>ABS44856.1 3-oxoacyl-(acyl-carrier-protein) reductase [Campylobacter jejuni subsp. doylei 269.97]

MKFSGKNVLITGASKGIGASIAKTLAGFGLKVWINYRSKPELADALKDEIIASGGVAAVIKFDASKEDEF

ESGVKTIVESDGELSYLVNNAGVTNDKLALRMKLEDFSGVVDTNLSSAFLGCREALKIMSKKRFGAVVNI

ASIVGEMGNAGQVNYSASKGGMIAMTKSFAKEGASRNLRFNCVTPGFIKSDMTEVLSDEIKQTYQDNIPL

KRFAEPEEVANCVAFLLSDYASYVTGDVLKINGGLYM

>ABS44855.1 altronate hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MKKIMGYRREDRKFGLRNKVIIIPSVHCANKVCENIARKCNGAVYINHQHGCSQLEFDALQTRDVLIGHG

SNANVFGVLIVGLGCEVIQAKAVAQKIKEATPYKKVEYLVIQECGGSKNTIEKGIKIVNEMLESAAKLQK

SEGDFSDLILGTECGGSDSYSGLSANPALGSLSDFVIDEGGAVILAETTELIGCEAILAKRAKNDEVAKK

VYDKILAYENLVKSFHADIRGANPSPGNIAGGLSTIEEKSLGCVYKAGTRTLMDVIDYAKPVVSKGLTFM

NTPGNDIEQLSAMVAGGANICVFTTGRGTPTGSAIVPTIKMSSNTFCYENMNDAIDINAGSIIDGAKTKE

EVRDELIDLIVRISKGELVKAELNEQNDFSVWRLATTC

>ABS44854.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MVYEIQKNFLLSDCTLLENLKKDNIPFQNSKFETFYTQITLNHSVKFQSFYNEFYKITKFNNSILEQNQE

EKISKKKFEKARKKIIGKSIKKESFEFKFCSLKSYIDIYEEPRICILKIFFPTLDSANKFKIPKDFKIQK

ELHHDLNSKHIVLYGFEYQNFDIEKCFKIIEKNQNFSLDFPNYINAYDGFRIFLFYLFKKLKFYWTLSLE

RKDKQSLCEFLFYSRSLYIVLSSMNTILDKNLSNILALKFKDITKKTQDILASENSNQDLLLFLSDEKIQ

DLFNDFDFFIKENSFYEGDCKDRFFKQLVALELRKKIILFRKNMLKKFDLELFENSFFELAIFLEYFYRF

LEIKNLNKLYEKYCKDRDKNIFSKMINNKNKFCKLLKKSSKNLKIYEG

>ABS44853.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MLETKKSFWPYGILLSLLAIIIACIVTIFIASHHPVYEDDFYFDSYQNVENNYNQIQKQQTNFDKFFKVN

FQNDKITFIGKRKIPSYEVDQNFYVANFKISALQNINSDDLKVQALLTRPFTKNFDQKLEGQVKNGILSI

ALPKLYKGRWELKLKLYANQETVGFFSYELNAQ

>ABS44852.1 penicillin-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MREYKKNRVSKVAFAYCIALLFMIIFISSTFFLTSKRHIPNTEKDQYDLALRGSIITKDNFTITSSKQIY

RAEIDLRSINKDKFDLFLKLFQIYSGISNDQVADIKKRMQNQKKRSYNFVLLQNLDSKQASYLKDLAKKL

YIQGFFKAFTNNSGRVETRGLNIIEHEEDRIYMSKDSFTPIIGYTKMILDPESGILKNIGVKGLEKYYNE

CLSPVQNEKIQGLKDIGGNIILNLNSLQQKKINGCDLYLNLSLKLQKSIEKAIDQRNEDLKANEIIVGVM

ESKTGRILALASSRRYDPQNRGKDLSVLNASAIEYGYEAGSVIKPFIFTTALRLGKIKMDEVINTYGGSY

KLGRFTIKDDHKMNKMTMEEVIRYSSNIGMIQIAKRLNNIEIISGLKIFKFGEKSGIDLPYEQKGEIPNP

KRLRDIEKSVLSYGYGLKTTFIQLLAAYNVFNNDGFYITPRLAEKFYQNGRFTNLDDDVKKEKILSSEAA

KAMQNVLINVIEKGTGKKAITQGVIAGGKTGTARIAERQGYTSNRYNASFFGFANDLNHAYTIGVLVRHP

TKPYSYYAAQSALPMFKDVVDILINEEFLTPIQDNNQTSTNN

>ABS44851.1 UDP-N-acetylglucosamine pyrophosphorylase [Campylobacter jejuni subsp. doylei 269.97]

MKTSILILAAGLGTRMKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEHFPKTQ

ILEQDLQNYPGTAGALRGFEPKNERVLILCGDMPLVEQTSLEALLGNNAKLNLAVFKARDSKSYGRVVIK

DDGVEKIVEFKDANAREREINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGVDVKFVGECEVYENVRIGGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNANLNAVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKYKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRTGHKIIK

NYYYKKFQK

>ABS44850.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MILITSAKYSSSDFTLEFGKIPPSFLPLGHKRLYEYQIELFKNCNQKVFLSLPSDFKLSKFDEKKLKELN

VEILFVPNNLSLGESVVYCLNVCCAFDEKLYILHGDTFFKELVFKENSLQAAKVKENYDWAYLDNEFNVL

SKTLEDDLILAGAYSFSHPQFLIRCIVESSYSFVDGMKSYSKAYAFDIIKNDTWLDFGLITSYFHSKKAV

STQRNFNNIDISNGYIKKSSSWQEKIKAEINWFDNLPKELFIYTPKVITYEDSYEIEYLCNNTLAELYVF

GKLPSYVWKRIFKSLKEFLDKLHSFKSNDKDINFNCKEKTLKRLQEFSKQSGIDSHKNIVINSKSYPSIL

TLVDKLDFYMNDMNEFSLIHGDFCFSNIMYDFRAGAIKTFDPRGCDFNGKITPCGGGGYDFAKLVHSVFG

LYDFIIAGFFECKFNGNNIEFFIEEDKNILDIQKEFLNIFNIDDNIKALTLHLFLSMLPLHNDFKEKQMA

FLANAFILYDKFFKESK

>ABS44849.1 L-lactate permease [Campylobacter jejuni subsp. doylei 269.97]

MEQILTWQQIYDPFSNIWLSALVAFLPILCFLVCLVVLKLKGYQAGFLTVVFATFIALSAYKMPWNLVGA

SFIQGFTNGMWPIAWIIIAAIFLYKLSIKSGSFEIIKKSVMSITPDHRIQVILIGFCFGSFLEGAIGFGG

PVAITAALLVGLGLRPLQAAGLCLIANTAPVAFGAVGIPIIAMANLVGIEQHSVSAMVGRMLVPLSLTIP

FFIVFLMDGFKGVKETFPAILVAALSFTTTQFLSSNHLGAELPDIISAVVSLAVTTIFLKFWKPKNIFRF

DNESNFTQDNTLSFNQVLKAWSPFILLIVCIIIWTQPWFKGLFDKDGILSYTSITLQFSNITTGILSPSI

TSIGEAKPLSLTLGVDLINGKTVAQGGTAILLAAFLTIAILKIKAQDAAECFWATLKEMAIPCITIGLVV

AFAFISKNSGMSTTLGLAFAHTGDAFSFFSPIIGWIGVFLTGSDTSANLLFGTLQQVSAQKLGISEALFL

AANSVGGVVGKMISPQSIAIACAAVGLVGKESDLFKFTLKYSVAFIVLIGIWTCIIAFFLQGIIPEVIVK

>ABS44848.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MFTLILDFTFYSINTLEKVFLGRTALVILFVVFIALFCVKGLFLYILLALELFLLLYLFLGILFLRFYKS

>ABS44847.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDGEFFMIYDAIDVSKIKKLSNLSDEAIKSSLANEFLELVSGFDNISKKKFKREFAEFLFEKGVNEKDVL

KITNLSKTTIWRIMNENKKN

>ABS44846.1 adenylate kinase [Campylobacter jejuni subsp. doylei 269.97]

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAQVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKKRVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>ABS44845.1 hypothetical protein JJD26997\_0854 [Campylobacter jejuni subsp. doylei 269.97]

MNEGHEEFEVSTEDVLSLDLEDYDLNEDEKDFLKDLIEVAKTAPYAKNSGFIRLSWF

>ABS44844.1 uroporphyrinogen decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILNVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYNALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFSYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYALQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>ABS44843.1 flagellin subunit protein FlaC [Campylobacter jejuni subsp. doylei 269.97]

MMISDATMMQQNYYLNNAQKASDKALENIAAVRAISGVDSANLTIADSLRSQSSTIDQGVANAYDAIGVL

QIADASLTNISRSADRLNELSVKMNNAALNDSQKGMLRTEAKRIQESINDSFNNATYNGKNVFQTMNFVV

GSGTETINLNPLATGGLSIDNQDSITNFMDQLGSLRSEIGSSINAITSNINASVQNSINSKAAENNLLNN

DMAKNVNEFNANYLKENVAFVTVQNQLQSKIANLLQ

>ABS44842.1 hypothetical protein JJD26997\_0346 [Campylobacter jejuni subsp. doylei 269.97]

MIENTLNLFNQTEALEGGALQSEGSCQFNKKLLPLSLINLIKNSYL

>ABS44841.1 ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MVDKFFLNELFKSISFSYQRFFIIVLSVFIGALACSAFLNIYFDIDTKLSKELKAYGANVMISPKQDENF

ISNAEYEKIKENLKARALTPFLYDFLNLGSTSGVVLGTDFRALKITKPFLEVKEGSFSLNDFDENSAFLG

VNLAKQLGLKIGNELQIYNPNNGKSIKLTIKGILSSNDEFDSIVLAPLSVVQNLSDRAGINYANAVVYGN

FDEVKAKTQVISNEFIDAKPISSVSLSESLVLGKIKALMFLIILVVLIIVTTSVNTTLSSIIFSRKKEIA

LRLALGAKKSEIFKLFASECFIVSFFASLIGAFCGIFLANVFGYLIFNSSIDFRFIAVFIALIISLIFAF

LAAFFPIKRALKINVCENLKGE

>ABS44840.1 Mg chelatase-related protein [Campylobacter jejuni subsp. doylei 269.97]

MKKLKCISFHEGLDIIDVESTFTRGLPNLSIVGLASVAIKESVERIKATLLSCNFVFPAKKITINLSPSG

IPKKGSHFDLAIALLILLQNEELDDFFVVGELGLDGSIKSTNELFSLLLFLSAKIEKAKIVVPKSIAQKA

SMIPNLEIYGLENLNGAIEFFKEKNYENFRFSHNHPLFANPLQIENEIFLQNMDFKLDFKDIKGQEKAKR

ACMIAALGMHNILFEGSPGSGKSMCAKRLVYIMPPQSLSEILMQNAYMSLDSKDCEFTKIRAFRHPHHTS

TRASIFGGGTKNARIGEVALANGGVLFFDEFPHFNKQIIESLREPLEDHKIHISRVNSKITYETKFSFIA

AQNPCPCGNLFSKNLSCVCSENEIKKYKNHISAPIMDRIDLYVAMDEISKDDKASISSKEMSEKILQAFI

FGKKRGQKEFNGKLKDEDLSRFCVLEKDAKDTLDLAISRYNLSLRSLNKILKVSRSIADLEQSLNINKTH

ILEALSFRARN

>ABS44839.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MKKFKEFSLCFLFKVSEQPVLVKDLLEANALFNDGVLVDPSKLNFNFKILNSYIYFGVFCAVVLLPLLLI

THYFLTKLDFHISIVSAVMVTACVFIGYDVFKVYTRKIISKKIIQKAWALHFPYFAYEKYSIMAGEIYKE

ALKEEIPKANLEQYVLDKIIHSK

>ABS44838.1 hypothetical protein JJD26997\_1380 [Campylobacter jejuni subsp. doylei 269.97]

MKAFVKNLAKKSPSEDFLKENANDVFYQIQALLQEAVVLIEQKKKTKAVEIQKFQKALTYFKS

>ABS44837.1 hydrolase, carbon-nitrogen family [Campylobacter jejuni subsp. doylei 269.97]

MSKIAALQFPTLALSESRLDYYLKASKDNGANLVVLGEYVINSFFTELLHMPKNMIKEQSEAKKESLIKL

AKKYELEIIAPYVNVEAKSCKKLCLKVTPNGVKSYEQKILMPYEHWNEEKFFSNKAQSELKIFTFNYEKL

KCALLFGFETHFDIFWQQIMTKKIDLVIVPSACTFESKQRWEELLKTRAFLNSTSILRVNRIGKTKDEWN

FYGDTLFINAFGEIESKLGSEEEMLIIEPKKSDEARKLWGFDKILKNF

>ABS44836.1 hypothetical protein JJD26997\_0568 [Campylobacter jejuni subsp. doylei 269.97]

MNCVNLIKNSLEGEFGNIEVDLEKKILSLNLEENQVSNFTKEFQDLGFEIVERL

>ABS44835.1 peptidase, U32 family [Campylobacter jejuni subsp. doylei 269.97]

MIIPEIVAPAGNFTKLKIALNYGADAVYAGVNNFSLRSRTAREFNYESFEEAIKYTHERGKKIYVTLNGF

HLSSQIEGLKRHILKLREMKPDAFIVASVGAMRLVKELAPEISLHVSTQANILNYLDAQVYKDMGAKRVV

IARELGLKDAKALKENCDIELEAFVHGSMCFAYSGRCLISSVQSGRMSNRGSCANDCRFNYELYAKNPEN

GTLFRLEEDENGTHIFNSKDLNLCSYIEKIMQENCISAFKIEGRTKSEYYVALTTRTYKMAIQDALEGKF

ESSKYEKEIATLKNRGFTDGYLVSRPLEKTDTQNHNTNIEEGSHQVHAISEDGSFFKCKGKIVLNTPYEI

LAPLGDVIQTCDNELGKIYQKEDKYFVEFKKLIAKNNKEFSEIHSGNEHEIQLPNKISALSFLRKEI

>ABS44834.1 N-(5'phosphoribosyl)anthranilate isomerase [Campylobacter jejuni subsp. doylei 269.97]

MLKLKICGIKDEKNAKDLALLNIDFFGLIFAKSPRRVSLRQARNLSAIFHEKDKKVVGVFVDENLEKILR

CIKEAKLDGIQIYRTITKEEFEILKVQNVFVWQVISVANSLELKSKIFADLVLFDAKGILKGGNGISFDW

ALLSSYTKDFALAGGIALDNIHEALKTGAKILDLNSKLEDDKGLKDINKIKQILKELKK

>ABS44833.1 hypothetical protein JJD26997\_1411 [Campylobacter jejuni subsp. doylei 269.97]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENIQNANLALKNSD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAENLREFLMNEFE

KLKG

>ABS44832.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKELEKYSTCLKCIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFESPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIEKVNQNERL

>ABS44831.1 peptide ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MFKFLIILAPLIFLFLCALFAPFLAPFDILSTHLENLHQVPNFTYILGTDFLGRDLFSRLLFALRNSLII

GVGGSLLSIIFALCYLFLARCFFYVFWMRILEFFLALPAFLLMMFFQSMITSDVFLMIFLIALIHWCFIA

RIVESELKRLENLDFYKANIVLGRTKFRAFLKDLIPALKTLIFTLFIFNIVHAIATEATLSFFGLGLGFE

IPTLGTLLGESSKAVFIGAWWMILFPLLSLLLLFLPLLWLGNFLQKIWGIRS

>ABS44830.1 hypothetical protein JJD26997\_0862 [Campylobacter jejuni subsp. doylei 269.97]

MNILLRNDIDDLNSKEFKKFLECREAFCLRGMKNKNQEIFVKRMAKGEKIIARISSVIDVKEKVKIEILK

ISRKEKGIKEEILFEESFFTNYHEKTQFHDFHGFIIYRIIKLFLRDYLKL

>ABS44829.1 glutamate racemase [Campylobacter jejuni subsp. doylei 269.97]

MKIGVFDSGVGGLSVLKSLYEARLFDEIIYYGDTARVPYGVKDKDTIIKFCLEALEFFEQFQINMLIIAC

NTASAYALDVLRAKAHFPVYGVIDAGVEATIKALHDKNKEILVIATKATIKSEEYQKRLLYQGYTNINAL

ATGLFVPMVEEGIFEGDFLQSAMEYYFKNITTPDALILACTHFPLLGRSLSKYFGDKTKLIHSGDAIVEF

LKERENIDLKNHKARLHFYASSDVESLKNTAKIWLNL

>ABS44828.1 hypothetical protein JJD26997\_1503 [Campylobacter jejuni subsp. doylei 269.97]

MWGLCSACFYLACDTKMQDLLKNMIILQVYAFLRLEILE

>ABS44827.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKVLNFFYENHPKFEVSYERKIQISKPNIIIKGPRFCGKKTLIFNFLSQFKASEILFLDLYDTRFEKQSL

ERLADFLNENLQIKILCLYNLDFIPNLEKIKIPIILSTSIKDLNVNGFEELEFDYFDFEEFVSISKKNLP

INNLVGLFLQSGRSKFGEKNILLRQSFTLLELEILKYLALNLGQQSSISKIFMELKKRLKTSKDSVYQAI

KKLENTYVIYTLKHDEKKLQKIYFKDFGLRNNLCISKDFSHLFENLVLSELFKFKEEFFYNKYFNFYSQI

SKIAYISSPTLDIDLIKLRAKKILPKALELGIFHVIFITLSSEDSFFEQGVKFEVISFDKFSLGF

>ABS44826.1 hypothetical protein JJD26997\_1145 [Campylobacter jejuni subsp. doylei 269.97]

MESKLRRKSKRFIEVLILNAFTLSKSYPQVKLKGLKPFFTWAKLLRYARFKISLKMNLR

>ABS44825.1 leucyl/phenylalanyl-tRNA--protein transferase [Campylobacter jejuni subsp. doylei 269.97]

MESSNLYSKLLNAPKNTPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCVLNPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDARSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVNIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>ABS44824.1 quinone-reactive Ni/Fe hydrogenase, cytochrome b subunit [Campylobacter jejuni subsp. doylei 269.97]

MSIYKEAFMQNKEEKLQRKAEYEFSIGLRLTHWVRAVAIVILIGTGYYLSYVFQSPISNGEPVNFMQAKY

RLVHQAVGFVLIACIVFKVYLFFCDKISAKERRSVWDIFNIKLWIEQVKFYIFLGKHPHLKGVYNPLQFV

TYFFFYLVILGIILTGLILYTHTYHEGLGGFLYHILRPLEAAMGGLADVRTYHRILMWVIMIFVPVHIYM

AIFNAVKGKDGAMDAIISGYKYVKEEKH

>ABS44823.1 chorismate synthase [Campylobacter jejuni subsp. doylei 269.97]

MNIFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYAIRDHRGGGRSSARESVARVAGGAVAAM

LLREFGICVQSGVFGVGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGINAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVASAMVRLVLADCLLLNTSA

NLNNLKNAYGLK

>ABS44822.1 high affinity branched-chain amino acid ABC transporter, periplasmic amino acid-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKLTLTLSVLTMVNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLSNGDIIKLIAIDTKG

DKLETLNGVNRLIATDKVLGIIGEATTPNTIQAISIAEKKKIPLIAPVASGDKLLDKKKYASRVCFKDSF

QGDKFATYVSKDLELKNAVIIIDQSNVYSLGLARAFENSFKNNGGKIIKKLVINSGDKDFRAVVSQLRSL

NPDFVYMPIYHPEAALIARQARQIGFDKLLAAGDGVNNQTFIDLGGSAVNGVIFTDSFDYNNPSTQLGKD

FVAAYEKVKGTKELPAFSAMGADAYFVMLNAMNACVDNLSSECINNKIHQTKDFQAVGGVISIDESGNAI

RSVVIKEIQNQKQNYKTIINP

>ABS44821.1 phosphoribosylformylglycinamidine synthase, purS protein [Campylobacter jejuni subsp. doylei 269.97]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNGV

IEDYELVIEKE

>ABS44820.1 glutamate-1-semialdehyde-2,1-aminomutase [Campylobacter jejuni subsp. doylei 269.97]

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYDKLGTLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSNLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKVIDITLEAVRES

FKRI

>ABS44819.1 putative nicotinate phosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MTSKTSLALLCDFYEFTMSQGYFKNNKKDQICYFDIFFRKIPDSGSFAIFAGLEDILDFVENLSFDAEDI

EFLRKQGIFDTEFLDFLTSFKFKGEIYAMREGEVIFPNEPLLCVKATTIEAQLLETFLLLSLNHQSLIAT

KTNRIVRAAKDSKILEFGSRRAQGSEAALKGARAAFIGGCIGSACTLAGKIYNIPINGTMAHSWVQMFEN

ELEAFKAYVKIYPKNPVFLIDTYDCLNSGLKNAIKVFKEFGIQEGGVRIDSGNLLELSLKIRQKLNQAGL

QKCKIIVSNALDERSIKKLKEQNAPIDIFGVGERLITASSDPIFSCVYKLAALEDQGIKPKIKISENNEK

STLPHFKKLFRVYDKNTKKILFDELYVFDENPNQDENLERKELLELVYKEKRLLKKPSLNTIQDYTKEQI

SKLDESFLDLDRFVKFEVKLSPKLQNITEDLLKTRF

>ABS44818.1 hypothetical protein JJD26997\_1120 [Campylobacter jejuni subsp. doylei 269.97]

MPRLADLLGFIKNKNKFDKITLFKWLISLGGEGAVFNDRKDFKYYFLVIENSKKVD

>ABS44817.1 glutamine-binding periplasmic protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIILIFISFFALNLSAKDLVVGMELGYPPFEMSDKTGKASGISVDFLEAFAKKNGYKLVVKNIAWDGL

IPALKIAKIDLIMSSMTITDERKKVVDFSIPYAKANLAILTPLKSDIANIKDLDKKGKVLALKRGSTGHL

YAVKNLKNATINLFNKENAAILEVIQGKADGFFYDQLTIYRTWQKHQDTTRAILAPFQENPEFWGIAVRK

GDEALKDKLDNFIDESRKNGFLDFLGNKYLKDIKEVFKQNNITFFL

>ABS44816.1 aspartate carbamoyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MRHLITTKDFNKIEIMELFKEASDFLDEKPRTFLEGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQSDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKYYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>ABS44815.1 ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MNKENISIISAFFSRISQFFNEFSWQDIKEVSLNSITSFSENYENILKPALNETIYMSLMAVLFGFLLAI

IPGILLTIWDKNGIKENKIAYSILDFITNILRAFPFLILIVVLLPLSKIIVGTSIGTNAAIVPLAIGIAP

YLAKMLESAFKEIDKGIIEAAKSYGASNIQIIFKVIFSEALPAIISGITLTLIFTIGFSALAGTVGGGGL

GDVAIRYGYERFNKEVMIQTVVILLILVQLVQILGNLFYTWAKNSKTTYIIATLLILLGVSIVININNDE

NFFWQVIVFILFLGSLLYKGFKK

>ABS44814.1 putative molybdopterin biosynthesis MoeA protein [Campylobacter jejuni subsp. doylei 269.97]

MNNIFQTLKDLEDQISCLNESELISLEKAKNRILAKDLYATKNLPSFDNAALDGYAFNYADINEALEIKG

TIFAGDKNFYTIAKNECYKIMTGAKMPKNTDTILMLEDECIKENKLIIKKAPKQYNAYRYKGEELKKGEL

LLQKGAKLNDKHIALLASQGLYQIEVIRKIRIGIFSSGDELKEPWQECDEESIYNANALPLLTMLQNASY

LGIIKDDFKNTKEALENTNFDLLITSGGASVGEADFMEKALDELGFTPLFKGLKARPARPTKLYQKSKNF

VLILPGNPMAAYLSCFIFAKKIVALLSGNLENPLKFHAKMGIDLRLKNGRNNLILGNLEKDIFIPFNENK

FGSGMILPLVKSEFLLISEENTSELKKGDEITLLKI

>ABS44813.1 translation elongation factor G [Campylobacter jejuni subsp. doylei 269.97]

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVANIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKAVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFNHYDEVPKNVADEIIKKRNG

>ABS44812.1 purine-binding chemotaxis protein CheW [Campylobacter jejuni subsp. doylei 269.97]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>ABS44811.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVNLCDIKKEPQINYPTFWDYKVIFEVHVKASEIFQEILGQREYKFEHSNSSTSGKYQSYLLNVYVDNKK

DRLDIFDKLKAKAKFIL

>ABS44810.1 sensor histidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MNESILKSLDSNEKETLQKGLESLIEQTYVIENEYKTLNENYNSLRAMVDEIIEVLPSALWILDKEKNII

LQNQEALKNPKLLSIISLDKIRDDLEFEGRFYAVKIIAHNEKTIVSATDISDEKRNERLASMGSVAAHLA

HEIRNPIGSISLLASTLFARSELKNKHIVLEIQKAIARVERIVNSTLLFTKGVHINALNFNLLELKEECE

SAINSYNFTSQIDFEISFLDKQICADKALLGLVLQNLIYNAIDAIEESECEKPMIKILASCDNEKICIRV

YDNGCEIKDEKLVFEAFKTTKLKGNGLGLSLSKEIINAHKGELSFQSDPKNFYFTLPLV

>ABS44809.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MRILVIEDEISLNKTIIDNLNEFGYQTDSSENFKDGEYFIGIRHYDLVLANWTLPDGDGAELVNTVKHKS

PRTSVMIISSKTDKETEIKALKAGADDFVKKPLDFDILLARIEARLRLGGTNVIKIENLVIDPDEEKITY

KGQDIELKGKPFEVLTHLARHSDQIVSKEQLLDAIWEEPELVTPNVIEVAINQIRQKMDKPLNISTIETV

RRRGYRFCFPKKS

>ABS44808.1 porphobilinogen deaminase [Campylobacter jejuni subsp. doylei 269.97]

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSTDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLE

IISLRGNVNSRIEKLKNNEFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESIKDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGEGLAKEFITKGAKELLKKAESII

>ABS44807.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLNAKEQKLVDAKPFENFYPKLSVQQCNTNCLFDLLESRLYLSFLSEFADQNNPFLSNVYAKLLNSITDF

EKNVQKITSVKLAIIIPEKTIKSYSNTIINSSIAYLLRQRAEIKVKVFLTGTEDSDKIRAALDAAQDQGY

QYAIAGFTLKGANELKNYSGNMKIFIPTIHKNNMQISNQNIIFGSIDYDAQIATLLNKSNANIAIFSDGS

ALSSNLNSRILAQNNNTRIYTIEGEKLDFSRFLRSQGGVNNASIFFNTPLIKTALASSQLRIYNIHPYVL

LSTQINYNPTFLSLTQQGDRENFIIANSINNHDDNLIYLNEIFNQSIDYNWIAYATSIGVDYFYTEFLNK

KSESLFDEKIKNSQVDYKVRLMQGKQASFEELK

>ABS44806.1 FlhB domain protein [Campylobacter jejuni subsp. doylei 269.97]

MSKIKRSIKKAVALGYQKEKNSAPKVLASGKGESAAKIISLAKEHGVPIKEDEDLIEILSKLDLGDEIPP

NMYKAVAEVFAFIYQMVNKTPKN

>ABS44805.1 putative undecaprenol kinase [Campylobacter jejuni subsp. doylei 269.97]

MGNLYALILGIIEGLTEFLPVSSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLSVGFFPTGVIGFFVAKYLNALFNGWVVVGMLIFGGVMFILIEFAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFVVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>ABS44804.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKILFSPSESKNENCVKNPINENSFIFKELFPYRMEALKHYEEFIKNANLQNLQEFFGIKKENEIDKFKH

DLKQAPTQKAIMLYTGVSYEYLNFKALDKKSQNYILENTLIFSNLFGVVRANDTLPFYKFKQGAKIGNFA

IEKFYKEHFSKALDKYLENEEMLDLRAGFYDKFYTPKKKFYTYKFVKNDKVISHFAKAYRGILLSISAKN

QVKNNKELLAKLPSNLKLKEIQIKGLKEEIVLEILD

>ABS44803.1 thioredoxin family protein [Campylobacter jejuni subsp. doylei 269.97]

MGIFRIQAYFFTLIIALFFVACDSGENFKALNSDKTYNFAYNGFEKSLKLNDKAQNFALVFFTKDCGVCK

EQIPILQNLAKNYDFNIFVVLGDANDANDAKTWADKKGLSNLAMFYEKRATKYLSSAIGEIYGVPVLSFF

KEGKMDEKFIGLTPYSILEKEIKKVKS

>ABS44802.1 tat domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>ABS44801.1 hypothetical protein JJD26997\_0966 [Campylobacter jejuni subsp. doylei 269.97]

MGKNKDYFGKFLKTLEKGLDNLTGETEEDRAKFKKHVKEIFEKLFNKKENNENK

>ABS44800.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKTFNTDDYITIVKIIPFSERRALFCDFARKNEIKIEKINWKNYISKKELRKAYKIYKSKPSERNFFHEE

KLIVKAFEDVEKFLRSENEIKRF

>ABS44799.1 acetylglutamate kinase [Campylobacter jejuni subsp. doylei 269.97]

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDEDFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>ABS44798.1 lipoprotein releasing system ATP-binding protein LolD [Campylobacter jejuni subsp. doylei 269.97]

MPNLIQANKLTLGYDELVIKEASFAFKNDDFVFITGKSGSGKSTLLKSFYGDLEPISGKLEVCGSLMNKI

GNLELLKLRQRIGIIFQDYKLVQEYSVEKNVMLPLMIKGYSKKVCHDQVAKLLKHVNLTFKADKLPNQLS

GGEQQRVAMARALAHNPKLLLCDEPTGNLDEYSSDIIWTLLKSARELLGTCVIVVTHRIPSNLRVDYRRF

NIENGKMNEIF

>ABS44797.1 D-alanine--D-alanine ligase [Campylobacter jejuni subsp. doylei 269.97]

MKFAILFGGNSYEHEISIVSAVALKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIQ

QGGFFSKGFLKENKLECECVINLIHGGDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMLRKGQNSKEKLRFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCVINDKFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEVYLNEINPNPGSLANYLFKDFSTTLNTLADQIPLEKMIKINYNFLHSINGQKGKL

>ABS44796.1 hypothetical protein JJD26997\_0362 [Campylobacter jejuni subsp. doylei 269.97]

MPVSPLGNVNYINQNMAYPATQASNELAKEGFAATLNMAEFNEKEKTLNKLEKVNEIHEIKEEIKEKAEQ

EKKKKHNQEAKTSDDEENEEDESKDPNFKDAQSIHRLDISI

>ABS44795.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLKQRLDKVNAILAKLIALTEEDIENIKVAKHESVTPSVEEKNKLIAEFITTKKQLDVALVELNNSSTKG

LSELLDDEDKQKLDLLKKNLQNLHSKNKEYAKFVLIVKDFLDGLVNKMFDINNGTNNAYGDKKTNPESIF

KINV

>ABS44794.1 anthranilate synthase component I [Campylobacter jejuni subsp. doylei 269.97]

MFVKNANFYYRQILEKFENSYFAEDLTKVIIGIDCDYLDANELSFSEFKAKYYEALSKDKICEFAGFFGV

FSANFVSLFEKIPLSSKKNYDFPLFLFANAKAYLIYEKNSKMFFKFGASKYFEYLKDDIEPIKTKRKNDF

EILNSLKDEENDFLKMCEKAKEYLLSGDIFQVVLSKQLCIKHQVNAFDYYESLSALNPSTYMFYFPSKYG

VVLGSSPEFLLKIKKREIYLAPIAGTRNLENNCDLLALEKDLLSDEKELSEHKMLVDLARNDASKFGTQT

RVENLFSIIKNKFVMHIVSEVYANMKEDASIFDVIEAVFPAGTLSGAPKIRALEIISELEDCDRGVYGGA

VGFLNFNEDITLAILIRCAFFTQDKAYLASGAGIVLQSESQKEYAEICAKRKALLVAFENLKKENQ

>ABS44793.1 hypothetical protein JJD26997\_0849 [Campylobacter jejuni subsp. doylei 269.97]

MKDFFKKIVIFAKIPTKAILRFMESIGIGLFVNSLYGLQTGDGRAFIILIESLLILTVVALSSIFLKD

>ABS44792.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLVHICCSVDSHYFIEELRKTYPDEKIIGYFYDPNIHPLSEYELRFLDVKRSCDKLGIKLYKGEYEYEKW

LNAVRGYEDEPEKGARCEICFDVRMGSSVKFAAKIGEKKLTTTLLTSPKKDLEQLKNALQKECEPYGVEF

LAPDFRKNGGTQRQFALAKKEMLYHQNYCGCIYGLKKQKQDKNFIDELMSPVNKQILPASIEARITLYKK

VVLWEKKGIKFEILREKFLNYRLLSALIKLDKKPIKSYILFYSHFKNAYTRFSLDEENLKQNLKEGFYRS

TKDEIVFVEFWRFNAFFKNKWKNFEDFLKKPLSVQAEIKWRNKLFGIYNLSPIIVLENILPSRYEVIAKS

EIYHDNQEMLVKI

>ABS44791.1 S-adenosyl-methyltransferase MraW [Campylobacter jejuni subsp. doylei 269.97]

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSETLLKNHPGLKFIACDQDQQALEFSKKRLKDFHN

RITFIQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEVVNAYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNLIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLGYLENLKPKNCILAIISFHSLEDRIVKNFFKKWSKNCICDEKIMRCKCGNNHSLGQIITKKS

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>ABS44790.1 PDZ domain protein [Campylobacter jejuni subsp. doylei 269.97]

MLFTLSFGIERPKFEDFLAGYERNKASMLNYEGMPAFALSENLLAVLKQPNAKLNKYVKYDPFLNLYLVR

TDFSLISTPMGDEEKLTRNDWVGIWDPNKPYIGHIKYLAQNIDEKDQLDFNSKIGLLGTPCCEMMGIALN

NSSFIGNRYLKHFMKYNDVYWGDIGVDFIVRENKIYVNNVRKNPQFLINDQIISVDGLPANDLRKLNEKI

LFADRGSTLYFQVLRDNMDLNISTEVFAKDLSKFNLPDSKPKPKITNFTSNLGLTVNASLVVTKIDPKSK

ASSAGFMVGDKILRVNNIILNNFKELQNILSAGNDFSILIERKSTKLPLSNFNSELGGNANSGGDGKFQF

FIRLTK

>ABS44789.1 recA protein [Campylobacter jejuni subsp. doylei 269.97]

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGIPKGRIVEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRIKIGATGYGTPETTT

GGNALKFYASVRLDVRKIATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>ABS44788.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSREIEKFLEILKDPQKHFGINVHDLSTCKAYEYEKYDCEIALLHKYHFENDPDNEKLLSTFKDVFSKDY

LELRHPFHNDVVTRAVLNVTRPWSPSIYFIDENNRYPWIIYNWDSIGLMFITPKNVFFSQKILLSKESTE

NFLNHALSISKTITKLKIKDLKFKNKKFGIDLGLLRPYHAFYDFNWFNKLHLQNCKVINNPMFFKINTMA

NLVDGNDLVSIRPSLLDLCFLNFETGKNYVEDYIDEALEAHTRGGGYNLTLWLGIPGERRIWLEQWEGIP

QILKNLNLYFSNIKVYIDGMTSYDGERTEFKANVENFWKIVENIEITLKATHTKCSTFDPNDKNSANKAL

ITTKNGQIDIESLSGYDYKAKIARCNLCDIAICELGTTELTPFNFLKKSGVAFYFHEEQKGHMQHLAKTI

PHLKTLFPYHHKLFNTEVIITICNYHIPYQHLYNLAAECLEELSLENKIKGFSRENPLKMHRLSVPSVEL

INKAYELEQKTGVVLKNNKEEKKILQKIKAQEKLLRTQNLLLKIEQKQAKSNNPSPQAQIPLQKPKGAVE

RVHRHLAYKLGIAIIVCSKSLLGYARMPFVLYHIKAQHKFEQEKFQKALLKNPALKLLPLESYADYENAL

KEQRCYTYKLGLAMMEAHRNLFKGGLVWFYFESKRLKREFEKEKQ

>ABS44787.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVSLSTLSIVKNIPL

FAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLDAI

>ABS44786.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MDQSYEFFLALHLYSLYASGFLMLFYLILTQGNFKTEFIFIRRIRLFLPIYYLFLALIIFTGCLLSAMKQ

FQMNFDIWIMIFSWILIFALAIFHFICFKKARRFRKYATFRWISCLILPFEIFLLFLPFLIERYL

>ABS44785.1 3-methyl-2-oxobutanoate hydroxymethyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MRKSILSFLEKKGKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMIVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQGSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNILGGYRIQGKDLQSAQKIIDDAKAVQDSGACMLVLECVPIKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQIGVEKYRDEVKSGIFPSEEHSFDYLGEELLDKLY

>ABS44784.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. doylei 269.97]

MQTTKLSKKAQIHSVIAASSGNLVEWFDFYIYGFAAVYFAHNFSNATSTLFQQIEIFGVFAAGFLMLPVG

SIIFGKMADIKGRKKAMIVSIIFMAFGSFGIAFLPDKQAIGDIAVVFLLLLRLIQGIAVGGEFGIVAAYL

TEIAPQGKRGFVSSFQYVTIIGGQLLAVASISLLFLFIDERQMQEFGWRILFFVGGVLAVLSLFFRSFIQ

DNSHKVLENYADRGSFKALFKSYKALLIVIGVTAGCTIGFYAITVYPKVFMINNGVDTILANNIMLGSLF

VLCVAIPFIGAISDKIGFKISLFIYLGFCLVGTYPLFMALKSVALSGSNEFLLFVVVCFMCFMLSFYTAV

AAISKTSLFPPQIRALGAGLGCMISVGLFGGSVNYVALQFKALGIEWGFFVYFGVIACISLICTALIPKQ

RELD

>ABS44783.1 fumarate hydratase, class II [Campylobacter jejuni subsp. doylei 269.97]

MEYRVEHDTMGEVKVPNDKYWGAQTERSFENFKIGCEKMPKVLIYAFANLKKSLALVNNKLGKLDDAKKN

AIVQACDEIIAGEFDDNFPLAIWQTGSGTQSNMNMNEVIANRATEIMGGNFRKEKLVHPNDHVNMSQSSN

DTFPTAMSIVAVDQVEKKLIPVLDELIATFEKKVKEFDGIIKIGRTHLQDATPLTLAQEFSGYLSMLLHS

KEQIIASLPTLRELAIGGTAVGTGLNAHPELSQKVSEELTQLIGTKFVSSPNKFHALTSHDAINFTHGAM

KGLAANLMKIANDIRWLASGPRCGLGELIIPENEPGSSIMPGKVNPTQCEALTMVAVQVMGNDAAIGFAA

SQGNFELNVFKPVIIYNFLQSLDLLADSMHSFNIHCAVGIEPNRAKIDHNLHNSLMLVTALNPHIGYENA

AKVAKNAHKKGISLKESAMELGLVSEEDFNKFVDPTKMIGPKA

>ABS44782.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNLQVNTNANIAPRMLNAKSDNIEPSSPIISEKEQILSAKALFVCK

>ABS44781.1 putative cell division protein FtsK [Campylobacter jejuni subsp. doylei 269.97]

MLAPSMGEWVYKANLFLFGEFGYYYPFSLLVLNYLYYKKNYKIENFKRRELFGFSLAFFSTLLLFSVFYR

EFGYILEIVYGFFSIILGRTGSGIFALLLLLFSLILLFPKFAKEILKIELDFTYLLKVEQAFKSLLMRVF

GGEDEKEDIGKLEPIVPKLDILQDSIFKNSQANEKTKTSSLEQIVKESNINASKNSITTAKKNFEKLKNQ

ILDETIEIDKQSLKESRSFVYEHSQQVWNFAQKASKSSVSLDEEFNFITEEEVDMIPERFLKPKKPQDLK

QIDTNKNLDEPSYKRKNIEIPVSKQEVKSKIFTKELKLRENLIKKEKLEQEYKAYQNEILENKVKQEIKK

LEEYDAINSSDIIEGNKYSFNSPKTIKTETESNKINENKNLDKADNIFEFAPIVEELNHPYIEPTPIKNI

NEIVIEEKNTLDFIQNTETKIDDKKTNNQDIKLQKAVLAKEIAINQALLREIEQGEVEKPKDFTLPPLDF

LANPKEHRQEINESEIDKKIYNLLEKLRRFKIGGDVISTYVGPVVTTFEFRPSADVKVSRILNLQDDLTM

ALMAKSIRIQAPIPGKDVVGIEVPNDEIQTIYLREILQSEVFKNAKSPLTIALGKDIVGNAFVTDLKKLP

HLLIAGTTGSGKSVGINSMLLSLLYRNSPKTLRLMMIDPKMLEFSIYNDIPHLLTPVITDPKKAVNALSN

MVAEMERRYRLMADAKTKNIENYNEKMKELGGEELPFIVVIIDELADLMMTAGKDVEFYIGRLAQMARAS

GIHLIVATQRPSVDVVTGLIKANLPSRISYKVGQKIDSKVILDAMGAESLLGRGDCLFTPPGTSSIVRLH

APFASEFEIEKIVDFLKDQQSVEYDESFLKDQQSVGVTTNESFDGEVDELYEEAKRVILEDGKTSISYLQ

RRLKIGYNRSANIIEQLTQNGILSEPDAKGQREIL

>ABS44780.1 putative sugar transferase [Campylobacter jejuni subsp. doylei 269.97]

MKNVSIIVPFFNVEKYFRECLESLIGQDYENIQLILIDDESMDKSLNIAKEFAQKDSRICILSQKNAGQA

TARNLGLDFLEGKLKFDFKGDEVGLCAFVGEGFKAWQNAKFKFKKTDYLLFVDSDDVVEKSFVSECLKAI

KDADVLWFDYDFLCEIPFKKTPKSQMELFDLSEGIISAKKWLEVAKTKPLFWLTWQGMIDFKFLQKIKLR

FVGGAIYEDNCFGVLLFSMTEKIAIYKKKLYHYRLRANSTMNPEEKGLSKHSYLYELYLAVGEDFEALKT

QQWAKSWLLSVLYMSEFKGFEGEFREHFMPIFLDKAMACLFLEQDPLNLKQKFEVLKGEFEHYILSGAEC

VRQGLAYRLGFIFLQNYKSFAGLKRLFKELKKGVLECERAWEKFEENKAKFHFLHFDEDKNNIEILKIKR

HYSYKVGKIMSFLKNFFNFQKKKNKIWIRFC

>ABS44779.1 GTP-binding protein YchF [Campylobacter jejuni subsp. doylei 269.97]

MSLSVGIVGLPNVGKSTTFNALTKAQNAQSANYPFCTIEPNKAMVEVPDLRLNELAKIVKPERIMHSLIE

FVDIAGLVKGASKGEGLGNKFLSNIRETEVILHIVRCFDEENITHVEGGVDPLRDVEIINTELILADIEQ

LSKKIEKLTKEAKANQKGAKESLELANSLLDHLNKGLAASSYPEKESEIYQALIKELRLLSAKEVIYGAN

VDENGISEDNDYVKALKEYAKKNNHEVIKLCAKIEEELVGLSDEESHEFLSSLGVNESGLDQIIRTAFAK

LGLISYFTAGVVEVRSWTIKKGWKAPKAASVIHNDFEKGFIKAEVISYKDYIQYKGENGAKEAGKLRLEG

KDYIVLDGDIMHFRFNV

>ABS44778.1 GTP-binding protein LepA [Campylobacter jejuni subsp. doylei 269.97]

MKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNENF

VLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNADVE

KVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALALVR

IYEGSIAKNDEVLVMSTDKKHIIQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITSVKNK

AKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHMEV

IKERLEREFNLDLIATAPTVTYEIYQTDGELVKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNLIT

LLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKVAG

ENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGDIT

RKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>ABS44777.1 peptidase, M24 family [Campylobacter jejuni subsp. doylei 269.97]

MSIYKQRVLELRRLMKENNIDAYLILSADPHLSEYLPEYYKNRVFISGFKGSVGTVLITQEEGFLWVDGR

YWLQAQKELEGSGILLQKQDAKNTFTKWLEKNLSEDQILGIDFTLLPLSLQKDLQINCKANLKHIDLISP

LWKDRPTLPQEKIYEHELEYCSYSRKEKLALVRQKMKNLNATSHLISSLDDIAWLTNLRGNDVNYNPVFL

SHLLILEDKALLFVDQKKVNLELEKKLNLDGFWLKNYDEIIIELEKLANTNLLIEPSKMTALLVNSLDKS

IKIIQEINPSTHLKAAKNTKEIAHIEDAMIEDGVALCKFFAWLEEAIENKELISELDIDTKASEFRAQSK

YYISDSFATIAGFNENAAYPHYKATKESFAYLKKDGLLLIDSGGQYKNGTTDITRVVPIGKANAEQIHDY

TLVLKAHIAISSAIFPKDIAMPLLDAITRVPLWKEQIDYIHGTGHGVGYFLNVHEGPQVLSYLSPVLEKT

KAKEGMLTSIEPGIYKVGKWGIRLENLAIHTKVENPKNKDFGEFLYFKPVTLCPFEISCIDTKMLDEKEK

EWLNNYHKEVFEKLSPKLGDYPKALVWLEKRTKAIF

>ABS44776.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIFFARTINFLSNLIYNCSNFKKSNWILEMTIPFLSTINKANISTTKNTTIYKILFFIHNFFLIFILGIF

YYLTQPLKSNSVVFIPQGSISQIITYLKQNKYQMSGIDKYILFFLGHPQSGWINIGTKDLNRAEFLHKLA

IAKAALQTITLIPGETSIIFLEQAAKQLGLDKDILLKEFQVQAPYDEGVFLPETYKIPKGITENLLIQML

LNHAEISNKKTSEKIFGDYNPKKWHQYIIIASVIQKEAANENEMPIVASVIYNRLKKGMKLQMDGTLNYG

IYSHVKVTPQRIRQDNSSYNTYKFTGLPEKAVCNVSLAAIRAAIFPLKTDYLYFVRDKNTGVHIFSTNIN

DHSKAINLQKGK

>ABS44775.1 hypothetical protein JJD26997\_1635 [Campylobacter jejuni subsp. doylei 269.97]

MFILCLSLYIQKIIYNPNLKNINSVEKINNSIKRCNDFTH

>ABS44774.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MLELHENLKKILQAKNLETFYSEIYGQKIFVYVGLNLETWLFHDEKIYKLQDEEFKLSSIEEFSNFIKSI

LEDFKVQNTHFQRLLEHKEGIILKGGFVKNFYKKSFVLRQKINKNLKQINLLSEAFNLLLSEQAQYKKHL

KILNLSITILSKNTKEHLTRVDTLYTLTSAIKNEKMNKSIYLLSILSSIFLPLNLIVGFFGMNTNNLFFK

DSPYGTLYIFSLICCILIVGFIFYHSKKTKEFDLDEGKKAKKQIK

>ABS44773.1 UDP-glucose 4-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MKILISGGAGYIGSHTLRQFLKTDHEICVLDNLSKGSKIAIEDLQKIRAFKFFEQDLSDFQGVKALFERE

KFDAIVHFAASIEVFESMQNPLKYYMNNTVNTTNLIETCLQTGVNKFIFSSTAATYGEPQTPVVSEISPL

APINPYGRSKLMSEEVLRDASMANPEFKHCILRYFNVAGACMDYTLGQRYPKATLLIKVAAECATGKRDK

LFIFGDDYDTKDGTCIRDFIHVDDISSAHLAALDYLQENESNVFNVGYGHGFSVKEVIEAVKKVSGVDFK

VELAPRRAGDPSVLISDASKIRNLTSWQPKYDDLELICKSAFDWEKQC

>ABS44772.1 hypothetical protein JJD26997\_0714 [Campylobacter jejuni subsp. doylei 269.97]

