKDLGIDTNSLSEDRKKTLLKQEFLNKTMTNAIGSMSGLVPVQTIVT

QRRGEYDVGVIAVISNKTRQLAKDMALARQSAIKGKGKAISEYLPKDTKGFLNEYGIRLVYDENGAPIIL

SYGTGVM

>ETJ82040.1 hypothetical protein X908\_06730 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MADAAIIEFINTNLSLKDERTTGDTYEEIIKQSINVNDSSTQEQTQNITNIIDKVNSKIKASASGKIRGI

RTLKKWSYTSENGIEHVGAVRFYSYENLANTNEALNSKSNATKNEAKKSSSIQRSSNVVNSMDDF

>ETJ82039.1 hypothetical protein X908\_06725 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIIKILFLGLFLSLSLNAKVVTTTSTKSSTGEGTGLTREDAINNAIIEAIGKMSGVSINSLKKSNTSVS

TDNSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGKYTANVTIFKTTTTKKYQVPGLSADNRRSITV

FDSTLDAAKRGIGSALQQKIISDLLQSRKFNVLDRDSSGYYEMEKALIKSGDAASDEVYKLKNMLATDYI

LLFSISGLEGKQKTSNLTGKSKTEIEVIVDYRVLLFATRQIKFSNTLSMKVNLKDNSLSANETALKQIAN

RIAGDILNAIYPLKVASVENNEVIFSQSLNQGDVYECFALGKVIKDTYTKENTGRVESKTGSIEITRTSP

KFSYAKITEGSVKVGDICRPLSNTGSGNGYTIGRDANYQTQEGGGVNLGF

>ETJ82038.1 50S ribosomal protein L21 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYAIIKHSGKQYKVSVGDELKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKDAEKILNSNAVLEDNLLAL

>ETJ82037.1 50S ribosomal protein L27 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>ETJ82036.1 GTPase CgtA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFVCDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELIVPEGTQVIDAQTNEILLDLTEEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVNEYNSFVM

ADIPGIIEGASGGKGLGLAFLKHIERTSFLLFVLDPMRQMPLKEQFIVLRKELEKFSNELFGRKFGIMIS

KSDSVRLGEEFAEQIALNINELDNYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKTLRNNKKNFNN

LGSVLY

>ETJ82035.1 gamma-glutamyl kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKRIVVKVGSHVISEENTLSFERLKNLVAFLAKLMEKYEVILVTSAAISAGHTKLDIDRKNLINKQVLAA

IGQPFLISVYNELLAKFNKLGGQILLTGKDFDSRKATKHAKNAIDMMINLGILPIINENDATAIEEIVFG

DNDSLSAYATHFFDADLLVILSDIDGFYDKNPSEFSDAKRLEKITHIKEEWLQATIKTGSEHGTGGIVTK

LKAAKFLLEHNKKMFLASGFDLSVAKTFLLEDKQIGGTLFE

>ETJ82034.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIIREIKDLNPDFIVVAAYGKILPKAILDLVPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILTTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLNS

>ETJ82033.1 hypothetical protein X908\_06695 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDELKQNARMGEILELEKESFLLACKQGVLRIKKLQESGKKALDGRTYLNGKRLKSEDSLC

>ETJ82032.1 biotin--protein ligase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEEDLPKDLP

LASVSIYFAYLLKELLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFSPQNTALCDI

EILLKDLVSEFLQKVEKKFYGRIFLASIC

>ETJ82031.1 hypothetical protein X908\_06685 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGDKRVYSLR

>ETJ82030.1 sporulation initiation inhibitor Soj [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>ETJ82029.1 chromosome partitioning protein ParB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLGQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKN

>ETJ82028.1 F0F1 ATP synthase subunit B' [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAIAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>ETJ82027.1 F0F1 ATP synthase subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKASAAAALITAKKKLKF

>ETJ82026.1 hypothetical protein X908\_06660 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKELVSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>ETJ82025.1 F0F1 ATP synthase subunit delta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFDIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVYSKEKLSQENLKDLEVKLNKKFDANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYILKII

>ETJ82024.1 F0F1 ATP synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVINANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYTGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFAQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIEEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>ETJ82023.1 F0F1 ATP synthase subunit gamma [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNLKEIKRKIKSVYNTQKTTNAMKLVSTAKLKKAEEAAKRSKIYAQKIDEILSEISVQINKIVHNEDDV

RLFLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGTELLEDLIKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>ETJ82022.1 F0F1 ATP synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEISFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YISLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKADKLKG

>ETJ82021.1 F0F1 ATP synthase subunit epsilon [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDLINFEIVTPLGVIYQGEVKSVTLPGSEGEFGVLKGHAALVSSLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAATFSKLDNARMH

>ETJ82020.1 flagellar motor protein MotA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFEAIFHFFNNSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>ETJ82019.1 biopolymer transporter ExbD [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPFDDEKPELNITPLVDIMLVLLAILMVTAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>ETJ82018.1 energry transducer TonB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNYGLSNLNSFLLALAIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQVDIEKLFAQTTNKTVKTEDIDQKASNFNELFGNIKEIQEEKTTKIQSSAKSGASSAPKPQASELV

KQLNDSLLQEESSTQGQSTKAQKIGIYDEFLGKVVRIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDAKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>ETJ82017.1 translocation protein TolB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIVAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGSSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLASVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDKPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGVQSALGVIRVNANKTFYFPLRVGKIQSIDW

>ETJ82016.1 peptidoglycan associated lipoprotein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILFTSIAALAVVISGCSTKSTSVSGDSSVDSNRGSGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>ETJ82015.1 hypothetical protein X908\_06605 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDNLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQVKKVLAELSSLVDA

INANYVSKNELNDANLSVKTITPSVVVSTTDSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYKQKIITMLLFIIKKVLL

>ETJ82014.1 hypothetical protein X908\_06600 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSTKGDYFPKLLYHTAISLDKTGDTKTANGFYKALKTNYPNSPEAKASPNRK

>ETJ82013.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLGEYDENAVQTL

PKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIVDARAASEDEILT

GIIAGSHSCGCGSGHGHDHHHGHGHGHGGGGCCGGGGCGCH

>ETJ82012.1 malonyl CoA-ACP transacylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKDFYENSIKAKELLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLMAYSVLLEKKPDLSSKF

ALGHSLGEFSALAVNGAFDFLEALSLVNKRGLFMQEDCAKVEAGMMVVLGLDDEKVEELCQKAQKENKQI

FAANYNCDGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASAKLCVELEKVLKPNFKA

VLSNANAKIYTCKEEALELLKAQLISPVLYKQSIKACENEVDYFIEFGASVLKGLNKKITSKETYALTNM

NDIDEFLKVI

>ETJ82011.1 S-adenosylhomocysteine nucleosidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFAKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQV

LLFTGVAGAFNPELEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIKL

RAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEFV

INSAKISANFVLKMCEKL

>ETJ82010.1 hypothetical protein X908\_06580 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQLTLLLNLNLKQ

>ETJ82009.1 PP-loop family protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSYGMGEDYSHLHAHCEEHGIKHSVLDSNIYEVSGDTIRENSSFCSYFSRMRRGALYTYALEKGFNKLAI

AHHLDDAAESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRDNATQNELSVIGNEFCPGMKL

SEKNVKFPHAREEAKQLLANLEKNHPKLFTSLKTAFANLHTESFWLEKE

>ETJ82008.1 hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>ETJ82007.1 recombinase RecO [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>ETJ82006.1 heat-shock protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEYFNLPKSLIVRTLG

>ETJ82005.1 hypothetical protein X908\_06555 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSIFSINDNSNYGSILSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNT

SNNTNFSISSKTSSPNYDISSEFKNSIYTLKYKQADISNTSTNTAYGYSVDKDGYMGSDFNKAAGLPEDF

KIHKSTLDEIERKAENNSYTSDIKNI

>ETJ82004.1 hypothetical protein X908\_06550 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAETIKQYYNQFNQIVNHTFNDTNKTSFTEADINSMPKGYAINGIKSMDFNDPSNRMNITHLRDFSNSLI

SNVYKTPEQAKEADEIWLDSGCMIKGLSSETLGLSLEEIKNVSKGEDWQFNPDMSVYPQNEDGSYSKETL

FMSFLKSQGGQPVESPKTTLNPKVEAYNRAMAKESFSGPAINIDSIMTGKSDFKSFFRYWAERGIAEGDL

YMYENNIPKESAMGNWALDAEIKQALANGWKAKPSTINSYADSIMDRLNNLLGQTRV

>ETJ82003.1 amino acid ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFISFFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGLIPALK

TAKIDLIMSSMTITDERKKVVDFSIPYAKANLAILTPLNSDITNIKDLDKKGKVLALKRGSTGHLYAVKN

LKNATINLFDKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILVPFQENPEFWGIAVQKGNAEL

KKELDEFIAESKKDGLFDSLGEKYLKDVKDTFKKNNLEFFF

>ETJ82002.1 flagellar biosynthesis protein FliP [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILLFLLLSMSLFAAEATIPTVNLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLSEKIGYEEAFIKGAKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>ETJ82001.1 N-acetylglucosamine-1-phosphate uridyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTSILILAAGLGTRIKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEYFPKTQ

ILEQDLQNYPGTAGALSGFEPKNERVLILCGDMPLVEQTSLEALLSNNAKLNLAVFKARDPKSYGRVVIK

NDSVEKIVEFKDANTQEKEINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGADVEFVGECEVYENVRIEGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNAKLNTVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKHKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRAEHKMIK

DYYYKKFQK

>ETJ82000.1 phosphopantothenate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTILLAISGSIAFYKSYELISLFKKEDFRVKVLLSNGLLKFASKMSFEALVDEVLCEENESWQNSNNHI

AFSKDVDLVLFAPASVNSINKLAFGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LIIEPICKVLACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGSTRERIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLNHDFLIMTAAVSDFIPQSVKGKIK

KMSICRV

>ETJ81999.1 hypothetical protein X908\_06525 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQKIILEVIKMNF

ILSL

>ETJ81998.1 hypothetical protein X908\_06520 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSMINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKRPNFK

PFEEGLALIIAILQDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRA

KYLEIYLYFSVFGALKILIDSQGISVFTPFAKVQKFLNEHLDFNVSQENKIEPLFVFKRLFDFKG

>ETJ81997.1 UDP pyrophosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNELKHLAVVMDGNRRWARAKGFLAKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDRCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCVNLAISYGARDEIIRA

AKRVIEKKLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRII

KEFRNRERTFGK

>ETJ81996.1 peptidase A24 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCQTCKCHLPISLLINEILGII

LLILAYSLSQNFYDFLFLSLFLFNLFLLSLIDIKLKAVPQILLWSAFLFAFFYAFRESEILHFLIFKEFS

GGFLLNAFSFGGFVFLLKSLVFF

>ETJ81995.1 hypothetical protein X908\_06505 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFRKKDEILENLGDADIIIMSCIGGILGFEYGFLVLLIASILTLPFFIFFKIKAIKEQELAMIPFLNIA

FVAVLFYKNLGLF

>ETJ81994.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMIPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKYENIIMYRPKHKADDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYTTIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILSRY

>ETJ81993.1 tRNA pseudouridine synthase A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIKIIFSYDGSAFLGSASQPHKKGVQDALSGALSHLGIVSPLLMASRTDKGVHASYAVASVGCGDHFVN

LEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVHFYPKFDLDKANEL

LGFFVGKKDLKFFAKVEEIIKRL

>ETJ81992.1 hypothetical protein X908\_06490 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEKELKEQIEAKKQYNHFLAPPNGLYLSRICY

>ETJ81991.1 threonine dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNLSFIHPFEDEFVMAGQG

TLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMYESFHAKKIKNAKSVRT

IADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAASVATLLHQKINTQNHK

KIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIANANIVKIDYDRFSTKL

DYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>ETJ81990.1 hypothetical protein X908\_06480 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLELNKIYKAKQQISGFVNKTPFIYSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSTEQKQHG

VIAASAGNHAQGVAISAKIWH

>ETJ81989.1 CoA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNEKETISYIINTSKNIAIFALSPDKTKASYRVAEFLQRKNYKIFPIYPKEEFILNEKVYRNLDQIEEKI

DTLILFRKGKVALEILPKLVEKNIKNLWLQLGISNETAKKNVKN

>ETJ81988.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGVVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>ETJ81987.1 tRNA (uracil-5-)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSVTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQDRKIFYEFNNDCFIQPNTAINEKMITWVCEILNTQKRMDLLELYC

GYGNFTLALAPFFFKVLATEISKSNINFALKNCELNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVEEFALFDQFVNTPHLEC

GVFLSKV

>ETJ81986.1 sodium:proton antiporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTAIMGREFGSMYKAEVRARTTGQIAPLPKSGTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAIL

GFYFNGLSTLEGEELAKASANPLSFETFRAAFGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVET

WIYGWKTMIFTIVLLLFAWSLSSIVKDLGTSLFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMG

ILMPLAVPLAHEIAKINGMDANAMHHYMVINISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQ

IPYALFICGISLIAGYIPVSLGISVWFVLPLNFILIALLLRLIGKKVP

>ETJ81985.1 hypothetical protein X908\_06455 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKFLVLLFLPLVAFANSSEAAANANLFGAFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFL

>ETJ81984.1 hypothetical protein X908\_06450 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKADAVYENTQFISANDIAKVVMSIINLPSHINVN

EIELMPVTQTWNGFYIERDE

>ETJ81983.1 hypothetical protein X908\_06445 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTVFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNAHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMIDTNIKGFLYVAKAVIPILRKQKMLIFLT

>ETJ81982.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNKNYSVSYIQDFIFSNNPSQDDLTIALQAALLNQREKEILELLIRFGTRIDEGYESAIFYALENYENT

NFLIQNGANVNQANAFGKTPLFYAIEFNRLDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITF

CALEHTSKNVLMHAAAYGNVEILKLLISKGANFNAVDDLGFNALDFALSAGKKENADYLKSLGLKANENL

FYGGSLE

>ETJ81981.1 ankyrin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLLFTSFCCFASLMASDAINCDNIKNNKTLLNESSNLDYLNCKESLKNQDFTKKLYAISNEIRGGNSSC

NGIAYLPKLQQFNLLLLKIAIDPITYQKTLDTPENLEKNMIF

>ETJ81980.1 bifunctional aconitate hydratase 2/2-methylisocitrate dehydratase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSFMQEYNKLVEERAALGIPPLPLNANQTRELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKGKISAPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDSAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIKCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQAGSLEK

IKELKKSGREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNALLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVRPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDTVGTGGDSHTRFPI

GISFPAGSGLVAFAAVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIIDINLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTNEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>ETJ81979.1 methylated-DNA--protein-cysteine methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKVYYKMPLCYLSLHSDGKFLTRVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLRKFSIPVLIQGADFE

SKVYKALMKIPYGKMVTYKDIAQKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>ETJ81978.1 hypothetical protein X908\_06420 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNNKKEITQAVKKGAYAIITENDITIEDKD

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHSLKDANFTLLSRSSFFFTTLICENLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>ETJ81977.1 methionyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRFHAIYWPAFLMSVDLPLPEFIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGN

DGDFSENMLINRINAELSNEFGNLLNRIIGMSTKYSQGNISKEGVLKFYNVELNQAKEHLNLAVEFLENL

QCNRYLEELFKALSVANLAISKYEPWNLIKENKHEQANALVALCANILAKTSLLLSPTLPKSCQKVALAL

NFEISSTNYAKIILDNELLDFKANPCEALFPKVEKALLKQEIKEEPKKEKSPKIKIDDFAKIEIKVAKVL

DCQNIKGSEKLLKFQLELDDKEIRQVLSGIAKHYKASDLIGKQVCIISNLKKAKIFGHESDGMILSAKSG

DKLVLITPEQLVQNGSLVG

>ETJ81976.1 hypothetical protein X908\_06410 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRYITTPIYYVNDVPHLGHAYTTIIADTLARFYRLQGHETRFLTGTDEHGQKIEEAAKLRNSTPQEYADK

ISFEFKKLWDDFEITYDIYARTTDTRHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINDC

SCPDCGKQTRILKEESYFFKLSKYQDKILQWYEEKDPILPKNKKTNL

>ETJ81975.1 hypothetical protein X908\_06405 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDIRDEFEQDMDKKKEILLSCQNSKNLNSCYNCDEIFNCQTRKNYVDAVYNSMSKGKTEGGFDF

>ETJ81974.1 fructose-1 6-bisphosphatase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEVISYIQKAVLEISNALKFPDTGYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKANFIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKNLRAALYSMYGARLELVICKDQPKLYRLN

ANNEFIFIKDLKMNEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSEYEISKLLKAYNE

>ETJ81973.1 molybdopterin-guanine dinucleotide biosynthesis protein B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKQLIMAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDFNGKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLAPNFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLTWL

DLNDIQAICRYILKNAKNLQGEL

>ETJ81972.1 lytic transglycosylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNLLLAFNTSDPMSYIVQKEDINGFFKLYNYSKKYDLDLNTSLVNKLPNHIGFKDFAQNIIIKKENPKF

RHSMLEINPENVSEDSAFYLGVNALTYDKTELAYDFFKKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKTL

SQSSSLNIYSLYAKELTNTPFPKIESLNPSKKKNNFNMQDPFAWQKINKQIRDANASQLDVLAKEFDTQE

TLPIYAYILERKNNFKKHYFIMPYYDNIKDYNKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLA

NHIGEKELKIPNFDQDFMFKPEIAYYFGNYHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGK

FEPFLSMELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>ETJ81971.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGNIDLA

PLIIVLALQFLGIFLGNILRSIL

>ETJ81970.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKARNIAGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKPFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYNKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAIANYLIMLGNKTPCEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNELLSKSDLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>ETJ81969.1 metallophosphoesterase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVLFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLAWDFIKLILALIGKRDKKYNLILRLIFELSLIVLSVFLIYISINNALKIPEVKSV

DVEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLKNYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLLRKHTNMKILVNQNLDLGFINIAGLGDLAGLNKGLYAPDLARIKVD

LNTSKASILLTHQPKTALLYDLSDFDLVLSGHTHGGQIFPFMFLVKLQQGFVHGLYNLGEKTKLYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>ETJ81968.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSFSKESSRLFGFVAGIKFPKMIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLHIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSIEELLKDSFEKDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSATYTSGALYSVNEKHLERISNLYVKNERVSLKCQNEKGIFWLVFVGAQNVGKMRFNFDASIQTNAK

ISHNFTRKYENLNLKKGEELGNFELGSTIVLISQKGLLTFNLKAGQGIKFGEKIAD

>ETJ81967.1 hypothetical protein X908\_06365 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMANKTPKN

>ETJ81966.1 hypothetical protein X908\_06360 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLSPKDTLKELKNIINSSK

IENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNKPENLMI

KDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENMKEEKLNHNTKNQDEEKHIKASK

EETLTDDTKTDIKQDLKNEENSHAKETDIKEDENLDSDIKTHEEDTQDTKNDIQNNETENKPDNDIKNFT

PNQEKIKDEKQEKSKENIKENPKFYETKTENKTSINTNTNTSNPNTNNTQNLNNSQNIQSNNNQTMQNIF

KNQEFIKQNIIKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLKELEPYTQNAKLNQAELKNLEHKLNL

STKDLAQIKPKTEQDIAESLHHDVKSTLLQISNLAKNEGNEAIYNQANRLLAQIEINQLMSLANDSINTY

LPFSWDDLNDSKIMFRRGKKDKFFAQIKLEFAKLGDLEILISLNNEKYIDINIMAENIEFRKTIYENAHE

LKRNINKAGLLSANFFVGDIIRSKFDTRNMKNLDLEMGMDKKV

>ETJ81965.1 hypothetical protein X908\_06355 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQYFLGITLGIGIFCLYALALARANDVLVNKNKGVELGRGVLFCYSLGSLFGPLILGFLMQYFEIKGFIW

FYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>ETJ81964.1 MFS transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFTLFKLMAYVILVAGFLFLHRQDKLDIFAYICGISSLLVCVFIFILYIKKYESKKIIKSMTALFAGMA

FLFAGNALMVSSIGVILKENGESSLAVGVVSSCFFVGALVGTISAHKIISRIGHIRSFGLFGAIFGISAM

LHTVSENLIFWAILRFFIGICYYGLLMVIESWLNEKSKNTIRSRILGFYEIVFYLAFGIGVLIIALNLSK

HSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFIAGMLINGFFSMASLFILL

QGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMLILSFLNFTCICNIF

>ETJ81963.1 hypothetical protein X908\_06345 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYFCHYSFIFWIIFSSLNHFKLDTFLSYEIASFSVLLIIFTSYLNYKKVIIKKSKNYEKDFNFISSLFIK

KNKIYQKLFILKF

>ETJ81962.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNILKEEKNHLENSNSKRQKIIRKTLEAADGLSLGISMVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWG

ISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKNK

>ETJ81961.1 glutamate-1-semialdehyde aminotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYNKLGKLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSDLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKIIDTTLEAVRES

FKRI

>ETJ81960.1 hypothetical protein X908\_06330 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLYENPRGISCKECHGADGSEQILGYYMKNGIKTAYKVPSIQNLSFENFKNSLNQSKDAKSIMPNYSLTN

DEIVTLYNYIKQFSKEEK

>ETJ81959.1 bifunctional 5,10-methylene-tetrahydrofolate dehydrogenase/ 5,10-methylene-tetrahydrofolate cyclohydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGDNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLEGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPGGVGPMTIAMLLENTVKSAKNR

LN

>ETJ81958.1 signal peptidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSGSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKEHFVKRCVGTGGDRIVYANKTLYVRMHEGDEFMKEHYPN

DLVTLGGQIYVKEPYKQKGIHYDPKKDIESDILRFLSIGDFAMSPAYIKELGNHIGFSGGNAYVFDVPEN

EYFMMGDNRDYSYDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDEDK

LS

>ETJ81957.1 molybdopterin biosynthesis protein MoeA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNIFETLKDLENQISCLDESELISLEKAKDRILAKDLYARKNLPSFDNAALDGYAFNYTDINEALEIKG

TIFAGDKNFYTVAKNECYKIMTGAKMPKNADTILMLEDECIEENKLIIKKVPKQYNAYRYKGEELKKGEI

LLQKGTKLNDKHIALLASQGLYKIEVIRKIRIGIFSSGNELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDEFKSTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYRKGENF

VLILPGNPMAAYLSCFIFAKKIINLLSGNLDNPLTFYGKMGMDLKLKSGRNNLILGNLEKGIFTPFNENK

FGSGMILPLIKSEFLLISEENTGELKKGDEITLLKI

>ETJ81956.1 UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTYLEIEGTNHLSGNVTISGAKNAALPLIVSSILAKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNS

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGSDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEYPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKDLGAKITRLEE

>ETJ81955.1 hypothetical protein X908\_06305 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQINNSLNSLSQYVKVNSNEENQNSKNQEQNALAQDPAVEVNISKEAKEKSNTSNQNNSQAPAQALNAQN

NTQQDSSSNSEDKLTELTQKLAEIQAKIVELTAKMSKANEDQIKSIESQIATLNAQASTIQAQIQELQSQ

QA

>ETJ81954.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGVFLVLLGGIFWAISGVLAEYLFKNNYSVDWICFYRLLSTGLILIFLSFKAQKILVFTNLKESLSICMF

GFFGLLLTQFGYFKAIYYTDAGTATMIQYCAPLIIMLYLCFKNKKFPKLIEIFALILIIFALFLLATKGD

IEAVVLNYWGIFWAVIGAFGVAFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYALT

>ETJ81953.1 hypothetical protein X908\_06295 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGGIVFIGTIGAFCLYLKGVEYIGALRASMIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSVILNA

KKTKVS

>ETJ81952.1 para-aminobenzoate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEIFGGKVSKMQNPMHGKISKLYFKKDPIFKGIKQEIEICLYHSLHISSMPE

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>ETJ81951.1 para-aminobenzoate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLTDYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFKFHSKMNSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKTKLFEIQSHPTLHQMTSSVQGKLKKNISLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHKLFKDFYNILNQKSSYKEYQNFTLF

KLDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGRYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTFYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>ETJ81950.1 hydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MINFFDFLDKQNEEDEKAHIFDINLKNWAGIAGSKGVKLPEFMSEEELKKFLDAIENADFKNNTIRNKLI

IKIIIFTGIRVSEAINIKMGDISEENDLYIIRIRAKGNKYRVVMIKKELIYDLLKNVSINYMSKDALLFV

NKKGTPLTQSYVSRIVEQLLFRAGIRKQKNGAHMLRHTFATLLYKKQKDLVLVQEALGHASLNTSRIYTH

FDNDKLKLAAQVAKELSDS

>ETJ81949.1 hypothetical protein X908\_06275 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKYPLDCEENFEKSFLFWLAKYVKFKLNSLSNKELKNPQALAEVNFTLTKGVKNIDELDALAKKARNAGL

SGVNTYFNPLKKVFEYLNFYKLYSLKQIDEELIVEVLASITGALSDASKKITVLL

>ETJ81948.1 thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFPVKLARSIVVCAFLAGISASALSEGKEYVILKNPIANADNSLIEIFSYRCTHCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMGDYGKQANEIFAFAAFKDGVNKADPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMNVSKADFENFLKTPEAAELLKSYEIANPISQNYGTPAFVVNGKYQIVPSAIKSPEALI

EITKELSKQK

>ETJ81947.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSCIKMKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMEPCEQCVYIRFDMLVMAIGGM

IALINPTNNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPS

WFLPIGECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFINMAICCLIAFLCCFI

VLFAMFIAYVLDKNKPNAKIFALAIVILVLVLKFIGEPKNPNQNIASLNHLNQVVLRYS

>ETJ81946.1 arylsulfate sulfotransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRLSKTLCMALLAGSTLLAPNVLMAMGGPSGAKIDWQIQGQIGAIKMNPYGLSPLTAIIMDNGYVLSDIK

VTIVPKPNGQTISYNVNSKMAKTYGGIPIFGLYPSYLNTVKVSYTKTANGKSQKVIDEIYKITTPGVSIE

PSGSTDQRGTPFENVKVLKMDPKFSDRLYLVNNAPGKQSGKGSQSVWNNPVGGAMEWDENSNVFIIDTKG

EIRWYFDNDKLMNWDNIYNRGIMMGFHQNKDGALTWGFGQRYVKYDILGREIFNRKLPAAYIDFSHAMDN

MQNGHYLLRVASANTLRPDGKHVRTVRDTIVEVDENGNVVDDWRLYEILDPYRSTIIKALDQGAVCLNID

ASKAGKTLSDEELAKMDESDKFGDIAGTGIGRNWAHVNSVDYDPSDDSIIISSRHQSAVVKIGRDKKIKW

ILGAHKGWNKEFQKYLLQPVDKNGKKLFVMMIIANAQVMKMTMVDLISLGRNIQAGELIVNQTSVIFI

>ETJ81945.1 hypothetical protein X908\_06255 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEQIWEYGKNRGNEWFSPVTSLTQYEPDKDSIMVYSATAGMAFDLSKGVSLGEPKPEIDEFNWGAKEPSV

QIQFSGSGTGYQAMPFSVDQAFNPKK

>ETJ81944.1 protein-disulfide isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKFFCKFVLALVFYSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLEKLREAFPNLH

FKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRNFSNLDEFYDI

GLKAMNVNKNEVLNFLNTQKAKEILSEFQRANDIAKTYGTPAFVVNGKYQINPSAINSMQDLEDLVKKLS

NMK

>ETJ81943.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKCAVCHQENGLGLKNEDSAGAYYLYPPLWGDDSYNTGAGMYRLIKAASYIKENMPQGAPDLSLEDAYD

VAAYMNSQARPIKANRDKDFPDRKVKPLDMDVGPYDDSFSTTQHRYGPYTNMIKK

>ETJ81942.1 cytochrome C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKFSIVLTLLLYGSCALALDPNLEKTKSATGIDLPTAKWNLPKALNEDGTIDETKMPKNSEYSKMVILG

NKILNETSKYVGPQAKDPKKRFAGNNLSCSSCHANGGSVQNQSGFVGIWARFPQYNARGDKVITLADRIN

GCFERSMNGKRMPSDAPEMKAMLTYMQWLSQGVPVGAKIEG

>ETJ81941.1 hypothetical protein X908\_06235 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNLSIQEKKDLDNCVFQNLGRQDTFALSAIFKNFYLKIKAFIYSK

>ETJ81940.1 hypothetical protein X908\_06230 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQFSQENKDCLELLIEAGQVRILNSYNSCQKLSKDESFQKFLNEDFLKLYKNNGYLINENLQNLKNTMQD

IMIYYKLRYSFSKDVKDMSKNKNLDILNIDEKDGGTLLYKINNQACVGIELTRHDSRMAMKIYGIENLDK

ECKLFIQSPSFKDLSYTKKDFKWYYLE

>ETJ81939.1 hypothetical protein X908\_06225 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKNQIKILRFKTLN

>ETJ81938.1 cell division protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNQNNNKTLKNELEDLQYELSIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>ETJ81937.1 hypothetical protein X908\_06215 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIYHLSHTDLDGYACQFIVNFYFKNVRFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLELSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKESQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISCFVVEKLSELKENFSIEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>ETJ81936.1 hypothetical protein X908\_07320, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

ILTIIVGMSLASLGIFGVQAAWGVELFGVKNRYTKMAFAKELGSILSGGTAPMVASALLAYYGTWWPIAT

YFVLTAGIGFVTTFFAPETRGRDLNKIEDAI

>ETJ81935.1 nucleoside hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRLILDTDIGNAIAGANTDDGLALALILSSKEIKLEMLSTVCGNVPSLVAYSVAKDLFKRLNLNIPVYLG

ANEALKEPSKAWRQRLDESVKNFKLEYLWENIKSPEILENINPDAIFKMGELVSKNPKEISICAIGPLTN

IAMTMKIFKDFDINLKELFIMGGSFDMPYYTKDTNFGFDPEAASIVLNSRAKITLIPYNATMQTLLTHED

LKELQGKNILCDFIVETLGVWIDYASKTRGTKGTWMHDALTIAYALDSSIADFDECYADVICDSSLARGM

SWRCFKEPKMSMGVDLSTKNCVKILKNVDNAKLLKLIKERFLKGVCYENYESITT

>ETJ81934.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDFLYNDISYLGLFMVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIVATLGNTLGSLSTYALAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSIFAFFTFLPLVGDLFALGLGFAKYSFLKTIFFILLGKLSRYAFI

IFIANSF

>ETJ81933.1 UvrABC system subunit A [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRWTWNSLYFRYEKIIDENLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFMQLSEEQKRLVLY

GNAKTIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAVKVAKKGLGEI

LDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQRIRI

ASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKAGKF

GGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRTQKEWLELKNVNINNIQDLSVKFPLQNLVAITGV

SGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGAMDEI

RNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCEGKRYNDATLEIKYK

GKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSDTGK

TLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGIKGGKVISTGSV

EKVAKEHKKTRSYTGYYLDLELKNTQKS

>ETJ81932.1 hypothetical protein X908\_07300 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVSEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKSSMKI

>ETJ81931.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASVSGIISFSNSGVIDSEVIHKGILV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNFINF

>ETJ81930.1 hypothetical protein X908\_07290 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>ETJ81929.1 hypothetical protein X908\_07285 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFVKNVNFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKNKICDFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPMKKKQKMIL

KF

>ETJ81928.1 anthranilate synthase subunit I [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSAYMFYFPSKYGVVLGSSPEFLLKIKK

REIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQTRVENLFSIIKNKFVM

HIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEITSELEDCDRGIYGGAVGFLNFNEDITLAIL

IRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>ETJ81927.1 anthranilate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILLIDNYDSFVFNVKSMLEQLSNDEILVRRNDAISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKNSLIKQCRENELFSNLPSNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALGHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKPQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKDYEILQVAALLILITEKSLNEKSLSAFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNITTPNTLESVLKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYDNAKDLKDILSGRMQGAKFDLVVLN

AMFALYTANKASSPLVAKDMILEAIYSGKVIEYFKEYQAYAKA

>ETJ81926.1 N-(5'-phosphoribosyl)anthranilate isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKLKICGIKDEKNAKDLAFLNIDFFGLIFAKSPRRVSLEQARNLSAIFHEKDKKVVGVFVDENLEQILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVENSLDLKSEIFANLVLFDAKGILKGGNGISFDW

TLLGSYTKDFALAGGIGLDNIHKAVQTGAKILDLNSKLEDEKGLKDINKIKQILKELKK

>ETJ81925.1 Tryptophan synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKAYYGDFGGQFLPESAMFALNELEGAFLKFSKDKLFKKELNELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKWERKKS

>ETJ81924.1 tryptophan synthase subunit beta [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQALNVYKMELLGAKIHAVQSGLKTLKEAT

TAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVMHFQSIIGKECKMQLQKLNKKVDYIIAAVGGGSNAAGIF

YDFIKDENVKLIGIEAGGLGIDTPYHAATLNKGKTGIIHGMKTKVLQDDLGNILPVHSVSAGLDYPGIGP

LHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHALAFLEKLCPTLKKKSVIVVNLSGRGDK

DMQMIRDYKKGVIYG

>ETJ81923.1 tryptophan synthase subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVDFRKFYKENANVAYTVLGYPNLQTSEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGM

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLIKECERYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKCFKQGNLDIIMKDIEEIFKK

>ETJ81922.1 hypothetical protein X908\_07250 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKILEYSITHFCEHILRLRIEAAQDISGELYGASIPIMGKSEGECNFYLFFPKEFLKKIAEILINDEKF

KEDDWCDLTKECANQIIGYAKNLLNDAKGDDEYKLGIPEYLGKVDFSEIVLDEALTYKFENCYFRIGYCK

>ETJ81921.1 flagellar motor switch protein FliN [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>ETJ81920.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRLLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKEL

NSQLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVPTTTANNSQELMPKP

KSTSLEGYDYTNYILVMLILVILLIVLWWFKKTMVYKNNNVSRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLIEQRQKGKKS

>ETJ81919.1 hypothetical protein X908\_07235 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>ETJ81918.1 hypothetical protein X908\_07230 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKEGIFIFLKIAEKIKAKQVITSGVGIREGVYLQDLLR

PKITFPPNFNPSLKCLQDKFLQSKQKIKLHILLCKFLQPLKIFINLTITISILY

>ETJ81917.1 hypothetical protein X908\_07225 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGGGSSE

LCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAISNSIM

QKIPIH

>ETJ81916.1 hypothetical protein X908\_07220 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCALKHKCKKYL

>ETJ81915.1 ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLLITKDCVCCDACREECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>ETJ81914.1 chemotaxis protein CheY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTIKHKS

PRTSVMIMSSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIEDLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>ETJ81913.1 dihydroneopterin aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPNLTNLNIKIFKPHIIKNATVGVKLKKNINFFLKISKHLLKL

>ETJ81912.1 glycerol-3-phosphate acyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENLIIYAFIYLLGSIPFGLILAKFFAKTDIKKEGSKSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWVVIGK

IFKISSLASLAALLAFVISSFIFNYDLEIHTHAPVFIIAFIIIYKHLPNIKRLIFKEECKVI

>ETJ81911.1 cytochrome C biogenesis protein CcsA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVKSLLIASLVAFSSLNAASLIDEAKNSGLVALPKDQKGVDEILKQNGVKASEFTLEKAELGKKLYFEP

RLSKSGIISCNTCHNVGLGGTDGISTAIGHKWTANPHHLNSPTVYNAVLNNTQFWDGRAGTLADQAKGPI

QADPEMATPAKLAVEKISSLPEYVSEFKKIYGKSGVNFDNIADAIANFERTLITPSRFDKFLEGDEKALT

KEEQKGLKLFIDKGCVACHNGVNLGGNMQAFEVAGKYKFANLGDFKGDANGMVKTPTLRNVAETAPYFHN

GAIWNLKDAIKEMGSVQLGIKISDKEAKSIETFLKSLTGTKPAIVYPQLPISTEKTPKPEL

>ETJ81910.1 hypothetical protein X908\_07190 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQTFLAKFKDNYNKAKIKKFKQALKIELVWNLIVQV

>ETJ81909.1 phosphoglucosamine mutase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSITNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDAHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPANLAAEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIMSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIAALQFS

ALMLSKKKSASSILGQVKPYPQLLTNLKIAEKKI

>ETJ81908.1 hypothetical protein X908\_07180 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRLLLEAKDIKLLEKEMKNVVEFFKKALNG

>ETJ81907.1 peptidase A8 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSEYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

VVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIHGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>ETJ81906.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEIVKIQERKLYFYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>ETJ81905.1 coproporphyrinogen III oxidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLFQNLALKYSHTMMEKSLQKGFNVELLKQPEEKIPKQDKSYMLYAHVPFCHTFCPYCSFHKYYYDENL

AKVYFQNLREEIKIMKDKGFDFTSMYVGGGTTLINEEELLKTLELCKKLFNIKEISCESDPNHIDPNKLS

MFKGIIDRLSCGIQSFDDETLKKVARYNKFGSSKELQEKISKALGILPIFSIDLIFNLPGQSEKQLLNDL

EIAKNLAPQQITTYPLMKSNLTKDNIAKSLGVSIKDNEFAYYQIICEFFKDYTQNNGWSFSLEKNKLNDE

YVSSHHEYLGVGSGAFSFLDGELLINAFNLNDYAKFIQEKQNANIAKACFDKKEIIKYVFLTEIFSGKIE

IDKFNKTLNCNLEKELFIELLGLKTSGAIIKDQNALIATEFGQYLFVVLMKDFYTGMDLVRAVFRDDKRL

KNKDYIDIMKENIDPLNSASMEFKAETN

>ETJ81904.1 chain-length determining protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKAKIVQNLNALFKQRAEFYSYFDENIAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>ETJ81903.1 outer membrane channel protein CmeC [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKIISISAIASFTLLISACSLSPNLNIPEANYSIDNKLGALSWEKENNSSITKNWWKDFDDENLNKVVD