MLNVNFSQTTIDQFHTNLNKLGFGSKYYRDIFYELSVNEGLKCISTDIALSEILLDLGARVHHFEKNKKL

KNILEKHFKERENIQFHYKMLSNQNAILELPKYNYGKGFLPIENNLRESIECVDINTLDEFEEELYLFYM

ELDFHNYKILEILETKKIKFIFLKVDAVFEKSEIFEKLEQKYYKIQFIKGL

>ABS44771.1 putative 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. doylei 269.97]

MKVLLGISGSSSVNLGLKLLKNLENQCELYCILTQGSKLSFKAENQADLEEICRENFKHTYFLDDKNLSL

SVASGSFGIEKTIIAPCSISSLAKIRAGFADTLLMRAVAVALKERKKLILGIREMPFSTLNLEHMLKLSQ

MGVIIAPPIIASYSKANNLEQMENFIVGKWLDLLEIKHDLYEKWQNF

>ABS44770.1 putative bifunctional putA protein [Campylobacter jejuni subsp. doylei 269.97]

MIQKALALAEELQGKIEANISNSEKEFHSKMQKLLNNPKNKVMLIELLDRSFRCKDKNASFELIEYTLSK

YGIADFFSTFEKFLLFSFLNFGKFAPNLSVPFFIKHLREDTKAMVLDANPSVLEPHINKRKEQDKITLNV

NLIGEEVLGEAESKYRMQKYEEALKSSYINYISIKITTIFSQINIIDFDYSKEEVVKRLDYLYALALEEE

KKQGVSKFINLDMEEFRDLELTVAAFMESVAKFDIKAGIVLQAYIPDSYEYLKKLFAFSKERVLKGMRPI

KIRFVKGANMESEETIASQRGWELPTFYKKIDTDSNYNKMLDFILEGDNYKYINIGIASHNIFEIAYAYT

RISEAGALDSFTFEMLEGMSLQCSYELSKMHDLILYAPVCDEAHFNNAIAYLVRRLDENTSEDNFMRYFF

NLKVGDKNWNIQKELFLKSLEGIKTLDNTTHRKQDRNKESNTISSYESKKFSNESDTDFILAQNRAWAKD

IKAKYENLKDYDVYPVIGELDFKAENLNVLEVKDKVKDKVIGKTYLAGEKEIKQALEVAKNSKFTQKSHD

EIYQILAKSAKLMRERRGDLIGLAALEVGKTFLEIDPEVSEAIDFIEFYPHSLEELKKQNPKVKFTPKGI

GVTIAPWNFPVGISVGTIVAPLAAGNVVIYKPSSLSALTGYMLCKCFWDAGIPKDALIFLPSKGSDISKY

LLVDEAIKFSILTGGEDTAYAMLKANSTLLLSAETGGKNATIVSKFADRDSAIKNIIHSVFSNSGQKCSA

TSLLVLEEEVYYDEEFKKTLVDAASSMAVGNPFEFKNKLGTLADKPSSKVQKALNELQPYEEWALKPKFL

EDNPYLMTPGIKYGTKKGDFTHMNELFVPILSVMKAKDLKEAIDIVNSTGYGLTAGFESLDEREWEYFHT

HIEAGNIYINKPTTGAIVLRQPFGGIKKSAIGLGRKVGIYNYITQFLEIKQEDFDDHLIEDKFSKKLAQI

DLKEAQDFMNDLIKMSQSYAYHYKNEFSVSKDYVNIRGEDNLFSYTKIKNMVLRLCGNESLKDVLGVVLG

ANIANIDLSISYDEKDISMMEQIVQSIGAKVLFLKENKENFIKSIKEYERVRYLAKPDVNDEIYKEAAKL

AKIIIREKPLLNGRFELLNYFNEKALSISFHRYGNLGIRAIS

>ABS44769.1 sodium/proline permease [Campylobacter jejuni subsp. doylei 269.97]

MEVVQINTSIAVMFVVYALLMLYIGFYFYKQNKNSEDYFLGGRTMGPVISALSAGASDMSGWLLMGLPGA

LYVSGFIDSYIAIGLTIGASLNWIFVAKRLRIYTSVIANSLTIPDYFETRFDDDKHILRIVCAVVILIFF

TFYVSSGLVSGAKLFESTFGIRYDYALTTGTIIIVAYTFLGGYKAVCWTDMIQGLLMMMALIIVPLVMLY

HLGGFGEAMNIVKEIKPQALSMGEGVGVVSIISALAWGLGYFGQPHILVRFMSIRSTKDIPMATFIGIAW

MVVCLLSACMIGVLGIAYVHKFELSLQDPEKIFIVMSQLLFNPWIAGILLSAILAAIMSTASSQLLVSSS

TIAEDFYKKIFREDAPSHVVLNLGKLGVLLVAVIAFLISTDKNSSVLSIVSYAWAGFGASFGSVMLFSLF

WSRMTRVGAILGMITGAATVVLWKNFANSGLYEIVPGFLAASVVIIIASLLTNVRSGTKAAYERMLKEL

>ABS44768.1 cytochrome c oxidase, cbb3-type, subunit II [Campylobacter jejuni subsp. doylei 269.97]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETVYAEALTVKKVFNVPYDTENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>ABS44767.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLPPFKASFEVANYAPSLEYLNEGGLYSGVFRKAFLYEKIASDGGNNTFICFEFLTAKEQKLAIFNLFVA

KNNNFTYMDKNGKKENYLGFRQLNAIMKFFEIDELDFSQKGNENVFGVQTEVIYLNSLVNKLLVLGFGLE

EYLSKNGELANKIFLDRIFNEKMQSMDEFENNKEPLSIKSFKARYKSLNNNKSFIPKENQSYNPYGNEVK

NNNNEKYIEIGEDDGSLPF

>ABS44766.1 paralyzed flagella protein PflA [Campylobacter jejuni subsp. doylei 269.97]

MRILFLILLSFLNAFAFELVLNTGRENNQAFAVLHASNDLEFTCQEFITEAKVHFECDIAGMVDNKLKDQ

SFSAFDLKFIQEAQKIKMIILPKMQARMFDTSQNIYIDKELSSSSLHKSKAFTFIFAPELAPIKDYDGLD

FNINFPHESLPYVGALDLNSDPVVIPQSADINTYLRIKKEYDKANYNQVMIDAQNAINRYRGSIFTSEFM

LYKLRAQNKLYTQDPSIRDQQILEKMIDDAKNWMRTFTSDKNFSEVLHIMLKTYIALAQRADVEYTMSIL

DNEQPNNYFTQLSKLDYADYIYNLNEKEKAVNIYENSYFNTKNLDLVARAAMSLAKNLLLNEQVNKAIEH

INTILKANPEYFGKDIPRSLELAKLFNQKGQFDISTSIYEDTFAKMSKLDPSYEETLKDLALVLSHTNRS

SDAKKYLDLYMDDYLDGKYLDEIKKASDEVFFALGDNNASFLHQRYTDLMKQYANKDENIANKALDEDVA

LYYKEGNFSAILAYKDLIESKKIPNATQFLEKAAVNDLKNAIKADNCINAANIFMRFSAYDISQKIENKK

QMLACLIRTSNVEQALNYIDKNYNEDSISYGLQKASILFDNKQYPQVIKISKDIANSRILKSDDENFKAY

YLQFLSLLRLNDYNQAIKILQILESFPMNFSMIEAYDALLSYANDHNMQTAILTYAPKAIDYQNFKGINL

FSPNLEFIYLDALAKINKNEESLAVLTDLLKLKLSDEDRARALYIQALTYERMQNIQAEKESLKQCLEIK

GVSNWQNLCKSKNQILNQ

>ABS44765.1 arginine decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MDYGIDIWGNENFIIKNGKVCINHEKKPAIVDIVKELRDDGYKGPLLLRFPHLIQKQIENIYGNFNKAKK

EFGYKGGFNAVYPLKVNQYPGFVKNLVKLGKDYNYGLEAGSKAELLLAMAYNNEGAPITVNGFKDRELIN

IGFIAAEMGHNITLTIEGLNELEAIIDIAKERFKPKPNIGLRVRLHSAGVGIWAKSGGINSKFGLTSTEL

IEAVNLLKENKFLEQFTMIHFHLGSQITEIHPLKKALNEAGNIYTELRKMGAKNLKAINLGGGLAVEYSQ

FKNEKNRNYTLREYANDVIFILKNIAEQKKDLEPDIFIESGRFVAANHAVLIAPVLELFSQEYAENKLIL

KKQNPKLINELYDLYKSIKPSNALEYLHDSIDHLENILTLFDLGYVDLQDRSNAEILTHLITKKAILLLG

DKQNPADLLAIQDEVQERYLVNFSLFQSMPDFWGLEQNFPIMPLDRLDEEPTRSASIWDITCDSDGEISY

SKDKPLFLHDVDVEKENYFLGFFLVGAYQEVLGMKHNLFTHPTEAIISINEKGYEVEGIIEAQSILDALE

DLDYDIHAIMDILNERISNSKLVNDKQKKHILGELYLFLNDNGYLKSIGV

>ABS44764.1 addiction module toxin, RelE/StbE family [Campylobacter jejuni subsp. doylei 269.97]

MRKINLLRSFKKDYEKVKKQSWDLNTIDDVIQCLMNLDVLPTRLKDHALKGEFKDFRECHIFGDLVIIYK

RDDKILSLYRIGRHQDLFKKY

>ABS44763.1 general secretory pathway protein D [Campylobacter jejuni subsp. doylei 269.97]

MIRLILINILFCHYLYALDCQKRLFDISINEKLSIEESLDELAKYCSFSIIVKDKIAKEKLETSQNSVNI

HQMSLDEIFNFFIKEHDLSYDFDGKILRISGIDTKIFKISYITSIREGQSITKASVDAKPRQSEYSGSFD

DAEDNMIKSMEKFDFWQNIEKEIIVLLKNSHEDYEVKTPIINPNAGLIIVTGTNSQLKSVKNYLQKLENR

LKKQVIIDVSILAVSLSESHSSGINWQNFDIGLNSQANNENSFIQFQNGQGFVKNLGLRANLNFDSIINF

LSQNGKTSVLSNPKLMALNNQQAIISVGDTINYQVKESSKGTENGTTVSESYNNYSIFVGILLNILPEIS

DDGKIMLRINPSLSDFKYPEDNKRQKEPRTIAPDTIQKKLSSVVQVENNQTLILGGLISHDKSNEKNSIN

FLSKIPILGSLFKGEVLNSKATEIVFIITPSIVDSVNAPSLKDLGFKHYE

>ABS44762.1 3-dehydroquinate dehydratase, type II [Campylobacter jejuni subsp. doylei 269.97]

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKNLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>ABS44761.1 para-aminobenzoate synthase glutamine amidotransferase, component II [Campylobacter jejuni subsp. doylei 269.97]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEVFGGRVSKMQNPMHGKISKLYFKKDPIFKGIKKEIEICLYHSLHISSMPK

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>ABS44760.1 hypothetical protein JJD26997\_1784 [Campylobacter jejuni subsp. doylei 269.97]

MQIDANKNQSFSMDHTTKSGKHLVLSMYDNQSASYANNGEGKTLNLKHQYGFSFTFEGSKLTQNDLDEIK

NAIKEVEPMIKDFLANSKVGELKPKEIIESAMQMANVLPTPNDENHQNAIMNNFTNKLSDLLKQNQTDDK

DINTSMLENSKKLLDEVLEQIKKQLEKQQEKAKENQDKTDDSLNLYA

>ABS44759.1 hypothetical protein JJD26997\_1265 [Campylobacter jejuni subsp. doylei 269.97]

MFFLIIIVKSHKQVLIKTILQDLLKDKTLFIFSLVKNL

>ABS44758.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MSIDFLAIISVAFLSSFGHCYSMCGGFNLLFINLNSKSNNLFLLTFIYHLFRIFAYIVLGIFFGAFGNIL

AINAKVQSLSFFILGIFMMILGFALIFRGNMLSFIENNVFFDSFVKKIIKKSKNFKGLKLAIFLGFSNGF

VPCGLVYFFIANAMSKQNIFEGILVMMIFGISTLPAMLFFSKISQFFSGFLKNLFNYLSYGVIVCYGINL

AYIGFKAFQ

>ABS44757.1 carbon storage regulator [Campylobacter jejuni subsp. doylei 269.97]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>ABS44756.1 RNA polymerase sigma factor, sigma-F [Campylobacter jejuni subsp. doylei 269.97]

MNPKKDEEMLKEPPKAYAQMLKKEQDELVLSYMPALRAMAFRLKERLPSSIDVNDLISIGVEEMIKLSRR

YDKEQNDNFWGFARKRVNGSMLDYLRSLDVMSRNNRKIIKDIDAIMDEYFLEHECEPDDEYLAKKLDLDV

EKIKEVRTAHAISYTLPIDEQIELYNEDNTLEKIEKEELLEKIHEVLYDLKERDQLIIQLYYYEELSLKE

ISEILQISESRISQIHKKLLKKLREKLV

>ABS44755.1 pyruvate ferredoxin/flavodoxin oxidoreductase [Campylobacter jejuni subsp. doylei 269.97]

MDKIMKTMDGNEAAAYVAYAFTEVAGIYPITPSSPMADYTDMWAAAGKKNLFGVPVKIVEMQSEAGAAGS

VHGSLQAGALTTTYTASQGLLLKIPNMYKIAGQLLPCVIHVAARSLAAQALSIFGDHQDIYAARQIGFAM

LCSHSVQETMDLAGVAHLAAIKGRVPFLHFFDGFRTSHEIQKVEVMDYVHFDRLLDREALLEFRNNALNP

ENPKTRGTAQNDDIYFQTREVSNRFYDALPDVVNKYMQEISKITGREYKPFTYYGHKEPERVIVAMGSVT

QALEEVVDYLNAKGEKVGILKVYLYRPFSLKYFFDVMPKSVKKIAVLDRTKEPGSLGEPLYLDVKSAFYG

RENAPVIVGGRYGLSSKDVDPAQMIAVFENLKLDNPKDGFTVGIVDDVTHTSLSTGEKISLGDESTIECL

FYGLGADGTVGANKNSIKIIGDKTDFYAQAYFAYDSKKSGGYTRSHLRFSKKPIRSTYLVSTPHFIACSV

AAYLEIYDVLAGIRKGGTFLLNSIWNAEETIRQLPDAVKKTLAEKEVNFYIINATKLARDIGLGNRTNTI

MQSAFFKLAKIIPYEDAQKYMKELAYKSYSKKGDAIVEMNYKAIDVGANGLVKVEVDPNWKNLELKEKEQ

TNAYKGTEFVEKIVKPMNAAKGDDLPVSAFLGYEDGSFEHGTTEYEKRGVGVMVPRWIEANCIQCNQCAS

VCPHAVIRPFLINDEEMVNAPRGVKDHALEAKGTKGEKLSFKIQVSPLDCTGCELCVHECPTKEKSLVMV

PLQEEMDFGEQENADYLFKKITYKDDILNKETTKGAQFAQPLFEFHGACPGCGETPYITLITRLYGERMI

VANATGCSSIYGGSAPSTPYRKSVKNGHGPAWGNSLFEDNAEFGLGMKIATENTRHRIEHIMNESMQEVP

NALSALFKDWIANKDNGAMSVEIKDKMIPILEQNKNIKAVQDILELKQYLSKKSHWIFGGDGWAYDIGYG

GLDHVLASGENVNILVLDTEVYSNTGGQSSKSSRTGAVAQFAAAGKPIQKKDLGQIAMTYGYIFVAQVNS

TANYAHLIKAITAAEAYDGPSLVICYSPCIAHGIKGGLGYSGEQGELATKCGYWPLYTFDPRLEEQGKNP

LTLTGKEPDWDLYEQFLMNEVRYNSLKKANPEHAAELFERNKKDAQRRYRQLKRIAMADYSNEVES

>ABS44754.1 NADH-quinone oxidoreductase, G subunit [Campylobacter jejuni subsp. doylei 269.97]

MTVKINGMDCAFEEGEYILNIARRNDIFIPAICYLSGCSPTLACRMCMVEADGKKVYSCNTKAKEGMVVE

SDLQNLWDERNEIMQAYCINHPLECGVCDKSGECELQNFTHKSRVNVQKYWIKDTHKPHKHWGMINYDPA

LCIVCERCITVCKDKIGESALKTVPRGGDSVDNSFKENMGKDAYAIWTKFQKSLIGPANGDTLDCSFCGE

CTSVCPTGALIGSKFQYTSNIWELKRIPASNPHSSDCELMYYDIKQSGISHQKEKIYRVSNDFAFASLNK

AARFAFDTQNEADKDEKAFKELVELFEKNEIKNIKFNSFITNEEALILQNLKKKFNLSLINEEALKFKEF

LQEFIANSGEFYSANTQDITKSDFLVVAGTLLRHDAPTLSYKINNALVMNKGSGLYFHPMEDMGIAKYSK

NFISHIHKSGDEEQILYFLLQKFSQDEGIKTHLAEFFVSENKEIEESNNEEVVEQVIEKDEEGNEIQKEV

KKVVPKKVKKIVEVQRSVFAKNLGIDEDKLEDLLLKKVNFTLVIGSDFYFHKNAKKLAKLLALIQNTTPF

KVFLNPTHTNTLGVAMICDLDKNTQEGKTLGYNEKGDFSFSYEEHANLASASLNQQEGTFLNYDKRVVPT

NAALEFKGYFLNDLANALGFDEEYTINYTKRLPINRGFFPIDFDHLDNFYTNAGECKRGYELNLECFKQV

AKQEFISPNFENLSLKEDEILLYSANPSYQFGRFSNRASVINEVIFLGVSENLAKEKNLKDKDLVKLKIK

DKELSLSVRVDKDIKNGAFLPYFDEKLDTLSFFDERFVVANLEKLGANHE

>ABS44753.1 mechanosensitive ion channel family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIIILTFFVVFAFGDVNRTIINNINEKINTLNTVISASIWNIRYENFIKYQDINDELIILNLNLKKTS

DIHQQEELKRKIANLEEQLSLLKEYKDLNFAQSLSAPDNIETLSKLTNPLAIIGAFSHIKKLKGEKEEYI

FKFNDFKNLVDKIREKNSELRELVELKPSVENIEALKASDKKLEEFEQALNFASVSYSVYEKKIDEELSR

VSAEIKVQSLRAVNILVAIAIVIAIAFMLKFIAKKYIKDSERYYTATKIINFININIIFLILLFAYIENI

TYLVTILGFASAGLAIAMKDMFMSMLGWCVIIFGGSFRVGDRVKVFQNDTTYIGDIIDISFLRITLYEEL

TLETYSKNRRSGRIIFIPNNYVFTNLLANYTHHGMKTVLDGIDISVTFDSNLDKAQEIVENIVIRHAKGY

TELARKNIARLQHEYSIKNPKVEPRFFMFFEHWGMRISAWYMTNAYAALVLRSTISKEIIEEFNKHKDIK

IAYPSQNLYLGNLNQNHFEQHHENTHFHARNKD

>ABS44752.1 ammonium transporter [Campylobacter jejuni subsp. doylei 269.97]

MNAINSSFIMLCTLLVLFMTPALAMFYSGMVRSKNTLNTIMNCFIVFGVITLQWVVLEWIIHKKPTILGG

LSGLVAGFKFILS

>ABS44751.1 biotin biosynthesis protein BioC [Campylobacter jejuni subsp. doylei 269.97]

MNFLKAKDYEKHAKVQDFMGLKLCEILKDLKISHFKKVFEFGCGRGELSKKLQNFITFDEYLKNDILDFK

ENSNILIFDMNEIAKQDLSKEKFDLIVSNATLQWLDLKRILPSLRDMLNQNGILLLSTFAEQNLKEIKQS

TGFGLNYFSLNELEQIFKVYFDEIKITQELVELNFDNALEVFRHLKLSGVNSLGFYPLNKCFLKDFEEKF

QNKLTYHPVFILCKNDIK

>ABS44750.1 RNA pseudouridine synthase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQEKAYKLLALQEKISNREAKDLIDKGCVFSHGKKVVVARALMSDKARFNVIKTKNPQIIFEDDKIIAIN

KPYAYVSEDLEKKFNAKLLNRLDKETSGVILLCKDEDFRKLCIEEFKKHRVYKSYIAVLDGVLAEEVEVN

EPIFTIKAKGGALSKVSKDGLSALSIITPIMMQSKKTLAKIVIQTGRTHQIRIHAKFIKHGVIGDEKYAK

ISSDRMYLHSYEIKIFDYYFKAELDNSFAKFGFEIKNLDF

>ABS44749.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MDFYSLIFLSCALGMDAFAVSLCKSFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCNSNAKQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>ABS44748.1 MotA/TolQ/ExbB proton channel family protein [Campylobacter jejuni subsp. doylei 269.97]

MNFEAIFHFFNSSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>ABS44747.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLSVFLTLSLNAQNFEIDKIRTDLYSKSGANVLKKVEISLEFDGNNLKENENKLIDAVNTVISGFF

YEDIFTEIGKNNFKKTLEKFLDKKYKIKLNDIYIISLSGVEKFDLEEFKRFLESTEAKEKGMGSEVKKAL

ENLEVPKTQVPSVEKIPTPSIPNLEAKQAEQLFKDPDEENKNDNGEINIDNLNTPKMTPDIEEKIKRDLI

ANPPQIFKENNASKPYHLPQTGYDIKLDQNSTQN

>ABS44746.1 transketoloase, C half [Campylobacter jejuni subsp. doylei 269.97]

MIVGDAGLGLFDTFQVDFKEQYLNAGINEACSVGMAAGLALSGKKVIYYNIAPFSLMRPYEQVRNDICYQ

ELPVIVVGIGSGLTYAPAGVTHYAVEDIAIALTI

>ABS44745.1 hypothetical protein JJD26997\_0352 [Campylobacter jejuni subsp. doylei 269.97]

MDNFGNVVDIGKLIIFSNSFIAILIIAFFIAKSILIALKMLNEVSD

>ABS44744.1 hypothetical protein JJD26997\_0977 [Campylobacter jejuni subsp. doylei 269.97]

MPKTDTKPNTKNRIYKAIETWFAKIYLNKIIHKEKLFVNITSCLAFILSIYGKTDENKSKMTPAVMSYIK

KTKNTFIAKLKRVKNHESIIDLQAKYPKLDIISAYQFLTLKDKFKITKSEIQDFETLIDILSKNAQKSKK

>ABS44743.1 putative cyclase superfamily [Campylobacter jejuni subsp. doylei 269.97]

MSEIIKALELLRSGKWVDLTHEVHNKIPKYGAFPDLVTKTPYTLEKDGFFVHEVSFITQYGTHIDAPVHF

SKGKRSLEELELKEFILPLYVINKEKEVEENNDFVLSAKDILEFEEEHGKIEPKSFVAFASGWSIEALDL

LLNQRGVLGVGHETMDTDASKDVQQKGFLYAEKFVLDANKFQVELLKNLTQLPAKGGVIFIGVPKFKGFP

GFPVRCFAIV

>ABS44742.1 WbdK [Campylobacter jejuni subsp. doylei 269.97]

MKNYTLASSTWDEKELKAIQEVIDSDIFTMGEKVAKFEKDFAKFVGSKYAIMTSSGSTANLIATAALFYT

KNSKLKRGDEVIVPAISWSTTYYPLYQYGLKLKFVDVDLYTLNYDLEALKEAISDHTKMIACVNLLGNPN

DFDAINEMIKEKDIILFEDNCEAMGATYRDKQAGTFGILGTFSTFYSHHMATMEGGFVVTDDEELYHILL

CLRAHGWTRNLPKENLISNKSDDDFIECFRFILPGYNVRPVEMSGAIGIEQLKKLPDFLKHRRENAELFI

SLFENSEDFIIQKALGDSSWFGFSLIIKPNSKLKRSEVLKKLNDRGIEYRPICTGDFTQNPVIKYFDYSI

FKELKNAKYIHENGFFVGNHQVSIEEQIKLFAKVVGGGITLSHLLLQPKREAA

>ABS44741.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQKDFFQELQNILYEKNTTIKFHSFQNFYENFKSHKFIFNHEHQSIFKKNTSQQITLLHPTRIRRPKFVN

STHALAKIIHSVAHIEFNAINLALDTSYRFKNLPLQFYYDWLEVADEEIKHFKLLNSALEELGYKYGDFP

VHDNLESALEATKDSLSFRMGVVHRGLEAKGLDANPFVVQKLQSSNHSIKNLLMEYLEIILNDEIKHVKK

GDTWWKFANQNKYDFIELCKTFKQFSLAGKKLNIQARIKAGFTQEECEVIEKFYS

>ABS44740.1 hypothetical protein JJD26997\_0354 [Campylobacter jejuni subsp. doylei 269.97]

MQIISEDFNLSYSLKGGLVRSVAEGSYDGKKYSASVRIDATNLYDVENEKTGGLDTIKKELVFKISCPDN

TTAGQVLSFIREKFKSNQVLNLDGSIPDNNNVVKVLTPVNYFLGVEIKKSKN

>ABS44739.1 hypothetical protein JJD26997\_0479 [Campylobacter jejuni subsp. doylei 269.97]

MGKKNNIKMTKNASAVINELMDKPHYKPLKTLFFCKDFLSSFPLAKQRLIAKIYVKNHILNIITLHPAAY

QELNHDDSKIYIKFLIKAYGQKYPLSGFVDIKDIKIFSQKYTYAVNKNKNDEKLPKNSYLELSKGEFKNC

FEDEKLFKKFEDLRELIKKGSNLD

>ABS44738.1 autotransporter beta-domain protein [Campylobacter jejuni subsp. doylei 269.97]

MTITKNGTLMNSGSTVNPSSAIVLKPSNSSTPTLTLINEGTINSRIDIENNNGFSGTITVKKFENKGTIN

ERVFMGGDGSGTISIENFNNEGFIKGYESGTDSYQGVRFEGNVHVGTFENKNKGTIEGKNGNYAILLIGT

NSSTPTLENFNNEGFIKGEIGIGGTQGFRGTVTVKTFENKNGGTIDGGIYIPASTGTISIENFNNTGTIK

GGNYQGVYFQGDKVHIKTFENKGFISGSAYDMIYKNFNVSGGVSMAGGTIDTFINKGTIQSTGTNHNPAG

VKLNYATVKTFENTGFISGTIGVLATQGTIETFKNSGTIEATGKDGHEAAIQIRSAFKNSSSITHFTNEG

IIKSKSHGVLIESGDKIETLTNKGTIETELNGIGFYNYTGSEETHLGKIILESDSSIKAGKNGIDIDNQT

TARSIRVGGIEVQKGASVSGDEAGIYLGKDKEITAPITISGTVSGGNAGIVNEGRMARGITHNGEAELVI

SNQGLVGKDDKGNTVTNNKGSVTIKDWVVTTNEEGKLDTVVIGGEKTENVQVSNITVDQSGLELEELNEI

KNLISGVSTNNIANVKTNGGGEISLSYDPISARLSTDVQLNASIAGANFRSSVATASKRATFIDNVMANA

MQSFSLDSSGKSQKIALSEKGNLYADASDYIKNDYIKNDYIKSDLTQANYGLNKEHALFILPYLSSQSVE

LSLNEESKGHTKGTIIGYSTLKDSGIYGVYAGYEDTKMDSTYFDVNNISYYTGLKYFNTLFTTAKGQEVY

IKAQAQAALIKNDFTKRIGKNEAKAKAHSYTYGIHTALGMNFIADKNIFSPEAGFAYEGSYTEAFSMQDT

RGQATVRGGERTYANHLNLFSTKTSFTWFRDWLPNLKTSVELGAKFNVNPKVKARARFGNMKVNDEFHLP

RVRKFASTSLIVPVNEAFYFSLNYNGMFDEKGNTHTGFAQFNYLW

>ABS44737.1 translation elongation factor Tu [Campylobacter jejuni subsp. doylei 269.97]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>ABS44736.1 hypothetical protein JJD26997\_0304 [Campylobacter jejuni subsp. doylei 269.97]

MSNEVVLKEENKSQINFNPYELALVKGDLSKLSDVERANYVKNLCESLGLNMLTKPFEYIVLNGKLTLYA

NKSATDQLRQVRKVSITKTEVAQVGDIYMVTAYAATPDGRTDCDTGALNIKNLGGDNLANAIMKAITKAK

RRVTLSICGLGMLDESELETIKQKRFLNANEDLKVWDGDEKAIENKAQEIKALGAQLRKFMSDKGLSTEE

QNNFIKKHSLFTSEKIQEVLSNKDEFLTQLKGEL

>ABS44735.1 GTP-binding protein, GTP1/Obg family [Campylobacter jejuni subsp. doylei 269.97]

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFICDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELVVPEGTQVIDAQTNEILLDLTKEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVDEYNSFVM

TDIPGIIQGASGGKGLGLAFLKHIERTSFLLFVLDPMREMLLKEQFIVLRKELEKFSDELFGRKFGIMIS

KSDSVNLGEEFAEQIALNINELENYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKALRNNK

>ABS44734.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MYKTQDKILDLVAKENLDFYLTGGTALQRFHYNQFRFSDDLDFFLINNGIKIAY

>ABS44733.1 lipoprotein, putative [Campylobacter jejuni subsp. doylei 269.97]

MIKNGAIILSLAASIFLGACSMLPYKENFSCEKGKDNGMCGSVTEVYELSSNMDELRKKTDREYEQKHPE

VKAEAKTKVEQEARDSFRTLKLQEMVESVEIRKIQNETPTIFRYYLSEEEASNKADVALISENDKESKAI

QKGLKNQTEKANSQTNKNAKNGKNTHLKHSNKSSSKNDSKIKNNANKETNINKLYDGIKIYDNNESGVKD

INLTNKENNVVNTLEALYEQGGWIKLKDGTYVHKSIVTKD

>ABS44732.1 hypothetical protein JJD26997\_0405 [Campylobacter jejuni subsp. doylei 269.97]

MDLIRWFFKKNLDKLHNAKVLEFASHNGNNLSLFANYNYYCTGVELDQKNYENAIYNFKKIMKYNKFKFY

NENMLDFATNFKNLNANVFLIPNVINYISKNDFKNMLSNVRTNHLYKYGGGGYESFLFLKARSIKDHRYG

LGKSVGNGSFILENDEFSGEKNCLCTAYQEHELVEILQKYLNLYDFEVITSENINIKNKVYIKDSDIVIY

GKIK

>ABS44731.1 hypothetical protein JJD26997\_1777 [Campylobacter jejuni subsp. doylei 269.97]

MSKYSVIIPVDLDLRPFDILKKVKSILKRSSDEVEIVFGHNDRGSIFDKFLKTICTKKSNVKLISGKFYT

KLVCQSLLRNRAVEQCSSEFIYLMDVDYLFDEALSDGCINDIKNGQNPFIILPCLYLSRKGSREIFKFSR

EEMFEKYISFRKDLFISLASPSGGSIFMKKEDYFAVGGFDEDFVGRGGEDFEFMIKLALYKNVIKPTKDL

MVNKFYKAPLLSEGFRKYLTFNGLPYFFEKKVAFHIYHGRNRLRGYFRQYDKNSNLLQEKIKLASNLEDN

GASLIEFYEQLCKKYSVSVDKYAVLFDTYKPKLFSFERFMLFLRRL

>ABS44730.1 NADH-quinone oxidoreductase, D subunit [Campylobacter jejuni subsp. doylei 269.97]

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLVFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCATLYKDTPPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTGRPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>ABS44729.1 ribosomal protein L32 [Campylobacter jejuni subsp. doylei 269.97]

MAVPKRRVSKTRAAKRRTHYKVSLPMPVKDKDGSYKMPHRANPTTKEY

>ABS44728.1 methyltransferase domain family [Campylobacter jejuni subsp. doylei 269.97]

MIIFYDKKVIDLGCGEGRDSIFLKKNNANVIGVDISPCALTKARESSKAQNLDIDFIETNVLFLNAFKDE

YFDTAINMGCLHMIVDAKERKKHICNVYRILKRGGVFIVDHCQKNWGKGFFSLPPHLYSKDKMVVGNKIK

RVVRTKDGQKLMDLEVIPYLEKQKDELVEEICSFGFKKEYILDTDTQAFGNSTLAIFKKD

>ABS44727.1 cation ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MLEILNFTFFQNALLGAILVSIACGIIGTLVMINRLFSMAGGITHGAFGGIGIAFYFSLPILLSTGIFTL

FLAFLVAFLAKRYEHRSDSIIAVIWAFGMAVGIILIDLSPSYNTDLMAYLFGSILAVGTQDLWLMTLVDG

MVVLLIFLFYRQFEALSFDAEFAKVRGINTSFFHYLLIALMAFCIVISIRLVGLILVMALLSIPSFIAEN

FTKKLGFIMILASFLSMIFCILGLILSYYLNLSSGACIIAVACFGFLMHLIGKFLKR

>ABS44726.1 methylated-DNA--protein-cysteine methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFKVYYKIPLCYLSLHSDGKFLTGVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLKKFSVPVLVQGTDFE

SKVYKALMKIPYGKIATYKDIAEKKIVKLCTDTKTQIRI

>ABS44725.1 HsdS [Campylobacter jejuni subsp. doylei 269.97]

MTNLPQGWEWKSLYEILSNDKYSIKRGPFGSALKKSFFVENGVRVFEQYNAINNDPHWKRYCISYDKFKE

LEAFKAMEGDLLISCSGTLGKIVELPKNTEIGVINQALLKIRLDNTKILNSYFIYYFNSPTMQDKILEST

LGSAIKNIASVKILKQIEIPLPPIKEQERIVGILDFAFSKIDENIKKAKENLANIDELIQSALQKAFNPL

NDNTKENYQLPQSWEWKSLGEICEILSGGTPDTKNPIFWYSNQTDETQFEKSVVGGLGDFKGDKGSDFAI

KVPLSPLEKNYYWATLVDTKEKYLYKTKRKITQKGLDCSNATLLPINSVIFSSRASIGEISIAKVETATN

QGYKNFICDASILYYEFLYFALKHFTKEIELLAQGTTYKEVSKAKIKEFKIPLPPLKEQKQIASHLDELS

SHVKNLKQNYQAQIKDLQELKNSLLDKAFKGNL

>ABS44724.1 BdrR [Campylobacter jejuni subsp. doylei 269.97]

MQGNTVRNYYVSEGVKALFSIYFKDQTEENFIKALNEFNKENQINSQEIKDEALRQIKEELSKLATIDLL

NARIDTVDAKIDRTEASLNAKIDKVEASLNAKIDSFKTEVKTYAIIIIALMFILQPTIFDLIKSIFK

>ABS44723.1 chorismate mutase/prephenate dehydratase [Campylobacter jejuni subsp. doylei 269.97]

MPNLEEFRNKIDAVDDKILELLNERMTYVKSIGELKQSSGGSIYRPERERAIINRLKNANLGLLDQNAIE

AIYQEIFAVSRNLEMPQTIAYLGPEGTYTHQAARSRFGAMSRYIALSNIEDVFKELSNKEAKYGVVPIEN

NTEGAVGITLDCLGKYNELKIFGEIYMDIHHSFVGINENLKEIKRIYSHPQGYNQCRKFLESHELSAIEF

VPSKSTANAAYLASQDKYAAAICSKIAAKLYNVPVLFDKIEDNAANKTRFLILSDIKNPKMPNCKTSILA

HTAHKPGGLSFLLEQFKKENINLTKLESRPVKSKEFLHSFYIDFEGHIDDENVKKALKDIQEIVWLGSYL

SGEKDEI

>ABS44722.1 LamB/YcsF family protein [Campylobacter jejuni subsp. doylei 269.97]

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDKTLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKDMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLKYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNVKALEFVKKIKENLEKEQIQICALENFI

>ABS44721.1 radical SAM domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKRLDKKEALDLLHHASLTELGEMAYKRKLELHPEKITTFVVDRNINYTNVCCIDCSFCAFYRHHKEDDA

YILSFEEIGKKIEELEAIGGTQILFQGGVHPKLKIEWYEELVSWIKEHYPNITVHGFSAVEIAYIAKASK

ISITEVLQRLQAKGLFSIPGAGAEVLSDRVRDIIAPNKCHTATWLEVHRQAHKIGMKSTATMMFGTVEND

EEIIDHFEHLRKLQDETGGFRAFILWSFQSDNTTLIQKHPEIMKQSSNKYLRLLALARLYLDNFKNLQSS

WVTQGSLIGQLALKFGANDLGSTMMEENVVSAAGASYRMNQDEMMRLIRSLGENPAKRNTAYEILERF

>ABS44720.1 hypothetical protein JJD26997\_0319 [Campylobacter jejuni subsp. doylei 269.97]

MKVIELKVKMPDEYFELLQSVANDGGFNSINELIVDKIAHFIKLEKYYQELDKKDILSLDKT

>ABS44719.1 NAD-dependent epimerase/dehydratase family protein [Campylobacter jejuni subsp. doylei 269.97]

MRNILVTGADGFIGSHLCESLIKKGFKVRALNQYNSFNFWGHLEKSPFLKDMEVISGDLRDSFFCEKITK

NIDAIFHLGALIAIPYSYTAPQSYVDTNVNGTLNMLEAAKKNEISHFIHTSTSEVYGTAFYVPIDEKHPL

QPQSPYSASKIAADMMALSYYNSFNLNVNIARPFNTYGPRQSARAIIPTIITQILSGVKEIKLGDLSPKR

DLNFVLDTCEGFISLLNLKHFGEVYNIGSGVEHSMQEVLDLIQKILDSKVKIIQDEQRLRPKNSEVFRLC

CDANKLKKATNWQSKISLEEGLRQSIEYFKENLENYKSELYNV

>ABS44718.1 putative tungstate ABC transporter, periplasmic tungstate-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIVSLALALALSASAAELKMATTTSTDNTGLLDALKPLYEKESGNTLKWVAVGTGAALKMGEDCNADV

LFVHSPKAEKEFMKKGFGVDRTPVMYNDFIIIADKSLAPKFKGKNLKESLELIKNEKLTFISRGDKSGTD

NKEKSLWKNLGGVPEKQSWYQQSGQGMLASIKIAEEKKGVILTDRGTYIKYEASEKGNPNLVIVNEGDDS

LKNFYSVIATNPKHCKNVNYTEAKKFIDWLTSDDTLNFISGFKLLYKPLFVVDAKTRKD

>ABS44717.1 glucokinase [Campylobacter jejuni subsp. doylei 269.97]

MSISQNKKSYPRLLADIGGTNARFALEVEANIIKNIEIFPCNDYNTVVDAVKVYLNKFGNPTIKYGAFAI

ANPVVGDWVQMTNHHWAFSIETTRQALNLEVLILINDFTAQAYAISRMSSSELIQIGGNFCTINAPKAVL

GPGTGLGVSGLIPCGNGDYIALSGEGGHTSFSPFDDTEVMIWQYAKKKYGHVSTERFLSGSGLVLIYEAL

ADREGIKSAKISPELISEQALSGKSPLCRLTLDIFCAMLGTISADLALTLGARGGVYLCGGIIPRFIDYF

KTSPFRVRFEDKGRFDAYLAAIPVYVVLAKYPGIFGVAVALENHLKDYFSKK

>ABS44716.1 PEP-utilizing enzyme, mobile domain protein [Campylobacter jejuni subsp. doylei 269.97]

MAELNFKTKAQNLKNLQIKLKKAKVLPLVLTSLEELTSNEDKVLQDIQTLKANRLIIRSSSFSEDSMKNS

NAGAFLSLANIKTDSKDELLKALYEVANSMPSKSDEILVQPMLENITLCGVAFSVDKDNFSPYFCLQYDE

NGSNSSITDGSSKSAKTYYHYRDYLEFKDIRLQKIIELIKELEALYDCCFLDVEFAFAIQDDKEELFCLQ

VRPLVMHEKNNLFHSLPKEALYRFYKRFESLKESRSRVLGDKTIFGVMPDWNPAEIIGLRPKRLAFSLYK

EIITDNIWAYQRDNYGYRDLRSHPLIHSFLGIPYVDVRLSFNSFIPKKLDENIAQKLVNFYLDKLNKNHE

LHDKIEFNIVYSCYDFNSSKKLEELLNHGFNENEIKRLEFSLLELTNKIINPRSGLYLKDIQKAYKLKER

YDGIINSNFSLIDKIYWLIEECKRYGTLPFAGVARAAFVAMQLLNSLVEIDFITKEEKDDFLNSLNTVSK

NLSKQTNHLNFHTKDQFLKDFGHLRAGTYNILSPRYDEDFELYFDADQKDSKVYLQDKVFVFSEEKTKTL

NALLKEHGLEINACEFFAFLKQAIEGRELIKFEFTRLLSKAIVYIEELGKYYGIEKEDLAHLDIKSVLNL

YSSLYSINPKEQFLEEINRNKKEYELTQAIKLPSLLCNADEIFSFYNHSIIPNFITQKSITAFTAKENDK

DLEGKIVLIYAADPGYDYLFTKNIAGLITCYGGANSHMAIRASELGMPAVIGVGEENFEKYLKAKKINIE

CESEQIFCL

>ABS44715.1 pseudoazurin [Campylobacter jejuni subsp. doylei 269.97]

MKILIKTAILGLLTMSLEAKNYEVKMLDIDSKNQTMIFEPAVLHIEVGDSVTFIPTHKSHWAKSVIVPES

ANKFESKLDEKATFAFKKEGIYLYECPPHRMMNMLGLIQVGKAHNLDKIKNAVPKLEKRAMTNQGRLEAY

VKELE

>ABS44714.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIKKFIFLVFISSVVFGAEQDCEQYFEARKAQIELQTREFDEARQSLEAYKASFEALQKERLENLEKKEV

EVNATLAKIEELKLENARLVEEQQKILNSINDKTQGRVKEIYSQMKDAAIADVLSQMDAEDASKIMLSLE

SRKISGVLSKMDPKKASELTLLLKNLDNNASN

>ABS44713.1 Na+/H+ antiporter NhaA [Campylobacter jejuni subsp. doylei 269.97]

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFALVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLILNLLGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAVFSGVSIGIFLGLFVGKQVGVFLFSYLVIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFAARS

>ABS44712.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKENLQNRLERENLKIASFGKRVLAFLIDDMVISLIVFIIFYDHLIQAKDLFETTQIIGNFYLGFILLHF

SYQTIFTYLYGASLGKILCKIIVLDENLLDKPNLIQSCIRSAIRQVSAMAFMLGFAWALSNDLRKAWEDY

LARTIVVDVA

>ABS44711.1 methyltransferase, FkbM family [Campylobacter jejuni subsp. doylei 269.97]

MKRPLPFILAATNNGTMIINHLDRHDTSQGSYGVGFQFLNYGSFDSEEIDLCVNLLKLRRKYYEGYVFAI

DCGANIGAHTIKWAIEMHDWGGVLAFEAQERLFYALAGNIAINNCFNARAIHAAIGNPEKNQNELEILTP

DYTQKASFGSLELKSQNNNEFIGQIPQKKEKVPYLKLDNFNFKRLDLIKIDVEGMEQEVILGCLNHIKTF

KPILQIEIIKSNIQDIINILENLEYEIFQSGINILAIYKADPVINHLRSSNP

>ABS44710.1 putative chemotaxis protein MotA [Campylobacter jejuni subsp. doylei 269.97]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGRKMKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPKISQFDKG

>ABS44709.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MYHLLDFSTCKCENEKFDLAYKIFKQDFIEAPLYLAGCIYIDPQSHKKHKGKEKIFWHITTRENKQNKTR

EFDSQRACRINWIKQIIINHTHSEIKAFYYKEKRTIRFYLWLHNYDFIVILQKLGRSSSFLVTSFYIDKG

YNKNIYEKRYRNYIIDTLFIIYLIFCPILTFNPYAFTIFKLSN

>ABS44708.1 response regulator/GGDEF domain protein [Campylobacter jejuni subsp. doylei 269.97]

MNKKILIIDDNKMLGKLLAKKIQMTLDYEVDIAFGFAEAKELMNNDYFLAFVDLCLPDAPNGEVVDYVIE

KKIPAIILTASGDKATKEKFMDKDILDYIFKESETCIDEIISSIIKLNQYAKTKVILAMSKLPERNEIKK

ILTQRQFNVLAAAHGEEAMSYLNDNNDVKLIIADVNMPVISGFELLTQVREHFSDDELGVILLGDHNDSF

EANSFKNGVNEYLFKPLSKESFNCRLDRCLSYMDDKKFLSTYNVLDPVSGVKNYNALIDGIDDYFNEIAT

KDEEFAFAFLDIDNLQMINDEYGREVGDEVIKICANEIVNETKGRDLVGRYSAEKICILLKNISQERAIK

IFSRIRVNIKKAGVLVNLDEVFFTASIGVVFGKSGDKIDSLADKASKILSQAKDNGKDRVEVCS

>ABS44707.1 hypothetical protein JJD26997\_0832 [Campylobacter jejuni subsp. doylei 269.97]

MAIKIEISGFDKDFLPVFESLAKSLKATYCLLEYDTQEEKKQSSMKKALEEMKNGEYETFKNFDEYKKAM

REI

>ABS44706.1 excinuclease ABC, B subunit [Campylobacter jejuni subsp. doylei 269.97]

MLELTSEFKPSPDQQEAIKGIVKSIKKGNKYQTLLGVTGSGKTFTMANVIKELNIPTLIMSHNKSLCAQL

YSEFKGFFSKNHVEYFISYYDYYQPEAYIPRTDVFIEKDSSTNEDLERLRLSATASLLSYEDVVCIASVS

ANYGLGNPNEYIGMVLIFELGMQISQKELLKKLVDMGYKRNDNFFDRADFRVQGDIIDIYPAYYEDEVVR

LEFFGDELDAMYHYNVLENKKGKDLKRFILYPTSQFSVGEARLKQAIRDIKIELNERLAYFEHENKLVEY

QRLKQRVEFDLEMLTSTGMCKGVENYARHLTGLKEGDTPYTLFDYFAIKNRKFLVIVDESHVSLPQFRGM

FAGDRSRKQTLVDYGFRLPSALDNRPLMFDEFIHKNCQFLFVSATPAPLELELSKENIFHQIMRPTGLLD

PLIELKDSDNQVEILFDEAKKVIQRNERVLVTVLTKKLAEELTRYYLELGIKVKYMHSDIDAIERNEIIR

GLRSGAFDMLIGINLLREGLDLPEVSLIAIMDADKEGFLRSTTSLIQTMGRAARNVNGKVLLFCKKITKS

MQEAMDTTNERRKLQMAYNKKYNITPTSVKRHIEESLKNEEDLGEIYRKGKKLEKMPASERAKLVKELRK

QMLEAAKALEFEKAAAIRDEINKLRDL

>ABS44705.1 autotransporter beta-domain protein [Campylobacter jejuni subsp. doylei 269.97]

MTITKNGTLGNGSDNSITLKAQNGDTRTLVNLTNQGTIKGKIGIENNNGSFTGTITVRTFENKKTIDGDI

YMGIWGGNGGTISIENFNNEGFISGKSRNEKGVHFEGKNNAKVYINTFRNSGSIEGGENSSHERHGVYVQ

GNVDVTLFENTGFISGKNGQGVYFQGNVTINTFENEGTITSEKGQGVRFEGNVHIKTFENKSGGTIEGKN

GQKSIILVGTNGSTPTLENFNNEGFIKGEIGIGGTQGFRGTVTVKTFENKNGGTIDGGIYIPASTGTISI

ENFNNTGTIKGGNYQGVYFQGDKVHIKTFENKGFISGSAYDMIYKNFNVSGGVSMAGGTIDTFINKGTIQ

STGTNHNPAGVKLNYATVKTFENTGFISGTIGVLATQGTIETFKNSGTIEATGKDGHEAAIQIRSAFKNS

SSITHFTNEGIIKSKSHGVLIESGDKIETLTNKGTIETELNGIGFYNYTGSEETHLGKIILESDSSIKAG

KNGIDIDNQTTARSIRVGGIEVQKGASVSGDEAGIYLGKDKEITAPITISGTVSGGNAGIVNEGRMARGI

THNGEAELVISNQGLVGKDDKGNTVTNNKGSVTIKDWVVTTNEEGKLDTVVVGGNKTDSVKVSNITVDQS

GLELEELNEIKNLISGVSTNNIANVKTNGGGEISLSYDPISARLSTDVQLNASIAGANFRSSVATASKRA

TFIDNVMANAMQSFSLDSSGKSQKIALSEKGNLYADASDYIKNDYIKNDYIKSDLTQANYGLNKEHALFI

LPYLSSQSVELSLNEESKGHTKGTIIGYSTLKDSGIYGVYAGYEDTKMDSTYFDVNNISYYTGLKYFNTL

FTTAKGQEVYIKAQAQAALIKNDFTKKIGKTEAKAKAHSYTYGINTAWGMNFIADKNIFSPEAGFAYEGS

YTEAFSMQDTRGQATVRGGERTYANHLNLFSTKTSFTWFRDWLPNLKTSVELGAKFNVNPKVKARARFGN

MKVNDEFHLPRVRKFASTSLIVPVNEAFYFSLNYNGMFDEKGNTHTGFAQFNYLW

>ABS44704.1 acetyltransferase, GNAT family [Campylobacter jejuni subsp. doylei 269.97]

MIKLKNFTELNSQEIELIFKWRNHPDISQFMKTKYIDFEEHLRFLKNLHQDSSKKYFLVFQDEQIIGVID

FVNITTKSCEFGLYAIPDLKGVGQVLMNEIIKYAFENLKVNTLKAYVFKSNHKALKLYQQNHFTIYDEDK

DFYYVCLKQSHCKALLS

>ABS44703.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MFAKLLKFFISHPKSTFFGTLFICLFLSFFAFKLSVDASAESLLLEDDADLKTFREISKHYKSDNFLLLA

FKPYDEKPFSNENLAKLKKLHEELEKSPLVERVFSIINAPLLQSSQNTDLKELLKNIPNIESQDINRTKA

QNEILNSPFYKNNIISKDGKVTGLIIYLKPDTVYNNLVEKRDLATDEKEKDQIRLAIKKHQDKQKVITKQ

SLDTIKNIVRNYEKNKDTLYLGGVSMIADDMIAYIKSDLVLYGVSLVFLLGLALYYFFRSWRFVFLPLFI

CFISLSAASGVFALLNFQITVISSNYVALVLIITLSVVVHLITHFIESTQNHPKAKIERIVLQTLLAKAN

PSLYAIVTTMIGFFSLIFSNIEPIIKLGIMMSIGIGLALIFSYLFLASILVLLKPKNYHKKEFKFNLLAF

CAKTALDPKKRRMIYGISVLAIILALIGISKLRVENSFVNYFKDGSEIKKGLLVIDKNLGGTLPLEVIIR

FPNNKNDQNTSDTLDSFESEFENLATQETYWFDSKKTRIAKKVHEFLENKEFVGSVLSLNSLLTLGKNIN

DGKELDDFALAFLNENLPAKFKQDLLSPFVSIENNELRFSMRIVDSDPNLRRNKFLIDLKKQLNELVKND

GVEVQITGIMVLYNNMLQSLFSSQFDTLIFVILAIFILFIIVFRDLKFSVVAILVNVIPLSVVFALMGLL

GIPLDMMSITIAAIAIGIGVDDAIHYIYRFREEIKNKSLEEAIMISHLSIGSALYYTTISIVLGFSVMMS

SNFIPTIYFGILTVFVMILLLNGSLFLLPSFLITIYSKKAKFPNQHKEHILKQ

>ABS44702.1 lectin C-type domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKNYHWFRFFSKNTSVEQVTPIKNLRLAILLLASLSFSQAAIQCKDYNDFKQFNGHYYTATVQKMTFEDA

RKLAEDSGGYLAIPDSKAENDFLSSLFRGGQYAWIGVYDPSYISNYCVEGNAGCIYDDSRFKTVKGSPLT

YKNWAQTQPDNLLKKYDIVNGKERVSPLGEHWVAMASPSGQWSDQGNHFGDTNNPVRNYALLEFDKIPDC

AGGDGGGDGGHSATDTMQCNTNFSDDPNFKLTNGQGQSIACLQNSQQKYFCPAQLTQCVNSDDAVDGSSE

KIEGGVLKTSKTKVRFTFSNSIRYSAWQVVTNDIYITDIDAIDSFKLVYAGADDWVVPFAPNSTVTVIRN

EPNNTKDALDYIPYRPIDANYDRPNDNYGGLFRFSGKNLNIELKQYLHTGVNKSVAFFATVGRGAWQLTY

EATGKDISCSNFGRNLNCTEERKTIPFPFSAYKYTCPAGYQPKEQGGVCSPQSVDDLIDTNGDGIGDSCN

SSIAPAKNCLGVKRTCPFNSSRECVLIDNKYQCSPFPCFKGVSDIEDTDTPVGVNDANNNGWNDDGTCSG

QIIIFNGQDNRCKNWDMFGGLFGGGCCDKNNVFLGLVACKEDEKKLARLNNAGKCHEVGTYCSKKISLGF

TKICIEKKKSFCCFNSKLARIFNEQGRSQLGKGWGSPKSTQCRGFKPEEFQKLDFSEIDLSEFIADIVGS

FDTGKIQADSVKIQEKIQNNIENATKKPTN

>ABS44701.1 oxidoreductase, short chain dehydrogenase/reductase family [Campylobacter jejuni subsp. doylei 269.97]

MNTEFQGKTLVISGGTRGIGKAIVYEFAKVGANIAFTYNSNVQIADEMVQDLEKNYKIKARAYEFNILEP

ETYKELFEKIDADFDRVDYFISNAIISGRAVVGGYTKFMKLKPKGINNIFTATVNAFVVGAQEAAKRMEK

VGGGSIISISSTGNLVYIENYSGHGTAKAAVEAMARYAATELGEKNIRINVVSGGPIETDALRAFTNYEE

VKQATINLSPLNRMGQPEDLAGACLFLCSSKASWVTGHTFIVDGGTTFK

>ABS44700.1 alpha-2,3-sialyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFFFSNSDIEYNEAYTETDNLLKIILSYNVLSEYDILRESQVLKVNNKNKPSNQTDKNHYRKAKSRIQNH

LSYKLGQALIENSKSIFGYIRIPYVLSYIKDKHKFEQKAYEEKIKENPNLALPPLETYPDYNEALKEKEC

FTYKLGEALIQASKNWYGGGYIKFAFKDVPRLKREFRKR

>ABS44699.1 CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNLPNILAIFRMVLAPLLFFLLIHHFENIHQSWTNYFTALTFSLAALSDFFDGYIARTWKQTTKLGGILD

PLADKMLVLAAFLGLLLTGKANEWVIYIILVREFFVTGFRVVMISENLNVNASFAGKLKTAFQMTAIGFL

IMEWIGGEILLYIALILTLYSGFEYIYAYIKAQKKGEK

>ABS44698.1 metallo-beta-lactamase family protein [Campylobacter jejuni subsp. doylei 269.97]

MDENKEINKNEQNPNSNSKNNKRYKYKNRRKKLADSLQNENDTPKIDQNSNKENSENSENKTEKKKKKNR

NLPSKLTGNEDWQIALAECIEANRVSHENRLHPLKYNNSSEHKIRITPLGGLGEIGGNISVFETNKDAII

IDIGMSFPDGTMHGVDIIIPDFDYVRKIKDKIRGIVITHAHEDHIGAVPYFFKEFQFPIYATPLALGMIS

NKFEEHGLKAERKWFRPVEKRRVYEIGEFDIEWIHITHSIIDASALAIKTKAGTIIHTGDFKIDQTPIDG

YPTDLGRLAHYGEEGVLCLLSDSTNSYKEGYTKSESSVGPTFDQIFSRAKGRVIMSTFSSNIHRVYQAIT

YGLKYGRKVCVIGRSMERNLYTTMELGYIKLDRKIFIDADEVSKYKDNEVLIITTGSQGETMSALYRMAT

DEHKFIKIKPTDQVIISAKAIPGNEASVSAVLDYLLKAGAKVAYQEFSEIHVSGHASIEEQKLMLTLTKP

KFFLPVHGEYNHITKHKETAMKCGIPERNIYLMSDGDQVELCQKYVKRIKTVKTGKVFVDNQINKQIADD

VVIDRQKLADSGIVVIIAQIDKATKTLINKPRVFSYGLVADKHDHAFSKDMAEVLGQFFINIKDEVLNDP

RFLENQIRQVLRKHIFRKIKKYPTIVPTIFVM

>ABS44697.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQEKIQILMDLLEINKAQATDIVGRYLKSVKDIHAFLDFYFETLERENIVGTTYEKLRRVCKRAEIEFKK

RFEDKEIFLEWLKNKYKNSPFFRLLESDFKYSYLCHDGQGNPLKQLAKSINMLVCLNNFGELTYADGEVL

KNNEFKHALIDFIFKNQERIGKDTHINTSYKIKGYVPLSHEEEYSNFKNVQKKIFEENQEEFQKNLKVKM

AFKNIS

>ABS44696.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGTSLNELKTGREKLQIINQVLARISNVATALDNTRIEEIVGLKEQVNNFHTQILELKNSVIENSELTQS

NADFVKSKKNEIERISNEINDTLNNIENIYNNMIESQRNINNGVNMVKEKYPELKEFNKNFEIIKIKLKE

YDDIATHFNAGLEKIEENKNLTRSYLDLSIGLKEQILQELEHAQSIKDDLHSNIELVNNLVSNIRATKNE

IVSISNDFKNVKSEIQDTVNDAETTIKLKINTILFENQRLNQNMIDLLKRCTRLENQIVEKYEDILQVED

LINSSQSMINDLRQAVEQSEQISEDMRSFTAIIKDFKTEIANLKADLESYNERLKGQLDLKATQINSSID

AKVSSIETLKNQIEAYVETHNNTIDTALANFIERSSIANEDLGRLVEVARTELANDKTAIESYLLELKQS

IINAMKKVSSDITDETSGILAQKNQIELIIAQGRSALDTLNNELNSNHQNKLNEFNLNANEKLASIHSLR

EESIANIQSKTDENIGRLETLSEEKLAKFDEIIRDNLGVIYSRIFSIENVFLDKKIIKLSYKE

>ABS44695.1 dimethyladenosine transferase [Campylobacter jejuni subsp. doylei 269.97]

MVKAKKQYGQNFLIDKSVLAKIIQAIPKEMNNIIEIGPGLGDLTQELLKISQVKAYEIDNDLIPILKKKF

QKELECGKFNLIHQDASEAFNPSLDEKPYFLVANLPYYVASHIILKALEDKNCLGLIVMVQKEMAEKFCA

KEGNSEFSSLGVLSAMICERKILFDVDPQCFNPPPKVISAVMSLIKTKDFNELCEIENFKNFLKDCFKAP

RKQLLGNLKTYKVKVLEVLSILGLKENIRPHEICVDSYLKIYDKLKDEYGRKQRDK

>ABS44694.1 3-isopropylmalate dehydratase, large subunit [Campylobacter jejuni subsp. doylei 269.97]

MAKTLYEKVFDAHVVYENENELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>ABS44693.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQVNYENFQRMSKEEYYEKYKVGIRFLFGYDQKNDYKLKKFNNFFRIVKLEE

>ABS44692.1 pyruvate kinase [Campylobacter jejuni subsp. doylei 269.97]

MLKKTKIVATVGPASEKEEILRQMIINGVNVFRLNFSHGTHEYHKKNLDTIRRVAKELHTRIGILQDISG

PKIRTGELKELFELKKGDRLDFYREAILGEKIAQNHYKISINQKSILNMLKIDEYIYLYDGSIRAKVVST

DDQKIETIIENDGFLNSNKGINFPNTKINIDVITQKDKNDLLWGIKNEVDFLAISFVQNAHDIDEVREIL

AQNNAKISVFAKIEKFDAVENIDEIIKSSDGIMVARGDLGIEVPYYKVPNIQKEIIQKANNASKPVITAT

QMLFSLAKSKTATRAEISDVANAVLDGTDAVMLSEESAVGIDPANAVDIMCQTIIETEKRYPYNKFNDFN

DLDNTDKIMRSSAHLATDLNADAIFSLTSSGKSAIKIARYRPNIEIIAVGHSEKTLNSLSIVWGVNPAIL

VNKSNELTELLKDSVRSSVEKGFMDEDKCYLLTAGFPTGVEGSSNLIRILNKEQIAYYLQ

>ABS44691.1 hypothetical protein JJD26997\_0131 [Campylobacter jejuni subsp. doylei 269.97]

MLAQPFLKRHFWKKRLFDFKFTSTCKDFKRLISPLVSIHFSLSLLLLIVLK

>ABS44690.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTYSFIQPRKKPIFTLFDKIWLGLFGFSILFILLVYFTHTIKIALINSSIDDEKQQVIVLQNQTKQNEML

YEILFDQSQIAKNFNTQNQIAKESLRNLFDIIVKTDNITLESVEQDEYSLKLIGVTPTREMFTLLLETPL

KSIFDQSYTTYYRLDNGWYRFVSISKQIPGVADER

>ABS44689.1 putative thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. doylei 269.97]

MKILFNQGYNMRNFFCKFVLALVFCSSFALANNSFITLNPSLPNSENSVIEAFSYKCIHCYNHHKFGTLE

KLREAFPNLHFKLYPVSLMNGEFSKEMNELFAFAQYKDEQNGKDASYSDSLSHKLADVYFVSYFLNKQRN

FSNLDEFYDIGLKAMNVNKNEVLNFLNTPKAKEILSEFQRANDIAKIYGTPAFVVNGKYQINPSAINSMQ

DLEDLVKKLSNMK

>ABS44688.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDNSLSAYTQKYDKEGYGLQYPDGHVIRFYERILKYKLSKTSGKLLDFGCGNGVHSKYFKNITGGGGIEP

YGIDIVPSLKKVWEKDPCLDSKNFHIISPNSSFKKLFNTKMDFIFANQSLYYLTKQAFKEAMQEFYELCN

EGAIIFATMMSDKGYSMYERGELMDNGLREVKGCPSGRLSGSSYIRFTKDIEELKEDFKPFKPLFWGDYE

LINLYNFEGSVEHFIYIGQK

>ABS44687.1 TonB-dependent heme receptor [Campylobacter jejuni subsp. doylei 269.97]

MHPNKKLYKLSLFALLLITNLNAQESNEAINLQKVVVSATGFEQDADSNLRNVISIEGKDLQNKGYVSLE

QALERISGISFVNFGLGRNIDMRGQGNKSNIAVKVMIDGRTINVLDNSHGVTPLDSINLDNVERIEIIPG

GGSVLYGSGTRGGVINIITKKQKSDAFAINLKSSAYDHGRLGGNLGINGAKQINENLAFSFDIQSFNLDG

YQEGYNEKGYFINTKTYIDINDNSDLTLGYNYFKSKNTSSGYLTKAQAQSNPTQKGKSDNITQINRPEIS

LDYHYYFDDIWQFNLEAFWQNQKINYLKSVGNGFEDTLTGISLKNKLNYANNSYFIFGYEFANHDAKRKS

LRYYSVPNVINYHRMTTLMDMTKQSHSIFALDSHNFNEFFTLSGGVRYEFSTYNTHRSYRNEMSMNKKPP

SDTTTLFDTNKNTNNFAFEITPNFKYSDTGNLYLKYERGFVSPTPAQFVNKDQATQTYYSVNLNPEIFDT

FELGIDDFWWDFYGFNLTLFYTLSKDEISYRGNPHARGGGFWQYYNIDQTRRLGVELSLSQNFLDDDLIF

RESLTYLDAKISKGVNDGMRIPYVSKIKVTAGLEYAWNKNFSNFVDLTYFSRAKDGGTINENTGKMSKNS

WIRDYFLTDIGMKYNYKKLQILAGIRNLFDKRYYTYQDSINDQYLAGNGRNYYVEFKYAF

>ABS44686.1 RNA methyltransferase, TrmH family [Campylobacter jejuni subsp. doylei 269.97]

MFNIVLVHPRIPQNTGSIGRMCFNAGFKLHIVKPTVFDISQKAVRRAGLDYWDKLEPIIWENLEEFLNEN

MIYKNRFFFATTKSRKAYFNTEFQKNDFLFFGSESYGLPMELMQLNWKNAITIPMKSYGRSLNLATSVGI

ISYEALRQNFSNFVS

>ABS44685.1 hypothetical protein JJD26997\_0064 [Campylobacter jejuni subsp. doylei 269.97]

MISLNSHYPNINYPNNALSIKKDENNEYTYTKKDEPKSEEDAYWEDFVQKYFGEMLSKEYANKYGYNGSP

DVKEVENSLYKRYMEDKLSKDEIKILNEFGTDYLVEGVDLTALIRRKVDLLKTLTSMNEFEKIWGAERAQ

REKQFFNELGKPLTQEDIDRFLANKNNQKEDKKTFKPIQAESKNKETYKDDSTRNELVKKLLEGKFSTSK

ELELLFGMNFSNDDAGEFNKFLSQNTSAKIIDIKA

>ABS44684.1 cysteine synthase A [Campylobacter jejuni subsp. doylei 269.97]

MKVHEKVSELIGNTPIIHLKKFGINVFAKCEFLNPSHSIKDRAAFEMIKDALDSKKINQNTTIVEATSGN

TGISLAMICADLGLQFVATMPESMSIERRKMITLFGAQLELTPANLGMKGAVDKANEILKNTPNSFMPSQ

FDNLANKNAHRKTTALEILKDLDNELDIFVAGFGTGGTISGVGEILKEKLEKVHIVGVEPLNSPLLSKGE

AGSHKIQGIGANFIPAILNKEVIDEVITVSNEDAINTAKELAKSGLMVGISSGANVFAASMLAKKFPDKR

ILTMLNDTAERYLSTDLFA

>ABS44683.1 putative cysteine desulfurase [Campylobacter jejuni subsp. doylei 269.97]

MKVYLDNNATTMLDPNTYELMLPFLKDMYGNPNSLHQYGSTTHPALREALDKLYAGLGANDLDDIVVTSC

ATESINWVLKGVYFDHILDKERNEVIISSVEHPAVTAAAYFLKSLGVKVIELPVNEEGVSTVEDLRKVIS

DKTALVSVMWANNETGMIFDIKAMAELAHEFGALFHTDATQAVGKIKVNLTQAGVDFASFSAHKFHGPKG

VGGLFIKKGLKLTPLLHGGEHMGGRRSGTLNVSYIVAMGEALRIANTMLDFEDSHIRRLRDKLEDQILAL

PDTTVVGKREHRVPNTILASIKGVEGEAMLWDLNKNGIAASTGSACASEALESNPIMEAIGADHDLAHTA

LRLSLSRFNTEEEIDYAAKQIKNATQRLRAISCTYAYNPNNYK

>ABS44682.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MINSTLPIQMKVLAKSGYGHYTLLLNHKKIQTKSMIELEIGAEYLAELYMQNGGVIQFKHLSKCPNFKPF

EEGLALLIAILEDKISYKKFIIQNLLDCKDIERYQILKEMLFASFENIYHIPFIFENKSCLFQMRKRAKY

LEIYLYFSVFGALKILIDSQGVSVFTPFVKVQKFLNEHLEVNVSQESKIEPLFVFKRLFDFKG

>ABS44681.1 GTP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIISAKFITSLVVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCK

RNEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKFRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRF

LRPDQKILKVFTKCDKLNQSEKARLKNEFKDSILVSNLNKFGLDSLEDVIINQTLGFDK

>ABS44680.1 putative cell division protein FtsH [Campylobacter jejuni subsp. doylei 269.97]

MKNKKIILASFMVLCMLLGILYFKNEPKYIDENLYQSLLSQNLIQKAVIDKDEIWLKAEGENYIIIRDGI

NIKTLLAKVPVEVKKDNTLWVFFILLVFIIALFISLSYFARKKELAKYPISNKNQNHTQAQNSNINLESS

HIKPVISNITFNDVAGVDEVKMELSELVDFLQNPKKYKEFGVKMPKGVLMVGPPGVGKTLIAKAVAGEAG

VPFFYQSGSSFVEIYVGMGAKRVRELFSKAKMMAPSIVFIDEIDAAGKARGEMSNVERDSTLNQLLTQMD

GFEDNSGVIVIAATNKIELMDPALLRSGRFDRRIFLSLPDFKDRLKILEIYMKDKNNNVNLNKIAKASVG

FSGAGLETLVNEAAINALRRNSVLVEESDFYAVLNKVLLGKKKILSFNDEEKKIQATYQAAKALSAYYFD

IGFDKITLIEDRFKEYEHNIRSKSELINRIKVYLAGSRAMKLIYNESYTNSQDDFLKIKELLDYMLSFDM

LEEPNLSEQKKEMDEFLNSMKDKILKLSELLLEKEKIEYDDVKNIMQV

>ABS44679.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMAQVILDTVNYPDFFQADQIANYIKK

>ABS44678.1 NADH-quinone oxidoreductase, M subunit [Campylobacter jejuni subsp. doylei 269.97]

MLNYLIFFPLISAFVVLLLNRGGVKVFSVVVSFMILALNLDIFADFLQGTSFDYNLSFKILKFFSFHVGV

DSIALILMLLSSLMIFLSFLFLKLEQKALVSCIFFLEFAIMGLFSAKDGLLFYVFWEFSLLPLLYIMGVY

GKDFREGVKFFIYAFAGSILMLVALIYQAYLNYQLLNIFTFDLEIWKNNTSAVNFTEQLLLFGAFFIAFA

IKAPLFPLHTWAPKVYANSPVLVSVMLVVFKMAPFGFLLFCLPLFPDASVYFMPLIVALCIVSIVYNALI

AYKAENIKELIAYSSISHLGVMILGIFSLNALGISGAVFYMFAHGIVTGALFLMVELLYQRYHTYDISFY

HSLAKKAPLFSIFFMLILLASVSLPLTVSFVGEFLILLGIAKINLFYALLAGLVIILGAIYIFAVFRKIS

FMQKQSFIESFSLRLREIVALVCIVVMIFGLGLMPNILLKPIQKDVDNLIKTMNIRAVEQNTLDFLSKIG

EANVK

>ABS44677.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAKKDNFEEYAQLEEYVSAEDISRVRAELLTCPELNTSLAGTIIKIDKNYAKSILITTSEMVADDQGLIF

DAFIFAAANYVAQASINKEFSVIIGSKCFLYAPLKLGDVLELEAHALFDETSKKRDVKVVGHVKEIKMFE

GTIQVVSTDEHIFKLKRPPLNTVKPTENQEQGTKINNPEAVAAALMASVGGK

>ABS44676.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEMKAIVFIIGGYGANANIHFLDSYRNYIAKKFDVA

TINVFYHCFCQRPSDVEKYSTLADFTKEDLRLMEKVLCKYNIPCDQLANNTVVSHCEYLSEIMTELKMLN

RLPYDFEERLSATYIPSDGEYQNFGIMPAIDHINALKDLIKHFPQFSNLPKIYGGGSYGGYLSLLIAKIA

PWYVDGVIDNSGSALPPLNYIIGRELEFESKDTNGDMYIQGNHFFVSCFLKTYWNRDENSPYFFAKENYL

IRALLNKEHLIIQSEKNTNIFYVSYHSKYDPLTPCKFKIAYIESLQYLGYDATLHIIDENKIDGRFAKDL

THGMGIPDKALFRKELPLMLEKLQGRISPMQENSISYPCGNKVFMFKDQGMQLKFTIN

>ABS44675.1 GTP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MHASYALENELKELVFSLDRNVNIAIIGQFSSGKSSLLNLILGCDCLPTGVVPVTFKPTFLRYAKEYFLR

VEFEDGSDIITNIEKLAFYTDQRNEVKQAKSLHIFAPIPLLKKITLVDTPGLNANEDDTLTTLDELKNIH

GAIWLSLIDNAGKKSEEDAIKANLELLGENSICVLNQKDKLSTEELDNVLNYAKSVFLKYFDELIAISCK

EAKDEQSYEKSNFQSLLDFLTHLDTTALKEKFVKRKILNLCEILEDENQLFVGIFDRLLNQFQNYAKHLF

LVYENFLNEIEILNHQILEQLKSISERISSEIFASVKEKDAYFYKESKGFLKKDLYIRYDYKAPYISSDD

AFLAMFYNSDMMSKEFKKIKNELYKSFEEIKMKLKDFISILEKEILLFKAEFSNIQKDHIFQSDKNFSEL

RAFCNASDEYFLKDFKELLFKSILELDLFFEKLNLKAFTNYENATKLSLAFFSRKINESRVLYELDSSEF

VLFYPKKSEIYERVLNELNVYEFESLLINKPILTKIAKNFLEQSQNLIQEKNKFLDLKKMELQKRRVQIL

NVRENMKED

>ABS44674.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MYIKDIQRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQGEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMIYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>ABS44673.1 fumarate reductase, cytochrome b subunit [Campylobacter jejuni subsp. doylei 269.97]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQATAMIKNYNGANYEYTI

>ABS44672.1 C4-dicarboxylate transport protein [Campylobacter jejuni subsp. doylei 269.97]

MIIGIIAGIVLGYTDKELAIASKPGVDYFIGALKVLIGPIIFVTLVLGIISLESLKKVGSIGAKAVIYFE

VVSTLALAIGIFMANVMQPGHGMNLDPSQLDTKSVQKYISQTTEVSASSEIMHILKDAMPTDIITPFAEG

KTIQVLVIAIITALIISLMRIEDKQAIQRVFEVVQNFVFKILQIIMYFSPIAAFSAMAVLIAQYGIGSLI

NLAYLLLVMLISCLVFIFGILGLICYFAKVNIFKFMRFISREVLIVFATSSSESALAPLMRKLEKAGLSK

ATVGLVLPTGYSFNLDCTNIYLAMSLIFLAQAFNVNLSLAHEISILIVLMIASKGAVGVTGSGFIVLGST

LAALGNMKISEANATLAQVLPVAAIGVLLGVDKFMSEMRAVGNLCGNSVAALIVAIWDKQIDWEKFRYAM

DNPEKFHNAGMN

>ABS44671.1 preprotein translocase, YajC subunit [Campylobacter jejuni subsp. doylei 269.97]

MAENSILTSLLPLVVLFAIFYFLVIRPQQKQAKAHKQMLESLQKGDKIITNGGLICEVVKPEEDFIKVKL

NEDNATAKISREFIAKKIDA

>ABS44670.1 SPFH domain / Band 7 family protein [Campylobacter jejuni subsp. doylei 269.97]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIVLFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSLGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIATQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSSANMN

>ABS44669.1 rubrerythrin [Campylobacter jejuni subsp. doylei 269.97]

MKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEGWHAVARHFREAAENEKWHARAEFKAYHEIVDG

KPLEVTTKNLVSAAEGENYEHTTMYPNFAKIAEDEGKKAIARLFTAIGKVEIEHEREYLALKKMLEEEEF

FNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFKREFLG

>ABS44668.1 TenA/Thi-4 family protein [Campylobacter jejuni subsp. doylei 269.97]

MMLFSNLIKENQKIWDAYLHHDFVKKLEDKSLKQENFLFYLKQDYIYLLNYAKCYARLALNSNTAKELRF

AMKFQNYIVEGEMELHRAILSLGINADELDTKDESLVNIAYSRYMLSVGENGDFLDMLVALSACAIGYAK

IGAEIIDRLKNENLKDHPYKEWILTYGSENFQNEAKEFEDFVNSYTSNVSAQKFQKLSEIFHTVTRLEVA

FWEHSLRMELNL

>ABS44667.1 amino acid ABC transporter, permease protein PEB1 [Campylobacter jejuni subsp. doylei 269.97]

MENVFNAQNIQFLMQGLFLTLKIALATCIISIVFGTFLAITKNYGDRLSKFLAACYIDIFRNTPLLLWML

AACFVLPVFFGQFPQAFWGTIGFSLYTSSVMAEIIRGGLNSIPKGQFEAAYSQGFGKFFTLFYIILPQTF

RKIIPALLSQIVTTVKDTAYLAGLGIAELTYNSKTILAKLTSFEEILAMIGVVAGIYFIICFSLSMLVRY

YAKKTAYIS

>ABS44666.1 integral membrane protein MviN [Campylobacter jejuni subsp. doylei 269.97]

MKSLVLKNFIINALGILFSRILGLARDVLIALFLGAGLYSDIFFVALKMPAFFRRIFAEGAFGQSFLPNF

VKAKKKGAFCVSVMMQFSLIVFLFCLLVSFFSSFFTKLFAFGFNADTIALAAPLVAINFWYLFFIFLVTF

LGAILNYRQKFFITSFSTALFNLSIVIAAFFVDKNTPQNTLYYFSYATVLSGVAQLILHLLVLKNNPVIC

AMALSIKFKKAKVKLQGFYGNFFHGVLGSSATQFSSLLDTTIASFLMSGSISYLYYANRVFQLPLALFAI

ALTQVSFPKILKHLKSDQENLALKFMQRALALLSILLIASSIIGSVFALEISKLLFERGNFTHEDSVITA

YVLIAYLVGLLPFGLQKLFSLWLYAKFKQKTAAWIAVKSLIISALCSMAFIFLIKDESLKVIAVALSSSI

SAFYLLGANIKEFGFKKFFALISIKIFLLIMVALIVFTILLILIKPYILSFFIGIFTSFKGVF

>ABS44665.1 2-oxoglutarate:acceptor oxidoreductase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MAFNYDEYLRVDKMPTQWCWGCGDGVVLKCIIRAIEKLGWNMDDVCLVSGIGCSGRMSSYVNCNTVHTTH

GRAIAYATGIKLANPSKHVIVVSGDGDTLAIGGNHTIHGCRRNIDLTHIVINNFIYGLTNSQTSPTTPKG

FYTVTAQFGNIDPNFDACELTKAAGASFVARGNVIEANKLENLIYKALAHKGYSFVDVFSNCHINLGRKN

KMGEAVAMLDWIKNRVMDKAKFESMDFEERKDKFPTGILHEDNSQPEYCHAYEEVRRAAKEKRMVDLGAL

K

>ABS44664.1 GDP-fucose synthetase [Campylobacter jejuni subsp. doylei 269.97]

MFKDSKIYIAGHRGLVGSSILKKLQNDGYENLIFRTHSELDLTNQKAVADFFVKEKPEYVFLSAAKVGGI

GANNTYRADFIYQNLMIQNNVIHQSYLNGVKKLLFLGTACIYPRECPQPIKEEYLLTSKLEYTNEPYAIA

KIAGLKMCESYNLQYKTNFISVMPCSLYGANDNFNLETSHVLPAFIRKMHLAKVLQEEGVAKVQYLLNFN

DESEVKNYLNRFGVTENSVEIWGSGKAMREFLHADDMADACVYVMEKVNFNDLYKNNDVEIRNTHINIGS

GKDISIKDLAELVKHIVEYRGNLVFNTNKPDGTMKKLGSCKRINSLGWKAKIKLEYGIKMMYEWYLKEQN

IRQ

>ABS44663.1 glycyl-tRNA synthetase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MSELLIEIGTEELPAIPLLKELTNIEKKWKNILEEYRLVSDFKFYYTPRRLVFFHENFADKQEDSFTEFI

GAPKNVAYKDGVLTPAGQSFLQKAEISENELTFKEIKGKEVLYHQKATKGLQSQEILGEMIEKFLKSLSF

GKSMRWGANSFEFIRAIRSIACILNDKLVNFQSYGVKSAKKTFIHRSVSYDLQDFNNAKEYFELLEKNYI

ILDPIKRKEKILEQFKLIESQKNIQIGEDEELLAEVVAITEYPNALLGSFEEEFLEIPSEVIITSMRENQ

RYFAVFNDKGLSNHFIVVSNAVCKDYSKIIHGNERVLRARLSDAMFFYQNDLQNGLKPEKLAKMTYLEGL

GTMQDKSLREIKIAEILCQMLHNDKIENISTALKYAKADLATQMVYEFTDLQGIMGSYYAQKMGLDYEIC

LAIKEQYLPNSEQAPLPSTEFSSIVALANKLDSLIGLFSIGKIPSGTKDPYALRRAANGIIKIALNLNKE

FDIQILLEKLSSHYKSFDMQILKDFIFERLYTFYTVNASFVKAVLSSQNTDLIHINQSVNALIKLSKKDN

FNENFTTFKRLANIATKNSHKVDENLFVQEAESKLYKAFQEKTKVNSLQEKLENLFALKPFIDEFFNQVM

INAEDEKLKNNRQALVYEIYVEFLKIADLKELSL

>ABS44662.1 L-serine ammonia-lyase [Campylobacter jejuni subsp. doylei 269.97]

MSNLNIFKIGVGPSSSHTLGPMLAGNLFCKKIAKKLEKIEKIQIILYGSLSLTGKGHLSDKAVIWGLNAL

EAKNLSVTIQDEVNKNAIENSQIDFCGEKKLCFNYEKDLIFSKDFLPLHENGMKIKAYDCKGVLVDEETY

YSVGGGFVLTAAQLEKKGKNSNQNTKKKLDIELNNAKEALELCDKRDWDLAELSYRYELQFHTKEEIRAY

CLEIWEVMQEVYYNGTHPNEDYLPGKLHLKRRAKGLKERVAMTADPMGIIDFISLYAIAIAEENASGAKV

VTAPTNGACAVIPAVMLYLKNHTIGFSDEKAIEFLLTAMLIGSFYKKNASISGAEAGCQAEIGSASSMAA

AAMATVLGANALKACNAAEMAMEHHLGLTCDPVAGLVQIPCIERNAFGAIKAISAARMAMTRKSTPMISL

DEVIETMYETGKDMNYKYKETSLGGLATNLKTVC

>ABS44661.1 cell division protein, FtsW/RodA/SpoVE family [Campylobacter jejuni subsp. doylei 269.97]

MVADKRLFYLSCILIAIGIVFSYSLTAFTVLFLDYSEFHFFIRQLFFGISGILIMFFISRLDPDKALSKK

IILAILIISFIFIIILPFLPSALATASGGAKRWIRLGPLSISPVEFFKIGLIYFLAWSYTRRIDDSKKAI

RHEALILLPYCILASIVIGYIYITQNDLGQSVISFFLILALAFFAGASKRLFAFGTLIIMMIGIMVIFSN

QRRIQRIASWWGNIQDAFLPMLPDWLANALRVSSNSEPYQISHSLNAIAHGGMFGEGLGLGTFKLGFLSE

VHTDFVLSGITEEIGLLGLGIICYIYLWMILRIFRIAGRCEAKQDFIFCSGIALLLLFSFFMNAFGIISL

TPLKGVAVPLLSYGGSSMWAICIGIGYVLMISKKVKL

>ABS44660.1 fructose-1,6-bisphosphatase [Campylobacter jejuni subsp. doylei 269.97]

MQEVISYIQKAVLEISNALKFPDTSYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKAKLIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKKLRAALYSMYGARLELVICKEQPKLYRLN

ANNEFIFIKDLKINEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSKYEISKLLKAYNE

>ABS44659.1 ribosomal protein S3 [Campylobacter jejuni subsp. doylei 269.97]

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLISKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKSRRTRRGK

>ABS44658.1 CRISPR-associated protein, SAG0894 family [Campylobacter jejuni subsp. doylei 269.97]

MAKILAFDIGISSIGWAFSENDELKDCGVRIFTKAENPKTGESLALPRRIARSARKRLARRKARLNHLKH

LIANEFKLNYEDYQSFDEILAKAYKGSLISPYELRFRALNELLSKQDFARVILHIAKRRGYDDIKNNGDE

EKGKILKAIKQNEEKLANYQSVGEYLYKEYFQKFKENSKEFINVRNKKESYERCIAQSFLKDELKLIFKK

QREFGFSFSKKFEEEVLSVAFYKRALKDFSHLVGNCSFFTDEKRAPKNSPLAFMFVALTRIINLLNNLKN

TLYTKDDLNALLNEVLKNGTLTYKQTKKLLGLSDDYEFKGEKGNYFIEFKKYKEFIKALGEHSLSQDDLN

EIAKDITLIKDEIKLKKALAKYDLNENQIDNLSKLEFKDHLNISFKALKLITPLMLEGKKYDEACNELTL

KVAINEDKKDFLPAFNETYYKDEVTNPVVLRAIKEYRKVLNALLKKYGKVHKINIELAREVGKNHSQRAK

IEKEQNENYKAKKDAELECEKLGLKINSKNILKLRLFKEQKEFCVYSGEKIKLSDLQDEKMLEIDHIYPY

SRSFDDSYMNKVLVFTKQNQEKLNQTPFEAFGNDSAKWQKIEVLAKNLPTKKQKRILDKNYKDKEQKDFK

DRNLNDTRYIARLVLNYTKDYLDFLPLSDDENTKLNDTQKGSKVHVEAKSGMLTSALRHTWGFSTKDRNN

HLHHAIDAVIIAYANNSIVKAFSDFKKEQESNTAELYAKKISELDYKNKRKFFEPFSGFRQKVLDKIDEI

FVSKPERKKPSGALHEETFRKEEEFYQSYGGKEGVLKALELGKIRKVNGKIVKNGDMFRVDIFKHKKTNK

FYAVPIYTMDFALKVLPNKAVARSKKGEIKDWILMDENYEFCFSLYKDSLILIQTKDMQEPEFVYYNAFT

SSTVSLIVSKHDNKFETLSKNQKILFKNANEKEVIAKSIGIQNLKVFEKYIVSALGEVTKAEFRQREEFK

NELR

>ABS44657.1 ATP-dependent chaperone protein ClpB [Campylobacter jejuni subsp. doylei 269.97]

MANIQDFLTDNMLSNLESAASLAIHSKNTEVVPLHLLWALSVDSTSILNQILNKLNISKEALELEIKSRI

SKLATSSNVSRENIRFSNELINSLENAKGLMSANGDSYLSVDTWLISESQKSPIKEILAQFLDLREFQKE

FESLRAGRKIDSKTSDETLDSLNKFGIDLTLKASEGKLDPVIGREEEIERLMQILIRKTKNNPILLGEPG

VGKTAIVEALAQRIIKKDVPKSLQNKKVIALDMSALIAGAKYRGEFEDRLKAVVNEVIKSENIILFIDEI

HTIVGAGASEGSMDAANILKPALARGELHTIGATTLKEYRKYFEKDAALQRRFQPVNVGEPSVNEALAML

RGIKEKLEIHHNVTINDSALVAAAKLSKRYIADRFLPDKAIDLIDEAAAELKMQIESEPSSLRKVRKDIE

TLEVENEALKMENDEKNQKRLDEIAKELANLKEKQNALNSQFENEKSVFDGISTKKKEIDLLKNEASLAK

TRGEFQKAAELEYGKIPNLEKEVEILEDKWKKMSENGVLLKNQVDEDLVAGILSKWTGISVQKMLTSEKQ

KFLEVEKHLKESVIGQDKALSALARAIKRNKAGLNTDNKPIGSFLFLGPTGVGKTQSAKALAKFLFDDEK

AMIRFDMSEFMEKHSVSRLLGAPPGYIGHEEGGELTEAVRRKPYSVLLFDEVEKAHKDVFNVLLGILDDG

RATDSKGVTVDFKNTIIILTSNIASNVIMNLNGKEQEDAVKNELKNFFKPEFLNRLDDIITFNPLGKDEA

YEIVKLLFKDLQMSLENKGIKASLSENAALLIAKDGFDPDFGARPLRRAIYDLIEDKLSDMILADELHEN

DNILIDAENDEIVIKKIQI

>ABS44656.1 hypothetical protein JJD26997\_0921 [Campylobacter jejuni subsp. doylei 269.97]

MKKYITISILSILLLILLAVVFTLLWQFKTNVNFIPQFAKDTNTQPSIQTQNQDLSWQEELAKWPTRDFT

PVAEKFTLYFDADTSELKEKNKYYQLIVGKYDIYSMFCLRQTLNSFNVKYFLLKSGDSPEIFLDTGNEKL

IDDIIKELKKYKINTEVKEIWL

>ABS44655.1 hypothetical protein JJD26997\_0958 [Campylobacter jejuni subsp. doylei 269.97]

MKTTEYNTQQKNSKEYLAEREAVKKTMAKMEKELEKPAINAVFQRLKNK

>ABS44654.1 lipoprotein, VacJ family [Campylobacter jejuni subsp. doylei 269.97]

MRIKFISFILIFFTIFAFAKEQNLDDFEQEYQNYQVNDPLSGYNKVMTSFNVTLYDYGLRPMLKGYNAIT

PEFIRLGVRNLFDNLLAPLRFVGNVLQFKFEEAGEEFKRFTANTIMGFSGLMDVASKMGLKKHPADLGTV

LAYWGVGSGFHIVLPILGPSNLRDTLALPATWYASFTAYIDPTWASIAISAYGFGNELSFRLDEIDEIYH

NTPNLYPFLRDAYEQRRNELSANKGK

>ABS44653.1 putative multidrug resistance efflux transporter [Campylobacter jejuni subsp. doylei 269.97]

MLNNVLPLSFIVGTRFFGLFIVLPVLSLYALKLEGVNEFLVGLLVGVYALTQMILQMPFGILSDKIGRKK

TMLIGLIIFIIGSLICSFAENIYTMLLGRMLQGAGAIGAVATAMISDFITEENRGKAMAVMGSFIGLSFA

ASMVISPLMSAKWGLSSLFDLSAALSLLCIILLYTVVPKENKITHENEKTPFFHFIKQKNLALMNLTNFM

QKMLMSIAFLSIPIILVKHLGFAFDKLWIVYSASMVAGFIAMGFAGSLGEKRGLAKQILLLGIVFFILAY

LFFAFSNSIDFFIIAVVIFFIGFNLHEPIMQSCASKFCKVHEKGAALGLFNAFGYGGSFIGGIIGGMFLH

LNALNLLAIILVVLALIWLVALFFLKNPADFKNLYLPLETPLNFSTFSENLGVVDIYKNSKNLVVKFDSK

LTNKEELEGKIKI

>ABS44652.1 HAD-superfamily phosphatase, subfamily IIIC [Campylobacter jejuni subsp. doylei 269.97]

MNLFSPHLKRNELIKFAKELNFDKSQDLLINIHRNHAFEGIQSIIAPFLHFANLKADFNFSSYDESLSFD

GFKKANLELLWLDLTRYKNNVQNFLEERLLALRKFSQSPILVLSLGEFKTDKKILNCEIFNVEKLVKEYF

DEEDILDLAKEELTGSKLNNKALIFLAQILGLSLIPALIKPALKALVLDLDNTLYQGILGEEGIDNLKLN

PLYKALQEKIKTFKKQGFLLALASKNEEKDAKKLFETRKDFILQWDDFDARMINWEPKGENILKIAKKFN

INANAMLFIDDNIAELENTKFTGVKTLLCDENILYKIKLFPNLLKLSNTKEDQIRAKDIAVNALREELKS

LSDEEYFQNLEISLNFSKNDLQNIPRISELLGKTNQFIANYTRLNQEKVAQHMQKELIISVSMSDKLSDS

GIIAIFVFSCKEGNLLIDDLCISCRALGRKLETRMFFKAFELALKFFNLKNNNARLYYQKGERNMPFLSF

LEQISKEFEKNSALVSFQNLNFKGLIIHEN

>ABS44651.1 hypothetical protein JJD26997\_0948 [Campylobacter jejuni subsp. doylei 269.97]

MKKDKMQIAEHILQNCYWENTTMTPSFIIEHINDKDFARTIFSAIFQNSLTMFEDLKIIDNEEWIKEFII

SQNQRLGYHKRFYYEERLDELIAHYGIKDAGKRREVYPIV

>ABS44650.1 macrolide-specific efflux protein macB [Campylobacter jejuni subsp. doylei 269.97]

MIFLKNICKNIGENAILKNVSLSIEKGEFVAIIGQSGSGKTSLLNIIGTLDTPSSGTYIFNEYEVTKLNN

DEKARLRREKIGFIFQRYNLLSLLSAKENVSLPAVYAGKNLQERSQNAKKLLNDLELAHKLDSKPNELSG

GQQQRVSIARALINGGELILADEPTGALDSKSGIMVLEILQKLNAQGHTIVLVTHDPKIAAQAKRVIEIK

DGEILSDTKKGKAQEKLTLKTMPKEKKTLTLLKNQAFECFKIAYSSILAHKLRSVLTMLGIIIGIASVVC

VVALGLGSQAKVLESITRLGTNTIEIRPGRGFGDLRSGKTRLNFSDLETLRSLEYLEAVDAHSNTSGVAT

YTNISLSARAEGVGINNFAIEGLRIDAGRILNNDDVKNSTNVAVLDFNAKKNLFPDEKSENILGRVVLFN

SQPFKIIGVLQKNTDKPIEDNVVRLYIPYTTLMNKLTGDRNLREIIVKVKDDVSSTLAENAIIRILEIKR

GQKDFFTFNSDTFKQAITANKRTTTILTACVAVIALIVGGIGVMNIMLVSVSERTREIGIRMAIGARRED

IMMQFLIEAVMICTMGAILGVILSIFVIFAFNTLSTDFPMILNAYSVLLGLLSSMFIGVIFGFFPARNAA

NLNPISALSKE

>ABS44649.1 phosphatidylglycerophosphatase A [Campylobacter jejuni subsp. doylei 269.97]

MQKLFLTFFYSGSIKKASGTFGTIAALIPAFFILKYLGINTLFLLSILIFVASIRVIDDYEKKTGIHDDK

HIVIDEVAGVFLACAITASVENSIVNFILAFVLFRLFDITKPSIIGKIDKKVKGGLGVMLDDMLAGLFAG

LLSAVIYGFLLQFNLVFWDINLKDLF

>ABS44648.1 aminotransferase, classes I and II [Campylobacter jejuni subsp. doylei 269.97]

MFDAIRFNTIERLPDYVFAEVNAIKMAARRAGEDIIDFSMGNPDGKTPQHIIDKLCESANKDKTSGYSTS

MGIYKLRLAICNWYKRKYNVNLDPENEVVATMGSKEGFVNLARAIINPGDVAIVPTPAYPIHTQAFIIAG

GNVAKMPLVYNEKFELDENQFFENLHKTLNESIPRPKYVVVNFPHNPTTVTCEKSFYERLIATAKKERFY

IISDIAYADLTYDDYKTPSILEIEGAKDVAVETYTLSKSYNMAGWRVGFVVGNKRLVSALKKIKSWFDYG

MYTPIQVAATIALDGDQTCVDEIRATYDKRMHILLEAFENAGWKLQKPRASMFVWAKLPEGKRHLKSLEF

SKQLLQRASVAVSPGVGFGEAGDEYVRIALIENENRIRQAARNIKKYLKE

>ABS44647.1 transcriptional regulator, TetR family [Campylobacter jejuni subsp. doylei 269.97]