LALKNNNDLKLAFIHMEQAAAQLGIDFSSLLPKFDGSASGSRAKTAINAPSNRTGEVSYGNDFKMGLNLS

YEIDLWGKYRDTYRASKSGFKASEYDYEAARLSVISNTVQTYFNLVNAYENENALKEAYESAKEIYRIND

EKFQVGAVGEYELAQARANLESMALQYNEAKLNKENYLKALKILTSNDLNDILYKNQSYQVFNLKEFDIP

TGISSTILLQRPDIGSSLEKLTQQNYLVGVARTAFLPSLSLTGLLGFESGDLDTLVKGGSKTWNIGGNFT

LPIFHWGEIYQNVNLAKLNKDEAFVNYQNTLITAFGEIRYALVARKTIRLQYDNAQASEQSYKRIYEIAK

ERYDIGEMSLQDYLEARQNWLNAAVAFNNIKYSYANSIVDVIKAFGGGFEQSEDTSKNIKEESKNLDMSF

RE

>ETJ81902.1 RND transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MYYAWSNYLYKAVPNSLVPEEDQGLMISIINLPSASALHRTISEVDHISQEVLKTNGVKDAMAMIGFDLF

TSSLKENAAAMFIGLQDWKDRNVSADQIIAELNKKFAFDRNASSVFIGLPPIPGLSITGGFEMYVQNKSG

KSYDEIQKDVNKLVAAANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVN

DFSMLGKNFQVNIRAKGDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQ

PAPGYTSGQAIEAIAQVAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPL

AVVTAVPFAVFGSFLLVYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAK

LRFRPIIMTSLAFTFGVLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKK

RGKVHE

>ETJ81901.1 RND transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSKFFIERPVFASVVAIIISLAGAIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSTTLAA

ISMYSSDGSMSAVDVYNYITLNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFGITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNNDGSFLRLKDVADVEIGSQQYSSQ

GRLNGNDAVPIMINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVVKTFVEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFVPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVKKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGAIISIKQYQIL

>ETJ81900.1 hemolysin D [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSAKSEDLPLSFTYPAKLVSDYDVIIKPQVSGVIVNKLFKAGDKVKKGQTLFIIEQDKFKASVDSAYGQA

LMAKATFENASKDFNRSKALFSKSAISQKEYDSSLATFNNSKASLASARAQLANARIDLDHTEIKAPFDG

TIGDALVNIGDYVSASTTELVRVTNLNPIYADFFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQG

KLYFIDSVIDANSGTVKAKAVFDNNNSTLLPGAFATITSEGFIQKNGFKVPQIGVKQDQNDVYVLLVKNG

KVEKSSVHISYQNNEYAIIDKGLQNGDKIILDNFKKIQVGSEVKEIGAQ

>ETJ81899.1 hypothetical protein X908\_07135 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLFQKNTILALGVVLLLAACSKEEAPKYKCRLNL

>ETJ81898.1 TetR family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNSNRTPSQKVLARQEKIKAVALELFLTKGYQETSLSDIIKLSGGSYSNIYDGFKSKEGLFFEILDDICK

KHFHLIYSKTQEIKNGTLKEILTSFGLAFIEIFNQPEAVAFGKIIYSQVYDKDRHLANWIENNQQNFSYN

ILMGFFKQQNNSYMKKNAEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>ETJ81897.1 4Fe-4S ferredoxin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYDGHTKLHKKPPEGECIGCEACVSICPTHIDIRKGMQLECINCLECADACSKVQSKFNRPSLINWTSA

KAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELVISNAYTFLF

QNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIRATKNLANNDKKDVIFPLHIKAYA

KDNEKISVFRKSIFVYPKSTLIKDKNELK

>ETJ81896.1 hypothetical protein X908\_07120 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQGHITNYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFLTQEFYLMPFVLIFLFL

FIFLLQL

>ETJ81895.1 30S ribosomal protein S21 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>ETJ81894.1 colicin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDFFDFFHKFILKTENLNLEILTKNNKYFLIPNEVCRYKKSPFGLLG

>ETJ81893.1 hypothetical protein X908\_07105 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANAQGAFVIIEETAPGQYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEAAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASSAKKSGFFGGGSKATSSSSSFGS

>ETJ81892.1 glutathionylspermidine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANAYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLIPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANISIIKDGKTLHENVGPYGNNKAIYQEYVEFNSCE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>ETJ81891.1 2-hydroxyacid dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKNLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFMFAFLNQVLYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVVKISKAFGAEIYYYSTSGANKNADFVHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEALNALMDIVYNNLKEWIENGK

>ETJ81890.1 hypothetical protein X908\_07090 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDAIDSENAKKINKAIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNVSFKNLK

>ETJ81889.1 hypothetical protein X908\_07085 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKHCLALCFIFFLCACSAKNQNFSSQSLMVLIASPMIKINDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKQVFNQKFFKNVYYDDILNDILKANPLWQGRNLEKTDCGFEQNLKAKNYEIFYYVCDNKV

SFFDKISHTKIILTHIQN

>ETJ81888.1 hypothetical protein X908\_07080 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFFLLVFCFVNLALAQVYKGELYFYHLQDKEIFAIVYDNTPMTPLFDRDKNQTSSSFLIVDDINGNLEI

PLFKTNDFWQDEHKKYKINSSKMLTYDNKNFQGENLGTTTLELVETQDGIRIKRSLDFIGFKDDFKEFHP

VHKGVFSFEQIRQKPIFLQDGKISFEEWYYFYEDGMSRAILELNNFVYDINAHAFVKLNDLYNTKNQKFQ

NLLHEKLKNTCDECFEDLQNLQFNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>ETJ81887.1 ATPase AAA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLENNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FARIQLYERLSFIQKSAYNSEIKNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSTDINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFQKPDF

KDRLKIWEKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSKDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>ETJ81886.1 ferric reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCLVLASYHY

FLTPKIPMFWEWSALIIALFYFIVRYTKTLKKLKSNNLTFIKT

>ETJ81885.1 hypothetical protein X908\_07065 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQTKYFKFLAYFSFIISLIYGFYHIIKAFDFVKEAYIYTGIFALIFLNLSLLFSLLKFKKQKIILKF

>ETJ81884.1 sulfoxide reductase catalytic subunit YedY [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIITPENLYKKRRDFLKLGAGALISSSVLASKLSALNFTSDTNPNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSMEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEMAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>ETJ81883.1 orotidine 5'-phosphate decarboxylase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLCVALDLSTKEECLQLAKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGVDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQRNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>ETJ81882.1 transcription antitermination protein NusB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTDTPSAIVINEAIELAKELANDNSPKFINGVLDALIKAKK

>ETJ81881.1 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKEENLSLILVPGAFELPYALKKAIES

KKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLSKEL

>ETJ81880.1 hypothetical protein X908\_07040 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGKSEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPN

MLNLTRLKNCVNTLLEIQNIIKENK

>ETJ81879.1 2-dehydro-3-deoxyphosphooctonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKMILIAGPCVIESKDLIFKVAEQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKA

LQTRGIEDEGYEAAQKMVFL

>ETJ81878.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQPWAHNLNHSGFDL

KNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQHLDSLHLDFILAP

FVMPSLTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIILGDSLPSAMVFLGI

IGIIFGGLILVKNKGKK

>ETJ81877.1 hypothetical protein X908\_07025 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFS

>ETJ81876.1 GTP-binding protein Der [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQSIILIGKPNVGKSSLFNRMARQRIAITSDISGTTRDTNKTQIHIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVVNKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHEEFLIPDEEENLEDFLEHYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESVVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDAHEGFNELDERIAGLVAKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>ETJ81875.1 hypothetical protein X908\_07015 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKVSEIFEQKGENFFREQEQKMSDFLV

LVRKLVLLQVGVLLMFQI

>ETJ81874.1 hypothetical protein X908\_07010 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFYDEIKAKKLYNERLSKYEQKANFILNIENKNIDELLSEIKKVIK

>ETJ81873.1 tryptophanyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRVLTGLQPSGDLHIGNYFGAIKQMVDAQEKSQMFMFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

PQKSVFWLQSDVKEVMELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMAADILLFDTQIV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEAKVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDFKNCNVFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELANAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>ETJ81872.1 seryl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLDLKNLQNNFDEVAKKLKNKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSAKVNALENELEEIAHAIPNIPDECVPVGEDEDENVELKKVLNPSSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPVTNLYSGEILASETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDVLKKYF

>ETJ81871.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEQEDIILEKPEDGLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPQENSESGFKFTRESAPEDVST

FEEVESQEPTPWYKDRKFMSLVGLSLGIICILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDMEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLARLQNSYDNDKDRYKILDAYKIQVRLNKDLFNIAVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQAALYIKKANVTDFVDDSADAGVYLNTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDETKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPNIAREFYVNLMHIAGLLNLERQKIKEL

INVSGAKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAIGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>ETJ81870.1 hydrogenase-4 component G [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQVNTFSNIASMAQTQVSNKKADDAKENTKDKNVQSANSSKDVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNAVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSGKNPLDMNTDELQQLVSEDGFFGVENTA

NRIADFVIKGGGDDVEKLKKGLEGMKKGFEQAEKMWGGELPQISQNTIDAALKKVSDRIDELGGKTLDLQ

A

>ETJ81869.1 pyruvate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHIRIGILQDISGPKIRTGELKEPFELKKGDRLDFYRETILGEKIAQNHYKISINQKSILDMLKIDEYIY

LYDGSIRAKVVNIDDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFV

QNAHDIDEVREILAQNNAKISIFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQ

KANNASKPVITATQMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVGIMCQTIIET

EKRYPYNKFNDFNDLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLN

SLSIVWGVNPAILVNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGTSNLIRILNKEQIAY

YLQ

>ETJ81868.1 hypothetical protein X908\_06980 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKT

>ETJ81867.1 malate:quinone oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGLMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYVKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIIHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

VDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLVCNYLGMEFNEDKFSSELL

>ETJ81866.1 pantothenate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLLCDIGNSNANFLDDNKYFTLSIDQFLEFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYGVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>ETJ81865.1 tram-like protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKILEQTIKALKLNLKPYDLSMLTRKKSYICAKDQNNILFMYTGKTKFLMKDALFLENLAQQININNKY

FFSMTSLCSKAKNHLEMKGFNIYAAL

>ETJ81864.1 hypothetical protein X908\_06960 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLAYQDGEYFTADNNGNLKIFDNSYNEIYNFQFDASVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQIIKDVVISAENFFNNAIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFVKSNIYN

NYLYIFEKTGYLIKMNLNLDNTQVFKLSEAVDKISFMGNGKFYYGNKILDLL

>ETJ81863.1 hypothetical protein X908\_06955 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPSNKNLLEQLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNTQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKFLEQNKIEEANVLLSQIKENSSLNQITKNLKHYQGITQ

>ETJ81862.1 glutamyl-tRNA amidotransferase subunit C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIDEKLLSKLEKLSALQITKNRNETIVQLSEIVNFVEKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFLLFLKS

>ETJ81861.1 hypothetical protein X908\_06945 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQAAEFIQSTFYKIENQSLAGFA

GFLAILIIFG

>ETJ81860.1 colicin V synthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLAGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFAKNSYTLNLLKETG

SFIMNQPLTENSLDHANEKLQDIVSDLNNTQKGE

>ETJ81859.1 hypothetical protein X908\_06935 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEW

>ETJ81858.1 Fur family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQLYGVCGDC

NNQKAKVKI

>ETJ81857.1 lysyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEVGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNVEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLIVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMINFSKPFERITYKDALCKYGGLDRDLIEDKEKILTKLKADGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVIDFPISISPLSRRSDEDSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>ETJ81856.1 serine hydroxymethyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIQRCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLSHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEIGAYLFADIAHIAGLVVAGEHPS

PFPYAHVVSSTTHKTLRGPRGGIIMTNDEEFAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKIY

AKQVRTNAQVLANVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGEIRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>ETJ81855.1 hypothetical protein X908\_06915 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALNEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHFTAYKTKTPGHLHLYIHKGHTALNEGYSLA

SKLSMMFASKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHM

>ETJ81854.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLINGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTASSSNNNDSTNFAMPDQEVPAEPTAATSENT

APQASAPKQEVKQTVKPKEEAKKQTAVKKEKESTKQTPKKEQNANDLFKNVDAKPVHPSGLASGIYVQIF

SVSNLDQKSKELASVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>ETJ81853.1 shikimate 5-dehydrogenase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDKIYAYNTDALGFLEVIKDFDNIKKALILGAGGTALALAYVLKQKGVEVH

IANRSKERFKDFLAYRAYLYKDLQDFDFDLVVNSTSAGLKDENLPCDRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>ETJ81852.1 hypothetical protein X908\_06900 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVEPIDSGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEEQIKTIARLKGYKIVTANPDYTLKNSISIYTEEKNAQKTSNFMSGDYIKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSGFNSFDGDATFEESLPQTNSNQNNTIESTPTQNIPTNP

SSINQNNKSKNQDGVEIFE

>ETJ81851.1 prolipoprotein diacylglyceryl transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYVIALLLALLLAKFFVKKFQLDINEKHLDSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYVDGILRHPSQLYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>ETJ81850.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQTTAMIKNYNGANYEYTI

>ETJ81849.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNIQYSDALVIGGGLAGLRAAIEVAKSGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRMEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGPKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>ETJ81848.1 fumarate reductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>ETJ81847.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVNKDNYERYFLLKEFQELCKKIDLRVDIFSMQ

NAQICILNLFKSGFISKQDLLKALKILEKISKNTEIFDFILQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKSRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLKNNISIVDTPGLDDVVVQREIVTNEYLRESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIVLTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQEFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLKEAQDEISNSIAKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNLSRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGISKNIDSIFQSEKFALLRLKIEKLSNL

KSDLYELETNLDTVIFDTFKEFKMSEILNSLNINGAFFEFLNDKLKHYEKNQKSKLESLEKVLQSLKNQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>ETJ81846.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHASYALENELKELVFSLDKNVNIAIIGQFSSGKSSLLNLILGRDCLPTGVVPVTFKPTFLRYAKEYFLR

VEFEDGSDIITNIEKLAFYTDQRNEVKQAKSLHIFAPIPLLEKITLVDTPGLNANENDTLTTLDELKNIH

GAIWLSLIDNAGKKSEEDAIKANLELLGENSICVLNQKDKLSAEELDNVLNYAKSVFLKYFNELIAISCK

EAKDEQSYEKSNFQSLLDFLTQLDTTVLKEKFVKRKILNLCEILEDENQLFVGIFDRLLNQFQSYEKHLL

LAYENFLKEIEILNHQILEQLKSISERISSEIFASVKEKDAYFYKESKGFLKKDLYTRYDYKAPYISSDD

AFLAMFYNSDVMSKEFKKIKNELYKSFEEIKMKLKDFINILEREILLFKAEFSNIQKDHIFQSDKNFSEL

RAFCNASDEYFLKDFKELLFKSILELDLFFEKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEF

VLFYPKKSEIYERVLNELNVYEFETLLINKPILTKIAKNFLEQSQNLIQEKNKFLDLKKAELQKRRAQIL

NVRESIKED

>ETJ81845.1 hypothetical protein X908\_06865 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRIFLTLFLFFNSLFALSELEEGLKLYEANKFDKAYEIFKSLCEKDISKACFSLAFMHESARGVSKDLNQ

AYKFYDKACKLGLANACSNMALLLQNQGYENEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASVKSALAFYSKSCTLGFGDACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>ETJ81844.1 oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQDNIIDRRSFFKLGLLGGSVVAASTIGGGAVLKAAELTHSHQASQGKSNKIRGRMFFQTQTEFDTLSAA

CERIYPKDEQGEGAIGLGVPYFIDNQLASAYGYNDREYMQGPFMEGKAEQGYQTPMQRKDIFLEGVHALE

ENAQKRYKKSFSLLKGGDQDKILSDFEKGKIQTTGFKSSYFFTLLRDMTVAGVLADPIYGGNDNKNGWRM

MQYPGAQMSYVDKIASDEFFNIEPMGLADMES

>ETJ81843.1 GMC family oxidoreductase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAEVLKKVDVVTVGAGWTGGIVAAELTKAGLNVLSLERGHMQSTENFNYIHDEWRYGINYGLMQDCSKDT

VTFRHDPSGLALPYRKMGSFLLGNNVGGAGVHWNGWTFRFMPYDFEIQTLSKQRYGNKLGNDYTLQDWGV

TYKDMEPYYDRFEKTCGVSGEPNPLAEKMGAFRSSPYPQEPLENTKMLKRFESAAKSSNLHTYRLPASNS

KGGYTNPDGQDLAPCQYCAYCERFGCEYGAKASPLNTVIPKAMSTGKYTIRTYSNVTQILKKDGKVTGVK

FVDTRTMKEYIQPADIVVLTSYMFNNAKLLMVSSIGEQYDPKTGKGTLGRNYCYQMNMGTTAFFDEQFNT

FMGSGALGTTSDDFNGDNFDHSKEKFLHGAMIYSVQLGTRPIQSAPLPAGAPTWGAEFKKALNYNFTRAI

TVGGQGASLPHKNNYLSLDPTYKDAFGMPLLRLTYNFTDQDRALHKFITDKTAEVAKRMQGVKSIKKGAY

LKDYSVVPYQSTHNTGGTTMGADRETSVVNTYLQHWDADNLFVVGAGNFQHNSGYNPTDTVGALAYRCAE

GILKYHKSGKSLA

>ETJ81842.1 hypothetical protein X908\_06850 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MITLSSFNRYFGNNPLQTLTKIRDESIENAKI

>ETJ81841.1 hypothetical protein X908\_06845 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLNILHANSSHRFHKCMPKEVHQIYDTLKLMEQQEGTKKVEAKKEEQSNSTNTDKVDNKKINF

>ETJ81840.1 hypothetical protein X908\_06840 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDDKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQAAGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARAEAMKLKAEEAKEKEEENKEKDEENKEKDDKNSENSLEKTDKDSKNNDK

NSNFDKDFKNLVTRTYQQNSQNNDIKFSIAS

>ETJ81839.1 histidine triad (HIT) protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREAIKLDLPKFEEFVKFLNSKIF

>ETJ81838.1 hypothetical protein X908\_06830 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVLLSSLVAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSAVIDFDPASAEFKKLDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>ETJ81837.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLG

>ETJ81836.1 hypothetical protein X908\_06820 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILKNLIKTFQILDFNKSDNCIEKNLKAGFIYFNYEILDYQSQLFSSFF

>ETJ81835.1 ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSTLQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFAGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIAHAISPDTGSMHLGATIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIALGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>ETJ81834.1 hypothetical protein X908\_06810 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLSD

KEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>ETJ81833.1 hypothetical protein X908\_06805 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQVNYRTISSYEYDAISGQYKQVDKQVEDYSSSGKSDFMDILNKADEKSSGDALNSSNSFQSNAQNSNSN

LSNYAQMSNVYAYRFRQNEGELSMRAQSASVHNDLVQQGANEQSKNNTLLNDLLNAI

>ETJ81832.1 phosphoenolpyruvate carboxykinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQTINQIFQTQIDIKKSIFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLARAYSDAANAVINNSSLLSFELKKNISIAIDLK

NLNRFEYFLKTYSFNFTKDFKDCKAILHIKLNEKEDQEFEIFCKNFAPFEIEKL

>ETJ81831.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFSHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGASISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYHLTFQKYKNLLWFLMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIF

>ETJ81830.1 hypothetical protein X908\_06790 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFYNFLIFCYFLIVANQLLYYFINNSNRHFANNYHFAKELALELKKQDVLELATAPSLQKRLRFYGIKNS

NKFYLKALKQADKHDMDKKIVKVKLGKYEKVYQILNYD

>ETJ81829.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKAFSLLEFVFIILILGIVFNLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNLTKRFGIEKVEFKGSCSGFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYVYIPDFKTLKSQFVNIKNKNYECSKI

>ETJ81828.1 hypothetical protein X908\_07765, partial [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDAMGMQILYTRSANFYVKMDAARAVH

>ETJ81827.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKILVVLVLLQVFSHAEELNNNKIRELIESSPEANEPQNKNLKNTLKNQKSPVNFKEQNTTNITNSQTD

QNEAKVFVREYVLHIDNKDLTFKKLRISEKEIQDAIAEYRNQELSLQNLKDITNIIAYYCQVSGYPSATA

YIPPQDLSSNKVQINIAFGTLGKVIIKNNSGVRDYALESKLNKNLKGKVITTKNVENEIYKINEIYGIQT

NANLQSGDGYGESDVIIEVNKGDSATLTLYSNNYGTKETGRFRAGMSQSLNNIARQGDNLNFYLQDSDEN

QIDYGINYSTFIGNLKITPFATQGHYVLGGIYRNLGFYGDSMNVGVNFSYPVFLYTEYSLYLVSGFTHKK

IKDYYLDGLVSNEKTSNSVNLGIEGTYKGLENNVLSYTLNFTYGNVENDGDSSGFNGVNLGNFGKMNLNL

SNEYQFQERLTHIFQLNYQKVVGGAVLDSSESVSLGGPYGVRAYLEGEGSADNVVSGTLGIRFQTPLEGL

YLTPFYDIGYSWYENKEY

>ETJ81826.1 hypothetical protein X908\_07755 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGYFVKDWWDGILKTNNIFVYYEKNSRDTYAGYYDVKGKFFGEILNDSALAHGRGFEFYDYNIKNKVINE

AMVGFLENQGGVVSKDYNNGYVSYYDGNAKITPEVPDFKDPVLSKNDFDPKLLQRILDDLMNGKYTYDFD

TKTWTYTDSKGVVGKDEASEITQSLNFLNAFKDTGVEQEFLKLWQGSQEQNYKNYTNLYEKWTQKKTAMD

KIKTGEGYFASFKEELQKYQEALAQLDKENKNYEKIKESGLVSDETLRAIYEKLLEQKEALEKQFADLSG

NEGFRYKLENEILNSQGFSIEGKDVDGKVYTGNFNFKGKLASLPEKPNISIYEPDKQGGEDPDKPSVLPP

EIPEKVVEAPIKIQTEVDAKKEEDDDQVEIGEADARSSGLRCIVSDNFKTMNICVNAK

>ETJ81825.1 hypothetical protein X908\_07750 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQIYAKAGDGVGGWFGNDYNNYEFNAAGGFLGGFLILELEM

>ETJ81824.1 adhesin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKLFLKQGASFSPAFDVSKQGNIINLGKINADNIVLIGNKVEIGVGAELAGQDGQTNAKTAHLIGNYVY

VSVGKDKENKNTIKIDKDGFKGTAIVEGFMQRDMTSFANDKYQFGDFGSIKSQSYDGKNSVDFYRAITIG

GHYYNNGQNINHYMNANEWKLFADGWNSDALNGDIFKDGLTTIRLMSDIDFSYLTSNGKQIAIDPVGANK

YAFSGNFDGGNYTLKNILINAQNTDKGWNTGIFGKVEGKDSNKKAKIYNLNVDGLKFSGKTNSGGAFVGQ

SSNADFSNIHLKNIGDLIFFDPNSKNGTDGFLYGGGFVGYAQSGSSFNRISLDNFSKIALQPEGKFSSAY

IDIYLGGFAGYSEGSNFSNILLNNIGGVTILGSETGGNIFAGGFVGYAGDKSYFSQIDLKNIGSVQADGK

TFVKHAGAGGFAGAINGTNSFEKISLINFGDIIAKRGYVWTPDGIASDKLLMLDLVDLLEF

>ETJ81823.1 hemagglutination protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKMSKHIVLSFAVSSLLFSQAYALPQGGKFTHGTSGTIHTSGNTVTITGKGQNHVIQWGGGFNIAQGES

VNFTTSGKNYLNIAYQKDASKINGALNGGNNNIFLVNPMGVLIGKTGTITAGKFVASTTPLNDENVKTFF

KARS

>ETJ81822.1 hypothetical protein X908\_07735 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGVENIYTLPLNGAPYISGSVAFDGEAKDNKLILESNTKIDLHNFQYFSDEEGKDIYDERITRLMGAFGI

NSNLQNNKVLIDSANIVLHGPDGEYTARSTFEILGALADVNNLKKYNVSKNSVIIKNLNLDLMVNSQNKI

TFYDAVLFGEIYGGRTLQGNAEKNSIEVYHFNSLDHLDKNIKTHASLNLYGGYSNDGEANGNKIVFRLKK

PLKISDNFYGKNYYNLYGGFATEGANFNIIDIQNDLTYEKVPQNYSDKFTVYAARTLSGKANNNTLSIKD

SVISLPLYAFITSETTLDGIDYIADESNNNEVNFENIKSSKNLSLMINAKNVSNNKINYNLIQSLTEASS

LGKGSKIILKATQNANNNLIKLKDCSSAAVESSCIIKADKESAFNKIIINNTVFSTASDKRQGYVGLIAG

VSANSHDNIMELVNLNIDEYKNQDAIFLAPSGTSDISNFKSYNNTLYLGGELNFFKDVNIDLLSGSVFHE

VNKKGKIITQILPHQEDFSKNNRLIIDTQDVKSEVVNNFENFTFILPNKIKNPILTIEKLINLPSNGSME

ILTKNKPTKGKYILIQSDVGIYDGVNRLLNQQELENLLEKMKNNKNKFNYNKIEKLAKSTLKNVNFSFEV

SDDAKIIYINIL

>ETJ81821.1 hypothetical protein X908\_07730 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRNEMKKYFNIFKIFTNKTNAKFGLGVCSVVLSSSVCFAAVQATSKDGKIFYISEHSFKDNQVYDPQAEI

FKKINGKNFYASKSKYPISNLTMIYNNPKSGNKNLSKLEILTPDTSKEEIITAFSTLGTVSSDTQAVPSS

FIPFIVTAYAQNTNATNNKLILENGELSSVYFCKPSIGDCGVPNNSQKGDRFKYLITAAFTDRRGGDLTI

KPF

>ETJ81820.1 hypothetical protein X908\_07725 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILSIALVALVGLFLGACSDSKNKESNASVELKVGTAPNYKPFNYKENSKLTGFDTDLVEEIAKKWY

>ETJ81819.1 hypothetical protein X908\_07720 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKRSPKNGIKIVWVETNFDGLIPALKAGKIDMIASAMSATDERRQSVDFTKPYYMSKNLYLKLKNNDSLQ

TKNDLEGKKIGVQLGTLQENTAKAIKNAQVQSNKDLNIAVLALKNNKIDAIVADQDTAKGFLAENPELVS

FYQETDGGEGFSFAFDKNKQKDIIEIFNKGIDEAKTDGFYNTLIKKYELE

>ETJ81818.1 HAD family hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLVLFDLDDTLIQGDSAKLWLKFCVEKGFLPQEYLEKIVFYQKQYQEKKLDMDEFMTFFLQSVKGKNED

RISSLVDEFIKIYIKPYEKAKELIIKYQDQRCIIISATAEFLVRKIASFLGVRESIAIKCERVGDKFSGK

AYGIYSFKEGKVLRLKEYLGKDYEKWMKDSYFFSDSINDLPLLESVSKAFVCNGDEKILKIAKERKYEIL

TF

>ETJ81817.1 spermidine/putrescine ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKLVELEEYAKTYPHKLSGGQMQRVALARSLVTKPDLLLLDEPLSALDAKIRKHLRVQIKEIQKELELT

TIFVTHDQEEALELSDRIILMNEGKIIQNSNANNLYLLPESHFVASFIGNYNILSPKELDSLGLKHDFKK

DIALRPETIEISNEGLEAKIKEKSLLGNIIRYRVRVQEIEFKVDTLNFSTHSTYEAGDKIALKFNLSLAK

ELK

>ETJ81816.1 hypothetical protein X908\_07705 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAYLKIKNFKKAYGDKIIFEDINFSAKKGEFITLLGPSGCGKSTLLRCIAGLSQINGGKISLNDKDLTKL

SPQKRNIGMVFQNYALFPNLNVFENVAFGLKIKKMDKKDIEKRVKKC

>ETJ81815.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNENLSLKAKIYHYAVLFLVFLFLALPLMATFLYSISTSWGVSVLPDDLTLKWYQELFHDERFLLALWHS

LLVCVGSILLSVILVFPLVFVLNYYFLKLKAFVNILIIMPFAVPPIVSCVGLLQLYADNIGGTAWILIFT

YFTIALPFIYRALDNAMSNVNLNELIASNAMLGGSLMGAIFKLVLPNLRNGILVAVFLSFSFLIGEFLYA

NILVGSAYETLQVYLYNIKNQSGHYSSALVIVYFVLIFITTFIASLIKE

>ETJ81814.1 ABC transporter permease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEKFLAFLSILPFFIVFTFFMIAPLIWIVFNAFYVEEDEIYSLANFIHIFESKFYLQSIINSLQISFIS

SIFGLLIGLLASYSLFILAPSKICNFLFSLNTMISNFSGVPLAFAFIIVLGSNGVVNVFLKNLGIEPFVS

VYANFGVNIVYVYFQIPLAILLLLPAFKSLENSHLNACKMLGGGNFLYWLKIALPLLAPALFGVFVILFA

NAFGAYATIYALSSGNFNVAPVRIAALIAGDINLDPYMASALSIIITIIMLVVTFMANFLSKKYNFKVL

>ETJ81813.1 hypothetical protein X908\_07690 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKVILVVLDGLNCKSASINMGYLNALCKENLGKFYSLECELPSMSRPLYECLLTGVKPVLSGIINNKLS

FSKQTSIFDLCKEQGLKAGGAAYHWVFELYNKKEFIPSLHRHIEDENLTLPYGHFYYEDDYLDSHLFADG

EHLRNKYNLDFTLIHSMNIDDAGHKFGSHSIEYANKTKKVDNLISEYLPTWLEQGINVIITSDHGMTEGK

SHGGLSEDEILVPFFTFGSAFSYENAKIKQDEICGSVCEILGLKHDKRYNDEILKAKK

>ETJ81812.1 glycerophosphoryl diester phosphodiesterase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVILTSAMLCSVLFGVQEYEANLAGHIIIDSKSTVKPPKDAPDFFKTYGKFANITREEKIGTFKSKGN

RETDFYLPFKNQPIQGHSGIKYIPKKDVFWVISDNGLGKKYNSYDSMLYAHEFKFDFKNSKYELLKTVFF

KDSDKKYPYPITTETTKERYLSGADFDTESIQVINDEFYIGDEFGPYLLHFDKNGNLKEVFDVYVEGKKL

ISPDNPSLKFSDKPDGENEKFNIKRSKGFEAMASSKDGSKLYLLLEGSIYNNNAYENEKGKEYLRIIEFD

VKNKKFTGKTYKYFLEDKSHSIGDFNMIDDKYGIIIERDQKEGTKDKACKEGEDTKHCFNNVAQFKRIYK

VKLDDKTHEAQKISYIDLLNIKDRNKISKKPLANDKFVFPFETIEGVDIVDDSHIVVENDNNFPYSSSRE

PNKTDDNEFILLEVKDFLKSK

>ETJ81811.1 ABC transporter substrate-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKFFLSLGLVALLFSNSQAIDENLIKAAQAEGRVNSLAMPDTWANWKDTWADLKNLYGIEHSDTDMSS

AQEIAKFKAEKKNASGDIGDVGASFGEIAVKQGVAQPFKTSYWDQIPTWAKDKDGNWLLAYTGTIAFIVN

KDVVKDIPKTWQDLLKGNYKITVGDVSVAAQAVSAVLAANYALGGDEKDLSPALAFFNTLAKQGRLVNND

VSIANLEKGEVEVGLVWDFNGLGYRDKVGKDRYEVLIPADGSVISGYTTIINKYAKHPNTAKLAREFILS

DKGQINLAKGYARPIRIDHIILPDDIKAKLLPSEQYKNARAIKDQKAWEKSTKELPQLWQEKVIVDMK

>ETJ81810.1 magnesium transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLYIYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSAAEIAFISSEFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLVRDLKNNEEDRNLIKLRTEIVTFATAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLNILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLIGTVYGMNFKFMPELELHYAYPIVLGVMVISIILPLVVFKKKGWL

>ETJ81809.1 molybdopterin adenylyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKCDLI

VTSGGTGPALRDVTPEATEAVCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIK

ECLEPVFPAIPYCIDLIEGAYIEANDEVIKVFRPKKKCQN

>ETJ81808.1 molybdenum cofactor biosynthesis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFFKKKISQKQKEKPKIPINDVILDDRLCKFKNKVQKISKDEASASLLARQLSRLIRANKF

>ETJ81807.1 peptidase M48 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLIAILCLYTALLSWISYAQIRFLEREKDKQAQILSEKDYQNAADIAIENEKFKLFSNFYNLIISIAWI

GFGFLYLKELLILNNTRFENTLFLLSFLIITSILNLPLSIYESFIKDKAHGFSNMTVKLFIKDTMKSLIL

TLIFGFLILYALLFCYDFFGTFWWIAAFIFAFCIIVIINLIYPTLIAPIFNKMEKLDDENLLKKISSLMK

QCGFSANGVYVIDASKRDKRLNAYFGGLFKSKRVVLFDTLLKALNERELLAVLGHELGHFVHKDIIKALF

NGAITMFLLFFVFANLPEFVYLESHLEGVNGGVFALLFIFANIFSFLISPMLNALSRKNEFAADQHGAKV

TSKEDMKNALIALARENKAFIKTSKIYTFFYLSHPSISDRIKALS

>ETJ81806.1 N5-glutamine S-adenosyl-L-methionine-dependent methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTIKNALMEAKSSLKGYENEAVFILCEYLKKDKAWLFLNQDIQIDHEPYFELIRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIVLAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIKENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKLTNMRYDKK

>ETJ81805.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFHSGLMMTQIFIKMGYLLIFVSVVNFLYE

IYSLIKDEMKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>ETJ81804.1 flagellin [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLAIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISQSADRLNELSVKMNNAALNDSQKGMLRTEATRIQESINNSFNNATYNGKNVFQTMNFVV

GSGTETTNLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSGINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNDFNANYLKENAAAFVAAQSNMQLQSKIANLLQ

>ETJ81803.1 hypothetical protein X908\_07640 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTLEQILEKTKNVRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKKILMKKN

>ETJ81802.1 YggS family pyridoxal phosphate enzyme [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDKRLDYKLNTLLEINSANENSKSGLDPNQAVEEYLQIQEECSNLNLCGVMSIGSHSQDKESIIKSFETT

FKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>ETJ81801.1 DNA polymerase III subunit alpha [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MCIAMGKKLNDPDRMRHSVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCNLDLNLGNPTPPNFKFTRE

YAKDHNIILPEETKEFSFDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRLEVEINIIKNMKFSGYMLI

VHDFIKVAKDKGIPVGPGRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPERVSMPDIDVDFCQDRRAE

VIDYVIDKYGADKVAQVITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPEELKITLDAAYEKEPKIKE

FIDRHPKGPEVWEYARALEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKNDERHLVTQYSKDHLEDVDL

IKFDFLGLKTLTVINNAIKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLGIFQIESGGMQSLNARLKP

ERFEDIIAVLALYRPGPMESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYGVIVYQEQVMQIVQIIGGF

SLGGADVVRRAMGKKDPEKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFAGYGFNKSHSAAYALITFQ

TAYLKTYYPSEFMAALLTSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIREFSALEQDGKDAIIYGLGA

IKSVGIPAVENLLEARQDGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDEFGFTRKALFDNMENLSEA

SRKMAEVRKNAASSLFGEEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIYVSGHPLDRFYEQINAIDY

VKSLDFESLKNNGEILSIGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVFESNVEEIENIIKDENLKN

NAYGFVLGFKAEGGEKPSFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEENHFTAEPKEFEKNIIELD

LTRLNRELIYEIHEIARNAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDSIVEEISNKYA

>ETJ81800.1 hypothetical protein X908\_07625 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSQFTHLHLHTEYSLLDGANKLKELALTLKEQGATSVAMTDHGNMFGAIDFYQTMKAQGLKPIIGMEAYL

HNHDELDDKSSRQRFHLCLYAKNEIGYQNLMYLSSQSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGE

VNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFKDDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIA

TNDTHYTFKERAAAHEVLCV

>ETJ81799.1 ArsC family transcriptional regulator [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

NLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>ETJ81798.1 phospho-2-dehydro-3-deoxyheptonate aldolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEFGFLKKSELHKQYTDISEKISQALAFMEACGINTSNTPSLREVSVYTSHEALLLPYEEALTRVDSLSG

EIYDCSAHMLWIGERTRALDEAHVHFLRGVKNPLGVKIGPSASADDIIALANVLNPNNEEGRLNIIIRMG

ADKIINNLPKIFSKLKSEGLNLVYSIDPMHGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHL

EMTGKDVTECTGGASNVTAQSLEDRYETQCDPRLNADQALELAFLIADLVKKARK

>ETJ81797.1 hypothetical protein X908\_07610 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIVLTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAIIKVQQR

>ETJ81796.1 hydroxyisourate hydrolase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFSIKKTLLILASVPMFLSATEYQLSTHVLDITSGQPAPKVKVELYKLEANQQWKKVSEEFTEENGRIGD

LLPYEKAENRAFGIYKLKFFTKDYYTSHKINTFYPFVEVSFELSKDQKHYHVPITLSPFGYSTYRGS

>ETJ81795.1 50S ribosomal protein L19 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESITVLRRGRVRRARLFYLRDRRGKAARIKELKK

>ETJ81794.1 tRNA (guanine-N1)-methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQAEPMYEVLRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFS

IGDFILTGGELPALVMCDAILRNVNGVLGNMESLEEESFENNLLEAPAFSKPFIFEKKNKKFYTPSEFLK

GNHARIASLKTTLASCKTKFFRPDLFLEHERKK

>ETJ81793.1 ribosome maturation protein RimM [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELINLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVIDILETGASYLFEIQSDEKWVE

KNILKYFLFHI

>ETJ81792.1 RNA-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVENFLREYAKLIADYPEQIDTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>ETJ81791.1 30S ribosomal protein S16 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>ETJ81790.1 signal recognition particle [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDVKQNGIGQKQFLNA

IKVNLENILSVNGKNQGFVFASKPPTVVLMAGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKVVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEVLGISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAIIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>ETJ81789.1 hypothetical protein X908\_07570 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MHAKFIKHGVVGDEKYAKISSDRMYLHSYEIKIFDYYFKAELDNSFAKVGFEIKNLDF