MNPNRTPSQKVLARQEKIKTVALELFLTKGYQKTSLSDIIKLSGGSYSNIYNSFKSKEGLFFEILDDICK

KHFHLIYSKTQEIENGTLKEILTSFGLAFIEIFNQPEAVAFGKIVYSQVYDKDRHLANWIENNQQNFSYN

ILMDFFKQQNNSYMKKNTEKLAVLFCTMLKEPYHHLNVLINAPLKNKKEQKEHVEFVVNVFLNGINSSKA

>ABS44646.1 hypothetical protein JJD26997\_0134 [Campylobacter jejuni subsp. doylei 269.97]

MSNSTQYSGARFIPITHEYLIIWKKTAKSLFAVTWDIADGKDLNDLLLADKMNSIKLKA

>ABS44645.1 prophage Lp1 protein 30 [Campylobacter jejuni subsp. doylei 269.97]

MKLSDFDFRIWDNGIFRYPIKINNDIVDINLDIGVNAEIELFTGLYDKNGKKIYEGDILEYTRWCEQYME

DAEHSETIYEIVCFDIRGGLYSKLLNGECGWFFEHFMNNKNNTIEEMSIIGNIHENKELLK

>ABS44644.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKALQIALAATFFAGCASTSVTSSASKGNNELMQNQLFKIEKIIVNGKTFDPKNAEESPNISFENNKFY

GYSGCNRFFGSYQTKADTLQIEGDRVASTQMLCHPMDVMDFENSFLSNFKGTFKISNENGKLVLSNDEMK

IFFK

>ABS44643.1 putative methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKDELFKQNPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILPTNASICDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFICDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>ABS44642.1 DNA ligase, NAD-dependent [Campylobacter jejuni subsp. doylei 269.97]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDALIRELRVFEEQNKDEVSKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKKRIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFVRDLGFLKDDFIKLCANLDEVLKAYDELLTLREKKPMMMDGMVVRVDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGINLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKERREGLEMEISHPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYVNLEGFGEQMALSLCEFTRVNHTRIDEFYKLL

NLKIEKLEVKSDSVIFGKTFVITGTLSRPRDEFKALIENLGGKVSGSVSKKTDYVLFGEEAGSKLSKAKE

LEVKCIDESAFNELVKE

>ABS44641.1 UDP-N-acetylmuramoylalanine--D-glutamate ligase [Campylobacter jejuni subsp. doylei 269.97]

MKISLFGYGKTTCSIAENLVDKFGPFDIYDDHFTETKKDTLGNLLLNPNDFDDNLSNIEIPSPGFPPNHK

LIQEAKNLQSEYDFFYDVMPKSVWISGTNGKTTTTQMAMHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFKDYIQDKLSVLKRMNECDVAILPKIHTNTPTKAHIIS

YEDEKDLATKFSIDTEKISFKSPFLLDAIMALAIEKILLDTLSYKLLNNFVMEKNKLEEIKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKGFDIELYAIGISTEKMLNYAKKANLKA

YKCEILQRAVSEISNHLKVNEVALLSPACASLDQFSSYAQRGEVFKECIKKL

>ABS44640.1 hypothetical protein JJD26997\_0250 [Campylobacter jejuni subsp. doylei 269.97]

MAYEDEEDLNYDDYENEDEEYPQNHHKNYNYDDDDYEYDDDSNDDDFYEMEIKNEQNP

>ABS44639.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSVVRFFFILIIVLGLIVVVMNQSISSYIEQKYHFAFYLHNDLLKEANGFKIKLEQIRAILSNEPLPQTN

DQENKSTDENLSKIDKVLNTLENDENTSHKETNLSLIQDTNISFIDNTKLELQNGDEFLFIGDSLMQGVA

VALNRDLRNLNLKVTDLSKQNTGLSYKSYFDWSKATNEAFVKNSNIKYLVVLLGANDPWDIKKGGNYHRF

GSPSWIDIYTNRVDEIIKIAKKHKAKVFWFEIPPIKKEDLNKKIQVLNKIYSDEILKNKEIFINTKLFFS

VNDEYSAYIKDENNRSIKVRTDDGVHFTPSGAREMSKLLLEHIKLKEENASK

>ABS44638.1 hypothetical protein JJD26997\_0295 [Campylobacter jejuni subsp. doylei 269.97]

MKTLREQIEVMEAFERGEKIQANYKLKNFEYWEDTKNPIWDWHFYDYRVKPRVKITEKEFNLIKERLTGW

KYNKDLIYENQRESFFSNAFGELRKYFRAKNDLEKVNALCNIVVYCFNDFDINCQEILEIHGFETNKITI

FDIVRDLSSITTEFHRNEIPDYTFIHRLVFDCFNLINNLGFNFYKCMLETIKDIESHAWYYDESLGKFVE

KIGAYSEREAFDLAINDFKLTNIPNKYFLDKEDKDYWYVKIEDNNGD

>ABS44637.1 hypothetical protein JJD26997\_1633 [Campylobacter jejuni subsp. doylei 269.97]

MHLFSNKASSSASTSLVCFLISPLGSKATCPAVLNIYQIKTLYHAYFP

>ABS44636.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKSRNIKGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKSFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYDKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAITNYLIMLGNKTPYEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNKLLNKSSLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>ABS44635.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALALRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDENSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPHSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>ABS44634.1 CRISPR-associated protein Cas2 [Campylobacter jejuni subsp. doylei 269.97]

MIEDKFMRVLLMFDVPTKSKKEQKLASKFRNNLIKLGYFMLQFSVYMRICKGLSSAKSSIENVKKILPPY

GNVRALIITEKQFDKMELLLGGIVFNEKVNNETNLTLFDIDSHGEFKYKNSNNEEIQINKKQEKYHQQNL

FEF

>ABS44633.1 inosine-5'-monophosphate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKIVKRALTFEDVLLRPGYSEVLPKEVKIHTKLTKNITLNMPLISAAMDTVTEHRAAIMMARLGGLGVIH

KNMDIASQVREVKRVKKSESGVIIDPIFVSPKASVAEALEIMAEYRISGVPVVDEDKKLIGILTNRDLRF

ESDFSNLVENVMTKMPLITAPKGCTLDDAEKIFSTNKVEKLPIVDEQGRLEGLITIKDLKKRKEYPDANK

DNFGRLRVGAAIGVGQMDRVDALVEAGVDVIVLDSAHGHSKGIIDTVKAIKTKYPNLDLIAGNIATAAAA

KALCEAGVDAVKVGIGPGSICTTRIVSGMGVPQISAIDECVEEANKFGVPVIADGGIKYSGDIAKALAVG

ASSVMIGSLLAGTDESPGELFTYQGRQYKSYRGMGSLGAMQKGSSDRYFQQGTAQDKLVPEGIEGRVPYV

GSIRSVVHQLLGGLRSSMGYVGAKDIEDFQKRAEFVEITTAGLKESHVHDVTITHEAPNYKVNHQ

>ABS44632.1 L-lactate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MSAIHFSYTKIFHVLNLENLASCDIIILAFRKESLKELPSRLVELQNNILELKDIVLTLKNANFKGKYIV

ATNPNDTITYYTQVLSQLPKNHVFGSGTNLDSSRLKKLLAKDLNINSKDIFACMIGEHGDSQFAALSNAS

VLGQNLLDFYKQKLGKDLDIQELEKAVISEGYFIYERKGRTEFGIGTSCTNLAKAILEDRKSLHPVSVIF

DDIAFSMPAIIGKDGIEKVFELKFNEKEKTKLENSKQQIKNAIQSVKDKI

>ABS44631.1 dethiobiotin synthetase [Campylobacter jejuni subsp. doylei 269.97]

MQIYVGGIHTNVGKTHFCANFCANFNYDYFKLIQAGTPTDSEFIVKFSPKTKIFKEGVFLQTPASPHLGK

IKEKLDYKALDIILPKSENLLIELAGGLFSPMDENYTMIDFMNIFKRPTILVAKYYLGSINHILLSIEAL

KQRNINLLALVIMGKKDILQDDFIKNYAKIPIINLDFFDENSILNKDFKEQMQEILQLKIP

>ABS44630.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQERIDLIVKILDEKKAEDIKTIDMSEQEYFVKYVIIAATLGERHALSLIDELKTQLKAKGEEFLNIDSS

EEWSVIDLGDILIHLLTPEHRGIYNIEELLESLKKGRV

>ABS44629.1 D12 class N6 adenine-specific DNA methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKENPSFLKEQIITYLGNKRALLSFLNKGFKVAKKELGKDKFSFCDIFSGSGVVSRFAKAHSNYILANDL

EDYSKLINECYLANKDKDLLQNIKKYYKNLIQNLDFEKGFISELYAPKDDDDIKKNERVFYTFKNALYLD

TIRQKIENEIPKELRHFFIAPLIYEASVHSNTSGVFKGFYKGKDGIGKFGGEGQNALKRIKGEIELKMPI

FSNFSCEFEVMQKDASVLAKELDFFDVVYLDPPYNQHPYSSNYFMLNLIANYKKPEEISKISGIPKDWNR

STFNKPKFAQEALFELINDLKARVILLSYNCEGFVKKEIFLKRLSTLGKCRILEQKYNTFRASRNLKNRN

IHLQEQLYILVKN

>ABS44628.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKFSQISDACVKCGKCIPVCTIHEENRDEITSPRGFLDLLAAYKEGSLELDKEAKKVFESCFLCTNCVEV

CPSKLRVDNAIEEVRYDIAKKFGIAWYKKLIFFFLRRRKILDLVAKLGYVFQSCAFKIQNENENTGMKAR

FSMPFVKKGRLLTSFNKKSFLNSNPKFINNDGEKTIGFFVGCLANYFYIDTANAVLKIAKELKINVDLMK

EQVCCGAPQFFTGDFKSVEILAKKNIEYFEKKLEKLDAIIVPEATCSAMLKIDYEHFFIMQNDLDWAKRA

KCVSSKIYMASEYFYKFTSLEEILKTKNKFNYSITYHDPCHARKMQGVFKEPRELLKTNYHFVEMSNSNI

CCGFGGVSMQTDYYDRALSVGLKKAQMIDESKASVVSAECSACRMQISNALEQNSSKVVFASPLELIAKA

L

>ABS44627.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MQKLGIFIYSLGSGGAERVVATLLPILSLKFEVYLILMNNKISYEIPECQIHFLECSKPSENPILKFLKL

PFLVLKYKKLCRNLGIDTEFVFLNRPNYIALMARMFGNKTRLVINECTMPSVMYAKNNFNSLANKFLISL

LYPRADLILPNSKGNLEDLVQNFSINPKKCEILYNAIDLENIEQKALEDIALKDKFILSVGRLDKGKNHA

LLIRAYARLKTNLKLVILGEGVLKDELLALIKELNLEEKVLLLGFDNNPYKYMAKCEFFAFASVFEGFSN

VLIESLACSCAVVCTDHKSGARELFGDDEFGLLVEVDNENSMFQGLKTMLEDDKLRKAYKNKAKTRAKAF

DKVKIARDALKYLLG

>ABS44626.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MRRNLNAYKAKFNGAYVFLGFFFLIYQILGSTFAYAPLLYGIFFCYMFCLLEERERTFSKLDFRWYFSLF

FLFFTDITYNFFIFSSWLAFFIFYYLCADWIKTNLKIGKFIPVVFVLCAYGIILFLDMILSYIGDEKIKI

LGWAYIVSVFIECCLTYVFFKGKI

>ABS44625.1 ribonucleoside-diphosphate reductase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MQRKKIYNPSSNETLGDRKVFDGNPHGILNFTKAKYTWALKLWDLMEANTWFPKEVDTTKDALDYRCNLT

AGEKRMYDLVWSQLISMDSFQTNNLADNINPYITAPEINAVLARQAYEEANHSKSYAVMVEAICDNTDLI

YEMEKHDETLREKNDFISSIYEELAGDVDDNKLLLAMVANQILEGVYFYSGFTAIYALARAGKMLGSAQM

IRFIQRDEITHLLLFQNMINSVHKERPDLFHDENINKIYDMFKKAGDLEIKWGKYITQNQIMGFTDDIIE

EYIHYLVDQRLSAINLDKLYNAKHPIKWVDDFSKFNDQKSNFFESKVTNYSKGSISFDDF

>ABS44624.1 hypothetical protein JJD26997\_0333 [Campylobacter jejuni subsp. doylei 269.97]

MKSITPNSKKSQNKSKENRKMTKTQAFIEGFIAKPIKNKPKN

>ABS44623.1 hypothetical protein JJD26997\_0861 [Campylobacter jejuni subsp. doylei 269.97]

MSLLILNGWDRLFELYGEAYQYLPKTKNYCAELKRYIAYLADVDDEPVFYSTNELEIVARKEINTFRDIC

KLILEEKGLNDKKINIILGE

>ABS44622.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIENIPASLWIKQDLSAYQIFDVRTPLEWEEGILPDVQCVALYDNQGLLNAKFLDEFQSKRDESKKLAFI

CRSGHRSMVAAEMVAEKLGLESINLDGGMLALKGY

>ABS44621.1 thiamine biosynthesis protein ThiC [Campylobacter jejuni subsp. doylei 269.97]

MKTQMNYAKEGVFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQIGA

KDFLDVVYHHAKSGVDFMTIHAGINSRATHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGVQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVTDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLV

>ABS44620.1 peptide chain release factor 1 [Campylobacter jejuni subsp. doylei 269.97]

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKTKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDLNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQEN

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>ABS44619.1 hypothetical protein JJD26997\_0847 [Campylobacter jejuni subsp. doylei 269.97]

MAKNKNQNENTTQTNEKANVTNTTQTNQNSERISRAEFLRRRIEGKKRTIDLNSNAQVFVSDSIAGTEIF

SDLRMLDAMDSTIRKLWGNGVDSKDAETWVKEINSIKENINELQNKGREILVKVGNVRHISNNVLRRTIL

REIQAQSVKAE

>ABS44618.1 adenylylsulfate kinase [Campylobacter jejuni subsp. doylei 269.97]

MINSPYIIWLTGLAGSGKTTIGQALYEKLKLKYKNLIYLDGDELREILGHYAYDRQGRIDMALKRAKFAK

FLNDQGMIVIVTTISMFNEIYDYNRKQLKNYYEIYIECDIHELMQRDQKGLYTKALNKEIDNVVGVDMEF

DKPEADLVVNNSCRNNLEEKVELIIKKLAL

>ABS44617.1 folD bifunctional protein [Campylobacter jejuni subsp. doylei 269.97]

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGNNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLKGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPCGVGPMTIAMLLENTVKSAKNR

LN

>ABS44616.1 putative transporter [Campylobacter jejuni subsp. doylei 269.97]

MQNYKKALFALTLSAFCMGVTEFVMAGVLVDVEAYFSVDAKTAGYLTTLYAIGVVIGAPLITIPLSRFHR

HTQLLINLGIFALANFIIFFSENFYLTAFARFIAGTQHGVFFVIATLAVSAITPDDKKSSALAIMVTGLT

VALVTGVPLGTFIGHYFGFKFIFLLIFIITSLAFFGVWHMMPKNLHPSPTSLKNLIPAFSHQNLLKTYTI

TICSCGAQFVLYTYLQKLLVEISGFRVQDTAYILLLYGICAICGNLWGGKIVDKKGAIFSLRLILSIQVL

VFLSVFLAMYSKILIIFSVALIGFFAFSTIPALKMLSIAKAKRHTYKVIDSTVSVNEAAFNVGIALASFL

GGVVLAGLGIEFNALFSALFVSPALIFALLFAKDKLNYKKFQRKSFKKV

>ABS44615.1 D,D-heptose 1-phosphate adenosyltransferase/7-phosphate kinase [Campylobacter jejuni subsp. doylei 269.97]

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKSLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSEILLENELIALFDEKIKDFKA

VVLSDYAKGILTPKVCKALIKKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGENLE

KGIKKLKEDFALRYSIITLSEAGIALFDKSLKIAPAKALEVYDVTGAGDSVIAVLAFCLANGVEIFKACE

LANEAAAVVVGKIGSVSVSFDEIKSFNRVDFEKKIKSKEELLTLLKQKDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLIVGLNSDASVKKLKGESRPVNSEFQRACMLAAFYFVDFVVIFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>ABS44614.1 putative dihydrodipicolinate synthase [Campylobacter jejuni subsp. doylei 269.97]

MGILKGTLPALLTPYKDDGSINEKEFIRYCEFGISKGLNGLFCNGSAGDSQALSVEEQVKLMKLTKKAAK

NNTPIITGITSTIYENTFILAQKAYELGLDALLLAMPYYYKLSEDALFEYVKYLASEVKLPLYVYNIPLF

APVLSLKFIEKVSKLDNVVGIKDSSGDALLLNHILDVVPSNFDVFVGREEFYAGALLAGAKGSMTSIAGV

FPELMSEIYKSINEKNIDRALLIQKSLLKAIRFGMSMAFPMGFALLLKVRGFEFVNASIHPLSPATKEEL

NTRFDEAKELIKTIEKETGIKL

>ABS44613.1 putative glycosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKKINIFLKDITESGGGERVCVNLANAFSKKYEVEIFSFYRSFEQPAYELYKNIKISYLSNQNFYHANKI

KKIFLKTFYRYFLSLLIILKFKNAKNEILLANDGYFLPFFKNKKLKYFRIWHIKAPKKKKKIFDYFDTLI

ILSAKELNKWQEWHKNIQVIPNFLPFTSSKTSNLSQKVVLSVGRFTKEKGFLRLIDIWELVQKDENFKEW

KLHIVGDGLLKEEILHKIQAKKLEHSIILLPFNKNIEEEYLKASIYVMASHFEGFGMVLAESANYTIPSI

AFDINTGPSDIIDNEKSGFLIEDGNLQEFVKKLKILMQDGSLRKKFGKNAKEKVQKEFSKEVIMKKWNKI

ASF

>ABS44612.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQVNIFYIQKSDEFKTWSEKYSKLISKYGTLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDERGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>ABS44611.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MSKRKICIVSATRAEWYLLRNLCHEIQNDKDLSLQIIATGAHLSPEFGLTYKEIEKEFKITKKVEMLLSS

DSEIGICKSMGLTQISFAEVLNELKPDIIVVLGDRYEIFSCVASAMICKIPVAHLHGGEATWGLIDEAIR

HSITKMSHLHFVATKEYQKRVIQLGESPLRVFNVGGFGLDNIANLKLLSKDELQKALNFTFQKRNFLITF

HPVTLENQSSQKQFQDLLKVLDLESKKENLGLIFTKSNADTNGRIINEMIDDFCSCHKNCIAFVSMGALN

YLSSMQFINAVVGNSSSALCEAPSFKIASINIGDRQKGRIKAKSVIDCEANFKSIEEAFKKLNDKNFIKE

LKNTENPYGKAGAAKKTKEILKNFNLENILKKEFFDIDFSTEFEK

>ABS44610.1 ubiquinol--cytochrome c reductase, cytochrome b subunit [Campylobacter jejuni subsp. doylei 269.97]

MAQIRKANGLVDWLDQRLAVHKLLDVLMVKYWIPKQINFLWAMGVILTTLFAVLFVTGLLLVMYYKPDTA

LAFDSVNKTIMQEVDYGWLWRHMHGVAASVVFLIIYIHMLTGIYYGSYKKGREMIWVSGMLLFVVFSAEA

FSGYMLPWGQMSYWAAQVITNLFGGIPFIGSELVIWIRGDYAVSDPTLTRFFMLHVCLLPIVIITIIAFH

FYSLRIPHVNNEISEELDFDLEAEKYMAGDTKGSKVIPFWPGFLSKDFMYISFFMIFFFYLVCFKFEFAM

DPINFDPANALKTPAHIYPEWYFLWSYEVLRGFFFDIAGIKAFDIGLAAFGIAQVIFFLLPWLDRSDVVK

PAHERPLFFIWFWILLIDLIVLTVYGKLPPTGVNAWVGFYASIVFLLLLIVVLPVITIIERKGAKQ

>ABS44609.1 putative permease [Campylobacter jejuni subsp. doylei 269.97]

MNKSVLKYLLFKYLRFDKEQPFINLSMLLAFLGVCVGLCVLLVAMAIMNGFDKEFEKRFFVMNYPITILP

KFYTPVNDEFIDELRKTFPNLLFSPYISTQVVVKGDNRFEGGVLFGVNFNDEKKINEVLAKALKDENLSG

FDILVGSALTDEFGLHKNDKLSLIFSNLNPSGFSLVPQTKRFDVKARFTSGLAFYDKAYMYTDVDALKKV

LGMPRNPNYDGIHVYSDNAFKDVEKIKSYLKDDYAVVGWWEQNKNFFSALELEKRALFIVLMLIILVASL

NIVSSLLMIVMNRRSEIALLLALGASKNEVKKSFFALGMLIGGGGMIVGVVLAFFALWLLGNFDIVTLPA

DVYGTSKLPLDLSLMDFSLTIVGALIIIALSSFYPAKKATQINILDTLRNE

>ABS44608.1 peptide ABC transporter, periplasmic peptide-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MLRWFVLLFLLFFNLEAKISKDTLIVAVENEISRINPAYSEDHDAVINLVFSGLTRFDENMSLKPDLARS

WDVSKDGFVYDIFLRDDVLWHDGVKFSADDVKFSLEAFKNPKNNSSVYVNFEDIKSVEILNPSHLKITLF

KPYPAFLDALSIGMLPKHLLSNKDLNTASFNQNPIGTGPYKFVKWKKGEYVEFKANENFYLTQVKTPKLI

IKHIPDPSIASVELKNGKIDTALIDVSLLNIFKKDENFGILREKSADYRALMFNFDNEFLKDLKVRQALN

YAVDKQSIIKNLLHDYAFVANHPLERSWADSKAFKTYEYNPKKAQDLILALGFKKNKDGNFEKDGKILEF

EIWAMSNDPLRVSLAGILQSEFRKIGVVSKVVAKPAGSFDYSKVDSFLIGWGSPLDPDFHTFRVFESSQD

SALNDEGWNFGHYHDKKVDIALQKARNTSNLEERKKYYKDFIDALYENPPFIFLAYLDFALVYNKDLKGI

KARTLGHHGVGFTWNAYEWSK

>ABS44607.1 DNA primase [Campylobacter jejuni subsp. doylei 269.97]

MITKESIENLSQRLNIVDIIENYIEVKKQGSSFVCICPFHADKNPSMHINPTKGFYHCFACKAGGDAFKF

VMDYEKLSFADAVEKVANLSNFTLSYTKEKQENKKELKSILPSLNAYFKDNLKHHKEVLTYLYQRALNDK

DIAKFELGFAGASEDSIRLLQNQKIPLEDAMSVGALKKDENNEFYASFIWRITFPIYDHKDLLVGFGGRT

LNPNVPAKYVNSPQNILFDKSRIFYAFNIAKENIAKKKEIIVCEGYMDAIAFHKAGFNNAVAVLGTALTE

HHLPLIRRYDAKVILCFDNDEAGLKAATRSTFLLSTNKIDGKVAILQGGKDPAELVAKNESAKLHDILDE

GIELGEFYIRRLISTHSIISALDKQKALETIQKFTFNLEPLVANSYTNLVSNLLKVDEKFIVLSQNSKKT

IQTPLISQNKYNFPKEKIHIAELELIAFLKQHPEICNDFKQISDSVCFKHKILLDKILEKKGYEDSDIRE

FESKNIRKNLNYNEFLLGICKVNLAFLNNVKIKNSTLALKKQLFTLIDKNLNLVIKNLNTEELNNFLKEY

LSFLKHEKNEEILQQSFRNLSGIFGKKNFTACDLGFSTQDNDEPF

>ABS44606.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKSLLILSILFLLNACSFENSKDTGKVGEKSAEISANEKIVLQTLQKLKNEGKTIVLITHNPDLAKFAD

RTLILQHGVLK

>ABS44605.1 flagellar basal-body rod protein [Campylobacter jejuni subsp. doylei 269.97]

MQNGYYQATGGMVTQFNKLDVITNNLANINTSGYKRDDVVIADFKRIFKETQDELPIENRTRDASRFVNT

TIDGIPQVSQEYTDFSLGSLKATNNPLDLAMTREDTFYLVQTKDGEVRLTKDGNFQLDDEGYLVNKQGYK

VLSSDYFNNPQNAGIRIPNGAVQISVDKNGSIEVDGAQNARLFVAQVDDIRALQKDGDNVYKIDDLTRIR

YLENSNAIRQGFSQGSNVNPVTEMVGLIEANRMVEMYQKVMTAHMDDLNQEAINKLAAVK

>ABS44604.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKFMSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDV

TKDPLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSL

SGGERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAY

VIRSGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>ABS44603.1 putative lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKVFIINLERSLDRKEHMQKQIQKLFEKNPSLKNKLEFVFFKAIDAKNKEHLEFKDHFPWWGSWVLGREL

SDGEKACFASHYKLWQECVKLDEPIIILEDDVEFSDEFLNNGAEYIDELLKSEYEYIRLCYLFDKRLYFL

SEGGYYLSFEKLAGAQGYVLQVSAAMKFLKCAKNWIYAVDDYMDMFYRHNVLNIVKKPLLLKHDCRIESS

ISQAGRLFLKAKFYRKIIREIFRLYRNILKLSYTFYIKKKLDIS

>ABS44602.1 ispD/ispF bifunctional enzyme [Campylobacter jejuni subsp. doylei 269.97]

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNIAYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPKPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAVLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>ABS44601.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>ABS44600.1 hypothetical protein JJD26997\_0852 [Campylobacter jejuni subsp. doylei 269.97]

MQGYAMEKEIILNESFKALLESIFSDADQAKKLIQAFEEFANDRATTQRLNFENLKQEAIEQIRNELVSK

DLFHSEIKRLEDLFHSEIKRLEAEIKRVESSIKTEIKRVESSIKQVESSLQSEIKLSVSSLKQQGIYWLI

GACVVSIATIISSVWAIMNFTIEHLK

>ABS44599.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKFSDFFYAWLHESYYKNAVSIGKNGDFFTAVSVGNLFGTLLAKHFLNLIDKKILQPPLELVEIGANEGY

LSRDFLAALLELRPEIFSQISFFIIEPHEKLRTLQKKTLERVEFSHKNSLKECHFKNAFFFCNELFDSFT

CELIDNDKMAFVENFKLIFKNMDENLITKCKALNLIKGELSLELENFFKDLDQACERFIFAGFDYGTLNP

QNFSLRIYQKHEVFNPFEVSLKDFFGKSDLTYNVNFTHLQKLIKEYNFKPLTFKKQSLALMDFGFEDLLE

YTKNKNIKTYESFLSQAKILFFNFDEKFHFFEFQKN

>ABS44598.1 hypothetical protein JJD26997\_0052 [Campylobacter jejuni subsp. doylei 269.97]

MDLKSLENSRLYILKRLGILKFLSVIEALLVGFLVFVFIRDTLIAVILAIFVGVFFFRFTAKKLKLAQKK

LQIDALNLFLRRFGAKFKKQSLSQKDFLQLGFTKDLKEFKSQNCFEFKDFKIYDIQFLDENKRFFCGILL

EILSANQNPSFEDEEQIYIKLADKNFTLNHIFSKENHYLIATLSNPFFIDMKKDLKSNFKNLEENLNSIK

NKLFK

>ABS44597.1 ATP/GTP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKEQILEKLKTVKYPGFEKDIVSFNFVKDIKIQDNGVFIDIEIVSANPEVANEIRKNATEALSSLALKNI

ELNIITPKIPEEKSNSRSGKNIAPQVKNFIMVSSGKGGVGKSTTTVNLAISIAKMGKRVGILDADIYGPN

IPRMLGETKTQPEVVGQRLKPILTHGVYMMSMGVLIEEGQGLMWRGAMIMKAIEQLLADVIWPELDVLFL

DMPPGTGDAQITSAQSIPITAGVCVSTPQTVSLDDSKRALDMFNKLHIPIAGVIENMSGFLCPDNGKEYD

IFGKGTAEDMAKAYKSEVLAQIPIEMIVREGGDEGKPVSFYHPESVSSKRYLMAAEKIWSFIEKINNEGG

ADNSAIQPVMNGKSACSH

>ABS44596.1 putative aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MQISDLKKELILKKGILYFDFTASALALKCVEKEISKILPTYANTHSDSSLNSFKTQQIYEQARKDIKKS

LSLDKNFALIACGTGSSSAIKKFQELIGIYIPPLVKERYFTQIDKNTLPLVIVGPYEHHSNELSFREGLC

ECIRIPLDKNGEIDFDFLEKTLQKNKKRKIIASFSLASNVTGILSDYKRISEMVRKFKGIVAFDASSFIP

YKNISCQYYDALFISSHKLIGGIGGSGLLAIKKDLCGNKPSFAAGGTVGYVSRTSQYYLCNEEALEEGGT

PGILQLIRASLAFKIKNSIGVKNIEKKEEILKDYFFEKLKTIPNLILYAKNLKTRLPIFAFNIKGISPFD

IAYELSKKYHIETRAGCACAGPYGHDLLGLKDNQKLKTKPGWLRISLHYTHEKENIDYFFNALNKTIVKL

SH

>ABS44595.1 putative sugar transferase [Campylobacter jejuni subsp. doylei 269.97]

MSVKVSVIIPSLNSIAYYDECIKSVMKQSLKELEIICVDANSTDGTLELIKKYQKEDERIKLIISDKKSY

GYQMNLGIAAANGEYVGIVESDDYIKENMYKELYALAKNKNLDILRSDIYNFYDKEKREFKYSVISYDEK

FYHKDLYFESAGAVCKNTALTKQEILKNSWNMNPPGLFSLDFLRKSRLKFHESAGASYQDLGFWFITIVS

ACKIYFHKKAYYYYRQDNMGSSCNSKKKVYCLCDEYSFMENFLKQKEEFKQYAFVLAYLRFGSYCWNMNR

IDESFYFEFLQRFQEDFRKIVGREELDRALFLPWQLEILDTILRSPQEALDRYYTKLYGAIDRIKNQLSY

KLGEAILKANSPLKFLKLPFTLISLAKTHQFEQKVLQFLIRLEPKFKPLDLEKYADYEEALKIKKHLSYR

LGQALLKNPLTFIFKIPSIYQNFKKGVS

>ABS44594.1 putative capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MRKQIDRALDLWDFELARVLLASSEYKEEYENFLYETGQFSYLQNSIYTNKITKIEYNLENFEGEGIEAM

ACVNYMLNNAIAKNDLCVQRAYDLFHKIKSEKFLLAKAYFISKIISYFATKSESDRIEFFVPLAMYSSPQ

NLLMQVLQKDFNDQKGAKKFFDDFIFQASLLVRKNLTDRFLGSKVAICFHGIFRGDFEGQINDTLEKLAK

PLNADVFIFTWDKFQEWGGLCGGISWSDRLLEKKLAESAPAEIGLNENFRKFFPNTSKVLSYEYRTPLSH

KAMQKFIAKNPCIRAYALENQDHKYLVWGEKIYYGMQKSLDLMQEYENKHNIRYDFIIFARPDFEIIKTL

SLEDLRSLDLNEICEEYGFYGSGSGFPYGRAEAMRHYVSLMSNLHHLQGSYLTNVVDNHDTQSKWAMYFN

LKTRNWKHITALYNRYAPSDMICLKKLRIPNIKKAFKEDLAVLQKEFNEKKLKEFESFFDRFTSHYECVS

KKAKRYVANESATRGYKKAKPRKIFSKIWKFIRG

>ABS44593.1 putative periplasmic protein [Campylobacter jejuni subsp. doylei 269.97]

MKKCILIFFSLYSLSFANIYEKLNDFAYEKKPNKDFKIQEVKLVQFSQENKDCLELLIEAGQVRILNSYN

SCQKLSKDESFQKFLNEDFLKLYKNNRYLNEDGTIDETKMPKNSEYSKMVILGNKILNETIKYAGPQAKD

PKKDLREIIFLVQAVMPMAEVCKINQVL

>ABS44592.1 beta-1,3-galactosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MPKISIILPTFNVEKYIARAIESCINQSFKDIEIIVVDDCGSDKSIDIAKEYAKKDERIKIIHNEENLGT

FAARNNGVKAAGGGYIMFLDPDDYLELDACEKLILLINTYKICQFSFTQISNGIKLKSVFKDTLKNLKEF

KGIYWNIWTLFVKKDFYLKSLEELFLIDKKLLVAEDMLAVFFLINNLKDDEYLQVDLHLYNYVDHSFSIT

KRQKNKEKIQECLDDYFYILKYIKENKILKENLKSYVLIYLQIDILKFLFNNKKINYFKYKLLKKICKIK

LFFYHFF

>ABS44591.1 hydrogenase maturation protease HydD [Campylobacter jejuni subsp. doylei 269.97]

MKFLVLGIGNIMFADEGLGVHLCKQLEKNYKFSHPDFTLDFIDGGTLALQLSYIIARYDRLIVLDCIEAE

NASIGDVFFFPYDAMPNKISWSGSAHEIEMLQTLQYMELAGDLPKTHILACVPKRIEAMSFKLSDELIQG

AEIMEKTLLNFLSKEGFVYEKIADFSLQELADISYKND

>ABS44590.1 glutamine synthetase, type I [Campylobacter jejuni subsp. doylei 269.97]

MGKFVNNIDDFFKFCKQNEVLFVDFRFTDMIGTWHHITYNLHAINEETFQTGIPFDGSSIHGWQPIEKSD

MILKPDAQSAFLDPFTADPTIIVFCDVYDIYKGQMYEKCPRSIAKKAMEHLKNIGIADTAYFGPENEFFV

FDSVKIVDTTHCSKYEVDTEEGEWNDDREFTDSYNTGHRPRNKGGYFPVQPIDSLVDIRSEMVQTLEKVG

LKTFVHHHEVAQGQAEIGVNFGTLVEAADNVQIYKYVVKMVAHLNGKTATFMPKPLYGDNGNGMHVHMSL

WKDGVNLFYDKDGYSGLSQTAINYIGGILKNARSVAAFTNPSSNSYKRIVPGFEAPCILTYSCQNRSASC

RVPYGIGKNSARIEIRFPDSTANPYLAFVSLLMAGLDGIKNKTIPVGPMDENLFDLTLDEIREKGIEQLP

HTLRGSLEALIRHNSYLKPVMSDIFIDDYQHLKFETQVWPVEARPTAYEFKTCYSC

>ABS44589.1 thiH protein [Campylobacter jejuni subsp. doylei 269.97]

MQDYMQHLPHMQEIKSEILNKVLIQVQSYDESQFSAKDVKNALNQTHLSIEHLKALLSSAAEDFIEELAF

KSAKVKQKYFGNSISLFTPLYLSNYCNSKCVYCGFQKGNKIARAKLSEVEIHEEMQAIAKSGLEEILMLT

GEGREFASVEYIANACKIAREYFKVVGVEIYPMNEEEYKILHEKGCDYVTVFQETYNPLKYSKIHLSGEK

RIFPYRFNAQERALKAGMRGVAFGALLGIDDFRKDALATALHTHFLQQTYPHAEISISVPRLRPIINNAK

IHPKDVSEKRLLQVLCAYRLFLPFAGITISSRERIGFRDEVIKLGATKMSAGVSVGIGEHKGEKKGDGQF

EISDDRSVDEILAMLKKSNLQAVMSDSIYVG

>ABS44588.1 chromosome partitioning protein, ParA family [Campylobacter jejuni subsp. doylei 269.97]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>ABS44587.1 porin domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKTHRYQNKTQTEITIK

>ABS44586.1 putative thiredoxin-like protein [Campylobacter jejuni subsp. doylei 269.97]

MKKSLLILSILFLLNACSFENSKDTGKVGEKSAEISAKDTLGKAVKLADDNTSLKVLVFFQNGCPSCLKE

LPSLDEFIQNHPNKISVYAINSIDNANVIKVLAEQFDFKNVKVLKDDLKITNDRYAVFATPTTIIIKDGM

IKDRILGEKPWEFFESKLISLL

>ABS44585.1 major facilitator superfamily protein [Campylobacter jejuni subsp. doylei 269.97]

MNGKTYKFHPNDTKMDKKIIQITEKSGFKAAVFSMAAMTMLGSVVISSALPAINRHFEELLTQSGATLAS

SFTLAHLDILVRLVLTIPAIFVVILSPFAGILMDKFGKLKFILPAMVVWTISGISGFFLNDIYAILTSRA

IFGIATAFIMTGASALLGDYYSRGGFNRRENALSLQGFFCAVGGAVFISIAGFVSSYSWRYPFLVYGLGI

LITLMAIIYLFEPRKFKFYNHTKIEAKTNYWQFFPIYFIGFFIMVVYYISPTQLPYYIEEHLGLDPKYIG

ISMSVSALCYGFFSLSYRHIIKFLSIKTIYVLTLFIVSCSFLLLFLVDSFFTVLIALALLGMGGGIMLVN

NTAYLFSICPENARARAYGILASCIFLGQFLSPIISQPIVRQMGLVDAFLIWSIVIFIVCIVFLFLKQKP

RIN

>ABS44584.1 tetratricopeptide repeat domain protein [Campylobacter jejuni subsp. doylei 269.97]

MFDKIHYYYFNADYEKCLNLSEQFLKESSKFALEFAMLSSHKLSLFQKALYYAEELFSLNPTSFNGLMLA

KGYIENLRLDEALNLLQTLLTRKDDLEDELKLELAFAYKLSNKLEESEKIFKELLSKDMYNFNLWKNYAE

IYFRHDFAKALDAHEHLCHFMQDLIDKLQKGILIEQTHLNLVKLEDRLHSKTKENLSISKIEDFLSHQIL

PQKAYLLFKLFRISDSLELFQSLQEANQHHAQFWQNYAKVLEFSSNYQEAYHAYKKCLSLDSHATYQFDL

AYLLMRMGVDDNFEEGKKYYESRLFYAHNETFSPYHYNESLKAFNKFGIDAFKDKEVLVFCEQGFGDTIM

YARCLEKLCKITSKVLFAPQSAMHKMFKNQIKFLNQKDDIFKNLKVLKNLPMHFDYAIPICSLPFFIDIK

LDEISRLKTPILAQKKPHNKRKKLGIFYATPNAENSNLSRNVKFEFLLDILKDLDYEIISFQMQLKEELP

KIIEDRSKLITDWNDTLNYLYDIDCMLSIDSAIAHLSLAMDIPTIVLLYPKFDWRWGKFENPKSYFWPKA

KCFILKEQEETKKNLQKLIKDILN

>ABS44583.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNLQTNALNFKNIEAKNLKAYESNTSTIKAYYKANSWVRYADRDEFNDFITLNLDFNLSANRLEFFNKDM

SKVLFEGNVTYIGANNIKIISQEVEYQPKDKILHTNTNFKALINGNIINGNTLNYDVKNKILNIQGVNAW

LQDK

>ABS44582.1 flagellar biosynthetic protein FlhF [Campylobacter jejuni subsp. doylei 269.97]

MGHLIHTFTVEDTEQIIPKVKEDYGDKALIITNKQIRPKTLNHSALYEVMVAIEESNYQEHLKKQEKSLP

AKKSSPKSSSTSLAEEKIRSQIPQDEDVVLDFSNTRLNTNLNTVKNDDITKRTYQDFPQNKINPHQNKTL

GFDDFKEKLSEVSNEISKITNTPLENYTPNPNYNKKIENFEKQFEKQINKLNDKIDLLADMMWDDKAEAR

KNLMIPPEFASIYKQAKESGMLESHLEAIMKATIENIPAAMKTNKDAVQRYFHSFLRNILPCRVESDIKK

QKIMMLVGPTGVGKTTTLAKLAFRYAYGDKRYKTGIITLDTYRIGAVEQLFQYAKMMKLPIIDSIEPKDL

DEAIKSLNNCEVILVDTIGNSQYDQSKLAKTKEFLIHSNAEIDVNLVVSANIKHEDLMENYKNFSFLNID

TLIITKFDETKVFGNIFSLIYETNIPLSFFSTGQEVPDDLEVANSDFLVHCILEGFNKGKK

>ABS44581.1 ubiquinol--cytochrome c reductase, iron-sulfur subunit [Campylobacter jejuni subsp. doylei 269.97]

MATSESRRSFMGFAFGSVAAVGGVFSLVAMKKTWDPLPSVKAAGFTTVDLSGMQDGELRTIEWRKKPIFI

LKKDASMPKDEKRDVVVDNVAYTVVIGLCTHLGCIPAYQPSEQLFKCACHGGEFDTSGKNVFGPPPKPLE

IPPFKIDGTKLVLGEESPEYKKMIAEA

>ABS44580.1 xanthine/uracil permease family protein [Campylobacter jejuni subsp. doylei 269.97]

MDFFKLKENNTSFKTEVIAGLTTFLAMVYIIPVNSSIVGNTGMPIEALITATALITIVASAFNAFFANTP

VAMSVGMGLNAYFTFAVCLGQNIAWQSALGAVFISSIIFLILSFTHFRLWVIRNIPKDLRLAICAGIGCF

IAFLGLSQMGVIMHNKDTLVSIGNFKSPHVLFGIFTLALIIFFWAIKLRGAFILGVLASSIIAWIFHLDN

ASFPVQIFSLPNFSMENGLGAIFLQLDIKSALNITMIPIILTFFITQLFDSIGTITGVGERGKIFDDPKN

GEKKLSKTLMADATGSALGAITGTSTVTAFVESTTGVESGGRTGLTALVVAICFAFTLFLLPLFKAIPAN

AIYPVLVMVGILMFMEVKNIDFKDSAIAVASFFTIIMMPFTYSITTGFAFGFLSYLLVRIFKREWDKINL

GIIVLSLLSLGNFLLMALQ

>ABS44579.1 putative L-asparaginase [Campylobacter jejuni subsp. doylei 269.97]

MKILNIGAKAFFLMASLGCLNTALVAKDIKPIIVIHGGTSGLGLSKEEFAKREVVMKQSLKAGQKILEQG

GSATDAVIATIKVMEDSEEFNAGKGAVFTADGFNELDASLMEGKGKKAGAIAMARTIKNPIEAARVVMEK

TPHTLIAGEGADKLAKENELEIVSQKYFYTPHRYKQLEDAKKSKEILLDSDKAKAHLGNYTEPYLGTVGA

IALDKEGNLAAGTSTGGTTNKMTGRIGDSPIIGAGNYADNDSVAISCTGTGDIFIRSIAAYKVSALYKYK

KLSVQKAAEQSIDEVAKLGGTGGIISIDKNGNVGYAWTKDKLGMYHGEARVGQEPRVFFPVAK

>ABS44578.1 putative sodium-dependent transporter [Campylobacter jejuni subsp. doylei 269.97]

MQRQTWSSTLTYILTVAGATIGFGATWRFPYLVGENGGGAYVLVFCIAMIIIGIPVILVENVIGRKAMTN

SVDAFKQKWQSIGYMGLLGSFGIMAYYMVLGGWVLVYIWELTLENFSLANVVSKEFTHQFFNDKIAFNPL

GVGIFTTVFVIVNYIILKRGIIDGIEKSVKFLMPLLFICLIIVIGRNLTLDGAMAGVKFYLQPDFSKILS

PKLLIDVLGQVFFALSLGFGVMITLSSHLNKNENMAKTAIYTGVLNTIIAVLAGFMIFPALFSAGLAPDS

GPSLVFETLPIAFSHIHFGTIVCILFFALLLIAALTTSLPIYQVIISVLEEKFKYSKNLSINLTLGFIFI

LGNLPCILTYGPWRDIVIIKGKNIFDSFDFISGNILFVLTAFFCCIYVGWILGKQESLKELSNNNTLKSS

WFGIWFYYVKYIVPLIILIIFIYGILN

>ABS44577.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQDFIYIKNDVLIPLPDAIEILDQANDKEALICNDKNQKAQIYAPEINFYLKNSQDEILEQSKNVLTLYE

ARASVYDLGLDLEQSKEVQNRLILVDSDTQTVEFLKEHGFKVIALSSAEILAVFGSVGELCAVVKNQGEE

VEIDFDFLLFKAEDLSVVRKDFTRQSGCYNLLNFENLEALLEFLQSKSPKYPYKTYISYNASVCQYHERR

SEHCAKCAEICPTVAILKDDENKHLEFSQVDCLGCGGCISVCPSGSLDYAPMPRESFFTLCEFYKDKKIL

IIPKKMSLENLNLALPKDVLPFMIEGEKWLSSMHFLTLLQNSGANLVFYTDFVSRGSNEAIVLLNTFFER

KFQKKAIFVAKDEKELQNVLKEQEFIQDLKYDFHNNILTTRENFAKRMQEMIKNEDFGSIESGEWLRYGK

VEINPNTCTLCLSCVGACNVGALIADTKENALKFNASLCTTCGYCELSCAEKDTLKLFRSGMEFRASYFE

YQTMAKDELFACIECGKEFATKKAVEKIANLMKPKFGNDENKIKTLYCCADCKAKVMIKAMGFAGQN

>ABS44576.1 putative 2,3,4,5-tetrahydropyridine-2-carboxylate N-succinyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MINTKEDFLLLIKQIEQKSGYKKPKAFGIARLDRGQLNKNKILQASFALINYEQNFGSAAIMLEAFMQRG

VEIDFNASEFVQTLKLEDIDFALSCFKPFLEEEGHQNIDLLKIIKDKFKDGEFAFVCLFEDKEPLSVESV

YLKLYLLSTKKVPLRSINLNGAFGLLSNVAWSDDKPIELEYLRANEMRLKMSNQYPKIDFVDKFPRFLAH

IIPEDNTRILESSKVRMGASLAAGTTIMPGASYVNFNAGTTGACMVEGRISSSAIVGEGSDVGGGASILG

VLSGTSGNAISIGKACLLGANSVTGIPLGDNCIVDAGIAVLEGTKFLLKDAEELAKLNPYFNFDKEIYKG

LELKGLNGLHFRQDSISGAMIVALNKKAVKLNEALH

>ABS44575.1 phosphoribosylaminoimidazole-succinocarboxamide synthase [Campylobacter jejuni subsp. doylei 269.97]

MTKKEMFYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGVLNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIIRNVATGSLIKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNDLVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>ABS44574.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>ABS44573.1 methylated-DNA--protein-cysteine S-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFKVYYKIPLCYLSLHSDGKFLTGVDFCDNKRSEKNCSLLDLAKYELDLYFTHKLKKFSVPVLVQGTDFE

SKVYKALMKIPYGKIATYKDIAEKINHPKAFRAVGNANSKNQIPIFIPCHRVIASNGIGGYNGGLEIKRF

LLENEGVNLK

>ABS44572.1 phosphate transporter family protein [Campylobacter jejuni subsp. doylei 269.97]

MQKDNLIAFVIFTISTIAFVIWGFGYISQHQLILFILASIFGIFMAFNIGGNDVANSFGTSVGAKTVTIK

QALIIAAVFELSGAIFAGAEVTKTIRSSIVIFPNSLDPMLFVIIMLAALLSSGVWIFIATKKGLPVSTTH

SIVGGIVGASIMMGVLKFDGIQTLSMVKWSEILRITISWVASPLLGSIVAYIIYSYIDKKILKPSEKLND

DLKNIKKERKKFKEEYFLNLKTKSQEEQIKELSAIALDEGEQENNFYRNKMKEFKDQEKDIDIYSILKTH

MPIIACIAAAIISAMFLFKSLNNVNTLDILQNFWIIGIIGTISYVVTFAIVKIVKKTELNKTTDRIFSWF

QIFTASSFAFSHGANDIANAIGPFAAILDVLKNGTINATSPVPFAALAMFGVALVVGLWFLGKEVITTVG

SKLATIRPTTGFSAELGTSIVILLATQFGIPVSSTHILIGAILGIGVYNKNANWIMMKPIGLAWIITLPA

AGVMAALVFLGFKLSLGI

>ABS44571.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MDILKLAIKDFFSFKFVKFALIPLIFSLILMLFLGVLGFSALLDYFNSLFSVGEDSFWAWFYAFHFVQIL