>ETJ81788.1 ribosomal large subunit pseudouridine synthase C [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKP

>ETJ81787.1 3-deoxy-D-manno-octulosonic acid transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGAKNVKIFKNIKANLEIKNNKIYTKPKEKLIIFASTHKDEEELLLDHFKLEENEKLIIAPRHPERFKEV

ENLLLNKGLEFEKFSSLKDENKKFAKKILLLDALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDN

VLISGKFIHNQKALFEEVENVYFCENLKDLNDKIHYLNLKVKISKKENLDLIIQTIQKGIDARKSL

>ETJ81786.1 3-deoxy-D-manno-octulosonic acid transferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFFYYFLTWAAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFEYAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKTKIILLNAR

ISDKSYHSYQRFSFFIKKFFLILMKFLLKVN

>ETJ81785.1 zinc ribbon domain-containing protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINRTLKDAELKIGKINTDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILENKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>ETJ81784.1 hypothetical protein X908\_07545 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLSEIYNFLDQLSPFDIQESWDNSGILLGDRDSEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKTYPRAFIKEMICKNISLISMHTNYDLSHLNIYFTEEILGFKISFKDEFLIYVENSISFEALCDW

VKKKLNLQILRVSNCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>ETJ81783.1 glycyl-tRNA synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTFSQMILNLQNYWQEQGCAIMQPYDMPAGAGTFHPATFLRSLGKKPWAAAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNEAE

>ETJ81782.1 hypothetical protein X908\_07535 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSSAKSQTAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYKLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>ETJ81781.1 N5-carboxyaminoimidazole ribonucleotide mutase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNFVSILMGSKSDYETMKEAVKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMSGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRLEKEKKLVSDSKEVEVLL

>ETJ81780.1 protease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIIPEIVAPAGNFTKLKIALAYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSFQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHVFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTSIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFIEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>ETJ81779.1 chemotaxis protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTQEELDALMNGDVDLDSETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEVLELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>ETJ81778.1 glutamine synthetase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNSGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKW

>ETJ81777.1 hypothetical protein X908\_07510 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVAHLNGKTATFMPKPLYGDNGNGMHVHMSLWKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFT

NPSSNSYKRIVPGFEAPCILTYSCQNRSASCRVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGI

KNKTIPVGPMDENLFDLTLDEIREKGIEQLPHTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVW

PVEARPTAYEFKTCYSC

>ETJ81776.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MMRSLHTAATGMVAQQTQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTEGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>ETJ81775.1 flagellar basal body rod protein FlgG [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIAGFKRIFKETQDELPIENHTRDASRFVNT

TIDGIPQVSQEYTDFSLGFLKATNNPLDLAMTREDAFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

DLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLATVK

>ETJ81774.1 cell division protein FtsZ [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKVSGG

YDEEIMAQIETPTFLRRQMD

>ETJ81773.1 cell division protein FtsA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHYDK

VVVSISGAYTKSVDSIGVVNIPNHEIGIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDDPL

GMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAICD

MVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLSYAALSQQPNTLIQIPSMGDERKVNEVS

LDIISNVIYARAEETLMILAKILSDNRYANAIGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARKDL

ITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDAESEIKSDFF

DENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>ETJ81772.1 peptidyl-prolyl cis-trans isomerase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDYALMQLKNVANAKFLDLKNGKDNF

QKDQNISESDVYYPIDLLNKAKNGDVLRPAPYNNGYIIVKLNKVDPIRNKTFEEAREEVLPMYLSEQARK

NLEEKAKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLMNVFNTDQNSSYVIINDNKAILYK

INKQKLDMNSDKFEQYKTMLEQNLRNLKANELKQELVDELKKIYPIKIYYKGN

>ETJ81771.1 hypothetical protein X908\_07480 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVITDKLNQIFNIPSKDEELKMLASSYFMQDALSIAKIDYDKKILRLMKRI

>ETJ81770.1 16S rRNA methyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSEALLKNHPDLKFIACDQDQQALEFSKKRLKDFHN

RITFVQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEIINTYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNPIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLEHLENLKPKNCILAIISFHSLEDRIVKQFFKKWSKNCICNEKIMRCECGNNHSLGQIITKKA

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>ETJ81769.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEDDFIKERQNIRQKMLKFSRAINQGKPLDDDLRDEISSDDILRRRFKKKTPNKFLEELDEEYESKHTK

KSNIYLKEDLINVKLEEKQSLAKKIFSKMKERRKEENKKTKKNFLFSRKKANEIKNIQTKTQIQTKSNQA

TTQTKQEKKELTNSIEKIQKTETKIQKPLIIEKKLDVKNQPNIKKSLENLQKKITPQENKQELPKPSNQA

QEKQQNDEDAQKAKNILLEGFSNATKEDRNLNFNHLLFAALLVSFALFLFAPQIYIRNQIYYLSREIATL

RTEESVLNEENKDLKRRLENMRFQNQILDYLE

>ETJ81768.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKFKEFSLRFLFKVSEQPVLIRDLLEANALFNDGMLVDPSKLNFNFKILNSYIYFGVFCAVILLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDIFKVYTRKIISKKIIQKAWALHFPYFAYEKYSTMAGEFYKE

ALKEEIPKANLEQYVLDKIIHSK

>ETJ81767.1 restriction endonuclease [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNYYQELKKYLNNNLFTSYSLEIDFPKIYNFNANQKAFRDILTKITKIYNKNKFIKQNEHQFEDEFISKV

LEILGWCFVRQDEKIIQGKLEKPDFLLFSNDKLKSKYENLDKETKKSSNDFTIILESKAYNIEIDNKKVK

DNPHFQILRYLGNLKKNYGFLTNGRFWRFYDNSILNSNKVFYEINLEKIIEDQNIEAFAYFYSVFSAFNF

TEKEDHLEITLQNNKLSKIKIEDDLKSIIYGTNGNESLFEFIGSRIYNKTKADLKLIYENSLYFIFRLLF

IAYFEDKFEIILEKHKYFKSKISLRTLLENLQEDENSSGGFGELENIFNIYNKGKGNFDMPVFNGGLFDE

SKTALLSTPKIFNDKDLKFILNQLLNFKDKNLSFKRDYKTLSVEHLGTIYEGLLSYFFEIANEDIYYVSY

KEKSKEIECYFDNYDFKILEKSKKVEKYTFYKKGQIYLKNTSNSRKASASFYTPQSIANFLIQSALKDKL

NNENILKFKILDNACGSGHFLVGVLNAITHIVLSDFDHFTNLKELYEEEKENILNHIKDFVQDYEVDESD

ILKRLLLKRIIYGVDLNPFSIELTKLSLWIDSFIFTTPLSFIEHHIKCGNALINSNLSDFKDLIKQNSSN

LFTNSITQEFEILQEVFEKLDNLKDTNEEQIKQSKQIYQNEITPKLNKLNLYLNYINTLHFVNKEELQIL

KALSQDDIQNLSQNEQAKAIISKYQKEFNFFNYELEFPEIVENQVFKGFDIIIGNPPWDKTKFSDDDFFP

QYKSDYRSLIASKKKEIQDNLLAKDYIKQNYEKQKAYINDLSEYYKKAYPLNKGSGDGNLFRLFVEKNLS

LLKKDGNLAYVLPSALMFEDGSLTLRKEILENKTLEYFYSFENNKAIFIDVHRSYKFALIQVKNTQANHA

HKIKTMFYKTDMNSLKNKDEILTLSLKDIKKLSPTHLALMELKDKQALEILRKCYNAFQNLSFDYIDFRR

ELDMTNDKDLFIEEFREGLLPLFEGKMIHQFDANFSQATYFLEKAKFDERLKSKELSRAKKTTGKELNPK

LIKYDREFFRLGYRAVARDTDERTLIASLLPKNCGFGHSMFANAPKQYIVKDDEICMDIVPYERILFVLA

LFNSLVVDFIIRNMVQINVSKTYLERIPLPQPSDEEIQNNEIYKTLAKNALLLQLYNDKNHHFDELKQKF

DIKNEEIPKTKKAYDILKTKNDLLVKKLYGLSDDEFSYMISTFKVLNEKQSEYITLIKTI

>ETJ81766.1 hypothetical protein X908\_07455 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFCYRLVKYIGSYFAVLPKTDAIIFTGGIGENDSLVRQKVCERLAHLGIELDFELNKQRISGERMINHAN

SKVKVLVIPTDEELEIARITEELIGKN

>ETJ81765.1 acetate kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILVLNSGSSSIKFKFFDNKIVKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNALDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKVEYMEFAVIMIL

EI

>ETJ81764.1 phosphate acetyltransferase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQTVKSAYGFTFR

EAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPIAAIINDEDKLI

AQKYFDHALDGRNYVLINENFNFEEVQKLKEYDFITPHRFKYELIKQSIKNKKTVVLPESNDERILKAAE

ILLKSKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKLVQ

DKTYFGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVLAFADCAVNPSP

TAEQLATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELNIDGPMQFDCAY

DPKTAAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDLSRGCLVDDIVD

TVILSAIQAQ

>ETJ81763.1 flagellar L-ring protein FlgH [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVVIQESTTQSTQANKATSRTNTSNLGGGALTGSSGVVANALNKVNAYSNIGFQTNSSNKYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>ETJ81762.1 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVVKACKERGIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRAVKE

>ETJ81761.1 invasion protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNLLLYIKNNLTPTLAQILLQALKNSNNEKFFTFVLENIETICTWLNSNEFRDRYLSTKHPYPPLINPN

FIEIDSSRHCAELAWDLNLPLPKHYKFIYISPHGVGAAAFLRYLNQCCDVTCFASWVLPPDSKERYCINY

MCLNDNTIAQYAINISEINLPYFDKYLSLLDFNSKIICGVRDPIGLLKHSWGRDWSKVLRNYPPEFNLTY

DWRYYINYLTHQNHKIKIDINELQQGVFIISYLLKYFNKDNVYYLDMEEIRQSKAFDTMNLLAINFNFTP

PHKDKLDLFKIKEFRGYIRYLFPITLYANSKDINNTFYLNTPKNNKNFNIDRTSSIPIILDRKHINHEKI

DVIQEIIKNDLCNDMGVYIDKNDFKQLEQNNLLFSTIKHYLYDFLYQIKITIDETESKMMKEKDVIDYFI

KNKSLIYTFFNIFENELNHLKQTHPHIIDSWKYYKEFEKIYKDK

>ETJ81760.1 primosome assembly protein PriA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLKSKKNLKAIVLKECQKPDFKTIEIKEITKYF

LTPLQLELANFIVYYYASKLGFVLGFFETSPKYECQKMFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLEQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLECFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELSITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNILKCHYCNYTSLIEQNCPSCKGEMLEARKIGTAELLELLQNALPLAKIAKFDSDEITSV

KKLNTILKNFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIENYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQKSAQKLCEKFASQFRNI

KQVELVGYGICGVEMLYGKYRFYLLLRSENHKALVAIENYILQFKNASVDIDPIDFV

>ETJ81759.1 hypothetical protein X908\_07420 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKAFTLLELVFVILILGIFSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDTPIYSDFKSWIKIGKNHYRFALNAKEMVEFIYDSKEGLLKCIGSSR

CKDLI

>ETJ81758.1 hypothetical protein X908\_07415 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>ETJ81757.1 ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>ETJ81756.1 excinuclease ABC subunit B [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNMPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGETRLKQAIKDIKAELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDIPYTLFDYFAIKDRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEFLFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKSQNP

CKKLWIPPMNAANFKWLIIKNTISRQLQSNAILKRV

>ETJ81755.1 hypothetical protein X908\_07400 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNEEDLGEIYRKGKKLEKMPASERAKLVKELRKQMLEAAKALEFEKAAAIRDEINKLRDL

>ETJ81754.1 histidine kinase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQRQSPEQILKKLEVKAKEEEKNKLAKLKIFLGYAAGSGKTYAMLSEARTLRDNGVDVVLGYIEPHDRPE

TMALTQGFESIANLEIPYKNIVLKEFDLDATLKRKPALVLVDELAHTNAKGLRNEKRFQDIEELLKAGID

VYTTLNIQHLESLNDLVANISKIEVKERIPDRIFDEADQVELVDIEPNKLLKRMQDGKIYKEKQAKLALE

NFFRQERLIALREIALRRLASRVNLRASEQRLINDDLAYHTGEHILVCINASNAKVIRAAARLALAFHAK

LSALYIKNPNIKEEKALEENIELAKSFDAEIISVYDDIARQIAEYSSLSNVSKIVLGKNKDKKKFKEEIF

EAVAKKAPNIDLYLVNENQISTPKIRSKKGFDFLGFLKITGVLLLATFIAFVFHKFNTQPSNIVMIFILA

VFASSFISDNKIFAFYSSLVSVLIYNFFFLEPIFSLKVHDSGNIITFTTMFIVGFLTAVFTRRLKLQSKE

LTKRAYRTAILLENSEKLARVKSKQELWEQLGNQALKLLNLPIIIYPINKNNILSKPLLFFNDDKQMLKN

CFSADEIAIAQWVATNKERAGVCTNTLPNANAMYLPIEDGEKTKGVIGIVLKEKRPLQDFQYEILSALLN

EVGVRTRDIFLL

>ETJ81753.1 potassium transporter KtrA [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLRTLLSFFVVMLILCTLIYPFALNTVAKFIFPYQSSGSLVDKEGRPTLDISKAVGSKLLGQDFNKPYFL

HSRASVSNYNTSDTNESSVSSGGFNYAMSNPALKERVQKDLQKFLDENPQITKEQIPLDLLSASGSGLDP

HISLQAALVQIPRISQSSKITKEELEKIIQENTESKFLGIFGEEKVNVLAVNIAIAKAMKKE

>ETJ81752.1 potassium transporter KtrB [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSKKQNKLITKEILNNAIKGAFLKFDPRFMVKNPVMFMVEVGLILTLILSIFPTLFNGNSDERIYNILIT

FILFITLLFANFAESIAEGRGKAQAATLRQSKKDSKARRIKSDGSEEMLNSSELKIGDIVLVKAGELIPN

DGEIIEGAASVDESAITGESAPVMREAGGDFSSVTGGTTVLTDFLKIKILVGAGESFLDKMINLVEGAAR

QKTPNEIALNTLLIVLSLSFLVVVVSLYPFMQFLGVSLPISWLVALLVCLIPTTIGGLLSAIGIAGMDRV

TRFNVIALSGKAVESCGDVDTMILDKTGTITFGNRLANEFYEVQGISKEEMIKACVLSSLKDETPEGKSI

VALAQKMGYELEGNDIKEFIEFSAQNRMSGVDLQDNTKIRKGAFDAIRAYISEMNGKIPSDLETKVMEIS

NLGGTPLVVCKNEKILGVIYLKDTVKPGLKERFDELRKMGIKTLMCTGDNPLTAATIAKEAGLDGFIAEC

KPEDKIEAIKKEQAQGKIVAMTGDGTNDAPALAQADVGIAMNSGTQAAKEAANMIDLDSNPTKILEVVEI

GKGLLITRGSLTTFSMANDIAKYFTILPAMFSVVLPQMQILNIMHLATPQSAILSALIFNAIIIPLLIPI

AMRGVKFKPMKSEHLLLRNLSIYGLGGMIAPFIGIKIIDIPTAWILRILGV

>ETJ81751.1 ATPase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLEILITLIIAFILALIFGNYLYKIASCNKTIFDFIFNPIDNLIYKICAIDRKNMTWQKYSLHLIAFNAL

VAIFSFVIFYLQDKLFLNPNSINSMKGDLNLNTVISFITNTNLQHYSGESALSLLSQNTGILLAMFVSSA

SGYSACMAFCRALCGMQMGNFYEDFTRIITRLMLPLSFILAVIFISEGVVQNYHANFSVLTLENKFQSIA

TGPVAALESIKHLGTNGGGFFGANSSMPFENPTSLTNFLQILSMMLIPSACVVAFGLMVYHRKERQGFAL

MGKEGGVIFGAMGIIFIISLLLIYFSEKMSNPNLDSLGLNANLGNLEGKEIRFGTDGSSLFSAVTTAFTT

GSVNNMHDSLNPLSISATLLNMMLNVAFGGEGVGLMNMIIYVLLTVFICALMIGRTPEFLGKKIESAQMK

LIALVILIHPLLILVLSALAVVFAKDSISNPSFHGLAQILYEFSSSAANNGSGLEGLKDDNLFWNLSTAF

AMFCGRYLVLIAQLAIAGSLLAKNTQENTANSLKTDNLTFMFVLVCIIYIFAALTFFPVLTLSSVAEYLS

LWH

>ETJ81750.1 membrane protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKGYPMDVIFALLLLLAFGSLWFFIRFCEIQTRTRG

>ETJ81749.1 C4-dicarboxylate ABC transporter [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFLTSLSEGGQFAIQIIIVLICLFYGAKKGGIALGLLGGIGILMLVFAFHIKPGKPAIDVMLTILAVVV

ASATLQASGGLDVMLQIAERILRRNPKFLTILAPFVTCFLTILCGTGHVVYTIMPIIYDIAIKNGIRPER

PMAAASISSQMGIIASPVSVAVVSLTALLLNANHKLAGFDGYINLLQITIPSTLFGVLCIGIFSWFRGKD

LDKDEVFQEKLKDPEFKKYVYGDSKTLLGVKLPKSNWVAMWIFLGAIALVALLGVFDFLRPNWGQVVKNG

IPQVDALGNPKMDVLSMVSVIQMFMLLAGSLIIIFTKTDAKKIGSNEIFKSGMIALVAVFGISWMADTMF

AVHTPMMKVALGDIVKEHPWTYAVMLLLISKFVNSQAAAISAFVPLALGIGVEPGVIVAFAAACYGYYIL

PTYPSDLATIQFDRSGTTHIGKFVINHSFILPGLIGVITSCIAGYFIAMAAGYL

>ETJ81748.1 RNA polymerase sigma54 factor [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEEIERVRARFKFLDPVGVGAKDYKEAFLFALENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALTV

LKRFSTPPFLEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDAL

AMRKATLYKIGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAF

ALDEEGETSNVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKL

YELEG

>ETJ81747.1 hypothetical protein X908\_07360 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQDSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKL

>ETJ81746.1 lipopolysaccharide ABC transporter ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFMSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDV

TKDPLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSL

SGGERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAY

VIRSGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>ETJ81745.1 ATP-binding protein [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEFILAKDEIKTMLQIMPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISTIQIKISIKDDKRKYEIYE

>ETJ81744.1 hypothetical protein X908\_07345 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIFFAKIAFMRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQKYKVL

AIPSTKSIPKNAQNEYVVKL

>ETJ81743.1 argininosuccinate synthase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPNESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRESANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>ETJ81742.1 50S ribosomal protein L9 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKVLLIKDVKALGKAGEVKEVKDGYGQNFLIAKGFAKAATNEVLKKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTFKSLGLHEVSVKLGHAIHAKF

NINIKAE

>ETJ81741.1 peptidase [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAVKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHASLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>ETJ81740.1 hypothetical protein X908\_07325 [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLANAALNLVKNEQREKNKDKIDEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGNLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

VLAKQVMSM

>ETJ81739.1 hypothetical protein X908\_08105 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKVYITENGSKIKLRAENLPSVNNLNKDLFVFYLN

>ETJ81738.1 hypothetical protein X908\_08100 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MDFRSYEFSNDEDEYIVNAFELFSCVFWGMDFNQREKLEILRDENKNIFLKFKDNIKQFEKDKKYKWEKV

LKELKKCSKK

>ETJ81737.1 hypothetical protein X908\_08095 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQNEDLKFDEWNEVKKHIEKEKNKIVKKQKIYWIKIGKNIGSEIFGKGRVFARPVLVINVFYNGLFLGVP

LSSKTKNKSGKLYYKFTDEKGNSQVALLGQMKIFDNKRKITFESNVKNEDFILIKEKIKKNIID

>ETJ81736.1 hypothetical protein X908\_08090 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKILTSALALGAMTLIIGCGDGDLVELKNNGNDQAMFDLGNQEIMKQYPNYKLYDYTSVRAISDIKDPE

GKIKEMKRDLKIDKTPYSNYVFLLNPNDKKDYKVVSVYCDKDFKKRIYCSVNDAFRFYAR

>ETJ81735.1 relaxase (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MILNIIRKESKKLENKKSKIDILNNESLELKQKRLDFINLFNQYKKKNNKKYFKLGKELKKLSDDLNKID

LKILSETKEIQKINEKISLLNKELDKYNYQSIVDTKNLKNFVDFMRKNKLATKSDYDLLEKVKLSILKND

VNLDKSLKNTMEANTILTKLFNGKKESIFKIEKKINNINNYIEILKQSNAEVKEYENYLKILEKNKEFLK

DYAKNRLDNLKLSISKNKNKIPLNAYIIQEYKKGCEYLNINDDLKLVSVKSNKINYGGFNKSKDNQKIL

>ETJ81734.1 hypothetical protein X908\_08080 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSFSDYWEEIQKIKKASSVIKDNYKRNKVFNSFVNSYSIKHNINNINQTTYSKQAVVKLCSNLSKDGA

KRAMDYILNSADTPYLINEKGEEILTEDVIKDWKMDFSNQENAKDAWHLIFSIKENPTEKNLEILKKSVK

ETMDNNFFGYKYVMAIHTHQNNPHIHIVLNKRNILTKKKIHFNTKDDIKDFWNDVRSNFSLSLSSKGLHY

HNQVSYEKDLDRKYQKIKSTLYLDDIDTKKI

>ETJ81733.1 hypothetical protein X908\_08075 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKSIFQKILTLILISPIFLFGADGGNIASKLANSVNQQITEAGSSVASIINTISIVMGVIWITVMLLMTF

INMEAIKNHAKLLFGAVVIIGIIYGLSSASM

>ETJ81732.1 hypothetical protein X908\_08070 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MVETSCYRDLTRKTKIKGLTSTSWFALIILGFIAWFFWFYTHLL

>ETJ81731.1 hypothetical protein X908\_08065 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGTSIFTYLKELKNKPKKENLGKKEKKNFKEYINKINRGADNILMLAEPKIFTMAKENNIAFKLDENILV

TKDGNLCVGIEIKGISYSGISLEEEISYLQSRTQFFGKISSDIEINLIVKKDRIELVKQNSNSKNVFANQ

IIEKWENHKDAFQITYFLIISTIDKK

>ETJ81730.1 ATPase AAA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MESFKNKTTKEKEQSKEEKESFSFEAKKIIINETLTEAKRALSIFNPTQITADDILNFYATYSNAQETKF

RYTNELITDSYISSNVEFKKDYILFERNDGKQMFSRFISIKAYETDIISSHITTKILRSSSDFIIFMNMQ

AYEKEKAIKKVKDTGAFAPQIIKDELSGLIEIIKADRENLMLVSFSVYILAENLEDLETKTNELKGILAN

QNLNIVRETINQKALYFSFFPSRANLNARKRTLKVSNLASIANFEKDVLGFAKNDWGEQPVTIFRHLSGT

PYLFNFHWTDQGDKPSGHTMIIGGTGAGKTTLAQFLMCNLYKYDIDIFSMDKLRGMYNFATYTDGEYHDA

DFSDFKLNPFALPYTSENKSFLQNFIQKMANIEDTQYNAVNEISKTIERLYNNKLEEDIFTLSDFIDSLQ

YEENDIKGRLRPFQNSIFDNKQDALSFNKQLSILNMDSILKNPTLASLTASYIFHRLKNSAKNSKKRGFF

CFIDELKDFLMDENMRESILESILEVRKIGGVMCMGFQNLSFFDDIPKGASFLENIANYIIFPTTNAQTL

ENMRNKLNLTPTELKFLQEAGTNSRQVLLKMNLSNQSAILNIDLSRLGKHLRVFSSSSDNVMLMKELKEL

YPNDWRNMYLENQKPNLNQGAK

>ETJ81729.1 hypothetical protein X908\_08055 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKILKISILTITIIFFSACATTNKEIPKKSPCACNYDVIKIS

>ETJ81728.1 hypothetical protein X908\_08050 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MAFIDDKKDPNFIFQLERNIKAYMLYIIIALTTIVVSLAIAITFLAPFKEVKPYLVFFSDGETNFVKVEQ

AGMDMRADENLLKSILAGYVKKRETINRVDDSERYEEIRLQSQKMCGKHSQT

>ETJ81727.1 hypothetical protein X908\_08045 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MWETFSNLVKAPNSIYTTQGVFRSIEIINVSIFNKNVATIDFIAKITNRDGSENHLKKYRATLFFDFIPM

ELTYNSVPKNPTGFIVKQYSITDIIDNDTFNNTQQTKGAK

>ETJ81726.1 hypothetical protein X908\_08040 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKYSKIAFLALFVNLTAFADNIQIQDVPNPNANTGESILQTKEQALNNYTQTNIKIDPLGNQGQGQRID

NSSYANPQYQAQAFDTYSQSNGEQLSEEQIALMKSAIRNQNLNALQQRFFQKKYSGFENTLNLDYQPNKT

QKIRTRFAMATTLIFETDITNYILGDTTGFKVEEIPSMPNAIAIKPMLIGIDTSLTIFTKDNKLHTFYIF

STDYKNSKDPSLVIYIHDQNSKELIKEKQEKLAKDYLIIKEGIAEVRVKKSEIYNHYSQKAKKGDEWLIS

EEIFNDKKFTYFKYDKDKMPQVPAIFAVIDKQDSPVETRIIGNYVIAETTAKNLQSKVEIVMYV

>ETJ81725.1 hypothetical protein X908\_08035 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKSFLSLSLATILLSNNLFAEDIFDQTSEENVSKNISKKDNQSQNLLNKEDLDYLFKNSDTKFPVTDYI

YKGGFKEPNEDIKIHSEEKPKKEEDNNITKLAKIEEKKQELIQKISKLQKKFIKIILVLKKEKSKNLSEI

VF

>ETJ81724.1 hypothetical protein X908\_08030 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIRAGRLIPALLTSAISSDLQGIVTAQIEQDIYASMGNAVLIPRGSKAIGFYKNDNKIGQNRLEIQWREI

ITPQGVNILLTNALASDNMGMAGAVGSVNNKYLERYGMPYALSTISNVLLLSIASKAGNNNYAQEVYSQS

KNDVSTIVDDIIQQQSQIKPTIEIKSGSRIFIVPTNHMWFAKPKNNEVLIQYFQDN

>ETJ81723.1 hypothetical protein X908\_08025 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEISNYEKIKKDIEEGIQKRKEEDKKIRK

>ETJ81722.1 conjugal transfer protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNNTIVLNNILNVLKPYLEMEANELIFNKPCEIKVDKGDVWETIYDDRLNYNFLETFLIELAIKRNQRF

DEKHCHLSCELPYPFLRYRVQAQHKTSLFNSEICICIRIPSKSRFALENFVLNDKCLEKGWTYEKIKDLI

KNKKNVLVSGGTGSGKTSFLNSLMGEIDPNERIVTIEDAQELYIENENKTQLAVPKEESEIYSYQTAINN

AMRLRPDRLFLGEIDIRNTFTFLRVNNTGHAGNLSTLHANNPEDAIKAIITNIILGGGLQNPDNKMLTEL

IITAIDFIIQISRNKKQGRRDITDILDLKNDYAKLLI

>ETJ81721.1 hypothetical protein X908\_08015 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MGTIRVYLNEYEQRQLKKLSIKRNESQSAVIRKLIAIEKYAKTLEILEKNNEINVEYLYHIAQCGNNLNQ

IAYHLNIGIESPSQTQNRLPKLIEELSQILNEHKEHIKNKAIKTSINKKIKRLSPDENFIGEENQ

>ETJ81720.1 hypothetical protein X908\_08010 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNDKKITPAKWVLMFITSIILGIILYLLMVKIIFKPDLLVTHQVGLQIIHNLGNPALKLKAYVAVFALIL

PFIVCLIWFFMPQMNLKENYGNARFAKEKDFEEMNICNDRGLILGCNIKKGIKGDEIEYIRAKMPLSALV

VAPPGTGKTSGIILPNLFTVPNSTLALDIKGELYAKSAGYRKKYFNNEILLFEPFSDNNTLFFNPFDNSI

VKDMNFIQMMKLADQIAGTIFVAEKGKEGDHWVTSAKTLFTFFALYNMQKHKHTSLGDLTQAPKKDYFNE

LNEEFGKECLIEDEDTGEVSRDYNVDTFKVFLKQVANDENLDEIVRNQARAYQTAAEQEFASIKSTYDTY

MKVFTNPQVANATSKMNFRFEDLREKRITMYVVIQTEDMDILAPLVRIFIESLFKKLMSGQENSNPDKFI

YCLLDEFVRFGKMPFLLEAPALCRSYGLIPVFVTQSYEQIRKYYGEDDLGIIRANAGYQTIFRMNTEKDA

KEISDLIGDFTREKTSSSKGTFDFFKSNNTVSKEGYKLITSQDIKNQSSEDILILVTGFLSRPIKAKVPY

WFKNPKLKGADKISLEDNNTNTEGESKNDEINNDDSQNVNQEQNFTQENSSSKQIFELEELGIKVKKE

>ETJ81719.1 hypothetical protein X908\_08005 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MASIEDSLREKELQKAKDILAFCELEDGEYPISKEEAKELEYLKTNEMEQSSLENE

>ETJ81718.1 hypothetical protein X908\_08000 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MARKKDVNAEIKEVANEQVKDNSYKAWDERSNEEKKASINEYSKAIIAKAIKEKATFWGKDMSKKDIDNS

MPYNASKGIAYTGQTSALLRAVSELNGYEKPSFLTMKQANFLGGTLKKQLDENGKPVLTKSGKEAYEQGV

KIALLKTESYVPKLEKTDKQ

>ETJ81717.1 hypothetical protein X908\_07995 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFEIVTEKIYHKTPILETVTLYHTSQFDNLKMDKLKERDLESLEKLRDSIKKSNYDTRPNINNLGLGEKV

TRDINNFLNAELKGLDYFKIQDREVTKTQTNEKEQNKSQGRGM

>ETJ81716.1 hypothetical protein X908\_07990 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLGVLAEFIKFLGLNNETNFTKTRTEEKEDELKELIEYENDMPKYYEESEIIDLGNQKIEVIKSIKINPL

GKGKAMKTSQIKEQRIIKF

>ETJ81715.1 hypothetical protein X908\_07985 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKTTIDNSWLDALQGTMQDALKPLFENIFNGIQGTLYNGVAYTIIGIWVMFWCLNLLKNGYPSREELFN

AGKWVLTLCFIFGIFYSYDGYTTFLGWLMIPAQWLKSATAGLIGGNADSFGNQVTNAFNSLNDIMVSLWN

EGWKRWSGLFSPDTFAALAVFAGMFCFWCFYIVTFFVLAGVACIIVSSTFFAMIILSLAPATIPLLFSKK

TAPYFYSWLKIFISYSLYVPASFIILSICMIPIQKVQELGNIKQVYDNQFDNFFVPTLISLICIYLVAKI

PNWISQVMGVQGLDGGGSGGALDMAKSVGMATTSFGAGTLAKRMAGGSVGESLKHGIANAIPGSQSLRKM

AGDLKGQNSQTNLIDTMQGLTDTITGATAKAG

>ETJ81714.1 DNA topoisomerase I (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENTIIIIESPNKREKIEKITGAKVYATKGHFKSLSKNFLKEYENYEPIFDFSSDETKKRMNAIFADCKN

KDVIIATDPDREGYGIAYLFYEVIKNIAKSIKRAEFHEITESGINKGLKNAVEFSKSNLNDFEAFKARIV

GDKLVGFIMSPKYINKMNDKNISVGRVQTPALSLIVEREKAIQDFLNDDNNKKLDYKIKAKLEKDGIVFY

ANNPNLYPNKEEALEKIESLRSKNAKLYTIETKKSEIKPAQPFRTSQFQEKANKIFGFAPDKSMALAQKL

FEKGLITYHRTDSNALSVEFLNEVEAFFKEKQWYQKREYKAGDQSQAEAHEAIRISHLHSFEDIEKIARE

ENLSDVKKIPIL

>ETJ81713.1 hypothetical protein X908\_07975 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPSFSKREIKLLSLYLLGACFLTSINSKSKTCISSPSFILSSSS

>ETJ81712.1 hypothetical protein X908\_07970 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEKEGIGRPSTYASFLKTLLDREYVELATKGKNKEIVATKKGISLIDFLNENDDEWITKSEFTKQMEEIL

DTISKGNLQYIDFIKPLHQKMEFIHIDDSDQIRKPSEKQIAFAEKLAKENNLELPKDYKENIKVCMDFLE

KAKENAKPLPASAKQIAFAEKLAKENNLELPKDYKENIKVCSSFIDEAIKKNKK

>ETJ81711.1 hypothetical protein X908\_07965 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRIEFRNKDNSYYINGVKIDDEALQSENLNYYLTHRKEHLDFLICLYADFSKSEDPLYLKDLPLILKNIV

KLSRINDKYVFVSNSSSNLITKSLNANKYEAMLKKILSENRIFKAKKLKLF

>ETJ81710.1 hypothetical protein X908\_07960 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNQVNLCGYLGKDFELKYTPNGSAFAKTTLGVSENRRNEKGEYEAYTSWIPIILFGRKAEVANQYIKKAI

VF

>ETJ81709.1 hypothetical protein X908\_07955 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISSFEFIEKKAEQNQDYKGEPQPNQITPPKEAETMQSIDENQAEIYMQDDENLPF

>ETJ81708.1 hypothetical protein X908\_07950 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLIIINFILAFIAFFIATMMTFQGSLPAPVAAIISGLTVAFLYWYINGLATTDLWLR

>ETJ81707.1 hypothetical protein X908\_07945 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MIKKKNNENCIKNRVRTIMLDYEKFQTMSKEEYFKKYNVGIRFLFGCDINQKDEIEMISLRVFLPKKHFQ

EYKNIDIFKTMDLFKETLLFKGLTEQSIKIDFEKREFVMPDFFIINDIEIIPYFTQGGEKEEELSKEKFF

ELLKQSKIKELNYLCFLFFGLFCEEEYKYFCKANIHEEYNIMKNIKFKGKENEQFNDGICNDEQERLL

>ETJ81706.1 hypothetical protein X908\_07940 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNLMMEFAMMSKKDYYKEFIENDVIRVIFGYKNEKEYDSDDYFEMSLRVWVGKEYFDEFLNNPKVENNM

EVVKLFMETPFFKELTEQIIKIDFENWDFIIPDFFKKHNIKIIPYFQLGNNENLSPKQFFMFLKELKVKE

LKYITTILCSKSIEDEYKFLHKKF

>ETJ81705.1 hypothetical protein X908\_07935 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MLFFGVYTLFISILLSILLSIESLIPSKYNYEKQLVNVILKPILLLLYGVGLIFLFFNTEVANSLAVEII

NRINRFRIIESFLSSKEIGLYILAFIILLQVVFIFWAVYKGFIENEL

>ETJ81704.1 hypothetical protein X908\_07930 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNYKKFQTMSKEEYYKKYNIGVRFLFGYDNFLVCDKEKGIL

>ETJ81703.1 hypothetical protein X908\_07925 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNTMYPYLLNDKIKNHSMILCTEIECKKCGEKIYVEFQTNEKFIFKCPNCSRKNRKVFYAFCRSYIIIF

>ETJ81702.1 hypothetical protein X908\_07920 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRFAEVILLFFNVVFLFWCFYVFLSYRKNQKNIEDIGFKIDKEIERQEIERQEIERHKERNQFIYNDNIR

AKFASMKEGKITDCYIEVSTEDLKKLDTFTNMKRPLNVIFFCKNDEQHFLFAEVDTGRDYYIKEGAEIIH

EEYNIMKNIKFKGKEK

>ETJ81701.1 hypothetical protein X908\_07915 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNCFKKLKEKIILIKIEKEKASEEKFLKECEIKEAEIRMEILEKRKDDLFKQREELIHSILDEASFNALT

EERYLELFDNYHILTEDNKANLYGILRRAYNLNSMVRDLKCLDKSINELEDYSRYSILSTYYKKEPK

>ETJ81700.1 hypothetical protein X908\_07910 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNLLNKKFILVYAIYIGIIALIYFFGKDFLLVFDNLKNFFLSVNPAYYMLSLPISMFFVFIVISFLEKRG

IKGVLVYLLTVIPLLFLFFYYSNAKLSVDYLKSEAMFIIFLILLSSLIAPVAIYEMFREKEEVEG

>ETJ81699.1 hypothetical protein X908\_07905 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MISVTLLFFLFGLNKLLFNAKNTIYKLLSYIKIHAIFINLRTLLFLILVFNADLSYMGTVLFLVDLMTAI

SIFFAYAQLAYGFSIKDCMFYLVCGKIDKEWLKEIQK

>ETJ81698.1 hypothetical protein X908\_07900 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNFKKFLKFFFIINIIGISFNGILFYFNIPNGISFFIKSNYYIQGISIIMYITFSFWLYKIIVLKQMI

SEQEKIS

>ETJ81697.1 hypothetical protein X908\_07895 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

METIKKLIFFEKFFKEKGFKIIKISENKFFIKNF

>ETJ81696.1 chromosome partitioning protein ParA (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKFISICNEKGGCGKTTILSNLAIALYEEGKKNLVIDADPQKSLGTFVSIRNQEGHLKKFDYVIKQGEAY

FDYILDLKQNNKDYEFILSDTGGRDSKEMRFALALSDIVIIPIIPSQYDVSVFDRMIEVVKMAKVKNPNL

QVFILINLASTNPFLSKKIDELRDYIKSVEQDCIKLLDFVIFQREKYKIFTQMGLGVIEENKKDDKAYLE

MNKLCEFIKKLK

>ETJ81695.1 hypothetical protein X908\_07885 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQFKKANIDENTIQDIKEFANNASGETSLQKNEKNTTKRKKKEENKRNTISFEIYLEDELKNKIQDEVTG