ITIISFLFSGFIIVFASVFLALFITSFLTPFIAKEINQKYYHYDNTNEVSTLKIIFEIFKIFIKFIGIFL

LCTLALFLPFINIFVYYLAFYYLFHKLLMIDITSTILDKESFKSFHFDFSPLEFKFSTLCFYLLSSVPLL

GLFLQVFFVIFLTHLGYQRILKLEAKT

>ABS44570.1 single-stranded-DNA-specific exonuclease RecJ [Campylobacter jejuni subsp. doylei 269.97]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIVRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMSKFLELLAIAIIADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLILTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGLVTPQFVIKEIL

>ABS44569.1 (di)nucleoside polyphosphate hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESAKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPGKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>ABS44568.1 UDP-N-acetylmuramoylalanyl-D-glutamate--2,6-diaminopimelate ligase [Campylobacter jejuni subsp. doylei 269.97]

MKLKLENSFITDNTLECEKECFFLQTTQNTKFHAQALERGAKIIDVNECKKLLKIDEKIQIIGITGTNGK

TTTAAAIYSILLDLGYKCGLCGTRGAFINDEQIDEKSLTTSPILKTLEYLQIATQKKCDFFIMEVSSHAL

IQNRIEGLKFAAKIFTNITQDHLDFHGTFENYKEAKELFFTDESLKFINKDALAIKFNVRNAFTYGIENP

ALYQIKAYSLEEGISAVATNKNQTFHIDSPLLGLFNLYNLLVASACVNELVKPDLKDLEKAISEFGGVCG

RVEQVAKGVIVDFAHTPDGIEKVLDTLKNKKLIVVFGAGGDRDKTKRPLMGKIVEHFAKIAIITSDNPRS

EEPKTIMEEILSGFAKKEKVLMIEDRKEAIKKALELKENDDLVVILGKGDETTQEIKGVKYPFNDKVVVN

EILKNQG

>ABS44567.1 DNA processing protein A [Campylobacter jejuni subsp. doylei 269.97]

MASEILPDEFLELFKDLKKPPKKLHYKGNLSLLKQDKIAIIGSRRMSVYTKNCVFSLASMLKNAHLCAVS

GGALGVDITASMAAMPNTIGIFANGLDQIYPRTNEKIIKQIYENALALSEYEDDYFPKNYDFLLRNRLVI

ALSKAVVVAQADIKSGSMQSAKLALELHKPLYVLPQRLGESTGTNLLLKENKAKLICDFKEFVSEFASID

TNQDEFLEFCKKGVSVDEALKIYGQKVYEYELEGKISIEGLFIRVLV

>ABS44566.1 F-box only protein 18 [Campylobacter jejuni subsp. doylei 269.97]

MSISCLQTKNSLTQEQQAVVDFNIDDILIVNAYAGTGKTSTLVQFCEARKDFNILYLSYNSSMRKEAETK

FKHLKNVEVKTMHSLAYIELEVQKKYKDRLGSLRAIDLFNFTGDLKEEVKSFYATAILKAVRYFCNSNLE

LKEFLKEIAKEPSKYEISPKMDLSYISKKTEKLWNDLQSQDCALVYEHDFYLKSYQLSKPKLEYDFILVD

EAQDINACVIDIVLNQKQTKKVFIGDAFQSIYKFRGAVNSLEVLASMPKSHILYLTQSFRCPQSIATIAN

SYLGILNASRDFKGTLKPRKENNENEAKAIICRTNAKLFDIAVENLNKKLFFVGGVNSYSFDELLDIQNL

LFKKHKSIKNQFIAKFADLKELLEYINETKEVDLKQKIFVLFKYVHSDIIKLIKDIEKSCVKKQEQADLI

LSTGHKSKGLEWNNVEIINDFLNIKQELEGREQITIAKEELNLLYVAVTRAKNSLNINKDYLLEKDFMEK

NLERIIIE

>ABS44565.1 putative phosphate ABC transporter, periplasmic phosphate-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILSLSVASLALCSALNAADLKIAGSSTVYPFTSFVAEEYASIKNTKTPIVESLGTGGGFKVFCEGTT

DISNASRPMKLSEFETCKKEGVTDIVGIMIGYDGIVLAQNKTNAPLNITKKELFLALAKEIPQNGKLIPN

PYTNWNQINKNLPNRKISVYGPPSSSGTRDTIEELVMSDVSKKIPEYKGEYKTIRQDGAYIPSGENDNLI

VSKLTIDKDAFGIFGYSFLVSNSDKINAANIDGVTPSEESIADEKYELARSLFIYINAKKNPKEAFDFAK

IYMSDDLAKSGGELEKIGLVPLSDDKLKASQKHVEDRKILNDELVKAGKVF

>ABS44564.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKSILFASALLTGSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGAPATPNTQAIPVARKIEIQCYKKAY

>ABS44563.1 ribosome recycling factor [Campylobacter jejuni subsp. doylei 269.97]

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKINTHILDHITVDYYGNQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDVYTTKIDESVKSKESELLKV

>ABS44562.1 hypothetical protein JJD26997\_0065 [Campylobacter jejuni subsp. doylei 269.97]

MLENLIAQIIEGIVGCKARKMGFFCIIAVMALAFVLWLVFSHLYGYF

>ABS44561.1 hypothetical protein JJD26997\_1152 [Campylobacter jejuni subsp. doylei 269.97]

MSDAVDYNKRLEAFKEIYPQILEMSLTEKSPFGEFKKLLEQFRNDNIIRNDTQFQSLAQALISVGQTIVA

QSQNTALSMILQGDENELNAEKALLFRAQTQTEKAKPALIARQIAQIDDNLRIETAKVAQGVQFGYCAGG

LDIPQEIMRLVKEKIQNI

>ABS44560.1 transcription antitermination factor NusB [Campylobacter jejuni subsp. doylei 269.97]

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTNTPSAIVINEAIELAKELANDNSPKFMNGVLDALIKAKK

>ABS44559.1 hydrogenase nickel insertion protein HypA [Campylobacter jejuni subsp. doylei 269.97]

MHELSIVESLIELCEENALNNKAQNVQEIHVKIGRLSGIETDLFTRCFETFKENSNICKNAKLFIELAPL

EILCLKCDQTSILEENVLKCPKCQSIEYKITQGENLHLMRLVME

>ABS44558.1 ribosomal protein L21 [Campylobacter jejuni subsp. doylei 269.97]

MYAIIKHSGKQYKVSVGDDLKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>ABS44557.1 plasmid stabilization system [Campylobacter jejuni subsp. doylei 269.97]

MKIVESDKFKKELNNILAFIAKDSVSAKNYFSKSLKDAILCIDNMPYKFRKSTLFNDENIRDFIFKKYVI

PYYIDSKNNKILLITIYKNNLVK

>ABS44556.1 sensor histidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MLKTKNIFIVFFVVLALIFGFIFYTFTNSYLNFLLIKQYKQKIKSLDDVLKFSLLEHLNNANIKDFAKDT

RADFIILNNNMKISSVKNPDFFSNLKEGEILNFNSKKILTKSFIYKGYKYVIIVYPRFLDLELFWTKITI

GFGVCLLFVFILMLLLGRRIEKNFNKILDFLDSIGNHKVVILEKGMFKEFNLLNEKLLKTKDKILKNTQK

NKKQSNKITLKNTQLASVISAISHELKNPLSVINLSLEMLKDEELEDKKLKKELLGKISRQSIKLNALTH

KLNFVFNLNSEALQMQEFDLFSLCEKITKNPGFERVVLQGKSTKVKADEFLIEQVIINLLSNALKYSQKE

VILTARDQKIIVQDFGKGIEKDKIKLITKKFYKIDVKSDNSFGLGLFLVKKILNIHKSYLEISSTLGYGS

NFSFKLSQG

>ABS44555.1 trkA domain protein [Campylobacter jejuni subsp. doylei 269.97]

MNNILIIIDGILAKHFLERLCFEKGLGYFFTVVCQNSEKNNLNISSEYIDLHYFDPTSTARLENIMSKDF

KQAFIYMQDEFETKKSYEALRSLNPNLEIEIMDFWGLSVNDTHANLADARMTLSRRFMDFLPDIALTAQY

IGLGVGEIMEVKIPAGSIFAYRHISSIQQKRWRIVLIYRNSKIYFVKPSFVLEPNDSILIVGDPVVLQSI

FHNIRDKAGQFPMPFGSNVFALIDMKNMNQNMQERVLDTTLKLTQKSNAKRFFIHVINPKLGAMYEKLKK

LSEDKEGVFFDYFNTDFKQISTWLQNNDIGLVVTDIKNFEKEKQAFFDLKIPIMKVGKASFDELKEAIIL

SADESELENNANVITDLSKQLDFGVILYYYNPNSQNITDMEEYFRSLSKLYDKNIQIINKNDENPLLNLQ

YREDLLQFVSFQKELLNRDFGKNLSTNLNRHYYKMRQNYQLFIPVE

>ABS44554.1 acetate kinase [Campylobacter jejuni subsp. doylei 269.97]

MKILVLNSGSSSIKFKFFDNKIIKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNTLDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGAYFAVLPKTDAIVFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>ABS44553.1 hypothetical protein JJD26997\_0954 [Campylobacter jejuni subsp. doylei 269.97]

MTLIIENVNEDFLPAFKGLAKSINAKCKISKPKLSSFESKILNASKELDKEKKVNTVLSFNSHQDFVKAY

QNGKI

>ABS44552.1 hypothetical protein JJD26997\_0326 [Campylobacter jejuni subsp. doylei 269.97]

MKTKRTDRVSFLTQLISESKSGYENYKPHFKELQDAYLLENKIMQKLRKRNKSSIYIPKINAKVKYLITS

LNEVYFNSERMADIETYINSDDTIIELWQNAIDFYSGKINMFKIFQPLFLDVLLVGTSIAKLTWHKGMPR

IERVGIDSIFFDPNALNSEDVGYIVNEIYLTYNEIYERQKLGFYKKLETPKLLDEEDEYKKVKLYDIYER

KNDDAWVVSTLFENHLLRNEVILQDGQPFVWGSMLPQLKKIDNENYVSAYGEPIMASAMPLQDEINITRN

LLIDAVRTHIMPKIMLPKSMGVSREDIETLGKPLYTDDPKGVQILPPPDVNSAGMNLQLLESELTEVTGV

SPQNNGAQTAHNETATEISIKAQEGGRRSADYIRQYNETFIEPLFDRFAMLVFKYGEDNFFKGFQREDIP

SFRFKIQTGTGAMNKEIRRAGIQASMQVFSQLYQMYMSIGDTNSAYGIINASKELTKELLPILGVKNVNS

LFAFENKIQQGETNAEY

>ABS44551.1 malonyl CoA-acyl carrier protein transacylase [Campylobacter jejuni subsp. doylei 269.97]

MNVTFIFPGQGSQSLGMGKDFYENSIKAKEFLQNASDFCKIDFKHLLFEENEKLNQSEFTQPAIVLNSLM

AYNVLLEKKPDLSSKFALGHSLGEFSALAVNGAFDFLQALSLVNKRGLFMQEDCAKVEAAMMVVLGLDDE

KVEELCQKAQKENKQIFAANYNCNGQIVVAGLKPDLASYESVFKEAGAKRAMLLNMSVASHCPLLENASA

KLCVELEKVLKPNFKAVISNVNAKIYTSKEEALELLKAQLISPVLYKQSIKACENEVEYFIEFGASVLKG

LNKKITSKETYALTNMNDIDEFLKVI

>ABS44550.1 uridylate kinase [Campylobacter jejuni subsp. doylei 269.97]

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALERSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>ABS44549.1 hypothetical protein JJD26997\_1832 [Campylobacter jejuni subsp. doylei 269.97]

MENNNRCVFSLSGVTGMLIATVLLLAILVVLTIWGLKAQQEVMQKPYSLKDAQSVKMFGSKEQDHRSIKE

AQ

>ABS44548.1 valyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MYDKNLEKEYYQICEERGYFEIDGNKTIQEKDKNFCIMMPPPNVTGVLHIGHALTFTLQDIMTRYKRMDG

YKVLYQPGLDHAGIATQNVVEKQLLAQGIKKEELGREKFIEKVWEWKEQSGGKILDQMKTLGITPAWSRL

RFTMDEGLANAVKKAFVELYDKRLIVRGNYMINWCTHDGALSDIEVEYKENKGKLYHIKYFLKDSNEFLI

VATTRPETFFGDTAVMVHPDDERYTKFVGKEVILPISKKAIKIIADEHVEKEFGTGVVKVTPAHDMNDYE

VGLRHNLEFISIFDEKGILNEHCLEFQGLERLEAREKIVAKLESLGFLEKIEEYNNQVGYCYRCNNIVEP

YISKQWFVKKEIAQESIKKVALGESKFYPNHWINSFNAWMKDLRDWCISRQLWWGHQIPVYYCECSHEWA

SQHTPKTCPKCQSQNFKQDEDVLDTWFSSGLWAMSTLGWGNENWGKDKIWSENDLKDFYPNSLLITGFDI

LFFWVARMMFQSTNALHQLPFKDIYLHALVKDEQGRKMSKSLGNVIDPNESIKEYSADILRFTLALLAIQ

GRDIKLSNDKLLQVRNFTNKIYNATNYLLLNESKFEDLENITLHSELAKYIYAKFQTCVKDVRENLDNYR

FNDAANTLYKFFWDDFCDWGIELSKAEKSSVKELGSIFKEALKLLNPFMPFISEYLYHKLSDTKLKTSPS

IMISKYPKFKEQDKNIEKIFSLLIESIVGIRRAKSLIDLGNSKIEKAYIKFNNKKIKDEIKAYMKFIMML

AKCEQIEFSEEKLPKAICDVSENLEIFITLENIDLSGILTRLENQKNKLEKESFKLNSMLSNEKFIANAP

KEVVEQNKEALENLKIQLEKISVELQNLRG

>ABS44547.1 argininosuccinate synthase [Campylobacter jejuni subsp. doylei 269.97]

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPHESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRQSANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>ABS44546.1 cell division protein FtsH [Campylobacter jejuni subsp. doylei 269.97]

MNNNTPNNKGNPQGNNFFNKNPIFIFAIFAIIMIIIFKGFFDGNGSFGGALNGNEVNKNVPYSELKKLIE

SGQINQVSIGQTTIKAISSSHNTVYAAKKVNDPELVSLLDSKNIAYGAYSEANWFTDILFSWVLPVFIFF

GIWMFLASRMQKNMGSSILGIGSSKKLVNSEKPKVKFSDVAGVEEAKEEVKEIVDFLKYPERYIKLGAKI

PKGLLLVGPPGTGKTLLAKAVAGEADVPFFSVSGSSFIEMFVGVGASRVRDLFENAKKEAPAIVFIDEID

AIGKSRAASGMMGGNDEREQTLNQLLAEMDGFGTESSPVIVLAATNRPEVLDAALLRPGRFDRQVLVDKP

DFKGRCDILKVHMKDVKISPKVKVEDIARLTAGLAGADLANIINEAALLAGRDSKKHVEQNDLVEAVERA

IAGLEKKSRRINEKEKKIVTYHECGHALIAETTKGAKRVSKVSVIPRGLAALGYTLNTPEENKFLMQKHE

LIAEVDVLLGGRAAEEVFIGEISTGASNDLERATDIIKAMISMYGMSEIAGLMVLEKQRNTFLSGGQTIK

DYSEKMAESLDDYVKKTLDERYKDVKDTLNTYKGAIETMVAALYEEETIEGTKVREIIKEFEDQNSLPTH

LQELEEVKTEVKVEE

>ABS44545.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKISLECKDLIIEKTLELFLKDHLVMKKDCDFIISDEKIHAAKPLFIISKNSPFLSVPFSKEALFESLNE

FDNALKAVALQLALEQKRLLEEKIDAIALEFKKDYENKIDLAIKDLKNKLIKALNDE

>ABS44544.1 hypothetical protein JJD26997\_0952 [Campylobacter jejuni subsp. doylei 269.97]

MEWIDTRKKNHQFVKFIVNNHKKELEWAVKTASLKVNNTVDSWQQRTIYKRFTNIFLGDLAKNIFKTFLI

TENVNLKEKLIEYDEIRTDNFKNKDEFDLRIYKNDKYCNFEVKSSGEKYSNNYNDLLKRNIIVNYGNIHQ

HLECAIIQIIFVPNNLSFFKNENYFDENLDTFIKAYLQDFTNANILAYIVGYANKEMQEKALNERFEVEN

VKAKSKPREYGRLSIENSLPIRDFLDRIQKVFS

>ABS44543.1 inner membrane protein YeeE [Campylobacter jejuni subsp. doylei 269.97]

MLSGIIVGLLLGFVLQRGRFCVVGAYRDVFLSKKFTIFIALFIVVALQSIGVWALHSLGYISIKSQEFYW

LSTIIGGIVFGFGMVIAGGCATGTWYRAGEGLIGSIAALLFYAFSASAVKYGVILPLRDNLNTFKISDGT

FYQSLGISPWILVLALSLVVGFFVIRELRKPRLKFARLKPRKQGISHILFEKSWHPFVTAVLVALIAILA

WLLSSLSGRNHGLGITTPSANLVQYLSTGDVQFIDWGVFLVLGIALGSFLGAKLSGEFRFRLPDKKTLAY

ASIGGILMGVGASLAGGCTIGNGLVETSLFSYKGWVATVFFLIGAYIATFYTIILPTRKATQKI

>ABS44542.1 hypothetical protein JJD26997\_0872 [Campylobacter jejuni subsp. doylei 269.97]

MKLKNTTIIEDLERWIEAYLKHIQALSYSNNTFLLYRRILLEFVEYSLDYQDEMQINDIKTTFLVNFLNY

LENNSKNGNKLSKKTKITYLRVLTSFFYFISDNNDDLFIFSFDMKKIRFRTEKAEEKLNYLNENEIIRLN

NVLEKEKAKKEVYNSFRNSLLIKLMLYGGLRISEALNVKLCDFEEVDDELEYFKENIQDSDYIMQTSTGK

HLNRSNAFLIVNNIYAKALISKKGLHLLRHTLAMRLTAKGTNLVVIQKILRHANLNTTTIYAKATNDTIK

AALLNN

>ABS44541.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MERRLFLKGSALGSMVAFFASSNLSAAMLKDKDLLGFKAVSASTQDKVIVPQGYEAKVLISWGDPLFSKA

KPYDENKIIDMNAVKNAHLVFGDNDDGMSFFPLSKNRGILAVNNEYINPEIMFNHHGKNLSKEDVLYEQA

SVGVSILEIEKKGDDWTVVLDSKYNRRIDTNTKMQVSGAAKKEVLKNEKFVHGTFANCANGQTPWGTYIT

CEENFDDFFGSSGENLEFNDSLKRYGFNKTSLYGWEKFDERFDLAKNIDEANRFGWIVEINPFDAKSTPV

KRTSLGRFKHENAEIIVEKDGSVIVYMGDDEMNEFIYKFVSKHKYKKGTDTSKILDEGTLYVGQFNGKVG

DFKGQGKWIALEYGKNGLDEKNGFKSQAQILINTRLAASIVGATPMDRCEWIESHKQSGSKEVFATLTNN

KNRQKPNAANPRTKNVYGQILKWMPKNSHKDDDFTWEIFALAGNPDNQQGLYKGSNNITSENKFNSPDGL

KFDRDGRLWIQTDGSYSNKDEYEGMGNNCMLAANPKTGEIRRFLTGPIACELTGIAFSEDYTTMFVGIQH

PGEGLKGSTFPYGKTPRSSVMMIRKLDGGVIGS

>ABS44540.1 UDP-N-acetylenolpyruvoylglucosamine reductase [Campylobacter jejuni subsp. doylei 269.97]

MRIGNEFEVLVLDQICDFEGFLIGGANNLLVSPKPKNIGILGDSFDFIQILDQNKDSTHLRIGCKTKSSK

MYRFAKENNLKGFEYLSKIPGTLGGLLKMNAGLKGECISQNLIKIATSGGEILKENINFDYRFCPLNVPF

FWAEFKLNFGFDTLKDKALKNARSNQPSGASFGSIFKNPKNHFAGHLIEAVGLKGFSKGEAMLSDKHANF

LINKKNASFEDAFFLIELARKKVFEEFGINLENEVIII

>ABS44539.1 hypothetical protein JJD26997\_0313 [Campylobacter jejuni subsp. doylei 269.97]

MPRLADLLGFIKNKNKFDKITLFKWLISLGGEGAVFNDRKDFKYYFLVIENSKKVD

>ABS44538.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNFIHLKAKLDFLANQKNTNHSLFETPDPLQIAKIHNDEFIALICALFAYGNAKNIVNFLKKLDFSLLN

LQEKQIKKEFKNLKYRFQNERDIQEIFITLSRLKNEISLYELFHQAYQKRENTTDAILAFMQKIKTLNSY

SSYGYDFFFGKIWQSTPTSPLKRYNMYLRWMVRKDELDLGLFTKIHTKDLLIPLDTHTHKISLTLGFLKR

KIYDYKSVLELTQNLKKLDANDPIKYDFALYRLGQSKEIDKFKE

>ABS44537.1 acyl-(acyl-carrier-protein)--UDP-N-acetylglucosamine O-acyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVIIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNSIILANNATLAG

HVELGDFTVVGGLTPIHQFVKIGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGIRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENIKKMCHFILETKRGIPVYRGKNNA

>ABS44536.1 preprotein translocase, SecY subunit [Campylobacter jejuni subsp. doylei 269.97]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIAITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>ABS44535.1 cystathionine beta-lyase [Campylobacter jejuni subsp. doylei 269.97]

MNSKTKLIHCGRGDQGAEVRSVNPTLMRASTILFKDHATWQKYRKLRKTDRVLSYGARGTTTNFELEKLI

CTLEGGYRAQLFPTGLAALAMVLLNYASKDVHFLITDAIYGPVRTICELFLDKMGVEIDFLKADASDVEE

KIKPNTKLILCESPGSILYEIIDLPKLCKIAHAHNIPVAIDNTYSSGYFLNPLELGVDISVIAATKYLSG

HSDVTMGIVVINEKEWKNFDKLPEALGFTTSPDDAYLVLRGMRTLDVRMKAHEKSADEIVEFLQSRKEIK

TIFYPKLKSHPNHEIFMRDHKGVNGMITIEFAEGYNKDDAIKFVDKLEYFSIGASWGGYESLATVTTPPR

TATDLSARGPFVRFHIGLEDTKDLIADLTQAFDGIKK

>ABS44534.1 ferric uptake regulation protein [Campylobacter jejuni subsp. doylei 269.97]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>ABS44533.1 Holliday junction DNA helicase RuvB [Campylobacter jejuni subsp. doylei 269.97]

MDRIVEIEKYSLDETYETSLRPSNFDGYIGQESIKKNLNIFITAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMDANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASTKSYSALKLNYEKTLFEE

>ABS44532.1 MTA/SAH nucleosidase [Campylobacter jejuni subsp. doylei 269.97]

MKIAILGAMSEEITPLLETLKDYTKIEHANNTYYFVKYKNHELVLAYSKIGKVNSTLSASVMIEKFGAQA

LLFTGVAGAFNPEFEIGDLLYATKLAQYDLDITAFGHPLGFVPGNEIFIKTDEKLNNLALEVAKELNIKL

RAGIIATGDEFICDEAKKAKIREIFNADACEMEGASVALVCDALKVPCFILRAMSDKAGEKAEFDFDEFV

INSAKISANFVLKMCEKL

>ABS44531.1 tRNA modification GTPase TrmE [Campylobacter jejuni subsp. doylei 269.97]

MSDTIAAIATAHGVGSISIVRLSGERALEFALRFSRKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARFALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEKISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIIGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEESFKLGTHLLRIIDTAGIRESKDTIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFELLANTDKKIFWILNKSDLENVFKNTRNKNFIKLS

AQKDIALLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKELLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>ABS44530.1 alpha-ketoglutarate permease [Campylobacter jejuni subsp. doylei 269.97]

MQELTRTKKIRSIIAASSGNLVEWFDFYIYAFTATYFAHTFSTSDNPVIQQINAFGVFAAGFFMRPIGSW

LFGSLADKVGRKKSMVISVVLMALGSFMIAALPSKDTVGDLAIILLLIARLIQGLSVGGEYGIAATYLSE

LATEGKRGFYSSFQYVTLIGGQLLAVASISIMFLFFSIDDMKDYAWRIPFVIGGILALGSLFVRKMMNES

ATKLHQHEDRGTLKALCKSWKPFLMVLGVTSGGSLAFYTITTYTKTFMENAGMDKMLVNNLFLGALFILM

IIQPLFGYIGDKIGHKRSLIVFCILALVGIYPIFSLIANNAQNNPSLTFMLVVLLFVILSFYTSVAGIFK

AKLFPEHVRALGTGLGYAISNAVFGGSAPWVALQFKNAGIENGFFIYIAIFTIIMLIVTLCLPKKSELN

>ABS44529.1 arginyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMFIASDLASKFQNHDCFESVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGNTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQAKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSAVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IYQVFAKAGKKIDDVMGADLQSLNQDGINLLFEALNLKAILNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>ABS44528.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQKHCHEIISHLIEENIEFSIVANTNFIDFDPELPKELDVKQNPYALFALGGYTFESIQLNKDFIQFHAG

FGNNDFDSFVKVDLGAITQIQIENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNKDIFKK

>ABS44527.1 fibronectin-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILLCLGLASVLFGADNNVKFEITPTLNYNYFEGNLDMGNRYAPGIRLGYHFDDFWLDQLEFGLEHYS

DVKYTNTNKTTDITRTYLSAIKGIDVGEKFYFYGLAGGGYEDFSNAAYDNKSGGFGHYGAGVKFRLSDSL

ALRLETRDQINFNHANHNWVSTLGISFGFGGKKEKAVEEVADTRPAPQAKCPVEPRGGALLDENGCEKTI

SLEGHFDFDKTTINLTFQEKIKEIAKVLDENERYDTILEGHTDNIGSRAYNQKLSERRAKSVANELEKYG

VEKSRIKTVGYGQDNPRSSNNTKEGRADNRRVDAKFILR

>ABS44526.1 ribosomal protein S19 [Campylobacter jejuni subsp. doylei 269.97]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>ABS44525.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MLFVLVAFFLTACGSSKINVVYPDYTKYKSNDFDLRVMKAYNYEYYKQYKEARDEFLSLYQDYNNTNFLE

NAFLLTLANNLDKQVELNNLAKPYLNQNDNLKRLSALYALNLNDIDNAQKLMKELLTKKDSDPRNLELYG

DILVKKNDLKNATKYYRSTYNQVQNEEILFKLIGIYAILNDTLNIKNVLEFSRKTNGCTLKTCVLLAKIY

FDEKNIEALKSIYKELYQLTKNKSFALAFVELLNSQGKTEEALKISLQYDLDDDIKLALYQNLKRFDDAK

KMSLALYHKTKNKEYLLRAAVFEFEAVNEAKKITPKMVDSVKEKFEQGIDKDSNALYLNYYGYLLIDYDL

DIKKGIELVKLALEKDPQNLYYLDSLAWGYYKLGDCKQAWEILKQTLDDKEFANSNESKAHIKTIKACIK

HDIG

>ABS44524.1 plasmid addiction system poison protein [Campylobacter jejuni subsp. doylei 269.97]

MFFYYSDKALRQFSKLDKAIQKEIKTYTDNLESLENPRTKGKALKANLKGLWRYRVGIYRLICRIDDDKL

IILCLELDKRDKIYK

>ABS44523.1 putative transcriptional activator [Campylobacter jejuni subsp. doylei 269.97]

MLLCDIGNSNANFLDDNKYFTLSIDQFLKFKNEQKIFYINVNEHLKEHLKNQKNFINLEPYFLFDTIYQG

LGIDRIAACYTIEDGVVVDAGSAITIDIISNSIHLGGFILPGIANYKKIYSHISPRLKSEFNTQVSLDAF

PQKTMDALSYSVFKGIYLLIKDAAQNKKLYFTGGDGQFLANYFDHAIYDKLLIFRGMKKIIKENPNLLY

>ABS44522.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDFITALKGGTGLGSSFADTLIKTSRFTPNLASSSGFLKGLKNSFGAWLFQNSDANKITHLDRLGNVLGG

AGALYGAYNQQKMAQKNYDLQKDGFTFNKYLANEELNRRKNMENKLQNVWSH

>ABS44521.1 ribonucleoside-diphosphate reductase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MKVIKRNGRTEELDVSKIKKCTSDAVKDLEGVNLSELELDAKIQFRDGISTEEIQKTLIKTAVDKIDIDC

PNWTFVAARLFLFDLYKKVNGMNRYNHLREYFEKGEKEGRILLGLKEKYDLDDLNAYIKPERDMQFTYLG

IKTLYDRYLLKDSKGMPIELPQQMFMAIAMFLAQNEFNPQEWAKKFYDLISKFELMLATPTLSNARTTRH

QLSSCYIGSTPDNIEGIFDSYQEMALLSKFGGGIGWDWSKVRAMGGSIDGHKNAAGGIIPFLKITNDIAV

AVDQLGTRKGAIAVYIEPWHMDISDFIDLRKNSGEERRRAHELFPALWINDLFMKRVRANDKWTLFDPAD

TADLCDLYGEAFEKRYEEYEKDESITKEIVEAKELWKKILLNYFETGLPFLCFKDSANRANPNAHVGIIR

SSNLCTEIFQNTEPNYYQIKVVFENGDELHFDEEQKVVIDGGYEKPAKKISTLDSIDGNKVYIVEKYKND

GKTAVCNLASINLSKVYTKEDIERVVPTAIRMLDNVIDLNFYPHRKVKDTNLKSRAIGLGVMGEAQMLAE

AKIHWGSDEHLNKIDEIMEQISFEAINASSNLALEKGSYEDFEGSNWSKGIFPIDVASPKAKALTLREGL

FDQSECDWVKLREKVKKDGMRNGYLMAIAPTSSISILVGTTQTIEPVYKRKWFEQNLSGMIPVVVPNLSL

DTWQYYTPAYELDQKILVKAAAVRGKWIDQGQSLNIFLSLDKASGGYLNEIYQLAWELGVKSTYYLRSES

PDSEKVNVADRSIECEGCQ

>ABS44520.1 hypothetical protein JJD26997\_1649 [Campylobacter jejuni subsp. doylei 269.97]

MNNDKKKQVIGLYGEMQLAMKLHGNNWQVHRSYIDEGIDFVISKYYCKSCKKFSKQLIRQELYKDKKVKC

VTNLCELCQKEKLSIVTKYLQVKTSEGEETNDKDTRDFSFHPKIRYDMDSKVYYVWIAVFENKELENTKI

HYYIFHSSSISEFDDISLPSYQTTDNQKTTLKININGDVLNKGKKHNYRCFREFYNNFQILESLD

>ABS44519.1 putative BLC protein-like protein [Campylobacter jejuni subsp. doylei 269.97]

MKFNIFINLFNKVNYEIIFVDSEYKVAIVGSPDKKYLWILAKNTIDEKNIKELLDIAKQRGFSISDVIFD

KY

>ABS44518.1 capsular polysaccharide ABC transporter [Campylobacter jejuni subsp. doylei 269.97]

MKENKTLLEKIKDLSIFDSFKIVWFIMIFVVIYYTLIAAPRYVSTMILDVRSISGESAQTSGILSLLGST

STASEDIKYLKGYILSSDMLKTLDEKIGLRSLYQEQHIDLPFRIWDSSSMESYLKYYQARVKLHLDKNSG

LLKIEVEAFTPESAHLIAQNIMQESEKFINEISHKSAREQMAFAENEVQKYKERYRKAQNDLIAFQNKYG

VFDPLKQAETKASLVAQIEANLAQKEAKLLTLQSYMNDAAPEVVALKAEIEAIKKQLLREKSKISANNTS

QKLNDLAAKFQDLTIETTFAQKAYEAALKAYESARIEALRKIKQLVIIQSPDIPESAKYPERIYDILTAF

IVLSLIFGIVKFIKMIIEEHKY

>ABS44517.1 putative ABC transporter, ATP-binding protein/permease MsbA [Campylobacter jejuni subsp. doylei 269.97]

MHNEMNLKEVLIRFKPFYKRYWKQFAIAIFGMILASGGTAGSFYALEPILNYIFVEKNEALLYTVPFLLV

LMYFFKNLGTYLQSFYVSFIGTDMLRVLRARVLKNILRLDMDFFKRYRSGELVSRCTNDINALQSIVSNI

IPDFFRELLTAIGLLLVVLYQSPTLAFFALVILPLAIFPLVWFAKKLKKYARNIQETNSDLLSYLGEIFS

NIELIKANDNEKKESDKFAKHNDTLCKLNLKSARIDALTSPLMDMMGSVGVAVVIIVGGREIINGSMSVG

SFISFVSALFAIYTPLKRLTSLYGKLQGAVAASERTFYLLDLEPQIKGGNKELKSIERISFENVEFAYEN

PHKSVLKGVNFDFVKGQMLALVGISGGGKSSIINLLMYFYEKQKGKILLNQEDISTFTIESLHTKIGLVT

QNIYLFNDSFAANIAYSEELEEEKVVQALKLANAYEFVKEMGGIWAEVKEHGKNLSGGQKQRIAIARALY

KNPDVLVFDEATSALDNESEKAIVKTIENLKQDRLILVVAHRLSTIENADKIVVLDKGKVLAIGKDEELL

QTCSLYQKFKSKEKTKPSFS

>ABS44516.1 GMP synthase [Campylobacter jejuni subsp. doylei 269.97]

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEVKKDSALFKNLPKKQTVWMSHSDKVENLSQ

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEIFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKINLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKADVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>ABS44515.1 tetratricopeptide repeat domain protein [Campylobacter jejuni subsp. doylei 269.97]

MFDKIHYYYFNADYEKCLNLSEQFLKESSKFALEFAMLSSYKLSLFQKALYYAEELFSLNPTSFNGLMLA

KGYIENLRLDEALNLLQTLLTRKDDLEDELKLELAFAYKLSNKLEESEKIFKELLSKDMYNFNLWKNYAE

IYFRHDCAKALDAHEHLCHFMQDLIDKLQKGILVEQTHLNLVKLEDRLHSKTKENLTISKIEDFLIHQIL

PQKAYLLFKLFRISDSLELFQSLQEANQHHAQFWQNYAKVLEFNSNYQEAYHAYKKCLSLDSHATYQFDL

AYLLMRMGVDDNFEEGKKYYESRLFYAHNETFSPYHYNESLKAFNKLGIDAFKDKEVLVFCEQGFGDTIM

YARCLEKLCKITSKVLFAPQSAMYKMFKNQIKFLNQKDDIFKNLKVLKNLPMHFDYAIPICSLPFFIDIK

LDEISRLKTPILAQKKPHNKRKKLGIFYATPNAENSNLSRNVKFEFLLDILKDLDYEIISFQMQLKEELP

KIIEDRSKLITNWNDTLNYLHDIDCMLSIDSAIAHLSLAMDIPTIVLLYPKFDWRWGKFENPKSYFWPKA

KCFIIKEQEETKKNLQKLIKDILN

>ABS44514.1 peptidyl-tRNA hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDALCGNDYERVRIGVGKGENVISHVLD

KFKPEEEITLSKVLEHTKKALLELIEKDDLSAISSKYSLKA

>ABS44513.1 ATP synthase F0, A subunit [Campylobacter jejuni subsp. doylei 269.97]

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLAEAFLEGVLSMGRDTMGSE

KGVRKYLPLVATLGIIVFFSNIIGILPGFHAPTASLNLTLSLAIIVFVYYHFEGIRAQGFIKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEKGH

>ABS44512.1 ribosomal protein S16 [Campylobacter jejuni subsp. doylei 269.97]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>ABS44511.1 heme/hemin ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MQNKIVATLKAHRKRELKRFYIIISFLMIAFVSLIFDIATGPSLITPKEILNALLSPFSSKEIDSTTLSI

VYDLRLPMALMALVVGAALGIGGAEIQTLLNNPMASPYTLGLAAASGFGASLVIAFGSFGLPLITAVPVG

AFLMTMLAASVLFGFASFKRFDSAMLVLVGISLLFLFQSFLSLVQYLSAPEISQQILFWLFGSLLKSNWT

NLSIVSIATLICVLFLLRDSWALTALKLGEARAKSMGIDLNFLRFKTLVLVSIMTATAISFVGVIGFIGL

VSPHIARMLVGEDQRFFLPSAMFVGAAFLSIASVLSKVIIPGALFPVGIITSLIGVPFFFWIIFSRKNYA

KA

>ABS44510.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MYKKKYTREEVERMMNEYFSEEKILLRTKERDIKEPKSMTGLALYMKTTRQTLYEWGKDPNLSDLIEYAK

TLCENEVITHSLVNLYNTQMSTFILKNNHGYVDKQEILSDNVQKIEIIRSEIQ

>ABS44509.1 hypothetical protein JJD26997\_1681 [Campylobacter jejuni subsp. doylei 269.97]

MMRGIYKEDKKIIICIFITSFILFLIISYFLLCVMDIKKIIEPMENFTTNIITFISIAFGFYLTSLSVIF

SSKYIGMLNTTDERKPDQKKIHTLREYFKLAIYCALTTIVVSFMTLICIFFNERNIIAIVFALLVAIFIE

NFIFIYLLLKIFTDALVIQARKDN

>ABS44508.1 hypothetical protein JJD26997\_0300 [Campylobacter jejuni subsp. doylei 269.97]

MASIKDIKKIKIICKECESEFSMFIGHSLYICPICGNNFGINELNDPFFRIKQAFESFTNPKNCDIELIC

EIKD

>ABS44507.1 ribosomal protein S8 [Campylobacter jejuni subsp. doylei 269.97]

MINDIISDSLTRIRNAGMRKLETTKLLHSKAVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINNLKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>ABS44506.1 invasion antigen B [Campylobacter jejuni subsp. doylei 269.97]

MNNFKEIAKLVRKYKERNNALYEFLDKEDVGEYFRSLISLSELKQDKTTMLAILRRLVDLKEENLVQEWK

KNNFKEDKIIELKHKFYEEVRKFYEKEHQNLINEIKEKKLLNNFYQSLIQGVHNIGLIMNIFEISWTKEI

IEKNNKILSTQFPNLDDAMEFLRKNHLYQKTPEGEICERSYGVLVRIGNLWKFVPYARFFENEILKLEFA

FENMIDQLKIFAGNEEEKAYIEYFEKLKLAFCEKDEDRVIKAWQEAEFAWMKVKSPLQVGHPLEYYEDNY

THAVALEWDIRIEDENDFDVVKFGSEIKESFEHVYKNIGLEDCELEKEVLSNIEKTQLYICTPMIFYGAE

LKGLFSAQVVPNDEFVSSKAGKKIFAFINFVYENAKTKPFMKISSEVFDKEFLDFGRNILFYQEKIWKRV

YEVSTIGHEFGHIFFIANDTEKIMNQSGFFKNIEEYKATTGGLINFFYHEQDDLIMPVFHELIKRAIGLI

SWQRVDEVRPYYTEGLIHLSLLFESEVLIFENNNLKINFDLGHYEKFKELTLKNYHELAKHYALRLDAKE

FLSRFCEIEDNIFLPIMPKCKEFVKFYYDLYEKIGNEIDNSGEFERY

>ABS44505.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVEFDNGKDYFDYVDFYKTYSKSDDTYFHISFLEDRGLSEKEILIRNKYRKMRDENCKRAKEEFIKNNEI

EPEHLPTHGD

>ABS44504.1 TonB domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKNYGLSNLNSFLLALVIYISIVILVFFRLVSEVEPAIQYTDIKDSFVDIELAEPSKQVITQSNTPKEIQ

KPTEQIDIERLFAQTTNKTVKTEDIDQKASNFNDLFGNIKEIQEEKTTKIQSSAKSGISSAPKPQASELV

KQLNDSLLQGESSTQGESTKAQKIGIYDEFLGKVARIITQRWTQYYPNSEKISVKVKIFIDENGKFGYTS

VEKSGNPLYDTKVAEFLESQKGKFITYPPQNKNISITMNLRDEAKVKND

>ABS44503.1 peptide chain release factor 2 [Campylobacter jejuni subsp. doylei 269.97]

MDNYEFSELLKTLKNKVGNIASIIKPKNIQTRLKEIEELENSPSFWNDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDASELFDLANSENDIETLQALFNDAPKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANSSEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>ABS44502.1 metallo-beta-lactamase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQIIKQACGVYETNCYILFTPKGEFIIDPGTDALLFIKQHVKNPLAILNTHGHYDHIWDNAKVKKEYNIP

IYIHKNDAFMLHDHFNQGYDSSDADFLVDNEDILNICGVDFKFHFLPGHTPGCTMIEIASKNIMFSGDFL

FYRSIGRWDFPYSDANLMKQSLEKVMTYKEDFKLLPGHGQETTLKEEQIHLPSWLRYF

>ABS44501.1 putative sulfatase [Campylobacter jejuni subsp. doylei 269.97]

MFKLTWFWFTFLNSLMIAILNFNLFEFVYEKNNQNWFITFVFIVAYFASVHAIFSLLFMKFFTKFFSILF

IISSFLSVYFISFYGVLIDSDMIQNVVQTDIKEVRDLLNLKLILFVISALLLVFCIVKAKIDYYGSFKSH

MKIKIINIILALIVVSAVLIPLSKTFIPFFRNYNEIRMYNTPFYQIYSVYRYYVRFVKAEPEFKTIANDA

YRENNHTKKLLVLVVGETARAANYSLGGYTKNDTNFYTKKDNVVFFDNFSSCGTATAVSLPCMFSISKRE

NYSSSEFQENAMDVLYKTGVDAAWFDNNSGGCKGICDRLAYKQKLSSDLDENLLAPFKEKLNHLSDQNII

VLHLQGSHGPTYYKRYPSEFKKFTPTCDTNELSKCDSEALINTYDNTLLYTDYLLSEIIKLLKEQKSYES

SLFYLSDHGESLGENGIYLHGMPYAIAPSYQTHIPAIFWSNDKNLMNLAKEHKGLKLSQDNLFSTLLGYF

DVKTSVYEPEYDLLNSKLKANP

>ABS44500.1 ATP synthase F0, B' subunit [Campylobacter jejuni subsp. doylei 269.97]

MSKLFFIIFLLPLYAFGASNGSGEYDIIPRTINFLIFVAILYYFVATPFKNFYKNRIVKISSKLDEIQKK

LLESKAKKLDTMKKLEEAKANAAAALATAKKEAEILVQNIKKETQDELDLRQKHFEEQKDYEFRKMEKEL

VSNTLNEIFSDPNMTLKQSEIIELMMKKVS

>ABS44499.1 3-oxoacyl-(acyl-carrier-protein) synthase III [Campylobacter jejuni subsp. doylei 269.97]

MLKASLKSIASYIPEKILSNTDLEKMVDTTDEWIARRTGIKERRIANENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYSDRSICILFGDGAGAGVVSLDNENYILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>ABS44498.1 TonB system transport protein ExbB [Campylobacter jejuni subsp. doylei 269.97]

MEFLKDYIDLIIFLILGIMAFIAFWCVVERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKISLLSNAYKAHKN

A

>ABS44497.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MILAGIIFIFNLILAYLSIDISKLDSVTEQLKIGMFSSIFALSFTLFIFAFRQNRNINKIYQKIFCMQND

FLNFQKKIDVDSALDLLKEKFEITGQNLTKISHEKDRYLHLLEENLYQLGNISNAMHCLNEGYNKEINSL

ILNALNSQKDQIRLELNEALEHHKSIIGTSHGKVLQFEASVAIVNNDELENFLLANLLSYFGIESTCFKN

LSFDVNDFHLIFIKDKILNENVKKNYDFIVMGRHKNTHYEYFLTLPFEKKDLENILQNKLDKVCTLKFKT

PYQNNVLLFKQNDFDATLFFNIIEKQCDKNICINSFSQLKQELSKETYRLILLDYELIKFDLEQMRNLLS

AYKKQHPQSHIIFFSKEKVRDFDCVSEVLSDVSRNDLIALLRKYC

>ABS44496.1 putative phage repressor protein [Campylobacter jejuni subsp. doylei 269.97]

MEKGTFNYKLIKSKMREKNITNQYLADYITLHDEKNKRTTVEAIKSWFRSDDNSRTVPEIHKLKYISELL

ELDANYLLNFENKNTKEEVIFRYFPDIYASAGFGTSSQSEEVKIVSVDENFLKEILDIPIKKSYDIIKIN

GDSMEPILSNGDFIIVDRSKNSLGAISNADIVIFRKNDDLFCKKIKKEPFEDYLFLVSENKKYEDKKVDN

VEFEQCEILGAVVSKMAIETFKNFIEVVG

>ABS44495.1 protein Tmden\_0678 [Campylobacter jejuni subsp. doylei 269.97]

MNLEALCKEAELSFYDDELVSENGKKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKIEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFMEW

>ABS44494.1 cation efflux family protein [Campylobacter jejuni subsp. doylei 269.97]

MSLQKKATLVASLCAIVLALVKFVVGLASGSVAVLSSAIDSLMDFVISAFNFLALKKSSQKANENYNFGF

SKIEALMGLLEGVFIVGVGVFIFYESILKIYYKEEIKDLNSSIYVMIFALIMTFFLVLFLNYVAKKTKSL

IIESDALHYKTDCLTNACTLGALILIYFTNLHIIDAIFGIVISLYTAFSAFKIIKKALAFLMDEALPKEQ

VDKICVLISNNPEIISYHELKTRKTPSCNYLSVHLVFFPTISLLNAHKISDEIEEGVRKMFENEKWDIQI

HLDPYDDAEQERQRQ

>ABS44493.1 geranyltranstransferase [Campylobacter jejuni subsp. doylei 269.97]

MNLKELFIHHLEKNLPKVESFHPFFNEALALMLKAGGKHFRAQLLLSVVQSNKPELLNQALDVALALEFI

HTYSLIHDDLPAMDNADFRRGIPTLHKSYDETTAILVGDALNTEAFLVLSHAHLKDEIKIKLIKTLAFNA

GLNGMVIGQAIDCFFEDKRLSLNELEFLHTHKTARLIAAALKMGCEICELNNEESNQIYKLGLKLGLIFQ

INDDIIDVTTSQEQSGKPANNDIHKNSFVNLLGLEQAIKTKENLLSECEQDLEKLNEKLAQMIQNLIIQY

L

>ABS44492.1 glutathionylspermidine synthase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQLLQVDKLQKDYLENIGFSWHTDEDGSDYISNKLVCVKESEANVYYEAVNELYDMFIAAAQEVIDNDRF

DELGIPFNLIDAIKMSWENEVHWHLYGRFDLAGGLDGKPIKLIEFNADTPTALFESAILQWALLKQNGMD

ESAQFNSIYESLMDNFKRLITLDESVEGFEEHYQGWKILFSSVAGSKEEEITTKLLSHIANEAGFQTNFS

FVDEVEFSEEGIFKEGENYEYWFKLVPWEDIAIEEGELAMLLTQIMRNQRAIILNPAYTLLFQSKGILKI

LWELYPNHPLLLETKDTPLEGKNYVKKPVFGREGANVSIIKDGKTLHENVGPYGNNKAIYQEYVEFNSYE

NEYYQAGVFFAYEGCGLGFRKGGLVLDNYSKFVGHIIKD

>ABS44491.1 L-fucose-proton symporter [Campylobacter jejuni subsp. doylei 269.97]