TLGSRSEFLKKIILEENLYIQNDKDLIEIYNIVQKEGISPKSFIRKKLGLDTNIEKFNYDKKIRKKLLQL

GSVMNTEKKYMKKQIKLILQ

>ETJ81694.1 hypothetical protein X908\_07880 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRAYAYAKILFYLETKNLFSFEEQMQLTKEANNYDLDFKEFLALKIKSN

>ETJ81693.1 RepE replication protein (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTILDLRNFCKIS

NKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYFKNLEYIKEKD

KTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPLQKGKE

>ETJ81692.1 hypothetical protein X908\_07870 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKIKK

DFMKM

>ETJ81691.1 hypothetical protein X908\_07865 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEETREETPKTILSEWQEQFQNKETEIEKTLEKEKSSEELQKELEELNKLNFQEDLENQEVLKSQLEKQL

KLEDLPQEAKQTLEILEEKEKLDNDMRNFIELTTEYETPNEKRAFIENNLKEVRETPEINESLSILKEQD

ELQKEIDNTKEEMAREEKELKDQLENANKEKKGLSQEEYDEKFAEMEKEHAKKLKEMEEKMEKLEQNFEN

SIENLLNSTSLSAILKSLYEMDKSLHLILKEKENNFDELNRQREEKLNLAMQTEKTREVVIDFIKELHQK

TKGVENGISEMNKERNFYYELDKLTKNPEKMDLKETQKLQEYINYIDKETPNFKENYPKKYKQTKKIIEN

NIKKTMDKAKVKTANSQGQGMSL

>ETJ81690.1 hypothetical protein X908\_07860 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKKNKIFFLFFFASSLFSAGIPVIDAASIAQAVTNYQQMLKQYEQMIKDTTNFEKQMKELGVDMSSISEI

LGDTKSLINQTQSLYDGIKAVPDDFYGEIEDITKACNFMEKQSTFFQTKIHNVGTKYTDKVNTCISAISD

TTEVDKSINQLNQKLLTISKDDTKTYNETLVQIQNLENAKQYLASKANQDRVNKMLAFYDNYQKMKALIL

IQKQKWIKICKSYQNSCLKLIIKNKLKR

>ETJ81689.1 hypothetical protein X908\_07855 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTSLGLNGNGGQMNKSPSFELTYQEPQDPKEYNPYLKDIKQQPKDENGFPVFTF

>ETJ81688.1 hypothetical protein X908\_07850 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MRKISLAVIAFSLINVSASAIDLSEFTGDTKLSCEAVLCLASPYKPSECAPALARYFGFSARYWSDVVRM

RTNFLNLCPLGANNTIKSDDKDLEAWRNSLVNLTGTCYIPDLNKKYQRTVLWIETIQKCSHGEGCTTESI

KHYGYRIDPTLDNNCKILSSNKYSDYNLKYTCPTKFYPEEDWNNGYEKKEVNQSEFNSLKEEDRFTADKL

TEVSYSEYKNLPNNKRKISTSGFKTTYYRIDLGYYKKEWINKNCWVNQGK

>ETJ81687.1 hypothetical protein X908\_07845 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEDSFKKFLEEEIKRQKQEKENDNANNTRSNSTGIVRENDKTEPREISQSSSLSDPKRNGGYSTMATLGL

SDNLQTIRFKRELSESLSRNTDEPRNTAQSRLSGAESRESRAIISANKEFQNINDEKIPSKLNKEESKEF

KDYIKDLRKQTLLSYTKDENVAENILNLQNDLKYYTKKSEILTPNAKKDLEEKIKTSFSKLNNFENANII

PKGTLKEVLNQKELDLCQKISNQSKTKER

>ETJ81686.1 hypothetical protein X908\_07840 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPKPKVFNEEILTLPFDMILMQNGYFHKKDKCSRNFITMSNDSDLIVITRQTNGQYLYFNPNEESDRGNI

YSFCKNRGIKINDLLNDKVDKIELKHNIEPSNSMNKATVEALNNYKSFTTIKQKNFLMMID

>ETJ81685.1 hypothetical protein X908\_07835 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MPTYVLDNFEGKEFINSSGYVAYLRRPITQDKQGNTYNKPIKQLCYGNKGLEIIRNKDNKQKIEDIKTII

ITESMVDSLSLFELKDYDPNSTLLCATNGQITKSHKEIFAYFEKNAKNAKIVLGYDNDEKGLDFTLKTKQ

CFKQREIIEENPKLKDFNDDLLISKVFGLKKDFSLEDIQKEINSLQEKTEYLLGRKSVLIESKKTELIKE

ISNNDIPLVSYLKPKLENFVNLKALGKRFDEFNAYLGRITENKKLRSSENGRKH

>ETJ81684.1 hypothetical protein X908\_07830 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MEESIEKRINEIYQETLKQNFDEKYDILKQFDFISKNCSDEYKLRKDIIKKNFFNFMGEVLGSRVKRGFF

IDFLVSIFCLSFSAFAIILTAVIRSEELFLNYCLIAGFFGFIGIWGFDSNLNALNYYADLYSKEFIRKRI

FG

>ETJ81683.1 hypothetical protein X908\_07825 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKIEVIKNKFFDLESVLKGERKNIYNKDAYAFLECKDDKDNIARFFDLGEIALNYNQENNQIEVYFLKYE

FFQESYEILKYHIVNSIKFAFVSAEDTFKRLSNLKINVKDFIKE

>ETJ81682.1 hypothetical protein X908\_07820 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQKNIKIDFNSKIIALEIDYSKDYGNFFKNIVNELYLENKDYIKLKGYTRKINFQFGVDQEKQKRFLLLS

YEQIDKIKSINLLMLSEAYRLINFIAEKILIK

>ETJ81681.1 hypothetical protein X908\_07815 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MNKVLAKRLAKKAREKELFLLFKEFMREVEELEFFVFRKIKNSKEFKEYILKLEDKKSPKLFSDESLKVR

LIY

>ETJ81680.1 PTS mannitol transporter subunit IIABC (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MFLTFVESVNYIGKDNIVFVSNFIILCFILKIVCWLYGTYQVLRVSLYLIPLFIAILYIFGIELSLDSFN

FYFLTFIIVLNGLLWAYNQELK

>ETJ81679.1 hypothetical protein X908\_07805 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MENKKFILVYAIYIGIIAFIIFFGKDFLNLTFLVFENLWNFFSAIEGVYYAIFIVLFCSLAFVWALLINL

ENKIVGILIFLLIITPLLFLFFYYSNANFSLNYFRKLYDLQFPIILILFIVVFSCFVTLTIDEKRL

>ETJ81678.1 hypothetical protein X908\_07800 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKTNKIIWTCINCQKTNDTSLGSLKSLEKAEQILTSFNEEVILLAKCKKCKKNNELLMKFKIIGLSQFQD

ENKSKRTLNMVKINKERAKNKKEKIFSLLSGLFSDSYKDEKGNFDIEKIALHAKVNIKTAKKYILEYEKE

NKK

>ETJ81677.1 hypothetical protein X908\_07795 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MSNINAFLFGFTNMFNADILKATSLKDRKTMISDFYKKSEELRKHSNEEYNAKFEKITKQK

>ETJ81676.1 hypothetical protein X908\_07790 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MTKTQAFVDGFVGKPIKNECFNLWDLNAIIREKQAKLYKENIEFREKQIEKITKQK

>ETJ81675.1 hypothetical protein X908\_07785 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MQEKCISLMEKQTDHIINIERKLIEDDIYPSDFEEFSVEDVV

>ETJ81674.1 hypothetical protein X908\_07775 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKEFINRETNAGRIKKVFILPNGEKQFLINGEYYNEKAVGAKNLFLVREYARKIKPNLFELWAMSRVYSD

FKNQRISFKEEFEFNNKFMRKKHRNLQGLPYNFANLIQDIEFKLKEFKILN

>ETJ81673.1 hypothetical protein X908\_07770 (plasmid) [Campylobacter jejuni subsp. jejuni 81-176-DRH212]

MKNKFNTDLRIIIKELTISILIGFKRQDLLCEMNFNIDKNSIINIDIERKDCKSSQNKIDIDFNIEQFTF

KMQVNLDYISLEDFNERLEIFKKILKLNIKNFNELILQQEK

>WP\_024088052.1 autotransporter domain-containing protein, partial [Campylobacter jejuni]

MKKSIFLSFIIVFNGYALSDQELIGSKEAYKLTITGDGINVGVIDSAINGEHPSLKGKVLEQTFSTVNGK

TYTPDYSVDTHGSHVAGIIGAKYIDENKPHGVAYNAKLYGVQIFGNNKGSGSFNAPNVYDYFKDKDVKII

NNSWNSTTYPVVSMTQTGLYLDAYKNKSSNELFEQIQQNSTAKQLNQLTKENKTLVVFAAGNEGIISPGI

MALSPLYNEELRSFLAVGSVDSSQITKNQDGKLVVNGRGLSGFSNGLLGAENFSLVAPGSNIKNVNAAYM

QKSSFGRVDKDLYRTQSGTSMAAPMVSGAAALVAQRFPFLNGKQIADVLLSTANKDYIAPKLTVKETKLK

VVEYLGKRPILMEKTFHTIFYIDTDIPKKADGSVDKEQVKRDLSQAGYSRFYTPITEYHGVDESKYASIQ

KVSKESLFGQGILDVTKAMKGLATLDANRLNNSDVSNTYAGQNEAYYTIDTQGYEAIFSNNISQKKWDGS

LHKKDAINLPTNLANLNVGFIKEGSGKLILTGNNSYEGVTIIKKGSLALNNKSENEKARIAGNVKVLEGG

LFSGNGEVGKNLENKGIVRPGNEDLSDLIIEGKYTQEGQNSKLQLDFGSHKNSKLIANSYEIKGGKLEYI

PLPNFFTSGHYVSIDLGDLGTCLSSFGAVEVVSNNAVDFVAVLDSDKTSINKDKMPQPAPQPQPTPQPDI

TNPQPPVTQPSPITPPPTTTPPTTTPPPNHIIVKPVIKKDAYESANSTMGRSLRSIRSMHNLQDRYKDYF

AFLDNTDTKTMEKTLESLEANSYMQSASGLYYQQHILAQRNIMNALNPSFTSGNLMASLEKDPLLTASIE

SDVFMDLGLLDKMDKRYIWNLSPNYKKINGDNFDGRSTGLNLTIGGELNENSLLSFGLDVSDTRLDFENA

NLKNKYFNFSFNHILDLQNFKILSSASLARASNDMTRTIIGQNGSLSSNYDNLLSSLQLGLAKDFQVFNN

LTLTPLAYFNYNFIKQDAFSENGNLVFAKSYDAINHHTTSLAGGLNLSYLFDREAMQTKLGSFFIYE

>WP\_079279200.1 filamentous hemagglutinin N-terminal domain-containing protein [Campylobacter jejuni]

MSSSNGTMNISGSKTNSVIQWGGGFNIASGETVNFKGSGYNYLNIVYGSKSSHIDGKLEGGSNNIFLINP

NGIVVGKGGSINANRVYLSTSSVSNEDMQRFANGVSDTDAIFGLGLSLSPVIAKLNGNVINLGVIEGKSD

VTLIGNEVAHHDENKNVGLFISDNPISFRANLLYFILKSNYSIASGSMNYGIQKGSPVEQFVANNQVVYE

TNDKITSTDIDANVMNSIFNDLKFNSSVNIEDLSKFYKDGKLLTADDLASINQSMDFITALYGQTQDSNN

ATFANALKEVLGNSYGNLGKANQAIIKTKEILSQIPKITEQQKNIQKAYDQAVDAYNEAVKKYNAALSGV

TGSNASETITALKTVLDKAYNDLKNAEANLESTTASNNSSLKSSNETLASVSIDGYKLTVNGEYLADYKT

VNKPNDNNSGSNNGNDGTDSGDINNGNNNVSNNNPNDTIGQQEPDIATALLMQTTDEDPNINEDDKQASI

DEASTQLSGNTCIVSDNFKAGNPCSR

>WP\_002855832.1 MULTISPECIES: M23 family peptidase [Campylobacter]

MVKNKFTITITDINGSRHFYLNQIIKKIVFYTIAFIVLFLVFSGFYIKYLDSKLSDISEKREELLKKSKE

LELSNSQMQKSIEEKTQQYAAIEDKIASFEEALGLEVENNLTISARLDNLQLTNEQQLGILGQIPNGWPI

ENKGITGNFGWREHPLLKRREFHPGIDLRAEIGTPIYAPASGVVEFSGYSDNGYGYNVILLHNFGFKTVF

AHMMRKEVVKAGQFVSKGQLIGYSGNTGLSTGPHLHYEVRFINKTLEPLYFLNLQRKNMNDFFNQERRVP

WQSLIKAVSAQHPALAQKQQ

>WP\_079279199.1 class I SAM-dependent methyltransferase [Campylobacter jejuni]

MLEWILTLSQHSTQKGTKMDNSLSAYTQKYDKEGYGLQYPDGHVIRFYERILKYKLSKTSGKLLDFGCGN

GVHSKYFKNITGGGGIEPYGIDIVPSLKKVWEKDPCLDSKNFHIISPNSSFKKLFNTKMDFIFANQSLYY

LTKQAFKEAVQEFYELCNEGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLSGSSYIRFTKDIE

ELKEDFKPFKPLFWGDYELINLYNFEGSVEHFIYIGQK

>WP\_002859931.1 DUF2018 domain-containing protein [Campylobacter jejuni]

MFNKTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMVELLEKQGLTEMDVKNFILENGDFIEERQNDIYI

ELGAKILGHEG

>WP\_079279197.1 DUF115 domain-containing protein [Campylobacter jejuni]

MQGSTYEKLKYKLKNFQELRNFSFHIGKDSIDINIIDKKHLKKIYQNPIKELEENLKLYQEQYTNYPFLF

FYGLGNGILYKALLKNTLHKRIIIIEKELDIIFITLNLIDFSEDLFKGRIIITHTLDYNNNIAELIFGLT

EISLFLKTYQINLHSPFYRIYQEDIKKINNINLQTIKYLTLKKGTDPLDAMVGIEQAIWNLPEMFKHYSY

KELLDKRKNLSKNAIIVSTGPSLTKQLSLLKQYANKAIIFCADSSYPILAKHNIKPDYVLSLERIPLTSE

FFNNDFGEFDKDILFILPGLTHPNSIKYLKKFKKDYMLVARHLPFALSLDLKEYGYIGGGMSVAHSAYEL

AILLKCENIILIGQDLAYSKEGKSHTDDYINLALHEKDFERNKGHFTTIAYGGEGEVESSEVWTLFRKIF

ENYAINNQKYIKTYNCTEGGARIKGTIEKPFAEICKEILTKDIKKPLKKLKKKTKKEQFDKMLKSYRKIK

TNIQLALNFQKECKKTLRKIQKITQKNKYINLENIVKDIDIIREKLSHKKYFFLHEILGPTLHHEESLIA

PIYTQSVHNESQRQNKILSWIYANESLIETIIDLIESQNTRLKKAIIPLQDELEKRSLI

>WP\_024088038.1 DUF2972 domain-containing protein, partial [Campylobacter jejuni]

NFNLIEEWLLSNDFNEKYKKENHPYPSLLDPKKLNDENEKINYKNIPAELAWEMNLPLPDGYKFVLIGGH

GTGEKAFQEMLSRCNVKILEKNIWYDNGLDRYKAFYGNLKIKNNYIACIPILECNFYQYDKYLHMINKHV

PAICLVRDPIKIMTSVYNYKILKNKDNLTFSNLNCTDHLFDNYYYAVTKNKTIASKKEIENGINNIKNIN

KHIRFTYIARTHLKNLKNISHVYYIDVSEISNNKAYETLYRLSKIIGFNMPNDDKLINNLSYTHYLRFIF

DIKKPIIYKHYFNNKFIEIYLYGSYNMINKNFYDITNMFNFKNKELHMNNIFISIKKNHLYEILCNGDLL

YEIKLNINIFLDKINNMINMFKKESIKDNDILEILSKNYESSRFFKQLIEYEFFDFLNSDKGKNWYSYKE

IKT

>WP\_002859481.1 MULTISPECIES: DUF1882 domain-containing protein [Campylobacter]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALNEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEVYQKERGSSWSKHM

>WP\_024088048.1 HAD family hydrolase [Campylobacter jejuni]

MNKTILFDLDSTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLS

YREIYAQIYLEQTTLLPKAKEALELGSEIADIGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALKRLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKTHSMVFLNAYEAVNYIA

RLN

>WP\_014517459.1 replication initiation protein [Campylobacter jejuni]

MTKDKINNNLVYHNDLNCFTFKNFKAVDYNLFFTICYYASQNIKTSKNIIPISLSFEQLRDFLPQEKNKK

RFYENVVEFALKLNNLKTSNLTLDNEGYRIYSVSSFFDEITVNEKEEKIVFKIKEKWLDLIVNVVREYTI

LDLRNFCKISNKYTKNLYRYLSQWQGTGEFIIPFEKFNLLLDIPASYDIDKIEQRIIFPSIKLFKENNYF

KNLEYIKEKDKTKQGQGGQVTTFTFTFDIPEERKDKTLALNKKWGRRRKTENIIPPPLQKGKE

>WP\_079264278.1 MULTISPECIES: methyl-accepting chemotaxis protein [Campylobacter]

MEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVSDIANNILEDVKK

KRF

>WP\_002853953.1 50S ribosomal protein L11 methyltransferase [Campylobacter jejuni]

MQKKYYELFFIVEERYKNLFLDFAFDLGIEAIEEKDNGVYIRSHESLEDLSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTYSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFYKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

G

>WP\_079279198.1 hypothetical protein [Campylobacter jejuni]

MKNIIKSIGDLRVSVVLFLLFALFCALATFIESAYGTPTAWAMVYDTFWFEYIQLLLGINLLCGMFRYKM

FGLKKLPLMIFHISFLFILVGSAMTRYAGFEGILPIREHTQNSLIESSKTSLRISAIKDGERYSAVNDRY

IGNLPFANSFKLKLNLGDDQAVLKYKDLILNAHYTYKENNNSDPLLVLMLSQKGSQGVDVKFEKGEVKNI

EGVNFAFMNDNVKAPFVKIDENLTLSSSENLHFLSMLDGQNLDLKIGEKANAKERRLYEIKDISFVVKAA

SLHAQEALEGSNRPQDESFWLWFKSAWLEVGRTMLISTFGEPQNWKNSLLLHFKDFALSNENKNLELTGS

NALKLELSYKNESKEFYIFEYNKPIMIELAGQKFFISWALSYEQLPFDIYLRDFVLDRYPGSMSPASYAS

EITVKIIMKILIIEFL

>WP\_024088086.1 MULTISPECIES: DUF4910 domain-containing protein [Campylobacter]

MDKLDFRSQDFNQTGKAMYELACELFPIPRSITGQGFRASLEILNKTLGGGYTQISLYKKWHKGF

>WP\_002856915.1 MULTISPECIES: cysteine synthase A [Campylobacter]

MKVHEKVSELIGNTPIIHLKKFGINVFAKCEFLNPSHSIKDRAAFEMIKDALDSKKINQDTTIVEATSGN

TGISLAMICADLGLKFIAVMPESMSLERRKMITLFGARLELTPANLGMKGAVDKANEILLNTPNSFMVSQ

FENISNKNAHCKNTALEILRDLDNELDIFVAGFGTGGTISGVGEILKEKLEKVHIVGVEPLNSPLLSKGE

AGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGLMVGISSGANVFAASMLAKKFPDKR

ILTMLNDTAERYLSTDLFA

>WP\_002856494.1 MULTISPECIES: enterochelin ABC transporter substrate-binding protein [Campylobacter]

MKKSLVFAFFAFFLSLILTACNSNSNENNASSTTKTNTATVKVLPISMSDEGDSFLVKDSLGENKIPKNP

SKVVILDLGILDTFDALKLNDRVAGVPAKNLPKYLQQFKNKPSVGGVQQVDFEAINALKPDLIIISGRQS

KFYDKLKEIAPTLFVGLDNANFLSSFENNVLSVAKLYGLEKEALEKISDIKNEIEKAKSIVDEDKKALII

LTNSNKISAFGPQSRFGIIHDVLGINAVDENIKVGTHGKSINSEFILEKNPDYIFVIDRNIIVGNKERAQ

GILDNALVAKTKAAQNKKIIYLDPEYWYLASGNGLESLKTMILEIKNAVK

>WP\_002855343.1 MULTISPECIES: formate dehydrogenase [Campylobacter]

MTNHLGDIQRSKCIIIIGANPAVNHPVGFRHFLKAKEKGAKLIVVDPRFTKSAAKADIYARIRPGTDIAF

MYGMLKIIFDEGLEDTKYLDERVFGIDKIREEAAKWTAEEVENVTGISKELLVQITHEVAKNKPTTLIWA

MGLTQHTVGTSNTRLAPIVQMVLGNIGKFGGGVNILRGHDNVQGASDMACLSENLPGYYPLNEATWRYYA

KIWGVDYEWLLGNFVSKDWMHKTGLSLARWWAAALNGKDGNDAIDNAGTPLKALVVMGNGITSTAQQVKV

KEGLEALELLVLADPFVNEAGIIAERKDGIYLLPAATQFETSGSVTATNRSGQWRFKVVDPLYESMEDQE

ILFELAKKLGFYEDFTKTLRDEKGEIVWPENATREIAKAVRSIGLNGWSPERLKKHTLYWDKFDEVTLEG

KDEVAGEYYGLPWPCWSDKHPGSPVLYNTDIEVAKGGMGFRNNFGLEYEGESLLAKNAPLNSPIDTGYPQ

ITKDNIEKVLGITLSAQEKEKMGSTWSYDDSNIIATKCIEKGIVPYGNAKARAVVWTFKDKIPLHREPLH

SPRNDLVQKYPSFEDQKALYRVDTKFVSVQQAKDYSKEFPLNLVTARLVNLNGAGMENRASMYLTRLTPE

MFCEINPELAKEQDIKAGDMIWVHSPEGTKIHVRVKVNPGVAKDMIFLPFHFTGVMQGVDLTHNFPEGTK

PYASGESANTVTNYGYDIMCQIPETKGGLCRISKDGK

>WP\_024088102.1 hypothetical protein, partial [Campylobacter jejuni]

NDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>WP\_011812794.1 hypothetical protein [Campylobacter jejuni]

MYNPNSAIERVKNHLAYKLGQAMIEFTNNGGGVYSII

>WP\_009882126.1 hypothetical protein [Campylobacter jejuni]

MYTGKTKFLMKDALFLENLAQQININNKYFFSMTSLCSKAKNHLEMKGFNIYAAL

>WP\_015016417.1 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine diphosphokinase [Campylobacter jejuni]

MLFRVMMDDKRFKILSTSPMLINEAFGFKEQKDFTNAVMLIQTNLHARALLKVLLYYEVKFKRKRTFKNA

PRTLDLDLLYFSQKVKRDKWCEVPHKGAKERVSVILPLGMI

>WP\_024088064.1 phosphopyruvate hydratase [Campylobacter jejuni]

MLVIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDNDERFGGKGVLKAVANV

NETIADEILGLDAFNQTQLDDTLRELDGTNNYSNLGANATLGVSMATARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMIMPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEGKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALAKKERTAKYNRLLEIELESDEYLGEKL

>WP\_050583785.1 hypothetical protein [Campylobacter jejuni]

MLSQAKANKESKENSKISFANAFLKQNASKLNEIQNANSQTLARSEVLNSTNTTNTSNNTNFSISSKTSS

PNYDISSEFKNSIYTLKYKQEDTSNIVSLAYGYGVDANGYMGSDFNKAAGLPEDFKIHKSTLDEIERFNQ

HNMASETSGNYYDSFDMASIVKSHYNSFNQVISAFPNDKTSFSEADLEQLPKGLNDGCNQNKEYIVTHIF

NAEQFHEAQAIKYSTMNLGMNLMKLDFSPQSMEQGPSNEGEFNPDMSVYPQNEDGSYSKEALFMSFLKSY

SPIPSPNQVVLSPEAKVREAKLELEMKANPSFSVSLDDIMTGKVDFASLLKGYAQDGWLDAGIYAMEKGV

AWQNTSIGYGGAWFDNQFNQAKANGWKASSESINSYVGSIMDRLNNLIGQTRV

>WP\_024088108.1 methyl-accepting chemotaxis protein, partial [Campylobacter jejuni]

EVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANESAIISS

TVSDIANNILEDVKKKRF

>WP\_024088104.1 amidophosphoribosyltransferase [Campylobacter jejuni]

MCAVVGVINSKNASTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENVVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNSMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>WP\_024088075.1 chemotaxis protein, partial [Campylobacter jejuni]

MQSINSGKSVGISAKLTLWVGILVVLILAITSAISYFDSRNNTYELLKDTQLKTMQDVDAFFKSYAMSKR

NGIQILANELTNRPDMSDEELINLIKVIKKVNDYDLVYVGFDNTGKNYQSDDQILDLSKGYDTKNRPWYK

AAKEAKKLIVTEPYKSAASGEVGLTYAAPFYDRNGNFRGVVGGDYDLANFSTNVLTVGKSDNTFTEVLDS

EGTILFNDEVAKILTKTELSINIANAIKANPALIDPRNQDTLFTAKDHQGVDYAIMCNSAFNPLFRICTI

TENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINYKTKNVSTIEVK

SNDEFGQISNAINENILATKRGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLD

VLQARVGSDMNAIHKIFEEYKSLDFRNKLENASGSVELTTNALGDEIVKMLKQSSDFANALANESGKLQT

AVQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAI

EAARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQ

TTKDNVEIANES

>WP\_024088066.1 DNA polymerase III subunit alpha, partial [Campylobacter jejuni]

QSYIKGLYYYPRINKKLLEDHSEGLICSSACLQGEVNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFK

DDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIATNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRH

SVHEFYVKSPEQMSELFADIPEAIENTQEIAQKCNLDLNLGNPTPPNFKFTREYAKDHNIILPEETKEFS

FDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRLEVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGP

GRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPERVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQV

ITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPEELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARA

LEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKNDERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNA

IKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLGIFQIESGGMQSLNARLKPERFEDIIAVLALYRPGP

MESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYGVIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDP

EKMKKLKTDFADGAEKQGYDRAKAEDLWELIVKFAGYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALL

TSEENNVDKIAVYIDEMKKMNIKLLPPSINKAIREFSALEQDGKDAIIYGLGAIKSVGIPAVENLLEARQ

DGEFKDINDFLGKIDPTKINRRTLESLIKAGAFDEFGFTRKALFDNMENLSEASRKMAEVRKNAASSLFG

EEELTSGVQVNFTPKNEEFEVMEKLGYEKEILGIYVSGHPLDRFYEQINAIDYVKSLDFESLKNNGEILS

IGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVFESNVEEIENIIKDENLKNNAYGFVLGFKAEGGEKP

SFFLKAIKDLQSLEDGEIKAIKKFGAKKDFKNKEENHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIAR

NAHNPNEKNNKKLVLKVISAGSCLLYHTDFIISDSIVEEISNKYA

>WP\_024088057.1 phosphate acetyltransferase, partial [Campylobacter jejuni]

SKVVDLILLGDEEKIKQDSAKLSLDLNTIRIINPLKSEYNQEFASILYEARKSKGMSLEEARKLVQDKTY

FGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVLAFADCAVNPSPTAEQ

LATSAYVSAMTAKSFGLEPRIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELNIDGPMQFDCAYDPKT

AAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDLSRGCLVDDIVDTVIL

SAIQAQ

>WP\_024088047.1 threonine synthase [Campylobacter jejuni]

MKLVESRNVNNVSSFKEALINPNAPEGGLYSPLNLPIFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKISEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRTLKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIVPSGNFGNALGAFYAKKMGAKISKIKIASN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILISSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDPLKPSIITSTAEWTKFTPSMIKALYDRDSK

NEKEDLKFIAKEFNVQVKEKILALFDLKNSDEKVFEARNIKKEILDWMQK

>WP\_024088095.1 hypothetical protein [Campylobacter jejuni]

MPMVNALKAKGWNAEVIFFEVGKKDEIYKYVKENFDGYVSRINPGNLKEENEYFDMLRKLCADKLVGMPH

PDAMIGYGAKDALTKLADTDLVPSDTYAYYDIKTFKENFPKSLAKGERVLKQNRGSTGEGIWRVSVEGNV

SGDSLPLNTKIKCTEAKDNHVEHRELGEFMDFCEQYIIGDNGMLVDMTFLPRIKEGEIRLLMLYNTPVNV

VHKKPAEDADAFSATLFSGAKYRYDKPEDWKTLVDMFLGELPKVREKLGNYDLPLIWTADFILDTDEKGN

DKYVLGEINCSCVGFTSHLELADEVASNIINIVSKTKA

>WP\_024088070.1 membrane protein [Campylobacter jejuni]

MFLLDFLISLSFIFEISALVLSFYFKNSRIFFLTLVLLGAKLPYFYASFFQANLFVALFLPMIFTLFCLG

KHHALILSKKNIASITTLIFIGVLSIILPRNTTFNSAGLEFHFIALDFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLIIAFFAAYFQFLFQEGAGIRYFEFASLVFCFYLLNHAYKLAFFDILTKLPNEKSLTRFTKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFRAKIFIVDNDFILIFNDKNQALNHLAFLESTLKN

TEFNLENENFKPDFKLIWQESEENLDKSLQSLRIKLLGYKLFFVRFNFDI

>WP\_024088039.1 hypothetical protein [Campylobacter jejuni]

MEKLLQELNVNIKVGNQLSYQILMSNIISNLDIDKRDKEILFLLLQDRDRNYIRINNNEQCYRNIVNYLN

LIRPLELPLYDLLRIGGNGDGGYVMYNGGGGI

>WP\_002803271.1 MULTISPECIES: formate dehydrogenase [Campylobacter]

MSSVGENIKLTRRSFLKMAALSSLATPLLARSETLREASADELKEAYEGSKKVKTVCTACSVGCGIIAEV

QNGVWVRQEIAQDHPVSSGGHCCKGSDMIDMVRSHVRLKYPMKKENGEWKRISYEQALSEIGEKLAAYRK

ENPESVMFLGSAKLNNEQAYYIRKFAAFFGTNNVDHQARI

>WP\_002868943.1 membrane protein [Campylobacter jejuni]

MNNVLDYDGYRFYQSSYDQDEKGTVLSVNKDPGKIPTYIGYFLLCLGMFMNFLNPHSRFRTLARLINKDT

LKHTSVIISILLLSFGSEKTFAQDLNSTLPVVNTNHAKALATLIVQKSADGRMVPFDTLSREILEKIHQS

DSYKGQNSNAVMLSMLVDVDKWQMEPFILMPQNQAVRDAIANILEIPSAKYISYKDFFDENNRYKLQKYV

ENANRKNPNARGVFDKEIIKLDERANVVNLVFSGELFKFIPVQNNPNNVWLAPFSAVTTLKGDEGHIVLA

LIQNYFSAVENAFKDGNWTRADEGLKFIKEYQEKIGYKVMPSKTKVEMEIFSNKAEIFVKLAPVYLIAGF

LLLILVFSKMVVPNLKISFIFKVVYVLNVLAFVIHTVGLGLRAYLSGHAPWSNGYESMVYIAWALSLSGI

FFSRKSPIALSLTSILSGVVLMVAHLSEMNPQITNLVPVLNSYWLSIHVSVITASYGFLGLCALLGIFTL

FLMCFLKKDGKYNLNILRNITEATRINEMAMIFGLCLLTVGNFLGAIWANESWGRYWSWDSKETWALVSI

LVYAAILHLRMIPKYCNQFVFALWSMFAYWVIIMTYFGVNYFLTGLHSYAAGEAAQIPNYVYWGFALMVV

LALFARRKRNFVGKL

>WP\_002868779.1 hypothetical protein [Campylobacter jejuni]

MNFLMSSTFTHYSNASYNQTILQKDAHISMGVENTYDLALNGSPYLIGAITTYGDSTNNSLNIKASSSVE

FFTSLPKKDKNGNNTFDERITHLVGGLAYQGNVKNNKIFIKDANMIIHGPSKAYASLAAAHISAGYIIKT

FKPVKTF

>WP\_010790677.1 MTA/SAH nucleosidase [Campylobacter jejuni]

MLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEAEVNATL

AKIEELKLENARLVEKQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLESRKISG

VLSKMDPKKASELTLLLKNLDNNASN

>WP\_004314304.1 30S ribosomal protein S12 [Campylobacter jejuni]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVRDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>EES89683.1 hydrogenase nickel insertion protein HypA [Helicobacter canadensis MIT 98-5491]

MHEFSIVASLIENCERIAKENNAESIFEIYLEIGRRSGVNAALLQRAFEEFKVGSMCDGAKLFIEDVEVE

VFCEFCKKQSQVVEICYTKCPLCQNEGVKIVKGTEMLIKRLVME

>EES89260.1 DNA polymerase type I [Helicobacter canadensis MIT 98-5491]

MATKTLTIIDTFGFLFRSYFALPPLKNHEGFPTGLLTGFAKLIMQLHKDYPKDYLVFALDSKGENFRKQI

DPLYKANRPEVPQDLKLQLEVAIRWVEDMGFKNISIEGFEADDVIASINKQVNKLDVNVRIISHDKDLYQ

LIDKDTFLFNPSKKEEIREEECKEKYGVYPSQFVDYQSIVGDSADNVPGVKGIGAKGAVNLLNNFGSLDS

IYQHLDEIPQKRTRELLSAAKDDAYRSRELVKLRDDLLEDFDLSECEMPQDSPLLRILDSLREYDLNSVL

KKLHKNPITKKKISQIESQENEQEKKFIYKTHLIDNDSKLKEFFSTLPKESIFSFDTETTSLDVRKAKIV

GFSFSVNGVDCYYIPIAHNYLGVESQVSLECARECIEQIFQSQYVIGHNLKYDLEILKTNFDFVLEDFSK

VRDSMLLAWLLQSDTLCNLDFLMKKYFNHEMIHYKDIVGKNENFSNILIQHACEYASEDAAACYQLYFKL

RGLMDESLLEIAQKVEFPFIQSLMNMELSGIKIDLEYFLGLNAETREKLHQISEEIFVLANKRFNLNSPQ

QLASILFDDLKLEASKKTKSGYSTSELVLNSLYDSHPIIPKILEYRESFKLYSTYIEPLIEHAKSDLEHR

IYTSFMQTGTSTGRLSSKNPNLQNIPVKTLEGRRIRKGFIAKENCLLISLDYSQIELRLLAHFSQDKAMI

DAFLQDADIHLETAKKIFGEEMAQEKRAVAKSINFGLIYGMGPKKLSETLKINFQEAKTYIQNYFTSFPM

IKNFLKEQEEFILENGYSKTLLGRMRKFDFEGVQEYQKAAFLREGINAIFQGSAADIIKMAMNKIMHSSL

ESKLLLQVHDELIFEAPKEIASKEAKKIALIMENIATLRVPLKCSISIGENWGELK

>EES89117.1 methionyl-tRNA synthetase [Helicobacter canadensis MIT 98-5491]

MEEILNSKFYITTPIYYVNDVPHIGHAYTTIIADTLARYHRIQNEEVWFLTGTDEHGQKIQQSAEKNNKN

PKEYVDEISAKFKNLWDSFGISYDAFIRTTDSYHKESVRNVFSKMFKKGDIYKGEYEGNYCISCESFFAK

SQLINHKNCPDCGKETNLLKEESYFFKLSAYEDRLLQWIESNPDCILPRMRRNEVINFIKEGLEDLSITR

TSFDWGIKLPSEIESNDSKFVMYVWLDALVNYLSALGYENSKENKMEFWPANYHLVGKDILRFHAVYWPA

FLMSLELPLPKHIAAHGWWTKEGAKMSKSIGNVVNPKEVVDLYGIDCFRYFVLREVPFGQDGDFSQKALI

ERFNADLGNDLGNLLNRLLGMGAKYFNNSLQVDLKSYKQSFEAESTTIKTILGSLKNFMNEVQIHRYLEE

LWKIFSLGNGIIAKKEPWKLIKEQKEQEVAELLVFIANLLIKGALCLYPCMPDSAKKILSVFGLEASAQN

YLNFILDDKILSQVSLNPIPALFPKIEETPIETKETNLKTNNKQTSKETLKALTIENPISKEDFAKIEIK

IGTIIEAEALPKSEKLLKLKVDLGESRTRQILAGIKAYYAPQDLIGKQVCVLANLKPAKLMGEISEGMIL

AAKDSEGLSFIMPQNPRENGTQIS

>EES89043.1 GTP-binding protein [Helicobacter canadensis MIT 98-5491]

MTYTLSKASFFTSAQNLSQCPPPLLSEIAFLGRSNVGKSTFINLLCKQKNLAKSSQTPGKTQLINFFLTH

WKQKDSNEILQIYLVDLPGFGYAKVSKSQKELWNKNLIEFLKKRDSIRLFVHLRDSRHPYLEIDSNLIEF

LTPFLRKDQKILQIFTKFDKLNSTQKTNLKKEFPNALFSSSLQKNNLQEISDFILNHTLGIQTKLGEAK

>AIJ27546.1 Cpp4 [Campylobacter jejuni]

MRTEYKHNPPIPYSLHDMRVKKIIIQDKTIVLEFEDGYEKLTEPFEQVEGNITIEGVDFDCTCVMLQSKW

GNYGKFNGEKLELERFIKRYKNYSFEIVDELYGYNQVLYSGYLSILETEDLVQMDISIYFTGKIIYDTKE

>AIJ27545.1 truncated pTet35 [Campylobacter jejuni]

MHVPEKGKTFAGEVREETVAWSKDTYQLLKQAEQGKVKSYVQDIALAVLDCKETATSRETFIRLMNERGY

GVDWQDSHKYITYTDLAREQAGEKACKIRDNKLEKYYNMDFGKESMEHEFERNARTAEAEQSKRAASRVK

PTEPDRAGKQSAQRSVGDVERELRGIDEAVKSRTSEGRAEQEAHQRAEAERRAAEEQQRIASRRYIGRDW

EPER

>AIJ27536.1 Cpp2 [Campylobacter jejuni]

MMKCEWILCPVCGSKTRNKIRKDTVLENYPLYCPKCRQERLIKVDNLKITVIKEPDA