MKGENMQVKSNNFALATLTALFFVMGFITVLNDILIPHLKVIFELNYFEAALVQFCFFGAYFITGGFFGK

LLEKVGYPIGVVLGFVLTAIGCILFYPAASTASYPIFLGALFVLASGVVLLQTAGNPFVTLLAPGKEATA

LTLVQAFNSLGTTLGPLFGAAFILSGTAEYVSKAQEAQSIQIPYLIIAGVLILLAVVVYLLKLPDVRERA

EKISEENHDEKRSIFEYPHLILGAAGIFFYVGAEVAIGSFLILTMKEFAGIEEIAGAKHIAFYWGGAMIG

RFIGSAIMSKIAPNKCLAFNAIVSLCLIIIAILLSGRVAMVALIAIGFFNSIMFPTIFSLATKNLGKFTS

QASGLICMAIVGGALIPPVQGLVADYSNLLISYIVPMLCYFYILFFALKGYKN

>ABS44490.1 hypothetical protein JJD26997\_1531 [Campylobacter jejuni subsp. doylei 269.97]

MSEKYTPFELESILLYEKDTYKIVAEKAYTNKDEKFCIGLKSNGFPINSYLIFPPQLNLDLLKSLLRQDG

AKNDKIIEFIKIIMEK

>ABS44489.1 hypothetical protein JJD26997\_1071 [Campylobacter jejuni subsp. doylei 269.97]

MDIKSDEISELVLPEGKDARGSLVYFKIIFIPAFLYILILLGYFNVIDFKVELHTVVMTGVIFFTALIFA

RHSAEYAYSIFEQQKDEFKQALKRHIMRHFLAIGKDTKSNANFDDFAYTYIKGARNENFASIGSAIFPMM

GILGTFISIAFSMPNFSSSDTAALEQEIADLLSGVGTAFYVSIYGIFLALWWMFFEKYGKSKIDRLLNRQ

KNATSGFFWTKEELDQRYLTESLQHFEKIGAIFKQVSNDDFFAELDHAIDRKFGIFQDMLNIEEKAIRLS

SEHIKQTMGELSKAQRDQRDLGKLYSEMLNGIGLLNQNLKEINTRMSEQYNRLLDISSDKIHHLDKTLSA

FDEKVERFGKNFELYEKAMLESQEKVFEGFKASLFEGMHKFKEVYEEEKSIDAKIKMMDELKKEMKALDE

ETNQMMSKLSGDENQNKENETKQIEDFSESKTEENQDEIQAEISKRESNDELKNEDKENINEK

>ABS44488.1 flagellar P-ring protein FlgI [Campylobacter jejuni subsp. doylei 269.97]

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNNDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDSSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>ABS44487.1 SsrA-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKSEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>ABS44486.1 acetyl-CoA carboxylase, carboxyl transferase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYTLDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKAMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>ABS44485.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIDCRNLSCPQPIVETKNAFEKLQENEILEIVLNSIISKNNVVKFLNSLNLNPVVDENAQEFCIKVQKK

NFNSSEVNIHDYNVLFLKTDKVGEGELGQNLLVGFLNTLKNLDHAPSKILCVNESVLINVDENHKAHLAM

KELENLGIEIISCGACLEFFNKSKELKIGNIGNAYEILNELFGKAKIITL

>ABS44484.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKITYSLNLQGEACPYPAIATLDVLPQLQSGEILEVLCDCPQSINSIPQDAKNRGFKVLEIDQSGPTLRF

LIQKP

>ABS44483.1 hypothetical protein JJD26997\_0039 [Campylobacter jejuni subsp. doylei 269.97]

MFFLIIIVKSHKQVLIKTILQDLLKDKTLFIFSLVLLISFSYLYFL

>ABS44482.1 DegT/DnrJ/EryC1/StrS aminotransferase family [Campylobacter jejuni subsp. doylei 269.97]

MNFINLQAQYLAYKDEINVEIESVLSNSSFIGGAKLNEFEQNLAHFVNIKHAIGCSSGTSALYLALRALD

IGKDDEVIVPSFTFIATAEVVALVGAKPVFVDINLSNYNLDFEAVQKAITPKTKAVIAVSMFGQMSDLRT

LEEILKNKDITLIEDGAQSFGASFKGEKSCSIAKISCTSFFPSKPLGAYGDGGAIFCHDDEIAKKIRILL

NHGQTQRYKHEFIGMNGRLDTLQAAILNVKLKYLEKELGKRQKLAQIYNANLKNCQIPQIDPNAFSAYAQ

YSVLVEDRASVLQKFEKANIPYAIHYPTPLHKQPCFSEFSNLKLKISEYTSEHILSLPFSPFLSEEEQEQ

IICIFKD

>ABS44481.1 ribosomal protein S12 [Campylobacter jejuni subsp. doylei 269.97]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>ABS44480.1 acetolactate synthase, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MRKVLSVIVLNEHGVLSRIVGLFSGRGYNIDSLTVAPLENKEFSRINIVTSGNERTFEQIVKQLHKLIPT

YKVIESEKFIDKEMALVKIPLNENLGGLDAVLKAYNGTIANSNENFLFLMVADDANRIDNFLKTIKKYNP

SDIVRSGSVLMEIK

>ABS44479.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLVLFFLILPLYSVELISYNIYDRNDRVDLMLSFDNAYNGKISQKKEKNLTLLTFSDLTYSKDELKELNS

QLVDKISISSKNNNTYIMLQNKQNINLELSSINDKFGVRIRAIEQGKANIESVVSPITTANNSQELMPKS

KSTSLEGYDYTTYILVMLILVILLIVLWWFKKTMIYKNNNISRDFTMIFQRFLDKNNQLVVFDHANKRYT

MIIGNSNVLLESVEIPEEQTIKHTEKTEKNFDSFFEENKKRIQNLKFFD

>ABS44478.1 flagellar protein FliL [Campylobacter jejuni subsp. doylei 269.97]

MDEELGNEETKKKKGGSLVIIIVILLFVLLLSIMGMIAWLISSSSSDESEVKEAPKEEVKADKPKVSAPA

QRGSDFANIGPMYPLDPFTLNLLSDSGSRYVKCTIELEQNNELLKPELDKKVPVIRDIIIRTLTAKTFEE

VSTQKGKERLKDELVGKINEILTDGFIKNVYFTDFVVS

>ABS44477.1 putative molybdopterin-guanine dinucleotide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFNLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGFLFSEIKTKFVEFENEDAFLNLNFYEEYEKFKSELK

>ABS44476.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSNINAFLFGFTNMFNADILKATSLKDRKTLINDFHKKSEELRKHSDEEYNAKFEKITKTKNV

>ABS44475.1 hypothetical protein JJD26997\_0732 [Campylobacter jejuni subsp. doylei 269.97]

MLFIHDSNIIAEFKSKYVAFCSVGDVDLEIIERCELLSKETLGQGIKCFDVFIVAHRTSGKTCDFIKECL

KQNTQAKIREFKSLTKGEFYDENGGFLHKKMEQHIEQTSKELYEAIKACL

>ABS44474.1 hypothetical protein JJD26997\_0317 [Campylobacter jejuni subsp. doylei 269.97]

MNKIDFFDFTKILSNHYTVISVKKIRTNKSRPSFKKQIEFKKLYGIPHEFWVDVRSNLTNIPKRGRKRKD

RE

>ABS44473.1 methyltransferase domain family [Campylobacter jejuni subsp. doylei 269.97]

MKKYISNEEISNNLGSNEKIWENIFSQKEWGKYPSENVIRFIARNFYNVQDRSKINILELGFGTGANLWF

CAKEGFSVSGIEWSKTGLERFKARMKDENLSDKIKQIELGDYIDKLDSFKDDSFDAWMDNYSLAYNDFDK

TKKIIDKAMKKLKKGGKFLSVTPSLYNDGFEKDESLGYHLVKPTSGSDACTGIIRYCDEKDIKQLYQGKN

YQITDIKINTLKNLENNLSELYIIEGKKL

>ABS44472.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKFETINQESIAKLMEIFYEKVRKDKDLGPIFNNAIGTSDEEWKDHKAKIGNFWAGMLLGQGDYNGQPLK

KHLDLPPFPQEFFEVWLKLFEESLNMVYNEEMKNVILQRAQMIASHFQNMLYKYGGH

>ABS44471.1 hypothetical protein JJD26997\_0863 [Campylobacter jejuni subsp. doylei 269.97]

MNLLVKNIKKTLKQYGHNFSSLKKENFSLSEELAFVFYSKYAQILIPFAPSAVKEFYDESDADILDYFIE

RIVKEALKNIVCIWENKESIENTNPELPICIDLINANVVESVNSFDDKCEQEILDFFNENNYELCYIIEN

NVKYYFLKDLELDIIEKNYASSIVSKNAFQKDLKILCESIKKDIELSASESM

>ABS44470.1 major facilitator superfamily protein [Campylobacter jejuni subsp. doylei 269.97]

MNKTLNQKDIKVLGLSSLGGTLEFYDFIIFVFFANYISTNFFPKDLSSFWQMFNTYGIFAAGYLARPLGG

VILAHFGDKFGRKRMFMISILLMVIPTFTLAFIPNYESIGFLCIVLLVFIRICQGIAIGGELPGAWVFVY

EHAPQGQKRTYLGILTASVVGGILLGSLVFLIMNKIYTQEELHEWAWRIPFFLGGIFGIISAYLRKFLRE

TPVFEQMKKDKALEKFPLKEVFKKAKMGIVLSMMITWVLTGCIVVMILLMPSYMAKILQINTSIQTYLQI

GGILLICLGCIISGILADKIGIIKSCIFFSVFFGIASLLYFNTLYKQNADFNLTVCLYLFVCFFGGVMNF

CPLIMSEVFDAKIKFSGLSFSYNIAYAIAGGLTPQLAFFLHSFALDNLSNFWRFSLGVYVFFLAIIALLC

AFIFSYLNNTQRTYSQ

>ABS44469.1 tRNA-dihydrouridine synthase B [Campylobacter jejuni subsp. doylei 269.97]

MIDFSKKPLFLAPMAGFSDLPFRNVVKKFGADITISEMISSNALVYESSKTLHMLERAELENPYIVQIAG

GDKEVLKKAVQMLNKMDFVDGIDFNCGCPVNKVVKQCAGSALLENLELFKNLVGVIKENNKKSLTSVKFR

LGFNEKYPEKMAKICESLGVDFVSVHGRTRKQLYSGKADYESIASAKASVKIPVIANGDINAQNAKEVYK

ITKCDGLMIGRASVGNPWIFYEIKSGKSVDEKLKKEIILTHFDEMIKHYKDQGVSIFRKHLHEYSKGHKD

ASAFRDGVNRIDNAEKMRKKIEEFFSLT

>ABS44468.1 1-deoxy-D-xylulose-5-phosphate synthase [Campylobacter jejuni subsp. doylei 269.97]

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMVYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

NSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAIQKPCVIHAQTVKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKNDAKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMHNIMEYAYLHQGPIAFRYPRGSFILDEEFNPCEIKFGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVISFEYEDKFIEHGKTSEVEKNLEKDINSLLTKVLKFHH

>ABS44467.1 methyltransferase domain family [Campylobacter jejuni subsp. doylei 269.97]

MKENIEKLFQAITQKNPIHSKYLKKIEFSQEDEEEFDKLISYYIQDSISIEEQCDCYLLILNDTLEETKF

FIENGTYRYSGFDEVKDKVYFNESYMKQYMIGLALSSFVWIAHIKVRKYFSQYLKNFTPKTTYFEIGPGH

GEYFARAVKSGKFSAFYGLDISPTSCELTQKMVKQQVGGLITKCDFLCQDFFTYDFDKKADLIVIGEVLE

HVEKPLEFLKRSKELLSDGGEIFATIPINAPAIDHIYLFSHPDEVKNLIEKSGLKLKTYECFMANDYSLE

KALKFKNAITMAVVLNA

>ABS44466.1 phenylalanyl-tRNA synthetase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKGLEDETKKEFAAKLNAQKEIFNKAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSALEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKEKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>ABS44465.1 NADH-quinone oxidoreductase, B subunit [Campylobacter jejuni subsp. doylei 269.97]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLV

>ABS44464.1 hypothetical protein JJD26997\_2030 [Campylobacter jejuni subsp. doylei 269.97]

MPFKFPFNAWSLYLLSKGSSLGNLLRIFLNNSKSSLLSFLTPFLNSFDFLKRVFNHLNNPLAYHQL

>ABS44463.1 tRNA (uracil-5-)-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MSLENFGNFLTLDEKHSFIKKYFKEFYTKDFKLFTSKDKHYRTRAELSFYHENDTLFYAMFDPKSKKKYI

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSLTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQGREIFYEFNNDCFIQPNTTINEKMITWVCEILSIQKRMDLLELYC

GYGNFTLALAQFFFKVLATEISKSSINFALKNCKLNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVENFALFDQFVNTPHLEC

GVFLSKV

>ABS44462.1 S4 domain protein [Campylobacter jejuni subsp. doylei 269.97]

MRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQKYKVLALPSTKSIP

KNAQNEYVVKL

>ABS44461.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILASVLSSCLLASALSAVSFKEDSLKVSFEGYKTKDMIGTKGEFKNVEYKFSKNTKDLASYLKGAKA

TIKPSNAFMGEGNDIITNNITKVFFPALLGDTDIKVVFQDVIVGENKGVISAKITMDKKSTIVPLTYTIK

DNKFEAKGQFDLHAFKNGSKALKALSDVATGHGGISWPLVDISFNADLTE

>ABS44460.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKINSLNKINFIKSTDLLYAQRTGIFKEDELFNNLTADFKLSKPFDYQIAFFKHSEIYHCFLAPVCKLRK

SRFCFPEPLIFQALFDERFIEESDYCVLNLYDQTLYLYFYQEGKFSNLKKIENFNPSNMDLFFKQNRFIE

ILKHYESKLLLYQDLDTIKHYFSSQIKCLNLNDILDKNSLLKLSSYSIKNLDQNCNFIKHNKIKISISFK

IILLFIFSFSLSMMILLFKDFIEYKQNKEIQNKNFIIQEEILKLKQDKQRLLTNIQDLNFTLSNKISSTQ

QQFHILSTITKEINLDKNKAIILNQIISWLNSNELKITNLEFEQTKIFLSFIDENYFKRALKNLNSAFKI

FDKNEETFNIILEVIHE

>ABS44459.1 membrane liproprotein MapA [Campylobacter jejuni subsp. doylei 269.97]

MFKKFLIFIVPILFLSACATKQDTFAQVNQISKNSQCSSCESPDGFEAKIKGLLYISDVGIQCCANKRTL

DTGIALKKVYLHRFYDLKEGQKILNAKGKKLFVDVNFNAVFYTYLKQELEARGIVVLDNNDQNSPYVSKI

DLEFISYGATQDATGLHSKLVGVLQVSDINKNKKFTIRTKQDVQGFDDLKETTFYTHLLIKQMANKAASL

ISEL

>ABS44458.1 chaperone protein DnaK [Campylobacter jejuni subsp. doylei 269.97]

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKTRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEVVMVGGSTRVPLVQEEVKKT

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGKA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDVRNAADSLAHQVEKSLSELGEKVATADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>ABS44457.1 peptidase T [Campylobacter jejuni subsp. doylei 269.97]

MDYKQIQIDNFFRYLAVPSQSNAKAQSLPSTQGQYDLALLLKKELEDLGLSDIVLEDNAILSGKLKGNTN

KKSIGFCAHLDTVDVGLSEVIKPQILKFEGKALHLNKEKNIFCDPKEHPELLKYLDEDIIFSDGTSVLGA

DNKAAIATIMTLLVYLVNEKCDHGDVYVCFVPDEEIGLRGSKALDLKYFNPDFAFTIDCCELGEFVFETF

NAGSAFIEIEGVSAHPMSAKGVLLNPTLIGLDLANCFDRLQTPENTQDDEGYIWVQEFHSNQIKASMLLN

IRDHNKEKYEKKKAYIREVVDFIQKRYEKAKISLRLEDTYSNLKDSINEKNKIALDILKQAFKECQIEPK

IFPMRGGTDGSALALKGLFTPNFFTGAHNFHSAFEFLPLKSFYKSFEVTKTIALLA

>ABS44456.1 posttranslational flagellin modification protein A [Campylobacter jejuni subsp. doylei 269.97]

MLENKIIFVAGACGRIGKALCQKILLNKGLVILADINKERLKKLQENLETNFKTKLLSLELDITKQESLQ

IALQKSQERYGKIDAFVNSSYPFGKDWGKTPYYELKYEQICESLNLHLAGFMLAAQEFVKFFKQQGHGNI

INLSSIMGVYAPKFENYEGTSMQSSLEYSVIKAGINHMGTWLAKELFNQNIRVNTLASGGILDNQNELFL

KAYRKCCASKGMLNADDICGTLVFLLSDESKFITGQTLVVDDGWGL

>ABS44455.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEINALTITTLYIIGISAEGMTGALAAGRHRMDLFGVIFIALVTAIGGGSIRDVLLGHYPLTWVKHPEYI

ILICFCALVATKIPRVVTKLETLFLTLDAIGLVVFSILGAQIAIDQNHGFIIAVAAAVITGVFGGILRDI

LCMRIPLVFQKEIYAGIAIISGAIYYSLIIWLELNALVCTLLTLFIGVIARLLAIKYQWSLPIFSYNEEK

>ABS44454.1 putative type III restriction enzyme R protein [Campylobacter jejuni subsp. doylei 269.97]

MAKAKQNTRTHLLLNKFIHDKSLVQKLDESYDFNNFSQAINLQFYQQESVKNALAILSFYMKDELNLHEY

NQERRKLLEFYQDESENLKLQKEHIARASFWMATGSGKTIVMIKLIALIHEFIKNNQLPKKPIMLLAPND

KILNQFKENIIKYNNHHSNFIKIKDLKDFESIEKEASLLNEAVVYFARSDLLESEEKVGKDKKAKRLNYK

NYLNKDGWYILLDEAHRGDSKTSLRKNYYHELARGFIKEDEFPKGFVFNFSATFEDEIDFITCAYNYNLQ

KFNQEGYGKDIAVLNENLDFKSENNEEAKIKTILESFIIFNAIVKSKEELFLKRSDFKYHNPLIIAVSDK

VNTQDAGIKAYFKAVYNVLKNKVDIGNIALELYKKLQNQNLHFGINTLSNDFLKYIKNANNDELRKNIFY

ANANANLECYSIKGNDKELAFKSKNSNKPFMLLNISNAKEWEKDFLLELGVESISDISQSHFENINSSRS

SINIMLGSKVFSEGWDSNRVNLISFINIGSVNAKKYVLQTIGRGVRIEPFLNIRKRLNALKEMFKIDERC

VNLACGLETLFVMASDNEAIKAIIEGIECEFMESRHLKGFKETKLSFNLPVPKYKNEAKLKNIYKISEKE

AKSLKEFINSYDEDVLILEQCLYKNFKYSTLEEFYKFNEGKESKIQLSGDNVKFNEKTTLKTINSVLNSN

AKVLDKFVKLEEEITHHRNIQAKLDFETVQKINKTIKDVLNTKSEDELKADFENKKINLDELMQGIKESQ

KSKEVQNYIISAKLSKHYYNPLIIYNKNDKENKINFAISNKSEKEFLEDLESNLNLSFFEQYEWYFSKLV

ENQDEIYIPYFDEEQQKERKFYPDFIFWLKNKQSGDFFIYFIDPKGLKIEDNPRFKLKGFRAIFENKNLT

YEDKNIKINLFFYNKNINNASEEIKDFVRSNIEDIFR

>ABS44453.1 3-isopropylmalate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKTYKVAVLAGDGIGPLVMKEALKILTFIAQKYNFSFEFNEAKIGGASIDAYGVALSDETLKLCEQSDAI

LFGSVGGPKWDNLPIDQRPERASLLPLRKHFNLFANLRPCKIYESLTHASPLKDEIIQKGVDILCVRELT

GGIYFGKQDLGKESAYDTEIYTKKEIERIAHIAFESARIRKKKVHLIDKANVLASSILWREVVANVAKDY

KDISLEYMYVDNAAMQIVKNPSIFDVMLCSNLFGDILSDELAAINGSLGLLSSASLNDKGFGLYEPAGGS

APDIAHLNIANPIAQILSAALMLKYSFKEEQAAQDIENAISLALEQGKMTKDLNANSYLNTDEMGDCILE

ILKENNNG

>ABS44452.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNKKFSYPIPNFTDKRKSIIFWRYLRFQARKILYFPQVRLLEKTLNEEKNKHLKDFFSQRPYACYNATRR

FCDKSFKANERVKTLIYDVDKGLTCFKFLPKEQMIFSFDEDFELFLGYNHNVYEEGFWAFSLKFKKYTIS

QCNFCFTLENNLLLSCIQGYKYKDFNILEINKILTKKCHGLRPVALLIECSKMLCKILKLQATLGVHEKN

QIRSQKGKGYFVDYQKIWLENGGELIKIDKHKYYKLHHSQKSLEEIPSQKRSMYKKRFAMLEEIKVNLDK

TLDIQD

>ABS44451.1 cytochrome c-type protein nrfH [Campylobacter jejuni subsp. doylei 269.97]

MIILRRKILKKTSNLFIIFLVLLFVFFAVGFYTFYNAKGTSYLSNASESCNNCHIMNEVYNEYMAGSHSQ

KVKGEPRATCVDCHLPHNFVAKWIAKAQSGLGHAYAFTFKLDELPTNLSATEKSRKMVQENCIRCHADFA

QTAINATTNPHADKSLNCASCHKDVGHKHGI

>ABS44450.1 4-hydroxy-3-methylbut-2-enyl diphosphate reductase [Campylobacter jejuni subsp. doylei 269.97]

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIKSLSNETKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEIVIFGDENHPEVKGVKSYVNTKAYVVLDK

KELQNIKLPSKIAVVSQTTKKPEHFMEIVNFLMLKAKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIENFGIN

>ABS44449.1 phosphoglucosamine mutase [Campylobacter jejuni subsp. doylei 269.97]

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSVTNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDTHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPVNLATEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIVSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIVALQFS

ALMLSKKKSASSILGQVKLYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>ABS44448.1 putative chemotaxis protein MotB [Campylobacter jejuni subsp. doylei 269.97]

MAKKHKCPECPAGEKWAVPYADFLSLLLALFIALWAISKTNPAKVEALKTEFVKIFDYTSTQTVKEESKT

QKKYKGAAKEESDELKSLKQMTMTQQETIKRLQAALDQSDNQIALNLPSKVEFERSSAQIVSADIQDYLK

RMAELTTYLPPQAKIEIRGYTDNSDSIIRSYELAYQRAENVLKYFIEGGANLKNISIKSYGLNNPINGNP

QALENNRVEIYFKVDTADTSTQKSVLELINKIGTKTP

>ABS44447.1 putative phosphate ABC transporter, permease protein PstA [Campylobacter jejuni subsp. doylei 269.97]

MKKLFKKRQKASKSFKRLCKMGLYINLIFLCIFLGSVAYLGIGAFKQTYIFVEANRNSPVYDLLSRAEQR

KIRTGQITEKSWLLANSEVDQYMKQKYNRLSEKQRALVDDLVQKDEIELKFNSNFFLNGDSKSPENSGIL

SSVVGTLLVMLVCMVVSVPIGVAAAIYLEEFAPQNILTHFIEVCINNLASIPSILFGLLGLGVFINLFGM

PRSSALVGGLTLAIMSLPIIIVSTKAALKSVDINMKNAAYALGMTKVQMVKGIMLPLAMPMILTGSILTL

AGAIGETAPLMIIGMIAFIPDVASSIFDPTSVLPAQIYSWSAMPERAFLERTAAGIIVLLGLLVVLNLSA

ILLRKYFQGKLK

>ABS44446.1 hypothetical protein JJD26997\_0835 [Campylobacter jejuni subsp. doylei 269.97]

MKKRRADLLKKHNSKIVLADTLESEAMVDLAMKANDIFLKLKKTAGVSLDFKDADEMLMLWNLVLVKSSQ

TLEQISQKIDMKYDEPFTITLAREKLEK

>ABS44445.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MVKNGLLLTIFLSIIGILSVIFFHIYVGAIIFILIAVLMIYLLRQYKDEQIMIDKFLVLCRELKEGNFDN

RIIYVKTKSKKLAEIADNLNNTIDGLEAYLREINTSISCSQKGEFYRKALPEGLKGIFAHNIEFINKALA

NIEVTARSIFKNALSRTLMDLSLGNQNKDMSQISNSLNQDISRMKNVYDTVDAIAHTATENGSEVDSLQS

AMGTLMDVVNSSKETVQTFVANSQNITSVVEVIRDIADQTNLLALNAAIEAARAGEHGRGFAVVADEVRK

LAERTQRSTSEISIAIQTMQQDFVNIQSGSEQVFNIVSESEERINKFSQAFKRLEENSSALGVNFGSFAK

RLILSVVKIDHILYKSNIYLNLNGAQNFNLESVDPISNLCQDEKARDVINELSSETELNLAKEFIKDNAK

KAIEESNQDYIDQKAYDVIVNDIKSLEQRSAEILAKLKI

>ABS44444.1 fumarate reductase, iron-sulfur protein subunit [Campylobacter jejuni subsp. doylei 269.97]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>ABS44443.1 3-oxoacyl-(acyl-carrier-protein) synthase II [Campylobacter jejuni subsp. doylei 269.97]

MKRVVVTGIGMINALGLDKESSFKAICNGESGVNKITLFDATDFPVQIAAEVKNFDPLEVVDGKEVKKID

RFIQLGIKAAREAMQDAGFSEELDKEEFGIVSAAGIGGLPNIEKNSIICSERGPRKISPFFIPSALVNML

GGLISIEHGFKGPNISCVTACAAGTHAIGEAYKSIALGNAKKMLVIGAEAAICPVGIGGFASMKALSTRN

EDPQHASRPFDKERDGFVMGEGAGALVFEEYEEAKKRGATIYAELIGFGESADAHHITSPTLDGPLRAMK

KALNMAGNPKVDYINAHGTSTLANDKNETAAIKELFGNNIPLISSTKGQTGHCLGAAGAIEAVVSVMALR

DGVVPPTINQLVKDDECDLDYVPNISRKVDLKVVMSNSFGFGGTNGCVVFKKVD

>ABS44442.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDGEFFMIYDAIDVSKIKKLSNLSDEAIKSSLANEFLELVSGFDNISKKKFKREFAEFLFEKGVNEKDVL

KITNLSKTTIWRIMNENKKN

>ABS44441.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MINVLMIEDDPDFSQLLSEYLAQFNIKITNFENPKSALNVGIRGYDCLILDLTLPGIDGLEVCREIRQKN

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHANNENINSAFKIDERRH

EITYEDKALTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>ABS44440.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MIISLIFIGIFYYYTQLYKNYENLNIFERLYKLQEELYEKPIFKTIIFQTSALKPIVLQEQFVNDGIFQF

QKLYFQDQNYSVYFKE

>ABS44439.1 succinyl-diaminopimelate desuccinylase [Campylobacter jejuni subsp. doylei 269.97]

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSSDAFVPMEKESFIYARGAQDMKSGVAAFVDALKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQKRDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVVTDIRGGIEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>ABS44438.1 carbonic anhydrase [Campylobacter jejuni subsp. doylei 269.97]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>ABS44437.1 penicillin-binding protein 1A [Campylobacter jejuni subsp. doylei 269.97]

MKILKYIFSFFTLLLIAGFIYVAYLFTSADTEGYTFKEYKPPLTTQIYDRNGKLVANIFEQHRFYASYEE

LPPRLIEALVAIEDTSFFEHNGVNIDAIFRAAVKIIKSGGKTMEGASTLTQQFIKNTELTPERTITRKIR

EALLAYKMETILTKEQILERYLNFIFFGHGYYGVKTAASGYFHKNLNELSFKEIAMLVGMPKAPSSYDPT

KHLDLSISRANNVISRMYSLGWISKADYDIAIKEIPQVYDDTLTQNAAPYVVDEVIKQLSPSIKDLKTGG

YKIILNIDLDVQNMAQNALKFGYNEIVKRDKDANLSTLNGAMVVVNHQSGDVLALVGGVDYEKSNYNRAT

QSMRQPGSSFKPFVYQVAINLGYSPMSEIADISRIFEGGAGNNEDWKPKNEGDKFLGLITLKEALTRSRN

LATINLALDMGLDVLYSKLMEFGFKDIPPNLSIVLGSFGISPLEYSKFYTMFGNYGAIKNPQIIRQVQDK

TGKIIMEFNSNERKVSDEAQIFLVLDMMRNVVEKGTGRHARVKDIEIAGKTGTTNKSVDAWFCGFTPEIE

AIIWYGNDNNKPMRYTEGGARTAAPVFREFLTQYIEKFPDTTRKFSIPDGVYRGNYKGESAYYTTKSPLP

KANMKFNESEIIF

>ABS44436.1 hypothetical protein JJD26997\_1391 [Campylobacter jejuni subsp. doylei 269.97]

MDFFDEMFNTTPKEKFIEIIQNGNLGALEKVFEEFFADHIAMIELLEKQGLTEMDVKNFILENGDFIEER

QNDIYIELGAKILGHEG

>ABS44435.1 ribosomal protein S10 [Campylobacter jejuni subsp. doylei 269.97]

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIIAATPDTVDSLTKLDLAPEVSVEVRAMGK

>ABS44434.1 snare associated golgi protein [Campylobacter jejuni subsp. doylei 269.97]

MFDFLYNNISYLGLFIVCFLSSTLLPLASEAFVLGFIKLDFNPNLVLIIATLGNTLGSLSTYTLAYFGKE

KILEKYFSKSLKKLENFNANFAKFGSVFAFLSFLPLAGDLFTLGLGFAKYSFIKTTIFIALGKFIRYYIL

IFLGQLF

>ABS44433.1 D-3-phosphoglycerate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKKKIIVCDAILDKGVDILRKAEDIELIEAAKVPKDELMQMLSDVEVAITRSSTDVDANFLNHAKKLKTL

VRAGVGVDNVDIPECSKRGVIVMNVPTANTIAAVELTMAHLLTSARSFVNAHNFLKIERKWEREKWYGIE

LMNKTLGVIGFGNIGSRVAIRAKAFGMKILAYDPYISASKITDLDMEQAKNLDEILEKSDFITIHTPKTK

ETNGMIGKQEIAKMKDGIRLINCARGGLYTEEALYEGLKSGKIAWLGIDVFDKEPAINHPLLDFENISVT

SHLGANTLESQDNIAREACEQALNAARGVAYPNALNLPIKTEDLPPFVAPYIELVSKMAFLAVQIDKNPI

KSIKLEAEGIIGEYANSMLTFAAVGALGGILGEKINYVNAEFVAKEKGVELSCETLPNSGYNNKLSVKII

TENSNISVSGTVFNENEQRIVGLNGFKIDFKPKGKMIIFKNKDIPGVIAKISSVLAAKNINIADFRLGRD

SFGYALAVVLIDEKVQKEVLDELKQLEACVFVQYVEI

>ABS44432.1 aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase, C subunit [Campylobacter jejuni subsp. doylei 269.97]

MQIDEKLLSKLEKLSALQITKNRNETIAQLSEIVNFVKKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFIVPKIIE

>ABS44431.1 DNA/RNA non-specific endonuclease [Campylobacter jejuni subsp. doylei 269.97]

MKYSQRIRNQIAIPSSYTKILKGENFKECYQVPNHEVEDENIRKYKVNCGKF

>ABS44430.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDFLDSLKSIKKEMQANTNTPKLAKKSSKSGASVKTLEKLAKEMQEIFLKQEKLQDEFSEFIKNADIKKI

>ABS44429.1 tetrapyrrole methylase family protein [Campylobacter jejuni subsp. doylei 269.97]

MLYFIPTPIGNLSDISFRALELLKTCEFVFCEDTRVSKSLISLLNTKFHTDIHISKFIALHSHNEKEVLA

SIDLKIFEKNVAYLSDAGMPGISDPGRALVEFAQENNIAYEILPGANAALVALVSSAFCQKEFIFIGFLA

NKGKERQKDIEKILNLPYPSIIYESPKRILSLVEQIMILDSQREIFLIKEISKKFENKFKGNAKELFEIL

KKSNLNGEWVVVLQSKEQNFLQNTLCEKDIMDLELPLKAKAKLLSKFNGKNAKEIYQKLLLSQD

>ABS44428.1 methionyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MRYITTPIYYVNDMPHLGHAYTTIIADTLARFYRLQGHETKFLTGTDEHGQKIEEAAKLRNSTPQEYANK

ISFEFKKLWDELEISYDIYARTTNTMHIEFVKAMFLKMWQKGDIYKDEYEGHYCISCESFFTQSQLINNC

SCPDCGKNTTILKEESYFFRLSKYQDKILQWYEEKDPILPKNKKNELINFVQSGLKDLSITRTSFDWGIK

LPQEMNDPKHIIYVWLDALFIYISSLDFQSKGEKAKFWPAHVHLAGKDILRFHAIYWPAFLMSVDLPLPK

FIGAHGWWTKEGEKMSKSKGNVVKPKEVVDAYGSEAFRYFLLREVPFGNDGDFSENMLINRINAELSNEF

GNLLNRIIGMSTKYFQGNISKEGVLKFYDAELNQAKEHLNLAVEFLENLQCNRYLEELFKALSVANIAIS

KYEPWNLIKENKHEQAHALVALCANILAKTSLLLSPTLPKSCQKVALALNFEISSTNYTKIILDNELLDF

KANPCEALFPKVEKALLKQEIKEESKKEESPKIKIDDFAKIEIKVAKVLDCQNIKGSEKLLKFQLELDDK

EIRQVLSGIAKYYKASDLIGKQVCVISNLKKAKIFGHESDGMILSAKSGDKLVLITPEQLVKNGSLVG

>ABS44427.1 polysaccharide deacetylase family protein [Campylobacter jejuni subsp. doylei 269.97]

MAKEILVAYGVDIDAVAGWLGSYGGEDSPDDISRGLFAGEVGIPRLLKLFKKYNIPATWFSPGHSIETFP

REMEMIVEAGHEIGVHGYSHENPIAMSAKQEEDVLLKCIELIEKISGKRPTGYVAPWWEFSNITNELLLK

HGIKYDHSLMHNDFSPYYVRVGDKWTKIDYSKEAKDWMKPLVRGEETDLVEIPANWYLDDLPPMMFIKKS

PNSFGFVSPRDIEQMWIDQFDWVYRENDYAVFTMTIHPDVSGRPQVLLMHERIIEHINKHSGVKWVDFNT

VADDFLKRYPRKK

>ABS44426.1 putative transcriptional regulator [Campylobacter jejuni subsp. doylei 269.97]

MKDYLELLSSIGTLKKFQKNSILFYEGEEAKFFFILLKGKIRIYKSTASDKEITLHYFNPPNFIAEMPAF

KKLNYPANAIFEEDGEILEIDFINFQNLCSENKEFNFLLISSLFDKIKILEKKLSQNALDLRTRLLKYLL

ENEKKLDTISQKQIAIDLNVRAQSLSRMLKELKISQLIDTKKGRIEILNKDVIMKELW

>ABS44425.1 methyltransferase domain family [Campylobacter jejuni subsp. doylei 269.97]

MRKVNLIKREKCVIDNTELEFLSRDEFPLFCGCVESDLREDLICEQEWVISKKGVIQLKNLIPLEILYAN

GHDAGVVGALWEEHHREFANFITKSNPKSVLEIGGGHGKLSQNCLNLADIKWTIVEPNSENKHKNVDYID

GFFHKEIFNNRSFDTIIHSHTFEHIYNPHEFLEEISSALMGGGKMIFSLPNMEKWLENKFTNCLNFEHTI

FLSENILEFLLQKHKFKIIQKQYFKEHSIFYHVCKDESINTQNIVLKNEYEKNKKLFLDMKKYYQEKILY

LNEILENTTKKVYLFGAHLFGQYLIFQGLNTEKIINILDNNPSKQEKRLYGAKFIVKSPKILKDQDDSLV

VLNAGVYNDEIEKDILENVNKNIRILKC

>ABS44424.1 hypothetical protein JJD26997\_1122 [Campylobacter jejuni subsp. doylei 269.97]

MTVISKILLISFLRSLNLYGIDVILVMMGIAVGIYAYVFALTVLLRLTFKGIEVNYPVSNSSVIRLLKVL

HIACLVADLTIIGAFFGIPIFLALWIFQYIFANEKNPFFVFRKYNPKPYQEEDIIDVEVEDEKPKKSLKT

FLENWKD

>ABS44423.1 thermonuclease family protein [Campylobacter jejuni subsp. doylei 269.97]

MNRHYFNLLKRILKAKKLSLSLVIAIIVLAVFSFNQVSSFNQSFTTFLAQKNLEKELTGKVSKVIGGDTI

ELLAKISKTNPYNHIAKLKIRLYGIDAPELKQAYGKEAKEYLSALVLKQEVGLIIENKDKYDRIVGTLFL

KGQDINKEMVKNGYAHAYESFSKKYLAEQADAKMFKLGLWQDERVMSPSEFRKQQRKNS

>ABS44422.1 conserved hypothetical protein TIGR00043 [Campylobacter jejuni subsp. doylei 269.97]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEHFNLPKSLIVRTLEG

>ABS44421.1 ATP-dependent DNA helicase, UvrD/REP family [Campylobacter jejuni subsp. doylei 269.97]

MNLFEDLNDSQKQAVSHIDGAMLILAGAGSGKTKTITTRLAYLIGEVGIPSYNTLTLTFTNKAASVMRHR

ALNFLQGNHNPLLCTFHKFGLLFLKLHFERLERKNSFIVIDTDDTKKIIKDLIHDKNKDNVYDIIKYISY

CKNEGKRVSNVFKDLNLLKEHNFEKYQNEYKFANYYRAYEEYLLKQNFVDFDDLLLLSNLILENDINFAK

EQSLLYNYITVDEYQDTNTLQYKILKNLCCMHENITVVGDDDQSIYSWRGAKIENILNFQNDFKNVKLVK

LEQNYRSVGTILQAANNLISHNEQRLGKTLICTKDTGENIKILKNENEKDEGLYIAQEVKKLLNSEVEAK

EIAVLFRVNALSRAIEEAFMKEKISYKLLSGMRFYERLEIKDLISYLRLILNPNDDLSFKRIINRPKRSI

GEKALKNLEEYAKKRQISLFDALCESDGGVGILTTKKAQNEANIFIQNIHTLKSYDNAKKVFDNIEELFK

IKDYFSEQDDGDERIRNLDEFYANLREKLKEDPEASLEDLLSEISLLSDQDNLDEECVCLMSIHASKGLE

FDYVFIIGFDEGFFPLNSEENLEEERRLAYVAITRAKKFLTISVANSRFYHGSRANINPSRFLEESKLIN

EKSKNQNIQKTSFCKGDLVKHKIFGIGRIVEVSKSGKEEKLNINFGGIMRVIMASFVEKAV

>ABS44420.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKMTNIILVLLFILFFILMFFNYKYQKAQVELLEQNKKTLELNIKILELNIKKIELLEKRIKEIKWEF

>ABS44419.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSENIELFESYTAKTLGELYSTFPIPSDFNFFDFIPKLEYEEFLIHQLNAFHTINYLKANHFLDFKSIDI

ENGKVEKAILKPKALELLKQDGLGVQLKKALNTGRDELIRSIVNKALEMSLKIMF

>ABS44418.1 acetyltransferase, GNAT family [Campylobacter jejuni subsp. doylei 269.97]

MSEFKIIDLRQEDLNILQEMIIEFAKYEDMLDFLQCTKEKLEHSLLKNKFARAFLLKENEKTIGYMIYFY

TFSSFWGSGGIYLEDIYIREDFRKKGYGKAVFKFLGEICKKENLKRLDWVCLNDNILGINFYESLNAKHL

KQWRNYRLSGENLEKLCDL

>ABS44417.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MKRVRTKIRANFCRRVKRTLKGSLKEKLVGTILLCAIVPLAVLGYLFIVIIGIFFNTARARQGVRALDHF

VNASLFNGYAWESVSSHAWRERNRKKWARIVIKITDFFQKDHCKRANKREQPVVDFILSRNLDKQTIGK

>ABS44416.1 RNA polymerase sigma factor RpoD [Campylobacter jejuni subsp. doylei 269.97]

MNAKTQKAELEELFQENAKDYITYEKLVKYLTKQPSASTAKKVQALMKKHKVQLFSAAEIAQMKNIEDAK

RLQEEKQKLQDTSLENEFDLANENDLLEWSRSDSPVRMYLREMGQIALLNKDEEIEISKKIELGEDIIID

AFCSVPYLIDFILDYKEPLINRERRVKELFKSFDDEEKSDDKLDELDIDEDEKNEAELEVDEENTKKNSK

KEDERTLKVIEKFKALEKAKKDWLKTSKDKESGNELLDKLSIAFKKNILKEKLMDLGPTSKLISEIVKSM

ETALKSDEEFDKELKRLEYRLPMFSDELKKRHADILKDITKLSKEEITERALETTMVSTYMEIKKLFQTK

EAGEKSFDLEKSRLKEILEQIKRGKKISDEAKGRMAKSNLRLVVSIAKRYTNRGLPFLDLIQEGNIGLMK

AVDKFEYKRGYKFSTYATWWIRQAISRAIADQARTIRIPIHMIETINQINKIIREHLQKDGKEPNVSVIA

KEVGLSIDKVKQVIKITKEPISLEAPIGNEDDGKFGDFVEDRNSLSPIDHILKDDLKEQIDEVLDQLNDR

EKAVIRMRFGLMDDESDRTLEEIGKELNVTRERVRQIESSAIKKLKHPKVGRKLKNYIEGWK

>ABS44415.1 glycolate oxidase, subunit GlcD [Campylobacter jejuni subsp. doylei 269.97]

MKKEFEQYFKRFLGEENAYFDEIHKRAYSYDATKKHYLPDGVLFPRNEEDIAQILKFCNENNIIVIPRGS

GSGFTGGALAVNGGVVLAFEKHMNKILEIDLENLVAVVQPGVINIHLQKEVAKYGLFYPPDPASMEYSSL

GGNVSENAGGMRAAKYGITKDYVMALRAVLPSGEIIRAGKRTIKDVAGYNLAGILIASEGSLAVLSELTL

KLIPLPKFKKTALAIFPSVKSAMNAVYKSLASGVSPVSMEFLDNLSIRAVESKFNKGLPIEAGAILIADV

DGNVKEAIDEDLRNLEHYFLEAGASEFKIAKDEQETADIWFARRNCSQSIAMYGTLKLNEDITVPRSKLP

ALLEGIDEISKKYGFKIPCFGHTGDGNVHTNVMVPDKNDKEQVKKGYEAVEEIFKLTVKLGGTLSGEHGI

GLSKAPFMNLAFSEAEMNLMRNIKKAFDPNNILNPFKMGL

>ABS44414.1 succinyl-CoA synthase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MNIHEYQAKAIFADNGILTLKGKVAFSVDEAVSNAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PGKIAKVGIDPQIGFKMFHGLEVARVLGLDKDEGKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASPETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>ABS44413.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFLNSKKNEKIRYLEKEIQRLKGVIALKDTAINEISLKLEEEIKTNGKLSNFRIKILDALGLIGVFKNDD

KAIKEVKKLKEKELNL

>ABS44412.1 fructose-bisphosphate aldolase [Campylobacter jejuni subsp. doylei 269.97]

MGVLDIVKAGVISGDELNKVYDYAKAEGFAIPAVNVVGTDSINAVLEAAKKVNSPVIIQFSNGGAKFYAG

KNCPNGEVLGAISGAKHVHLLAKAYGVPVILHTDHAARKLLPWIDGLIEANAQYKKTHGQALFSSHMLDL

SEESLEENLNTCEAYLQKLDALGVALEIELGCTGGEEDGVDNTGIDNSKLYTQPEDVALAYERLGKISDK

FSIAASFGNVHGVYKPGNVSLQPEILKNSQKFVKDTFALNSDKPINFVFHGGSGSELKDIKNAVSYGVIK

MNIDTDTQWAFWDGVREYELKNKAYLQGQIGNPEGDDKPNKKYYDPRVWLRSGEESMIKRLEIAFEDLNC

INKN

>ABS44411.1 potassium uptake protein, TrkH family [Campylobacter jejuni subsp. doylei 269.97]

MKQFGLDRRTFKILLAGYIIIALFGALLLHSSRAHITPIDFLDAFFTSTSAVSMTGLVVKNTAVDFTLAG

QIIILALVQIGGLGYMGIGLFVYILIRKKVSFSARNLLKESLFYPSMDGLFKFFKKVLLFIFAIELIGAI

LLTMRFALEMNFKKALWFGIFHSISAFNNSGFTIFEHGLIAYKHDIAINLIITSLIIIGGLGYFVLVELY

FFQRKKLQNLSLHTKMVVVASIFLIFSSTLIIFAFEYSNPQTIGHFSFFDKILSSYFIAINYRTAGFNTL

DMGHLHDASLFFGSLFMVIGGAPGGTAGGMKVTTVMVLLLYAYWSIRDGRVRIFGHEIPRETISKAFIIA

VGSAVYIVIAVILLSLLESKFDFIALLFETSSAFATVGISVGNGGTLSLCALFSDPSKVIIIIMMLSGRI

GVFAFLLSVFKQDKAIHLKFPEGKVNL

>ABS44410.1 cell division protein FtsZ [Campylobacter jejuni subsp. doylei 269.97]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKISGG

YDEEIMAQIETPTFLRRQMD

>ABS44409.1 ModE repressor domain protein [Campylobacter jejuni subsp. doylei 269.97]

MRELLNSNEKLDCGTAFKIAKKFNVNIEKIGQLADENHMRIDNCELGQFGHLDFEKAKIEVLKKIEPSLD

EKRRIFCKDARDIAKEGCGLKSMRSALKAYKVDVKYCQLGCFKEKKGKQFIVRTKTWIENADGDLLFGKG

KTELLELIGQTGSLLHASKLMGINYKKAWMHLQTLQKNSQEILVSTRQGRSKESGTKLTPRALELMENYS

ILQKDIEEYANKRFKELFLKGKK

>ABS44408.1 shikimate 5-dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKFLAVIGDPISHSKSPRMHNNAIKALGLDSIYTRYHLRNANCLREDFFKLGLSGANITLPFKEKALDIA

DVKDDFARNIGSANTLCLKEDEIYAYNTDALGFLEAIKDFDNVKKALILGAGGTALALAYALKQKGVEVY

IANRSKERFKDFLAYPTYLYKDLQDFDFDLVVNSTSAGLKDENLPCNRELLDRILPKAKFAFEVIYGRET

PFYRLCKEYHLKIKDGLDMLLWQGVFAFELFFEIRDKREMIKNAMQQALILK

>ABS44407.1 phosphoribosylamine--glycine ligase [Campylobacter jejuni subsp. doylei 269.97]

MKIMILGSGAREYSIALALRRVDKNLEFYFAPGNGATESLGTNLNLKDPVVLATYAKEKGFDLCIVGSES

FLAEGVVDIFKQQGLAIFGPSKAAAMLETSKSFMKSFLKKYRIKTAKFLNTNDIEKAKNFIYSLTPPIVV

KADGLCAGKGVIIAKTHEEAIEETAKMLSGESFGDAGKLVVIEEFLDGYELSIFAVCDGNDFVLLPAAQD

HKKLLDNDQGPNTGGMGAYAPSSLANESLLRKVQKDIILPTLAGMKKEGVEFCGVLFIGAMIVGNKPYVL

EFNVRFGDPECEVLMPLIENPLELILAATQRRLRHAKIKIKKEFAVGVVCASENYPYKSSPKSEITVNNI

PENSHISYAGVSLENGKLMADGGRVLVCVGTGKSIEEAQKNAYKLCDNVNFKGKQYRKDIAHQVLK

>ABS44406.1 endonuclease III [Campylobacter jejuni subsp. doylei 269.97]

MKRNLEIKELFLKHFDKPVTELKFSNLYELLVCVMLSAQCTDKRVNLITPDLFKTYPDIKSLANANLSSL

KTYIQTCSFFNNKAQNLIKMAKAVCENFDGEIPLDEQNLKSLAGVGQKTAHVVLIEWCGANFMAVDTHVF

RVSHRLGLSKAKTPEATEEDLTRTFKDNLNYLHQAMVLFGRYTCKAKKPLCKECFLNHLCKSKDKELK

>ABS44405.1 high affinity branched-chain amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MMLIVKDLHVYYGLIEAVKGINFKVETGHIVSLIGSNGSGKTSTLNALLNSVKRTGEVNFLGYDTKRHLT

HTLVQKGIALVPEGRRVFINLSVEENLKIGAFNNAENYEHLREQMYKLFPRLASKKHALAGTLSGGEAQM

LAISRALMSEPKLLMLDEPSLGLAPKIVGEVFDIIVRLKEEGITILLVEQNAYSALKISDYAYVLENGRI

VMENEAKNLIGDDEIRKKYLGL

>ABS44404.1 hypothetical protein JJD26997\_1373 [Campylobacter jejuni subsp. doylei 269.97]

MLVEIPTSPPKPNFPCKFRIFNPLFTKNLINYTKKFRIER

>ABS44403.1 imidazoleglycerol phosphate synthase, cyclase subunit [Campylobacter jejuni subsp. doylei 269.97]

MLKTRIIPCVLLKNSQLVKSIEFKDFRTIGHLTSTVRIYNARNVDELIILDIDASKSGEIDFESIEDLAK

ECFMPLTIGGGIKTLEDIQKILNLGADKISINSKALEDMDFISKAANRFGSQCIVCSIDVKRKGGQFCVY

DRGNLLEKSPLELALEYEKKGAGELLLTSVDFEGKARGYDLELLKIFQNKLKIPLIINGGLGKPSDGVEA

LNLGADALAGAYIFHFSKYTPKDVKEELAKQGFAVRLL

>ABS44402.1 ribosomal protein L4 [Campylobacter jejuni subsp. doylei 269.97]

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLAFERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDVLIVKDLLDEKTLLAYRNLANCYVVDVAEVNAYLVSVFNAVIMEKSALESITKEG

>ABS44401.1 hypothetical protein JJD26997\_0839 [Campylobacter jejuni subsp. doylei 269.97]

MNLENSLKAEVVNNSNIVLFENEELGQVRVALDENNEPLFCLSDICKILEIQDTYKVKQSILKEFELSTL

CVGSFDTGFGVKEFARRNK

>ABS44400.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQNLNQNEQIKCPSCGSFIDISTALYAQILDKAKQEMLKQKKEFDDEVNAKRAEYTKALNDLKTQKIEQE

KLISEQVSQKLLLEKQKFEQELLTQKQNFQKEFSEKFNKEHENEMKIMQEELEKKSKELSEFLSIKAENE

RLKREQKENEERLKFQAKEEAFKEFKEQESKNLEFEREKMRLEFQKNTQEQDLKYKELETNFKSVAQKLE

DAQRRIEQGSQQLQGEAAELLIEEYIQSEYLNDEVKEVPKGVNGADCLHIVKDNFGNICGSILYESKRTK

EFNKEWLDKLKLDSIAAKSDIAVLITKTMPKDKEKTHFKEGILICTFNEFKGVLAVLRESIINAYKLKNA

LQNKDEKNHILYEYLNSKEFNTQITFILKTYQNMKEELEAEKRALQNIWKKRERAIENLSFNSTAIVSSL

NAIFSDLQGGNLIGEEGIKSLENLAKDED

>ABS44399.1 phosphatase, Ppx/GppA family [Campylobacter jejuni subsp. doylei 269.97]

MLGIDLGSNTLRAVQMDEKLNKLKEYEFVIGAAKNLNQSGEISKEAIQRLKNALNILAKEQDLSKARAVA

TAAFRKASNTNEIFAHLKEEFGVDFKLIDAKSEAKISVLGMQSGLRRLKIWGEFAYCDLGGASCELSFRE

SFKSFDFGIISFYEKNCHSYYKSCISYKKLIKKYPKFIINIKDKKLKIHFLIANPYLKYLAFRAFDEVAM

IKKELHSLGVKTVVLNSGVPTTLSALKQNINYEKYEATRVNGKKLCHKDFLNYAIKLFHMEEKKTIKEVG

MMRKNYLSAGCLLFYALFDKHKLLVIDEGLREGVCLASMKNIKF

>ABS44398.1 CitT protein [Campylobacter jejuni subsp. doylei 269.97]

MSNSTKTFIIVADIILFIALLALLPFETKVNQGLAILAFIAVLWLSEALHITITAILIPILAVIMGLMPT

KSALHGFADPNIFLFFGGFALAAAMHFQELDKIIAQRILMLARGNFALAALYIFFTTAFLSMWMSNTATA

AMMLPLAIGMLSQLDYEENKNTYVFVLLGIAFSASIGGIGTLVGTPPNAIVATNLNITFAQWLQYGIPIV

IIFMPLMILVLYVTFKPNLKFQINTDLEQKIPMDTQKYITLIIFAIVAMCWIFSSYINPFVSNLLGFEKK

IANFDSVIAILAAVLVCAFRVVSWKKVQENTDWGVLMLFGGGITLSLVLKDSGASKIMADGIISLIAGGH

LFLIGLLVSLFIVFLTEFTSNTASAALLVPLFISIAESLGAPPLGLALIIGIGASCAFMLPVATPPNAIV

FGTGYIKQSQMVRVGIYLNVLCSIIIALMAYFFWL

>ABS44397.1 NADH-quinone oxidoreductase, H subunit [Campylobacter jejuni subsp. doylei 269.97]

MSDFAFFALEALIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVAIISYESVGALALIAIVMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGMFFIGEYASMIAGAILVTLLFLGGFNGFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVVNLLITALAVLL

>ABS44396.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAQTQLSYKNKSYQISYEILGDLSLPQILILHGWGANKELMKQSFYPFLKDFCQIYVDLAGFGNSSVEEI

LNTQDYANITELFLKQKKLNICFFMGHSFGGKVSTLLAKEKDTLILLSSAGILAKKSLKVRFKIRIFKIL

KLFGLGKFYRYFASKDGANLGPMMYETFKKVVDEDFSEIFAKQKAKSLIFWGKSDEATPLYCGEKMHKLL

KNSTFYPLEGDHFFFLKHSAFIAQKIKEI

>ABS44395.1 DnaJ domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLNFEQNNMLKPMLFIKIDFAAGRILMKLSSNEKLFVTYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>ABS44394.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MGFEHLDTIYYFILFFVALFAGFIDSIVGGGGLITLPALIACGIPAHLSLATNKLQSVFGSFTATLTYFK

STTLPHLAWGVFFTALGAAIGSYSVLFVKDEQLKLIILIFLTLTFLYTALCPNLGKHESEPKIKNIKIFH

LICGLTLGFYDGFLGPGTGSFWIFACVMLLGFNMRKASINTKILNFTSNIIALAIFLWQYELLWAVGLLM

GVGQVLGAYLGSKLVLKTNGKFIKTLFLIVVGATIIKVAWDYFS

>ABS44393.1 RelA/SpoT family protein [Campylobacter jejuni subsp. doylei 269.97]

MLEQLIDNVKNCKDLEAAKALLFEICGHDAILEKAVDYCIFCHEGQFRKSGEPYAVHPILVATLVGFLSE

NKSNILAALLHDVIEDTNCTEEELREQFGSEVLKLVLGLTKIIEIREDNLISSKSKKSLTKSALTFRNML

LASIEDVGVLIVKLCDRLHNMLTLDILREDKQKRISEETLVVYAPIAHRLGISSIKNYLEDLSFKYLMPD

EYKLIDNYINSNNQEMQLGLNEFISKIELLFLSNGFRQGSFEIQKRIKHSYSIYLKMQRKGIGIEEVLDL

LGVRILVEKVSDCYLALGILHTHFNPLVSRFKDYIALPKQNGYQTIHTTLFDAKSIIEAQIRTFDMHKIA

EFGIAAHWKYKEDGSVVAPRLDWLTDISMQSINNLENAEDYNAIELYEYAKDSLYVEDVAVYSPKGEIFT

LPRGATVLDFAYEVHTKVGLHAKSAYVNRIKVPLLTELKNGDIVRVVTSNDKFYRCSWIDSVKTGKAKAS

IREFCKQKIREINLASSINMLSFIFGVDKNRIETWIEKENLARRIRQVATDSAYLKDIVNGLKKYAKKSY

WFDKYEIKEQKIGNFTLYCNHKIANVDFDFCCHPKRGDAVLAFVKGGNAIVHHKLCDRADKMIDNNQDMV

FIKWDSNIPKSYKLIFSLENKKGVLAEFLAFLAKMQINLLTINLSSDLNLAVDYFEITMEIPDNINPDSV

KDRLKSRCKILDFTSLNDAYKEG

>ABS44392.1 iron ABC transporter, periplasmic iron-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFFMFLTAFSFLGASELNIYSARHYDADFEIMKKFEEKTGIKVNHTQAKASELIKRLSLEGSNSPAD

IFMTGDISNLTEVKNLGLLSPVSSKYLEEFIPAHLKDKDKEWFAFAKRARIIAYNKNANIDISKMKNYED

LAKPEFKGEIAMRSATAPYSKTLLASIIANDGNKNAKTWAKGVLDNLATNPKGGDRDQARLVFAGEAKFA

IMNTYYIGLLKNSKNPKDVEVGNSLGIIFPNQDNRGTHINISGIAMTKSSKNQDVAKKFMEFMLSPEIQK

ILTDSNYEFPIRNDVELSQTVKDFGTFKEDQIPVSKIAENIKEAVKIYDEVGFR

>ABS44391.1 carboxypeptidase [Campylobacter jejuni subsp. doylei 269.97]

MQKLVENLALKYYDKIVDLRHQIHMHPELEFEEENTAHLVCKILDEFGIKYQKNIAKTGILAIIEGKKKS

QKKPKCVLLRADMDALPVQEKTNLSYASKIDGKMHACGHDGHTAGLLGATLILNELKDEFCGTIKFMFQP

AEEGSGGAKPMIESGVLENPYVDAVFGCHLWGPLLENTAQIVSGEMMAGTDIFDLEFIGRGGHGAHPHTC

IDPIIMATQFVNNIQSVISRRLAPYEAGVITVGQICAGTTYNVIPTNAYLKGTVRFLNDKTQDILKSSLE

EVATATAKSNGGDYKFKYTKEFPPLINDEKAALIARKAFAKVLGEENIIVSSKPDMGAEDFAFLTRERMG

AYVFVGISKDLNHPALHHSSTFCWDDENLKVLMQGDVMMALEFLNL

>ABS44390.1 Inositol monophosphatase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKEFLDACLNANLQIRKYLNNIPQNDLKLCSKLGYDKNQGYELDLKCEQIFIKYLSCFGQIFSEESGLIG

KANPKQMILDPLDGSSNFVSKIPFYGTSVALMEKNLTKSAFVCNLVSQEIFAFNNNQAFKSNLSDPKYSP

LTPNLFPKIGIVEKISLHPELLDFLTKNQLKFRSLGATALSLAYASYFSFILILGKTRIFDTAAALTIHQ

NLYIEKNENFLLLSQDKKIFDIILEFLKNN

>ABS44389.1 putative periplasmic protein [Campylobacter jejuni subsp. doylei 269.97]

MSKKKLVPIQRYLIIAILFLLCIALALGILIKYQNSQDVSCVKLVHLPLAAIDYNKPELDTLNPNDSKER

IFKKIKQIKKDFKDLRYINNHTGSLFTSNEEAMRKLYEALKNQNIFFVDSKTIGNSKANKIAKELNVPYI

QRDVFLDNEDDVNYVKKQLENAVKLAQKKGFAIAIGYPRKNTFKALEQSKDLLKGVELVYLSEIYGK

>ABS44388.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MFKSLNVGLKLVFSVAIVVVIGLVILISLVTKQVSQSITENAEDIIASVSKEHAVQVQGIFNEIIALSKT

VSNTLTEMFRVASKENLDMDSITNIVTNTFDNSVYSNFTYLYLIDPPEYFKEKSKFFNTQNGKFVMLYVD

EETDNKGGIKAIQASDEIVNLQVVQDILKKAKYGENKVYIGRPIRMNLEDQDFDAVNIAMPIFNRKNQVV

GVVGMTLDFSAIAAYLLDPKSQKYDGELRVLLNSDGFVAIHPNKNLVLKNLKDVNPNKGAQETYKAMSEG

KNGVFNYIASDGDDSYAAINSFKVQDSSWTVLVTAPKYSVFEPLKKLQLIIIGASFIFIFVVLGVVYYCV

RKIVATRLPIILNSLESFFRFLNHEKIELKLIKIRANDELGAMGRIINENIEKIQMSLEQDQNAVDESVQ

TAREIEKGNLTARITKNPINPQLVELKNVLNRMLDALQSKIGSNMNEINRVFDSYKALDFSTEVFDAKGE

VEITTNILGKEIKKMLVASSNFAKDLANQSEELKNSMQKLADGSNAQASSLEQSAAAVEEINSSMQNVSG

KTVEVASQADDIKNIVNVIKDIAEQTNLLALNAAIEAARAGEHGRGFAVVADEVRQLAERTGKSLSEIEA

NINILVQSVNEVAESVKEQTAGITQINDAIAQLEMVTKENVEVANVTNNITNEVNQIAVAILEDVNKKRF

>ABS44387.1 HrEpiB [Campylobacter jejuni subsp. doylei 269.97]

MSKKVLITGGAGYIGSVLTPILLDKGYEVCVIDNLMFDQISLLSCSHNKNFTFINGDAMDENLIKQEVVK

ADIIIPLAALVGAPLCKRNPKLAKMINHEAVKMINDFASPSQIFIYPNTNSGYGIGEKDTMCTEESPLRP

ISEYGIDKVHAEQYLLDKGNCVTFRLATVFGISPRMRLDLLVNDFTYRAYKDKFIVLFEEHFRRNYIHVR

DVVKGFIHGIENYDKMKGQAYNMGLSSANLTKRQLAETIKKYIPDFYIHSASIGEDPDKRDYLVSNAKLE

ATGWKPDNTLEDGIEELLRAFKMMKVNRFANFN

>ABS44386.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFLNSKKNEKIRYLEKEIQRLKGVIALKDTAINEISLKLEEEIKTNGKLSNFRIKMLDALGLIGVFKNDD

KAIKEVKKLKEKELNL

>ABS44385.1 DNA polymerase III, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MKLSINKNTLESAVILCNAYVEKKDSSTITSHLFFHADEDKLLIRASDYEIGINYKIKKIRVESSGFATA

NAKSITDVIKNLNNEEIVLETIDNFLFIRQKSTKYKLPMFNHEDFPNFPNTEGKNQFDIDSSDLSRSLKK

ILPSIDTNNPKYSLNGAFLDIKTDKINFVGTDTKRLAIYTLEKANNQEFSFSIPKKAIMEMQKLFYEKIE

IFYDQNMLIAKNENFEFFTKLINDKFPDYEKVIPKTFKQELSFSTEDFIDSLKKISVVTEKMKLHFNKNK

IIFEGISLDNMEAKTELEIQTGVSEEFNLTIKIKHLLDFLTSIEEEKFTLSVSEPNSAFIVKSQGLSMII

MPMIL

>ABS44384.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLTLFCLIFLCACGTKRQYFEPKQTDGDLSHNSNLKSKIVDWNLVSAKLSNNTAILKNNISIDKFK

LPKNYMLLTYQDGEYFTADNNGNLKIFDNSYNEIYSFQFDSSVVGVASNGDDLALVLANNTIVLANRSLG

IKFSQTLTSAPAQDSRTANPIFLDNIIVYPTLDGKILILSRNNLQVIKDVVISAENFFNNVIHLSVIGDK

LIAATAKKIIVVSPARTLYLDADIKDVALSDDGIFILEKDGTIIKTDYNLRKIAEKKFEFAIFIKSNIYN

NYLYIFEKTGYLIKMNLNLDNAQVFQLSEAVDKISFMGNGKFYYGDKILDLL

>ABS44383.1 ATP synthase F1, gamma subunit [Campylobacter jejuni subsp. doylei 269.97]

MSNLKEIKRKIKSVHNTQKTTNAMKLVSTAKLKKTEEAAKRSKIYAQKIDEILSEISFQINKIVHNEDDM

RLSLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGIELLEDLMKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>ABS44382.1 putative oxaloacetate decarboxylase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MAKKFIDVMDTSFRDGFQSVYGARVLMDDFFPAVEAAKEAGITHFEFGGGARFQSLYFYLNEDAFTMMDR

FRAIVGKDANLQTLARGVNTVTLDTGSSELIDLHAKLFAKHGTTTIRNFDALNDVNNLKFSGECIVKYGL

KHEITITLMDLPPNCKGAHDVAFYEKILKEILTAEIPFHSICFKDASGTSNPNKIYETIKMARKILPQDT

HIRLHTHETAGVSIACYLAALEAGVNGIDLAAAPVSGGTSQPDILTMMHALKGKDYDLGGLEEEKILRYE

EVLKDCLKEYFLPPEATMVNPLIPFSPMPGGALTANTQMMRDNNILDKFPQVIHAMREVVEKGGFGTSVT

PVSQFYFQQAFNNVMFGPWKKIAEGYGKMVLGYFGKTPVAPDANIIELASKQLNLEPTTELAINIADKDE

SKSMAYTKASLEKEGIETNEENIFIAAACREKGIAFLKGEAKVNVRKLASMPKPSSIDENKFTVAVNGNK

YHVEVNYGFDKDVNVKSVKKVEKNKNIISSNSTSSVDAENEVFAGISGNVFKIYVNEGEEVKSGQAIMVL

EAMKMEIEVNAPKDGIISELCIKIGDTVNEGEVLAIYKN

>ABS44381.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MQERIKELELRYKYFLLKKYLKYLLLIILISVIAFCFFVLMQKYNKQKNIYLQAIEHKKHLEQKILQAQI

LQEKNKIFREKLYKELEEVKAVQENTYISKIEIDSKILNISDLKKSFYQNPSYEKALNLAKKYFDIKAYQ

KTIFWALKANELDRQKQDSWLIFAQAKRALGEEKEAQSALDAYINYYGLMELDGK

>ABS44380.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKITLFLSLIGIFFAACEQTKSVEYYQNHPEEAKKRSLECRHKAIISQDCVNAHKVGFPKDEWEDENISN

P

>ABS44379.1 putative flagellar basal-body P-ring formation protein FlgA [Campylobacter jejuni subsp. doylei 269.97]

MKIIFLTFFIVINYIQAASLEEIKTALAKEFRNNFPKIIISQIDLKITSLPKNFDQYEFLRIANGRFNQA

QGFLRAEFKTPQNIQKNVFFRYFIQANLEVLKSKRAIRRGDKLGAFDYKSILIDFDKVPLNALTLDDVDN

LIAKSNINKNAILRANMFKTTALIRRNDPIIGILSEANVDVLIELVALQSANMGERIHAKNKEGKVMQGI

VVGKNRMIIQ

>ABS44378.1 domain of unknown function family [Campylobacter jejuni subsp. doylei 269.97]

MKKFILLLGANQYLRERALAGARRASDAKIFIADKEGMFNKNRYFDGCLFCDEKDTQALIKALKAQIQKG

FEFLGAVPLNDWTLASANELNAHFSLPFLSKEVIENSRNKYKMKLKFEEFKLPSANFFLLEEESELKLAI

AKVGFPLIIKPYDFGGSGGVFVAFNEEEAIKGLRQAKELIAKYKANFKIQGDKYLIEEYIRSKEEVSVEV

LCGKNFYKSLCVTEKYLSDEPYFSEMAHLVPSHRLNNTSLNDLACKACKALGIDRGIAHVEIKIKENKFY

LIELGARTGGDGIMDQLENAFEFNPYFLHIASYLGMDLANFEVPKPKRTSSIAFLKAKVGKIKKINLPQV

LPKELTSIKITTSVGNESLVAKDWSTREGVVEFVWENHFFKEKTNLPIDLANVLSEQIFELE

>ABS44377.1 hypothetical protein JJD26997\_0975 [Campylobacter jejuni subsp. doylei 269.97]

MYGRYKNFLGVFFKKRQIAINHAINSLKIGILCFRLGIKMPLLKARLFNA

>ABS44376.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNQNNNKTLKNELENLQYELGIVLEAMLLYAGVKRDKLENAIEAYIDNIDNVLENSNKEGVDEILEVVEF

LKNKYKDFFQ

>ABS44375.1 ketol-acid reductoisomerase [Campylobacter jejuni subsp. doylei 269.97]

MAITVYYDKDCDLNLIQSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSASE

ASKMADVIMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVVPKGVDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGSKIITEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>ABS44374.1 hypothetical protein JJD26997\_0564 [Campylobacter jejuni subsp. doylei 269.97]

MVVLFGWLYSYFWYYIGQNEELIKTYLTQILIIIIIFVILASLIYIKIKKP

>ABS44373.1 cytochrome c oxidase, cbb3-type, subunit IV [Campylobacter jejuni subsp. doylei 269.97]

MMEHLSIVFDVIKNLVTFDLATVQKHEWEVFQGYGFFALVMFLSIVLYAYWYHLYRTEKKGERNYENYAN

LALKDDIDDSVLESKRSA

>ABS44372.1 formate dehydrogenase, cytochrome b subunit [Campylobacter jejuni subsp. doylei 269.97]

MRKVFVTLLLSVVSLFAYGSERMGQDTQIWDFHRITNIPNYDTFGKLWTTLQGEYIATIALIAVIAVLSA

FALHYMVIGPKQFSHDGKKIYAFTLFERLFHFIAAISWVILVPTGFVMMFGEVFGGGVFVRVCKNLHAFA

TVLFIISIIPMFLCWIKRMLPASYDIRWMMIVGGYLSKIKRPIPAGKFNFGQKSWYYIAVFGGFLMIITG

GFMYFLDFNSTAIQGLFGLTQIELLRISAIVHNFLGIVCAVFFGVHIYMAVFAIKGSIHSMISGYKEEEE

VYILHSYWYKELSGKKQIEPSFSYDPNVKI

>ABS44371.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQARQENKECL

DNIYFNYTKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>ABS44370.1 prolipoprotein diacylglyceryl transferase [Campylobacter jejuni subsp. doylei 269.97]

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYDVALLLALLLAKFFVRKFQLDINEKHLYSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYIDGVLRHPSQFYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>ABS44369.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSIKIIEASINSSLQDFGRKKFAKFGIARSGAMDEDALRMANILLGNKQDEAGIELCLKGGKYKFLDENY

FVLSGAEFEAKLNNQKIKTCKVYKANKGDILELDLAKIGFRGYLCVAGGFEIKSFLNSKSSDVKMGVGIF

EGRALQKDDILVSKDKFIPFNLRLRECENPLFKSPKEPIVRVILGTNEDAFTQKGIETFLNTTYKVGSKS

DRMAIYAESGKSIEHKNSADIISDPAVFGSIQVPKSGIPIILMAARQSTGGYTKIATVIENDLNLLAQAK

LGSSFKFRSISMQEALELYKQREMKFKAMDQKINLDFENLI

>ABS44368.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEMILFVLVMILLVLLFIVLFRQYKSPKIEEKSTQSFSDIMQLKSIGELSVFQVFSKEIVTKKDSAFNGI

WKNLLGWSLSERQIALIFEFEITFLYDLRDKNFDILPLGDDAYKIIMPECRYKHSIIDMKFYDEKNAKFL

PFLLPDSINSTGISFSESDKNKLIKEAKDEVKDLSLNLIQNLESKIHKSAKDTLEAIAKGFGAKRVKFEF

KDNTQKLDVN

>ABS44367.1 thiS family protein [Campylobacter jejuni subsp. doylei 269.97]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>ABS44366.1 Na+/H+ antiporter family protein [Campylobacter jejuni subsp. doylei 269.97]

MILLTNPIIISVVLMTLLCLFRFNVLLSLLISALVAGVFSHLELVDTMNILISGMKENLKTALSYILLGA

IAATISKTNLTAYLIKIVSHFISHKKYLLLLSIALISCFSQNLIPIHVAFIPLLIPPLLGLFNKLKIDRR

AVVCALTFGLTTPYMVLPVGFGLTFQDLLKDNLNANNVSVSLNDVTNTMYFAAICMITGLFLALFVFYRK

PREYQEVEIAKVDLENLEMTRKEWGVLAGLVLTLILQILTMNLPLSGLLGFILMVILGGVEFSKVNEVFD

DGLKMMGFIAFVILVAAGYGEVLKESGSVVELVNSVVPWMEQSKFLAVFFILLIGLIITMGIGTSFGTIP

IIATLFCPICLELGFSTALIIFILGVAGALGDAGSPASETTMGTTVGLNADKQHDHIKDTCIPTFIFYNG

PLLILGSIIAMFL

>ABS44365.1 DNA-binding protein Roi [Campylobacter jejuni subsp. doylei 269.97]

MNLEIFKKDENKEISLTSLEIAELTGKEHRNVTRDIETYLEKVVEGGVLKFEQCYQSPKNGQSYKCYRLP

KREVLILVSGYSVELRAKIIDRLEYLENELKKQSYKPLTHKEALELGLKLLEENEKLELENVNLKNEAKE

NAPLIHFANRIKDTNDAILIRDFAKILYEKNKIEIGEKRLFAFLRDNGFLMSDNKPYQKCIEQGLFKVSE

TTISTIKGDRLVSTTKITGKGQIKIANLLLERMNHAV

>ABS44364.1 hypothetical protein JJD26997\_0349 [Campylobacter jejuni subsp. doylei 269.97]

MPYFITSIFAFFADIFKKFSVEVLLKGVVSAIYISFVLISFSLFIALLYYGVNIVVFAFNQTNTFLASLD

TQTNIVSGTDNDIIGTVFSILRTLGLFKAFNDVLAIFSPTFISYFVFKLSVLVYVALCKLIKSYTSLYHI

IK

>ABS44363.1 ribosomal protein S5 [Campylobacter jejuni subsp. doylei 269.97]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>ABS44362.1 glycosyl transferase family 8 [Campylobacter jejuni subsp. doylei 269.97]

MLHICIGVSAEYVKYSAVLINSIVKATQKPFDLKPYENNLSFTKDLKEGFCFHIFTEYKSEDTEKIALLA

HKLSEIYPTKCLIHVMNNQDFQDFSYPFWCQNAAMFYKIKVVDILKDVDKCLFIGADLFALGDVRDLFAL

DLKDNLIAAALDTYNFDGYLRKAKAKNSDEELVFNDAKNYINNDMMLINLKEWRKQNLQAKYIDYLNKYD

LAGDLDVFPLVCAPKIHILSSKYNFILGYYTRESFGLENTLKDESDKPVWNFTKVELEQIQKDLRLVHFC

HYVYKPWMSAYNCHYVYFNMGLDNDLKPIKVPYYKEWWDMALKTPFFEEDFANLKDKLEKEALDHYAVAL

AKRLKDKENWLFGWLDGRFGEEDKKRNCEISALYSHIDEKLSFFYTHNDALRRVKNRLAYKMGELIQNSN

FSILSLKFLFKAVKLHLQNKTEIKIAKNCSKLYPFLKFLPLEHCFNYEEALKIKQNLTYRLGEAFIKSLT

HTRGGGD

>ABS44361.1 signal recognition particle protein [Campylobacter jejuni subsp. doylei 269.97]

MFELVSESFKSAINKLRFVDDEKALKNALETLKKALLKADVHHKVTKELLTLIEEDAKQNGIGQKQFLNA

IKINLENILSVNGKNQSFVFASKPPTVVLMTGLQGGGKTTSTIKLANYLKLRNKKVLVAACDLQRLAAVE

QLRQLCEANEIELFFIENEKDPIRVAKEALKKAESSMVDVLLVDTAGRLAIDEALMNELKAVKDVLNPDE

IFYVADAMSGQDGVKTAASFNEALNISGVILSKFDADTKGGVALGIAKQIGIPLRFIGVGEKVADLEVFI

PDRIVSRIMGEGDLATLAEKTAAVIDEKEAKKLNQKIKKGEFNFNDFLNQMESIKKLGSMKSLIGMIPGL

GGMANAVKDIDLDNSKEIIRIKAMISSMTPKERENPDLLNNARKRRIAEGAGLSQVEVNRFLKQFSNAAK

LAKRFSGKKGMESLTQMMSQARRQF

>ABS44360.1 isoleucyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MDYKETLLLPSTSFAMRANLAELEPQRFKKWLEQNYAYEKMKENRKNAKKSFTLHDGPPYANGHIHIGHA

LNKILKETIIKTHYFKGESVRFTPGWDCHGLPIEQQVEVKLGEKKKSLSKKEIREFCRQHASEFVDIQRE

EFKNLGIIADWDKPYLTMKFEFEAAIYRTLCEIAKKGLLCERSKPVFWSWAAKSALAEAEVEYQDKEDYS

IFVAFDLDAKACEKLGVSKVSAVIWTTTPWTLVANQAIALNPNENYVITKEGLIFASALLKSMVEKGLTS

GEIQKELNAKEFEKLEAINPLNGRKSVLIMGEHVLMDGGSGLVHTAPGHGEDDYYACLKYGIEVLMPVDD

GGCYDETLRTKGLLPSYLLEEFIGLHIFKANEKILELLGAKLLHSSKFIHSYPFCWRTHKPVIYRATKQW

FILMDEPKLQGKTLRECAKEQLLKTTFYPQSGVKRIDSMVENRPDWCISRQRDWGTPIAFFRDKNTKEVI

FDDELFNFVATIFEKHGADVWWEFEIKDLIPTNSKYKAENLEKVYDILDVWFDSGSTFNVVLNSGLYDAG

EKRASMYLEGSDQHRGWFQSSLLVGTAINESAPYESILTHGFTTDEKGQKMSKSKGNVIAPEYVAKTYGV

EILRLWILLSDYSSDLKISDNILKQVGEQYRKIRNTIRFLLANTNDLKDLEVQEFSFIDKWILSRATKVF

KASKEAFFAYEFTKGFSLLLNFLSADLSGIYLDISKDRLYCDSENAQRRKSAQVAMALIAKELLNLLAPN

LSYSVDEALEHANILIKGDAKDVFDLSLTQDFDYDFGIDDTFLMSAREKFFEQIDMLKKDKIIKSTLELN

LNISFDKFPNEELSDWFMVSQISNENEEILAEFEVENEKFKITKASLCKCPRCWKFQSKNEETPCLRCEE

VLKGIQC

>ABS44359.1 ribosomal protein L20 [Campylobacter jejuni subsp. doylei 269.97]

MARVKTGVVRRRKHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKTDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDVAAFAKIAEAAKKAL

>ABS44358.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MSLYDRDYSRSKEFENTRSSELSIFIKQTYQLFAASLLAATVGAYVGIFALASFFIQSQVTFWVLFAVEI

GLLFALQWKKKEAPLNLVLLFSFTFCSGLTLTPLLISVLALPAGGIIIAQAFALTTVAFAGLSVFAMNTK

KDFTVMGKALFIVLIVIVAASLLNLFFQSSIVNLAISAVAAILFSFYILYDTQNIIRGNYETPIEGAVAL

YLDFVNLFVSLLNILRSFNSR

>ABS44357.1 putative ATP-NAD kinase [Campylobacter jejuni subsp. doylei 269.97]

MQNKIDHKNIKKIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQAPMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRSIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>ABS44356.1 acetyl-CoA carboxylase, biotin carboxyl carrier protein [Campylobacter jejuni subsp. doylei 269.97]

MTKEEIKELVNLFAETNISKIKIKEQDGFEIELERDMCCDVPAPVCTPVPAPQPINVSVVNEAQPSQSAK

SNKPSINSPMVGTFYQAPSPGAAPFVKVGSTVKKGDTIAIIEAMKIMNEIEAEFDCRIAEILVADGQPVE

FGMPLFAVEKL

>ABS44355.1 rare lipoprotein A [Campylobacter jejuni subsp. doylei 269.97]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>ABS44354.1 thymidylate synthase, flavin-dependent [Campylobacter jejuni subsp. doylei 269.97]

MQITLLFHTPLSVCSHATRTCWQSFEKGDCGGEKDKELIDRVGNKFKHASTLEHLNYTFYIQGISRACLQ

EVARHRHTSPSVKSTRYTLKELRNEAEFKIGDFENASRYLVLCGNEEVDNASIKALENLRTILQKSISLD

IAKYCLPESYKTELTLTINARSLQNFISLRSSKSALWEIRNLANALFEALPQEHKFIFEYCLHKDIE

>ABS44353.1 co-chaperone protein DnaJ [Campylobacter jejuni subsp. doylei 269.97]

MEISYYEILEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGESFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCNDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNNTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

QSIKVPTIRGEVTLNLPKGAKDGQRFVLEKEGVKDVHSSRIGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKIANWFKS

>ABS44352.1 outer membrane efflux protein [Campylobacter jejuni subsp. doylei 269.97]

MKIILSIFLAFFLSACGAKLSLPKEVDLTQEQMKDLNLTYDWYRSYDNAKLNEFLNFVLLNNSDINIARK

TLLSALARADLIDYDLYPTLSGNLGFGGDKDLNSGKQSKNFNNSLNLSYELDIYGKLRDSASASEFSAKA

SAYDLENLKISMINTALNDVFELAYFNDVDKLLRAYLSNLEQMKELYSYKYKLGKIEELDLLNIKQSLLK

AKQNLLGNDQNRNLLIKNLQDLLTKQEGFAYIEYFKTLSLNDFKTLSPDFNIPLKALAYRADVRSKLNSL

KSAFKDYSSMQKSILPSISLGGALSGSDKKIDDSFKFEILSGNVKISLPFLDYGRVKQNIKISQFAYEQL

LISYEQALQSAMNEFALNYKDYQSDTLLLQNLHNINVKQELITKAYYEKYILGKSELKDYLDANNTLNST

QQEFLRARFNLLKTINSYYRITALSFNDENLEFPKY

>ABS44351.1 DNA mismatch repair protein [Campylobacter jejuni subsp. doylei 269.97]

MNDTKEELISKLDLNSYLEEFKALFARGKEIFLQGDCNLHFKRIHELCEVEFPTMPELSNLDKALVHLSK

QGILHLDEIFEFVKILRYFEKLKKIKLGTNLDSWLQKIEFVSGALELCLNFDEKGELKESLDEKLVNLNT

ALRLKNESIIAEFKKFCYTKALMPYLIDTQIHLINNLEALLVRGGFNHAIKAKIIGRSSGGGFYIVPLSV

ENLQNDIEKIKNQKEEIYYEYAKNFSAFLAKNLPFLKFINTAFDLFDHYSARVLLAKKRDFEFVLCDQSA

DLVLKNFAHPALKNPKSVSLEFKKQVLIITGVNAGGKSMLLKSMLSAAFLAKHLLPMHIKASESKIGTFK

EFDAIIEDPQNVKNDISTFAGRMLHFSRLFSKKNLLLGIDEIELGTDFEEAACLYSVLISKLIANNLKII

ITTHHKRLAMLLAKNEQVELIAALYNEELSRPKYEFLKGTIGKSYAFETALRYQIPPNLVSEAKKLYGED

KENLEELIGKNINLELELKAKLENVEKKEQKVDEILLSLKEQKEKNEQEFRMNLRNLEFKFHKAIEEAKK

TIQLKDIKDKQRSLNKANELKKEIILPSMEQNEELRVGDFVKYEKIKGKIISISKNDAMVESDGIKLRVP

LKLLKKSGAMPKKVAKTSISVSKPSNLSVTLDLHGLRSDEAISRLDKFISDALLAGFDEVLIYHGIGTGK

LAFAVREFLKTHKSVKGFNDAPINQGGFGAKVVRL

>ABS44350.1 ribosomal protein L29 [Campylobacter jejuni subsp. doylei 269.97]

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>ABS44349.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>ABS44348.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLEFILNFNNYGLKMGILTKLELDYEIDDIEKFLQFFRTMCDRFEPLIIKLGSDSVRYKEAIKELETLAH

NTAWAARRLNLKEVTDFCVFCEEMMAQANRFNGPASDEFTDWMLLMSDQFEKYCRSYENDDSVLAVFNPL

IVNVPNIISK

>ABS44347.1 hypothetical protein JJD26997\_0956 [Campylobacter jejuni subsp. doylei 269.97]

MREIVDLENKPITRLYSKVEEKVDNITGEVSTIVSSFLQKEKTKDDFIKLFVENINYLTDNLSNSALRVV

LMMFRNLNYQNIFHYNSDFVSYFTNKKILGKSSVYRAIKELEEKNVIFKITKEQQEEYDIISPNSYIINP

QIIGKNSFKDLKKLRQTTVKEFDFEKLEMIQKVEVESEYEGLEEVKENPDDYYVEDIKKISYPNTIENQI

IISKREAEADNQTLIANDTQPSLFDNKENNKEMCDFWNMCGALTGAYHPTKSAKELKREKLDQDLKEGRI

>ABS44346.1 ribosomal protein L3 [Campylobacter jejuni subsp. doylei 269.97]

MEYIVEKIGMSRTITNPSIAVTLLRVVNAKVCEVEGGKALVAYPKGKASNKCVAGQQKKYNLSAEYNRFA

TLEVANTEAGDLDETPLNEAKILKVSFNTKGRGYSGVMKRHNFAGGPASHGSRFHRRHGSIGNREWPGRV

QPGMKMAGHYGNTKVTVKNEVVSYDAENKILVVKGAVPGYNGAMGKIRIAK

>ABS44345.1 nucleotidyltransferase family protein [Campylobacter jejuni subsp. doylei 269.97]

MDINKLKLTPHSSIKEALKIVGQERVRLGIIVDKKDKFLGVISDSNIRKALIGGKTLKDSIKDIYTKNPI

TIKENTSKEELLKLSAKTDIYDFPVLDEKGQILSIKSISSLLKANPNSIIIMAGGLGSRLKELTKDTPKP

MLKVGKKPILESIVQRLKNQNFENFIFCVNYKKQIIEDYFQKGQKFGVKISYIKERKKLGTAGALSLIKQ

EFKESFIVMNADILTELDFNALLKAHKKSKALMSVCVREFEQQIPYGVITQKQGFIENIEEKPTQKFLVS

AGIYVLENEILNLIAKNEYLDMPELIKIALQKGKVNTYIINDYWIDIGRPDEFLKANEDFK

>ABS44344.1 TraT complement resistance protein [Campylobacter jejuni subsp. doylei 269.97]

MKINKTVFKTGICSVLVASLLTGCLTTTLQTNATMSQSIFLDPVAKEKRIVFLNIKNTSGHEVNLEAKLR

SALEAKGYKVIDDPDKANYILSTNVLYCDKKQENNAVGGAVTGGAMGVTVSGYNGGGAGSMVAAGAAGAL

VGGLLGKLTEDTIWQMQVDIHIKQKAEGKVLTSSGNVSGQASVRDQRASGFLNSFGGNVRSDKVGHLNSN

QINNTQQAYESKYIEKNTIIFAEAVKTGLKLPEATPILEDKIANQIAGLF

>ABS44343.1 hypothetical protein JJD26997\_0864 [Campylobacter jejuni subsp. doylei 269.97]

MGITVNIWKEIPELKNLKKYLSEKEILGLDSYEKCAFGSQEYVDRLVRDEKIYYLNTNLENRNFILKQAL

KLEKNEIKTFLHSDNFITFAKDMILFSIRKYFDKTGAGHYKFYEKLGMYYRDYGFDSTQDRVKLFLIALE

RGSVPYVCFYKDYLELQSIRNKDMILFVSKNENFSRNSKLPTESIQKLKKELLEYIKANNLTIE

>ABS44342.1 oxygen-independent coproporphyrinogen III oxidase [Campylobacter jejuni subsp. doylei 269.97]

MRDYKAFVKYSKAGPRYTSYPTAVEFNTNFKYEEYIEILKKQDRSLSLYFHLPFCRSACYFCGCNVIYTA

KEESKERYLTYIFKELDILSAILDTKREVVQMHFGGGTPTFFSAKQLQSLILKIRSVFGNFSKDAEISCE

IDPRFLNEEQATVLTQNGFNRISFGVQDFDEKVQKEIHRIQPFELTQNALNLVRSKGIKSLNMDLIYGLP

YQNLQSFTQTLEKVMLLNPDRLAIFNYAHVPWLKKNMRKFDENTLPSPDVKLEILEFCEKFLSKNGYKMI

GMDHFAKENDELFKALENGTLHRNFQGYTTKSGADLVGVGLTSIGEGQKHYAQNFKDISSYEAALDRGVL

PFERGVALSDDDELRKAVIMELMANFKLDIKSIEKEFSIDFQEYFKKDLKALEEYKDFINFDENFIKVNE

TGVLLIRNIAMCFDAYMKNISEDKKVFSKTV

>ABS44341.1 peptidoglycan-associated lipoprotein Omp18 [Campylobacter jejuni subsp. doylei 269.97]

MKKILFTSIATLAVVISGCSTKSTSVSGDSSVDSNRGLGGSDGWDIDSKISQLNDTLNKVYFDFDKFNIR

PDMQNVVSTNANIFNTEVSGVSITVEGNCDEWGTDEYNQALGLKRAKAVKEALIAKGVNADRIAVKSYGE

TNPVCTEKTKACDAQNRRAEFKLSR

>ABS44340.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MKAVNLFLLASIIGVELILGIVVAPTIFFPQNLIGEGVLSHFQSGLMMTRIFIKMGYLLIFVSMVNFLYE

IYSLIKDEIKFQIKFSKFMLSLLILILSLIFVFYFTNTIIELQNLGENATKTQEFISIHNASEVVIKIIL

IMQVFLYFLSFKIAKK

>ABS44339.1 prolyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MMRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEV

NLSFITPASLWQESGRYNVFGKELLRFKDRKENEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKF

RDEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKE

FMVLAKNGEDDILICENCDYAANIEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKTNAFYTI

KAVVKKAIYENESKLVVFFIRGSDDLQEVKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYI

DFELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQK

YSKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEASHDEKGCIWNKTLAPFVLEIIVSNIKDEKTLE

FANKLYEDLTELGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIEFIQREGLVKELIKTDEL

TEILKKKVL

>ABS44338.1 hypothetical protein JJD26997\_1115 [Campylobacter jejuni subsp. doylei 269.97]

MLELIFNTGRNIGLGIFVNGAFALQFSEVPQSQAIYAIAEGILIMFLSGLGEIKFKRS

>ABS44337.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEMKAIVFIIGGFGANANISFLDFDREYIAKNFDVV

AVHVFYHCFCARQSIDQKYNPKLIPNQNDLERVNGILKNINLGHLLANEDNFEQIIPFIEQRAGEIKQTG

LVDESQKIELFCDFIPPNGDYQNYGIMAAIDHINALKDLVKRFPKFADLPKIYGGGSYGGYLSLLIAKIA

PWYVDGVIDNSGVCLPFLPHILGRDMDQAEFVFEGDNHRIYPFVQKYWTRNVDSSFYFSDENYLVRVILN

LSHLKIQASYNAKIVFVSYHSQRDQGAPAENKIQLYEIYKILGYDATLHLIKDENDIDGRFVKSLEHGLR

MTDRALFRKELPLMLEKLQKRKSLMQENSISYPCGNKVFVFKDLEDKFELEMIN

>ABS44336.1 L-seryl-tRNA selenium transferase [Campylobacter jejuni subsp. doylei 269.97]

MNKFRTFPQINTLIQDESLKSYPFYIKAFFCKKVVAKLKENFSRDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELVKEKGLLSYYDLGSGWCENLNEKLIKNEPKIKKLVQECDILSFSG

DKLFGSVQAGIILGKKELIGKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

EKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILKINQMENL

>ABS44335.1 putative endonuclease III [Campylobacter jejuni subsp. doylei 269.97]

MTGAQIFTKLLNLDLNYHDFDWLESQGLSEFELLISVILTQNTNWKNVLKVLENLKKENIASLEQINTLS

NLELATLIKPSGFYNTKAKRLKGLVESIINTYENLENFKTNVSREWLLNIKGLGFESVDGILNYLCKREI

LVVDNYSLRLAFYLGYEFENYEELREFFQSGIESEQENLCKILEKKCELYELYQIFHALIVAFAKQSFKG

QKLSPKGEEWIKILKEDL

>ABS44334.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEEKIVSIILNVLKNSANDYEIEELKSANKDTKLYSGLGGLLDSLALVSLITDLEESLATELNIEITLAD

EKMMSLRNSPFKDVQTLAQYIASQIKV

>ABS44333.1 ATP synthase F1, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVVNANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYAGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFTQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIKEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>ABS44332.1 ankyrin repeat protein [Campylobacter jejuni subsp. doylei 269.97]

MASDALSCDNIKNNKTLLNKSLNSDYLNIASSCKESLKNQDFTKKLYAISNEIRGSNSSCNGVAYWPKLQ

QFDFLLLKIAIDPIAYQKTLDTPENLEKKYDILKSYFRYWAYQSIGNFRFYKAFWKEYNNAIEPLGKYFE

SNFKFDKGSNIYYTSNALNEFLNWAVGETKIYKDISPLTKIMSSKNYSVSYIQDFIFSNNPSQDDLSIAL

QAALLNQREKEILELLIRFGARIDEGYESAIFYALENYENTNFLIQNGANVNQANAFGKTPLFYAIEFNR

LDIIKLLLDNGANVNQKYINNNEKLALSANIGSNTPYFITFCALEHTSKNVLMHAAAYGNVEILKLLISK

GANLNAVDDLGFNALDFALTAGKKENANYLKSLGLKANENLFYGGNLE

>ABS44331.1 prophage ps3 protein 01 [Campylobacter jejuni subsp. doylei 269.97]

MKAIDVAKYLIAVNEQKNSDDESNSLSKLKLQKLLYYSQGYYSALYNKPLFDEEIRAWEHGPVVKEVYDH

FKNLNGNIIPASRENIPNEQELKNMSSEQQETINEVYELMGQYSAWKLREKTHSESPWLETYDEKNKMND

EKNIISKEKIKKYFKNYIKDDDEKN

>ABS44330.1 putative RrF2 family protein [Campylobacter jejuni subsp. doylei 269.97]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>ABS44329.1 putative dna methylase-type I restriction-modification system [Campylobacter jejuni subsp. doylei 269.97]

MNKEQENYIFASFTIRIRLKDVETFNPYFVALYIQHIAKEWYLYRNIAQASVRQNTDLPTIRNLYIPKID

PTAQEKIAKYIQKSFNLRKKSKQLLDNAKNKVEEQIQGKT

>ABS44328.1 flagellar biosynthetic protein FlhB [Campylobacter jejuni subsp. doylei 269.97]

MAGEDQEKTEEPTSKKIEDARKEGNVPKSQDAAAIVTLIIGVTITLFMMSFMGERIVNLYRYYQSFIGVE

FDLRIIQAIIIKSIFEVLIILAPIVLSIMIAGVLGNIMQFGFIFTTKPIMPNLGKINPLKGLKNLFSLKK

IVESIKIILKVGIVFTIAFIVLLKFMQELPRVELYTMVAQLAWLRDRSIVLAAIVIVAFLIIAVLDVFLV

RFQYFKGLRMSKQEIKDEYKQMEGDPQVKGRIRRLQMEAARRRMVQDVADADVVITNPTHYAVAIRYDTS

KEQAPRVVAKGVDFLALRIKQVAYENNVVVYENPPLARELYKACDVNDLIPREMFKAVAEVLGFVYNTNN

KSRLAGQVKKGD

>ABS44327.1 ribosomal protein L33 [Campylobacter jejuni subsp. doylei 269.97]

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTFHKEVKLKS

>ABS44326.1 hypothetical protein JJD26997\_0723 [Campylobacter jejuni subsp. doylei 269.97]

MKTFTLKLTLNTNFLKLNLNKRSFISLKNFCEEEFDNLSDSLLILNANCFFELKDLSNLLENKNPKALSF

MINNTNYQSLELINQNNKIAKINKKPNKIPYLSYAGALFLNKEQITKIKNFKNVLINDLKFDLEIVKLWK

HSLQIHL

>ABS44325.1 competence/damage-inducible domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKHLLYLIGDELTINEKFKNYIYRTYEAKFKEINEIRIQNKTDKDLPFLLENLLNQYDFITLFTSPLHYA

TVAKILATLNDDNLILKDDTLVPDKAEFSKNSFVCNFSNSKINVVKINPSEKLPDLLGYIKLNFAYFCIF

GMDDESAILLLQTLTKSYEISIKSTKLLDNLVLIKATCANFGKLDGFLNSVKNLFGQKVFLGKDPIHFIS

FKLLEKKLKISFAESCTGGLCASTLTKISGVSEIFEGSIVSYSNRIKHEWLGISESVLKNNGEYSERCVY

FMLKGIFKTANPDFALAISGVVGEKDEGKIKSGTIYIGAMFRDGTFIQETLYLDGDREFMQEQAVLATFC

LLLKLKPEIFEI

>ABS44324.1 CRISPR-associated protein Cas1 [Campylobacter jejuni subsp. doylei 269.97]

MSYDEAFKTLLISSNAKLNLELNHLVIKQDENIAKLFLKDINIIVLESLQISISSALFNAFAKHKIILLT

CDETHSINGVFTPFLGHFQSAKIAKEQMNVSAQKKAILWQKIIKNKILNQAFILKKHNKIEQSNELINLA

KKVSLNDSKNIEAVAAALYFKTLFGASFSRDEFCFENSALNYGYAIIRACIIRAVCISGFLPWLGIKHDN

IYNSFALCDDLIEVFRASVDDCVLKLKGESEFLSKDDKRALIGNLQSKINFDGQNYPLNRAINHYVANFK

NALLYEDELKIVKFDD

>ABS44323.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MRFFLSPPHMGGNELKYIEEVFKSNYIAPLGEFVNRFEQSVKDYSKSENALALNSATAALHLALRVAGVK

QDDIVLASSFTFIASVAPICYLKAKPVFIDCDETYNIDVDLLKLAIKECEKKPKALILTHLYGNAAKMDE

IVEICKENEIVLIEDAAEALGSFYKNKALGTFGEFGAYSYNGNKIITTSGGGMLIGKNKEKIEKARFYST

QAREKCLHYEHLDYGYNYRLSNVLGAIGVAQMEVLEQRVLKKREIYEWYKEFLGEYFSFLDELKNSRSNR

WLSTVLIDFDKNELNAYQKDINISQKNIALYPKILKLIEDLKNEQIETRPLWKAMHTQEVFKGAKAYLNG

NSELFFQKGICLPSGTAMSKDDVYEISKLILKSIKA

>ABS44322.1 8-amino-7-oxononanoate synthase [Campylobacter jejuni subsp. doylei 269.97]

MKLEKILQDLEQNHNLRTLTPLKHENKFVYKQDQKLLNLAGNDYLYLASSKELKAEFLNTLKEQDLFFSS

SSSRSLSGNFEIYEELESFLKTKFKNKEILHFNSGYHLNISCIAALSSVSKTLFLADKLIHASMIDGLRL

GGANFFRFHHKDMNHLESLIQKHYDKYENIIVLSEALFSMDGDFSDFKTLCELKRRYDKIKLYIDEAHSV

GCFDEEGLGLVKKLALENEVDFLVFTFGKAFASMGACMICDEKYKKFFINKARAFIYSTALPPINIAWTQ

FIFKKMPYFKKEREKLELLSAFFKSKLQEKNHTVLGDVYIISLLLGENKKALEISQKLQKAGFFAPAIKE

PTVPKNTARIRFSLHAGLNTEELERIIELL

>ABS44321.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MLFYTTHLYLVDYMLILLVFFLFTCVLLLCVFLRHRPIATLFIIAFDIIICFLVYIYGYKLIDNEVRTRK

TAITDQKMIQSSNDLIVDFNITNNSKNNFKECKITAKIFADKIPNDNIIEEYKKKFIPFRQKSREIKDLK

KNATQFQRIFFENFNYENNYTIRLVSECF

>ABS44320.1 chaperonin GroES [Campylobacter jejuni subsp. doylei 269.97]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIMFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>ABS44319.1 ribosomal protein L18 [Campylobacter jejuni subsp. doylei 269.97]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAVLAESLRENGIRL

>ABS44318.1 hypothetical protein JJD26997\_1341 [Campylobacter jejuni subsp. doylei 269.97]

MFKSTPKKVAAKNKTIKIVNCCFSLLFKALKTKRYEINYQA

>ABS44317.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQSVWFYMGKSFKIYCITYIVFILQWLIFLSCKKKYKGGKIDHKPYVILFWHGKLALMPFAFKHYRQKDK

KAYVMISYHKDGEQIAKIIKLFSLNAVRGSTSKGASTALRAAFKVLEQNDDIILTPDGPKGPYHSISDGS

IVLAQKKGLKIRILNYEASRFWEFKSWDKMILPKPFSKITYSLSEPLDILSLDKEKAKEFLMEQFDKISL

ADQFKE

>ABS44316.1 chromosome partitioning protein, ParB family [Campylobacter jejuni subsp. doylei 269.97]

MGLNKDRGLSSLISDMDTVYSKELGFDKNQSTMIEIDQISPNPFQPRKNFDQEALDELANSIKEFGLIQP

IIVFKKNNKFILIAGERRLRAVKALGKKEILAFIADIDENKLRELALIENIQRENLNPIELANSYKDLMQ

VHKITQENLAELIHKSRTQITNTLRLLNLDIRTQELIASGKISQGHAKVLVGLDQKDEKMLVDSIIGQKL

NVRDTEKIVKKIKNNESLPNQEFEDEIKKLKQILNRFGFDCKNRNNDFVIHLENIDKIKKLIKMLEKF

>ABS44315.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MCVLCGEMVSSFHWSDISFKEQNELISVGEQQKERLQARLKKVKILNQILSFYRLNLKEWQGSKYILSNL

RGGSIIVNDLGDLWAKVYELEKISPDTLDIKLLHFLHHG

>ABS44314.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFVVAMILKNSKKLNTTDDKTQILPKTKNNQFNYFKNKKKGDLYEIQIGKMYQKQGYKVYFKGINEKKKD

AGIDLIAYKDNEVLLIQCKNWQNSQIKQEHLRIFLGDCTAYLEKEKHKFKNKEIKRFFITSCDEIDFAVK

KFLEQNEIFYLIVPFETNLKT

>ABS44313.1 cjaC protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFSVVLVALVGLFLNACNDSKNKESNASVELKVGTAPNYKPFNYKENSKLTGFDTDLVEEIAKKNGI

KIVWIETNFDGLIPALKAGKIDMIASSMSATDERRQSVDFTKPYYISKNLYLKLKNNDSLQTKNDLEGKK

IGVQLGTLQENTAKAIKNTQVQSNKDLNIAVLALKNNKIDAIVADEDTAKGFLAENPELVSFYQETDGGE

GFSFAFDKNKQKDIIEIFNKGIDEAKTDGFYDTLIKKYELE

>ABS44312.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. doylei 269.97]

MNIAKKELFVAWFFLIAAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIILSIVGIIMINIGEVKE

>ABS44311.1 motility accessory factor [Campylobacter jejuni subsp. doylei 269.97]

MGIMTFTQKELFNKNIEALGNIFLKESLKQIKSSKFELILGKDKLDINLKNTSDNTFLHENVINELNSML

NTYNDKYLLYPVLYFYGFGNGVLFKALLQNKNHQHIVVFEKDIEIIWVIFHILDFSNELQNARLMILQTS

SLDIEFFSNFCSSKPFFQFSRIYFLELMSHYYERFHEDVLELNKKLVQYFKDSILSHGNDPLDALQGIEQ

FVYNLPSMITHPSYKELLAKRKHLSDTAIIVSTGPSLIKQLPLLKKYANKATIFCADSAYPILAKHNIKP

DYVCMLERSEFTAEFFNHDFGEFDKDICFIIKSVVHPNAIHYLNKKTDDFTLVSTYASFINYVKLDDFGY

FNMGFSVAHMACYLSLHLKHKNIIFIGQDLAYAKNGNSHPDDYQNSATYESKAHEPILTKAYGGKGEVKT

HHIWLMFKQNLEQDVEKIQKYLDTKVYNCTEGGARIEGAIEKPFLWACENLLGKDLNKPFEKLEPLSLKK

QNEFLLKAYYKVCKSIEHCRDFNDKFIKSYKKIKNSFMSLQNSQENEILVKKIIKNIDKIKTQIDELYNT

QKDLIQILGPLLTQFELNLARIYVLNPKTKEDVFNKSILWIKEHLEFMELVYGHIKAQENALIKNILPLE

EKLKERKLNKWMERVRR

>ABS44310.1 hypothetical protein JJD26997\_0358 [Campylobacter jejuni subsp. doylei 269.97]

MNLEFSKETQHFLTNYCKDNNLSEKEALELALSYLEHKIRIDGYKKDVELYKQGKLKTYTSDEVFAKIRA

KINN

>ABS44309.1 triosephosphate isomerase [Campylobacter jejuni subsp. doylei 269.97]

MIFAANLKCNHTRASFKIYAEILNKTMGAKCDDIIVFPPSVAFLENENNFMQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEELIKVKFNFAKEHGYKIIFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQTADIAKVLEFLASLTKVPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>ABS44308.1 putative nucleotidyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MLNIVVPIAGKSYFFDNEKDGFPKPFIEICGKTMLEHFVKNYENVKSKRFIFILKEEDVKRYHLDDAINV

LTNNQSKIIILKNETQGMVCSVLMAIDEINLNDSLLIVNMDQIFEYDLNEVISDLSLNDAGVLSFESVHP

RWAYVKCDENNFVLEAFEKKPVSKNAIAGFYYFNKAEFFITSAFDMIKKDVNYKGKYFIAPILNELILQD

KKIINISIDKNRYFTFYSHAKINEYERIKNA

>ABS44307.1 carboxynorspermidine decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MFYENIQTPAYILEEDKLRKNCELLASVGEKSGAKVLLALKGFAFSGAMKIVGEYLKGCTCSGLWEAKFA

KEYMDKEIHTYSPAFKEDEIGEIASLSHHIVFNSLAQFHKFQAKTQKNSLGLRCNVEFSLAPKELYNPCG

RYSRLGIRAKDFENVDLSAIEGLHFHALCEESADALETVLKAFEEKFGKWIGQMKWVNFGGGHHITKKGY

DVEKLIALCKNFSDKYGVQVYLEPGEAVGWQTGNLVASVVDIIENEKQIAILDTSSEAHMPDTIIMPYTS

EVLNTRILATRENEKISDLKENEFAYLLTGNTCLAGDVMGEYAFNKKLKIGDKIVFLDQIHYTIVKNTTF

NGIRLPNLMLLDHKNELQMIREFSYKDYSLRN

>ABS44306.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNFQSIISHMNDHHKSNLVDLCKKFGGIEQVQDVFLKSVDFNGLDLVYNDKENLRVEFPKKADENTIKDT

IISLCMSAKSEQNFSGVEKELNEFMLSFNSVALATLNANGEVVCSYAPFVSTQWGNYIYISEVSEHFNNI

KANPNNIEIMFLEDESKAASVILRKRLRYRVNASFLERGERFDQIYDEFEKQTGGEGGIKTIRKMLDFHL

VKLEFKKGRFVKGFGQAYDIENGNVAHVGASGNRHKH

>ABS44305.1 nonheme iron-containing ferritin [Campylobacter jejuni subsp. doylei 269.97]

MLSKEVVKLLNEQINKEMYAANLYLSMSSWCYENSLDGAGAFLFAHASEESDHANKLITYLNETDSHVEL

QEVKQPEQNFKSLLDVFEKTYEHEQFITKSINTLVEHMLTHKDYSTFNFLQWYVSEQHEEEALFRGIVDK

IKLIGEHGNGLYLADQYIKNIALNRKK

>ABS44304.1 Na+/H+ antiporter NhaA [Campylobacter jejuni subsp. doylei 269.97]

MQMIKKMALSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFVHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSYDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFIFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>ABS44303.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MRIFFIGCVQFSHFALKKLLSLQNENLQVVGIATKEKSDFNSDFYDLKQDIKNLPCLHVKDINDAQSLKF

IHSLKPDIVYCFGWSSLIKKELLNSYPIIGFHPSKLPYNRGRHPIIWALFLNLKESGSSFFVMDKGADTG

RILSQKSIKISSKDNAKSLYEKITQKALKQIEDFTLKIYKKSLKNKDFKSILHTLSYKQTKGNTWRKRDF

KDGKIDFRMNSLAIYNLIRALAPPYIGAEVLYNNKIYKIYEAKIVKNSQNNLECGKILKVDQKGILVKSY

DGAILLTKHNFDILPKNGEYFKG

>ABS44302.1 magnesium and cobalt transport protein CorA [Campylobacter jejuni subsp. doylei 269.97]

MLYVYIKTQNALVQRINFNLDSQELPQNILWIDLLHPSTAEIAFISSKFNLEFPTKEEREEIELSAKYWE

DNATITINAHFLIKELQNSQEDENLIKLRTEIVTFVTAKNILFTIRYNEFSTFEEIQARILASPKNFEDG

FDIIDKMFEVRVEKDADLLEWIDKEARRLRTSVLEKKDEYSYDEMLKDISSLQELNMRVRDSLFDKRRAM

TSLLKSDKIDKDIKQNLTIVLKDLNSLVEFSVSQLSILDNIQTILASQINIEQNKIIKIFTVATVAMMPP

TLVGTVYGMNFKFMPELEFHYAYPIVLGVMVISMILPLIVFKKKGWL

>ABS44301.1 HIT family protein [Campylobacter jejuni subsp. doylei 269.97]

MIYENDLIYIEKEEAQVPWLKIFTKEIYKEFSDCPLELQKELFEKILLCEKAMIEFYKPEKINIASFANY

VPRVHFHVMARFKEDAFFPECMWGKQQREIIKLDLPKFEEFVKFLNSKISNFY

>ABS44300.1 Na+/H+ antiporter family protein [Campylobacter jejuni subsp. doylei 269.97]

MNKFLVLLFLPLVAFANSSEAAANANLFGTFTLIPPLVAIALAFITKDVILSLFAGVLSGTFLLSLSANI

FKAQHLAFVNFYNTAVESFSKIISYILGSTSDPVNAGIILQILCIGGLVALITKMGGAKAVALKFAKRAK

SAVSAQVNTWFLGLLIFFDDYANLLIVGPIMRPLADKFKISREKFAFIIDSTAAPVAGIAVISTWIGLEV

SLIKTAYEHIGISDISAFGIFVETIPYRFYNIFMLFFVIMTAIMGREFGSMYKAEVRARTTGQIAPLPKS

GTLDTAELEDQFLAPKEGIKIRAFDAIVPIFTLIILAILGFYFNGLSTLEGEELAKASTNPLSFETFRAA

FGNADSSVVLFQAALFAAIVAIFIGVRRKIFNLKEAVETWIYGWKTMIFTIVLLLFAWSLSSIVKDLGTS

LFITSLLADKLPEFILPATIFAFASAISFAIGTSYGTMGILMPLAVPLAHEISKINGMDANAMHHYMVIN

ISCVLTGAIFGNHCSPISDNVILSSMSAKCDHMEHVRTQIPYALFICGISLIAGYIPVSLGISVWFVLPL

NFILIALLLRLIGKKVP

>ABS44299.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKLELRIFRFDKTKDYEAYYKPYVYDNYENFASFYDLLLQVQDDDIYFDFDKDEDTCIVVNKQIIPLFT

PLEKIAKEFDFNLFIEPLSTKRAIKDLIIDKNDFLDKYKYLEKFGDEEDKKLYAKYDYLYYASEILDYLP

EYMGDGVFYLASKMIEKYPEKKIEILKTLADKEKGIFYHLESKNEILETTIKNLQNEILNLGLFDKNILR

FDLPKTNAFDNEIKELKEIKHNFKDFNIAFYGFNACDTLKSKLEAKFIPYENSTKNNGFTLLNLNPTLSY

KMAADIVLDAYDSGADFIVVKEEKDFYLFDTCAKKLMQTSKREFEDFYILSRFEFLALIQGIQVPSLKNH

TLKVSLI

>ABS44298.1 ATP-dependent protease HslVU, HslV subunit [Campylobacter jejuni subsp. doylei 269.97]

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAIKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHANLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>ABS44297.1 capsular polysaccharide ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MLNVIHALFFRELKTRFGKNRYLGYFWVVGEPMAIVLVITTIVTIIREYHHQVMPEGISIFMFLISGIVP

FFMFRSIVNQLMSGTQANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRFDIFPIHLSG

VLFCIFLLMCSAFALGICFAIIWHFVEPLRTLLAYFSIVFYWTSGVIFPTWFMPRPLLDLFYYNPLLHIF

ELLRFNFFEHYPLQDEYSYFYPIFWILLVLFIGLFVYYYNRQALTAAKKE

>ABS44296.1 imidazoleglycerol phosphate synthase, cyclase subunit [Campylobacter jejuni subsp. doylei 269.97]

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKHSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKIPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>ABS44295.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEYLFLVIVFLFIVFIIIMRYEKKIELLNKSLQSIKEDINELKEFTQKNRTLIEKNRSNIEDINK

>ABS44294.1 cation/acetate symporter ActP [Campylobacter jejuni subsp. doylei 269.97]

MKVFIFLSLIFNLALSAGFDLGEIHQKPINIIAVSMFLIFVLATLFITYYSNKKSKSKSGFYTAGGNITG

MQNGMAIAGDYMSAASFLGITALVFTNGFDGLIYSIGFLVGWPIILFLIAEKFRNLGKFTFADITAYRLE

VKPIRVISAVSALSVIIFYLIAQMVGAGQLIQLLFGLPYTFAVILVGILMICYVTFGGMHATTWVQIIKA

ILLLAGATFMAVMILYLTKFNLKYYFDLAISHHPKGENIMKPGTFLPDTISALSLGLALMFGTAGLPHIL

MRFFTVKDAKEARKSVFYATGFIGYFYILTFIIGFGAIALLLGNSQFTNADGSFNGATNMVAVILADVLG

GDVFLGFISAVAFATILAVVAGLAISGAGAISHDLYVNVIKDGKIDHKSEMRITKIATIVVGIFAILLGI

VFEKQNVAFTVGLAFAIAASVNFPILLLCIYWKNLTTKGAFWGGLIGLMVVLALVILSPSIWVKSFGFSE

AIFPYNHPALFSMPLSFILIYIISKLDDSKRAKKDKEGFKAQDFRAQSGVGVSEAVTH

>ABS44293.1 hypothetical protein JJD26997\_0968 [Campylobacter jejuni subsp. doylei 269.97]

MKKQIIGSILLCSSLFAIDDNLTKEQIFHNKYLKDKAAMQNKISVDELYKNTKDFNLSSMRQDMNLTKDE

IKKRYDIKFNQSAESNKSAKVISDMRRSDAFEKKIVDNQNYILYDKSMNFNEYLGEYSQNTKDMINQMEN

SKHLISTNKYLNPNEKIFIIISSSMDKSSIQNYFKLLENVKTDITFVLRGLVGNDARYINPTFSYLQDLL

VKDPNNKNKEDKNNFYYYNIQINPKVTRRFNITKVPAVIFIKNYDPIVEDYWKMTNTPADTDEEYFVAYG

EASINYALSEINKQAKSDGLARLIQNMNSNFYFK

>ABS44292.1 hypothetical protein JJD26997\_1486 [Campylobacter jejuni subsp. doylei 269.97]

MKDKSLEEIDLLKLIICALSFISVCTALLLFLLLPTLKNYKQANLRENSQLAILKTTKSKFDFSEDKIST

LRSENNKSLEQFEQNFNIGNFDIFLQKYFQNVKIQETKPEKQEKYLKNRLVIKATMNNPRRLYDFIDALK

NYNNLIKLDYPLNLKAGEQGISIDLTLKVYSN

>ABS44291.1 flagellar motor switch protein FliG [Campylobacter jejuni subsp. doylei 269.97]

MIKLSEEQKMVYDDLSMPEKVAIFLIQLGEDATTSVFSHMEIDVITEISRYIAMAKNVDRSVATAVLEEF

YTLLQSNQYIKSGGLEYAKEILFRTFGPEIANKILEKLTKSMENNQNFAYLAQIKPQQLADFITKEHPQT

IALILAHMDSIHAAETLEYFSDELRAEVVIRMANLGDISPSIIKRVSAVLESKLESLTSYKVEVGGPRAV

AEVLNRLGQKASKSTITYIEQSDERLAETIKELMFTFDDIQKLSTQAIREILKVADKRDLMIGLKGASEE

LKQKFLANMSTRASEAFLEEMGFLGAVRVKDVEDAQRKVVEVVQNLAEQGLVQTGDTDEMIE

>ABS44290.1 flagellar hook assembly protein [Campylobacter jejuni subsp. doylei 269.97]

MATTNWNSNLNWTNTTNTNQTSDKATKADNSSSSSSSGVVSNPNATLDKDAFLKLLLVELQHQDPTDPMD

SDKMLTQTSQLSALEMQQNTNTTMQKMVETMQKLSDSFSASMSTSALGAIGKMATVNENKVKLTGADEVI

ALKMYLPEDSDDKGITLEVYDKNNKLIFSEKSNEGKEVSKGLFTLEWPGRNNDGVYAGDGEYTVKMVYNN

KNGEKITANYGTYPIEGIKFVAGVAYAKMGGQYVSFDDIGEISDYKLGLSSTSVGDSSSGDSSNSGSTED

GGKEEKA

>ABS44289.1 hypothetical protein JJD26997\_0726 [Campylobacter jejuni subsp. doylei 269.97]

MFYLKKIDHIKEIIIASNCDLKKEATNLGVKFYLRSKEESDDDVSLFVKNIATQVKNKHIIYTYCNTPLF

DEKCLLNSIEKYLSLDFNTYDSLITCTKLQSFIFDENGAFNFKNIHTNSKNIATLYQLLNACFIMSKELN

LRYAYHFGKIPFKELIHKKDSFEIKDKESFIFFKNMLDKKERK

>ABS44288.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNIREFLLEKPQENNIISFLQDGVSQNTSGYLSNLKNEAINDFYKNKYAKEYEKYNFKDENLTNPMGSIS

EYKRDLYDYNKNPSMNANDLSDYILDKQSKFNASKPFFADDNEVARKSNQFMRDLGDELQKSGRGRLLQD

DDGSYWVQDNNGNYSKVQGSIGGDLYRGLRANGASVALGTAGAIGGSMLGGVGMVAGGALGASLGAGYDY

YANTKDTNEDMNLKEALMLMGENAGLSLIGDAAFAGVAKGARALKNTYNMAKSGARAGKDMIDGVAVNGK

NVSDRIVDKITQKDIPIVGKFTDGGLQNAETIFTNLTKNVENKKQIDELIAKENPTYLENAKPTIEILKN

IVEQGLNKNNPQFIQDSAKRTSAILKNISNALQGVPTTQRREVLLKSAQAYPEMGSFLEDVLKADKDASI

SFLNMIKGQDEVFKNKTGLKGEFDYKAWQKDNHAYENRVNQEYGGAIAKLDELNNGNIVLNNEDLVKLEN

FKNNHFLEQDVKNNIQSYLDEVKGKNLNAEQIFGLRTAINKQLNTGNKTYNTKKAYGIIKEILDDALIRN

ASDKTLAKEVLDNANKNFALKENFKESYLGMMKPQETKEGLADRLVKGLRNINEDKNLQNAFKGMNEQER

WVNETHAMNALLEKHRIEGIGYDFKSLAKDMKDVEFSSKKLKAVKGVIDTYALIYNNNRDLIMTALTSSG

KKTNSSIATTLKGALDRILISGILARLHALVPFMKSAKEQALRNQILDAIKLAKTHKEILSNLKNIKIAD

GEQSRIFKDALNHYMKVDKEQNKRLKDALIKEGVIKGDNFFMDKVNPKDNSLRFIGKNGKEYTINKDVRN

EWMKTFNLKNIDDEYIPNIPKEAKIALKDREIKLTKGSLLKLIEKDRIKYIPHIKETLESPQVILKDKDD

FIFIKNIGNQTYFTSIGKDYETHLTIVSNAPKKQNNIKNKMKNAEVVYNNNARALPTSRASSETKQVSFS

NLNSTQAKPKKNLMEELKENIKAKEVEQKNKKSVKQRLDEKIQNDKKASEDILKRYDNFLKESKNNKLDF

LDRMSLNTIEYNLSRQMIINAKESTNKGIKKDIPSALRGKIEQELNINPLKEFGENYTEYYHDGKGALQK

LLIEKQGQVAGAFHRKDLGDIDLVWGVEGSSRSDGYGLSKIVKYHNEVLHQIDDIINEGELKRDNKGRLN

IEYKNSIIGLRDNWKGEKNKNHWIITSYSKR

>ABS44287.1 methyltransferase GidB [Campylobacter jejuni subsp. doylei 269.97]

MIFKDYDFLQNYDLKNFGEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKTAFLRTLKIECELSNLHIYKEKVQEYKNTFKADIITSRALMDIK

PLLEICTNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRKYCIVK

>ABS44286.1 phenylalanyl-tRNA synthetase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MIITKSWLNDWLELEEISSDKIAKTLNSIGIEVDRVGALKSPDKVVVGYVKEKIKHENSDKLSICQVDIG

SETLQIVCGAANVDAGQFVAVATKGAIMPNGMEIKEAKLRGVDSCGMLCSSLELGFEKINEGIMLLDESI

GKLELGRALNTYEIFNDELIEVELTPNRGDCLSIYGVARDLATALNLNLKEAKPFKESENVLGIGRILRL

AAEKELNGLYNYRAIELKEEIQTNLLLSLRLAQIEGLGKNSIENLLNYATHSTGVLFNAYDLSSFSEKDE

EFTINLSKQVHGETKVSCKDKLLSFSGIFQNNESRCKNDSKIIIIEANYTDPSVIADAKIYHKDQDEKML

YRSFRGSEPKLNLGMDFLLGIFEQIPNLVIYSSSQQILTDKELPIIPISIESIGDIIGQNVDKDEVLKIL

KKLGFELILSGEGLINVKAPLHRPDIKNLSDICEEVVRIIGIYNIASKGLEFVEKNRLNSVYKNYIEFLN

LRKRAVASGYFESLHYVLDNEEELKRLGFDSVKLKLINPITAELNTLRTTLLNHLLNAASLNAKNSKKII

KIFELGAVFNVNNQELNRIAFIHSGLKEEAKISNKAKPESVQFYDFLLDIKNIIGDFKLKSSKYNILSPY

EQADIYLSDIKVGFIGRLHLKIENDRDLPKTYICELDLDLIKQDFKIAKPYSKFPAITRDLSVLIPKGFE

YNQIKNCIEELNLEMLENFRLVDIYSDENLKEFYSITISFSFRDINKTLEDNQVNECMDKILNTLKNLGL

DLR

>ABS44285.1 high affinity branched-chain amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MMVKIKVSHLIFLIASIIFIFISPYIFGDYGLNIVNQIAIFIILAVSYNLINGVTGQFSLEPNGFVAIGA

YAATLVLLSADAKNDQFFLDGPSSFILAIHSNSFILALIVAGICSSLLALILAFAVFRVRGDYLAIVTLG

FGIIIKIAAINFPSITNGSRGLVDIPQFSTIYWTGGIAIVAVILILNIVYSKYGRAMKAIRDDEDAASAM

GINTFWIKTLAFSTSAFLEGVGGGLLACLLTTVSPTQFDFLLTFQLLIIIVLGGLGSTTGAIIGAILVIG

GSEWLRFLDELNIKIDSLNLDIQSTPGFRMVVFSIVLILVMLFARKGIMGYDELSDVIRGIKKRFKRSEK

>ABS44284.1 transporter, LysE family [Campylobacter jejuni subsp. doylei 269.97]

MFDSFLSGVFLGFGVSVPFGPVNILILTYALKAFKNSIAVGLGAFCIDMLYLFLLQFGLLNFLDNVIFMR

SLAIFGFCFLTYMAYLMLRKKKESLNLEHKEFKESLLKSYIKGAFLNGSNPFVIGFWLSAASVVLSSDHA

YLMTLGLVMAILFWVSALAFVVARYSHVFSAKVVFIINIISAIIIEYFALNLLYKTFLG

>ABS44283.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLKRLALLIALSSLMLHASDLVKIYLNQGLDAVGVAIEKELTQKDFWLSEIGDKNISLGYYDDNVAIVLT

NKTDKILRVYSYEDGKIKKDFEQKEIITGLMGDKKIEGDLKTPVGFYELGRKFNPGDPYYGPFAFATTYP

NLLDKVQGKTGGGIWIHGYPLDGSRLDEFKTRGCIALFNNNLEKFAQVVQDKKVFVMTEEKEKIRAKKDQ

IASLLADLFTWKLAWTNSDTNTYLSFYDEQEFKRFDKMKFEQFASMKKSIFSRKEDKKIKFSDINISPYP

NLENETMYRISFYEDYYTKNYQFRGDKILYVKIDSKGKMKILAEQ

>ABS44282.1 NUDIX domain protein [Campylobacter jejuni subsp. doylei 269.97]

MAFKNLKELSFEKSNYIKPKRFAYESNGRLCTWDFIESKDSVSVLLYHKELESFIFVRQFRIPLWYHQMH

DKDYVKDDNMGYTIELCSGLVDKNLPLKEIAKEECIEELGYAPKNLEKIGDFYTGFGSGVSKQSFYFGEV

DEKDKIYSGGGVDDEEIEAVYVKVQDFEKKCKNMIRTPLLDFAYMWFLKEKWEKLKII

>ABS44281.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKDINYYLNLPYKINLVKLDDGDYFAQFDDKELNKLVLMAGDGKTPNEAIDDLKNALACYLEEALAKNE

FIPEPLQKDKSKNLAITLKNSLVDEIDFYSKKMGLSRSAFLAVSAKAYIKTL

>ABS44280.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNLITKLENEERLNQEEANALWDLDLFTLGKYAHKKRTKLHGKKVYFNINRHINPTNICADTCKFCAFS

AHRKNPNPYLMTHEEIMKIVDETVKRETKEVHIVSAHNKDTTWQWYLEIFKMIKEKYPNLHVKAMTAAEI

DFLHRRFKMSYEEVIEKMLEYGVDSMPGGGAEIFDEEVRKKICHGKVSSENWLNIHKLWHEKGKQSNATM

LFGHIEERHHRIDHMLRLRDLQDKTNGFNAFIPLVWQRDNSFIQTDKIMDSEEILKTIAIARLVLDNIKN

IKAYWATMTLNLAMVAQEFGANDLDGTIEKESIQSAGGAKSAKGTGLKTFIDMIKTSNLIPVERDSLYNE

LKTY

>ABS44279.1 7-cyano-7-deazaguanine reductase [Campylobacter jejuni subsp. doylei 269.97]

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVIELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVP

>ABS44278.1 hypothetical protein JJD26997\_0998 [Campylobacter jejuni subsp. doylei 269.97]

MINTQLASQIANTQKNDLKVDNSTSKDKTNLKDNPKEALAQALKQNLGLSKDASSEEILAKFVQNETGAK

LKELVNKLLDQINAQKNPDSPVLKQGKNLNLAPNFANELKTLSTELTKSDIFTQVLDRLNQILKPASEIK

NNNLAPLFKNSGVFLEAKLKDALNEELLPKSFHSLLSTIKGLSSEKLSVQIAQLANTNLNPKDTLKELKN

IINSSKNENKQILNQSSFKALLNLSSKLENFKNYISKNPSHAQEKITPIANKILKELNSIKNDFFKALNK

PENLMIKDPNILKQTATAFEKLENTLKNILGNQASKIQDKENILENLLSNKENIKEEQLNHNTKNQDEEK

HIKVSKEETLADDAKTDIKQDVKNEENLPKKEVNANLDSSTKTHEENIKENPKFYETKTESKTSINTNTN

TNNTQNLNNSQNIQPNNNQTMQNIFTNQEFIKQNIVKNLAFNVENLDLEQVQDLSKNLSNLSRRLNESLK

ELEPYTQNAKLNQAELKNLEHKLNLSTKDLAQIKPKTEQDIAKSLHHDVKSTLLQISNLAKNEGNEAVYN

QANRLLAQIEINQLMSLANDSINTYLPFSWDDLNDSKIVFRRGKKNKFFAQIKLEFAKLGDLEILLSLNN

EKYIDINIMAENIEFRKTIYENAHELKRNINKAGLLSANFFVGDIIKSKFNTRNMKNLDLEMGMDKKV

>ABS44277.1 3-deoxy-8-phosphooctulonate synthase [Campylobacter jejuni subsp. doylei 269.97]

MKKMILIAGPCVIESKDLIFKVAKQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKV

LQTRGIEDEGYEAAQKNGVFVAERGASFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLDLTRLKNCVNTLLEIQNII

>ABS44276.1 6-pyruvoyl tetrahydrobiopterin synthase-like protein [Campylobacter jejuni subsp. doylei 269.97]

MIIRKLFEFENAHIVRFCSSKRCKSSIHGHSYKVEVLLESKYLDNAGMVYDFGLLKTYIRQIIDSFDHAI

TLFKYDDAKYLEEMKKYSSRWICLPVNVSAENFCRVFFILIDALLKQTKMVNGEQGVILQSIIVHETRTG

YAQGFREDAYSELMPKISLQDIEFSNGIKAEWNDIDFYNKLKNEEIFINPKEI

>ABS44275.1 tryptophan synthase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MKKAYYGDFGGQFLPESAMFALNELENAFLKFSKDKFFKKELSELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVTHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGVDTLYHAATLNKGETGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVINLSGRGDKDMQMIREYKKGVIYG

>ABS44274.1 FecB protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIIILFLILLDLTQSKELKIISLDWAIAETMMMLNYQPLAVGDKRIYNVWVKEPVLPNEIKDVGLRVQ

PNIEYIINLKPDLIITSSLFSIDNYILKNKTKVIDFYQNKKDVYSSINESVLQIGMILNKKQEALELIRN

TKLFFKSFKNKLHYAKPIAIVQFIDRKYLRIYTKHSLFGAVLEQLGLNNAYDKDVNNAWGVDTISFLDLL

KFSKETKFIVIKPTPFTLDEELKKNPFYQKINIFQDYNELDPIWSAGSLMSMRRFAKYLVEVIK

>ABS44273.1 chemotaxis protein CheY [Campylobacter jejuni subsp. doylei 269.97]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>ABS44272.1 bacteriophage replication gene A protein (GPA) [Campylobacter jejuni subsp. doylei 269.97]

MPVFLTITLNGCFRKALEGDFSTFTQKDKKYFDYSLSYKFENNISFTIKDLINFLNRQWNLFILRIHRKY

KGINKYYIRCFEPHKKDGVPHIHALLYIPRYAFDYIFKTYKDIFNAPQNLKQGNKLTQEQVLNGEINGFQ

WSLNNPTGYIMKYIYKTFINFNERQDLDFLSAWYVKYKVRRFLSSKMPVPLWIYKKVNFFKKDLYHLCKL

IDNPDYLIEWSFEKDYFIFFSDDEEIEYNQGYLTYKYKGRLLYEYKKEIQESIKHYYSYSFKNKDDVYKI

NLGLLKNPKPIKDYDLMTLINSENFKYSNCKKIAYYRNLAFERGLISEKLDINNVDDLELVEKAYKYVF

>ABS44271.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQKELQKLPQEEQKIYQNIPPSDENNDFESNVDDPFVAKGSLVLTNDEYPSRVYVGEVFPITIYARTTEN

TKFDFNISVEKTNLSFLNPDAKWEFINNEYKTTLWFEAKNSNASLSKISIKLLRNNEAFQEADINLNPIK

FENTLSNKDFSHLVASSLEIKKVKASYFDDANIIMMVELNATNANLKSFFMEGIQKQGIENLKGDFNASS

AFYYAILPLSKTNFEFSYFNKDGKKLENINLKLKISDDEISTQSDLNPVNKDLNIYKQYTLWFLAVLFGA

LFVWRKNYIILALAVVCFSLSFLVDTNTQNAIIKAGSRAKILPTEPSTYFYTANADEKVEVLGKRQNYIK

VLFSDGKIGWVNKDDLQKD

>ABS44270.1 dihydroxy-acid dehydratase [Campylobacter jejuni subsp. doylei 269.97]

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGIDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMIVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGKAVCFNSQDEAIKGI

IKGKVQKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSIGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEKEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>ABS44269.1 amidohydrolase family protein [Campylobacter jejuni subsp. doylei 269.97]

MFIVAARYLFLCDEDFTILENQALVFEDEILELGKLDNLRKKYPKAKIIKTPKNSVILPAFINPHTHLEF

SANSTTLHFGEFLIWLKSVINSRSMLNAQAKEELILQNINKMQKSGIGTIGEISSFGSDLDPCLKASQKG

MRVVFFNEILGTNENQVEGKKQEFLKRFENSLKFKNDFFIPAISIHSSYSTHPSLAHFALNLAKKQNLLV

STHFLESKVENIWLRESKGGFKKWLENFTLHPKPLYTPKDFAKLFKGVRTLFTHCVYLKEYEWLDKNLHS

ITHCAFSNRLLSQKSLDLKKALKSCLNIHLGTDGLSSNISLSLLDEMRANLLIHKNFDLLELASKLLQMA

TLYPARALNLNLGELKKGKIADFSVFELGECDKKQAPLQFILNAKEVDKLFIKGKECKI

>ABS44268.1 flagellar hook-associated protein FliD [Campylobacter jejuni subsp. doylei 269.97]

MAFGSLSSLGFGSGVLTQDTIDKLKKADQKARIDPYTKKIEENTTKQKDLTEIKTKLLSFQTAVSSLADA

TVFAKRKVVGSISDNPPASLTVNSGVALQSMNINVTQLAQKDVYQSKGLVNDSGFVNAQLNGTADLTFFS

NGKEYTVTVDKSTTYRDLADKINEASGGEIVAKMVNTGEKGTPYRLTLTSKETGEDSAISFYAGKKDAQG

QYQSDSEAENIFKSLGWELDKTSSIDPAKDKKGYGIKDTSLHIQTAQNAEFTMDGIKMFRSSNTITDLGV

GMTLTLNKTGEINFDIQQDFEGVTKAMQDLVDAYNDLVTNLNAATDYNSETGTKGTLQGISEVNSIRSSI

LADLFDSQVVDGTTEDANGNKVNTKVMLSMQDFGLSLNDAGTLSFDSSKFEQKVKEDPDSTESFFSNITK

YEDINHTGEVINTGSLNKYLNPNGSNTGNNTQGLDFKPGDFTIVFNNQTYDLSKNSDGTNFKLTGKTEEE

LLQNLANHINSKGIEGLKVKVESYNQNNVKGFKLNFSGDGSSDFSIKGDASILKELGLSDVNISSKPIEG

KGIFSKLKATLQEMTGKDGSITKYDESLTNDTKSLTQTKESTQTLIDTRYETMANQWLQYESILNKLNQQ

LTTVTNMINAANNSNN

>ABS44267.1 5-methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKNSIISYPRIGANRELKFAIEKYFKAQSSKEELLETAKNLRARHWKDIQNAGIDFIPSNDFSLYDNVLD

TAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDDASIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDKKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALVQQYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIILNTSCSLLHVPYSTEFESKLDPSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFKANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSADVRSNRLAFKQKKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPIIWGDVSRTKPITLACSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFSDILKEIDAMDADVISFEASRSNLSLLDTLKAVHFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIRKQL

>ABS44266.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKFFLTILFFITSIFALELDFSVGENGKSLDDNNTVLILGGIQGDEPGGFHAASLLLSDYNITKGKIIVA

PNLAFDSIIKRSRGNNGDLNRKFASISPKDPDYKRVQRIKELILLPEVSMVINLHDGWGFYKPIYIDAMQ

NPKRWGNSSVIDTSEINASKYPDLENIATQTVNIVNSSLADPKHAYHLKNTKTQELGDTEMLKALTYFVI

SNHKAAFANEASKNLPVNLRAYYHLLAIENYLKTAGIEFSRDFELTPQGVDKAINKELEVKLFDDRILLS

LKNPRKLINYVPFPVNKELNYNTSNELTAIIAEGNSFYIQYGNRFQTRLYPEYLEFSDAFNEVTFQVDGN

ETTVFFGTKVKVKENFLIPKIANVRVNIIGFDHSKDESGILVHKKNIRTQYSLDMAGKIYRVEFYELRGA

NLQRLLEANTHGKLIKNAKNLDLNTLKMARSKDKFLGSILVEFE

>ABS44265.1 hypothetical protein JJD26997\_1757 [Campylobacter jejuni subsp. doylei 269.97]

MSLHEKKVFENEILDFIKSGLAPNLKAVILTAKEIKLIKIEDRNG

>ABS44264.1 amino acid ABC transporter, periplasmic amino acid-binding protein PEB1 [Campylobacter jejuni subsp. doylei 269.97]

MVFRKSLLKLAVFALGACVAFSNANAAEGKLESIKSKGQLIVGVKNDVPHYALLDQATGEIKGFEVDVAK

LLAKSILGDDKKIKLVAVNAKTRGPLLDNGSVDAVIATFTITPERKRIYNFSEPYYQDAIGLLVLKEKNY

KSLADMKGANIGVAQAATTKKAIGEAAKKIGIDVKFSEFPDYPSIKAALDAKRVNAFSVDKSILLGYVDD

KSEILPDSFEPQSYGIVTKKDDPAFAKYVDDFIKEHKNEIDALAKKWGL

>ABS44263.1 hypothetical protein JJD26997\_0309 [Campylobacter jejuni subsp. doylei 269.97]

MQNIGGFKALSKELITKLLNEFPKKSILFYDDFIKECEIYKIDFVSCIYFLKECKVLKYDKENNGDFSGV

LISPKAYLYFSKNDLKDIDDLIEFCIK

>ABS44262.1 flagellar basal-body rod protein FlgG [Campylobacter jejuni subsp. doylei 269.97]

MMRSLHTAATGMVAQQMQIDVTSNNIANVNTAGFKKSRAEFADLMYQVMKYAGTSTSATTLSPSGIEVGV

GVRPTAVTKVFTKGNLKSTSTDGLDMAIAGNGFFQIQLPDGTIGYTRNGQFTKDNEGNIVNSDGYRLLPE

MTIPEGATAINVATDGTVSVMLPGEQQETQIGQVELVQFINPAGLHSMGDNLYLETGASGAPVAGIAGQD

GLGTIRHGFIELSNVQLVEEMTDLITGQRAYEAGSKAITTSDDMLGIVNQLKR

>ABS44261.1 glycerol-3-phosphate dehydrogenase, NAD(P)-dependent [Campylobacter jejuni subsp. doylei 269.97]

MRIAVIGAGKWGSALHLALKENHTCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDDDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGAKEETFLGLG

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>ABS44260.1 peptidase family protein [Campylobacter jejuni subsp. doylei 269.97]

MEKILKILLFLPILALSAKAEWVVKSYQEIKNERVIRQTYEQSCGASSLATLLNILDDQKKFDELELLKI

MSGQELYTDMVSFADLNDAVKKLGYESNSYQINRENLDKLVNIPMLVKIEDDPRFPHFVIIINHKGNYLQ

VLDPSHGEYISSKSQFFSIWDRYNKGGYALIIAPKKELKPFKLNTPKSLHFDFSPFSLF

>ABS44259.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MYKKKYTREEVERMMNEYFSEEKILLRTKERDIKEPKSMTGLALYMKTTRQTLYEWGKDPNLSDLIEYAK

TLCENEVITHSLVNLYNTQMSTFILKNNHGYVDKQEILSDNVQKIEIIRSEIQ

>ABS44258.1 RNA pseudouridine synthase family protein [Campylobacter jejuni subsp. doylei 269.97]

MAYIKIKLSNNEKKAFQVLVENLKISINEAQKLIDKKRLFCDGILVEEKNKILKGLVELIVYENNPKGVE

IVFENENFAILEKESGILSHPNGRHCKYSLSDEIWHLWGKGACVAHRLDKETSGLILVAKNKKAQIDLKS

LFEKKLVQKEYLALAHGKIEKNFIVDKAINLAKNYDDVKTRMQICKEGKQAITEFKILEYFPKINATLLL

CKPLTGRQHQIRVHLHYKNHTILGDPLYGLSKEQIESILDEKLSPKERLKLTGALRLCLHSYRLKFQYKN

QNFDINSKINIKEIFNNSIK

>ABS44257.1 hypothetical protein JJD26997\_0209 [Campylobacter jejuni subsp. doylei 269.97]

MKKWIFIVFCFILGFIIHIFYIGYTNELLFNKFIKNSNPDYTITDIYFKKGFLTSKGSFTLNHSHTQLST

KIDLKFNNYFLLNKIIKGNFTNPFDFLDEVLKNNKLGTFTLKLHDNNSKIFLNIKDINLSNEGGDTIING

GYIEVLMNKNLEIKNMKIHFDMIDFSQFYTKFVLQNLNYEQFFNNPVQFYELNLFSDSQQEINFDYLVLD

NNKINSFYSKNQVNFNEENSAVNLNIQGKSNEIDLKSLLGQNLNFDKTKFNITINKFFNSNFNISHFIQK

NLDLKIQNLILEKNKQNISLQGNLNINNSYQAKLQVISSDEPDEIFPWTKDYGGLNQYFLKGNNNFFLNL

SYDSLANPQLKINGSEFSNMDLN

>ABS44256.1 catalase [Campylobacter jejuni subsp. doylei 269.97]

MKKLTNDFGNIIADNQNSLSAGAKGPLLMQDYLLLEKLAHQNRERIPERTVHAKGSGAYGEIEITADLSA

YTKAKIFQKGEITPLFLRFSTVAGEAGAADAERDVRGFAIKFYTKEGNWDLVGNNTPTFFIRDAYKFPDF

IHTQKRDPRTHLRSNNAAWDFWSLCPESLHQVTILMSDRGIPASYRHMHGFGSHTYSFINDKNERFWVKF

HFKTQQGIKNLTNQEAAELIAKDRESHQRDLYNAIENKDFPKWKVQVQILAEKDIEKLGFNPFDLTKIWP

HSLVPLMDIGEMILNKNPQNYFNEVEQAAFSPSNIVPGIGFSPDKMLQARIFSYPDAQRYRIGTNYHLLP

VNRAKSEVNTYNVAGAMNFDSYKNDAAYYEPNSYDNSPKENKSYLEPDLVLEGVAQRYAPLDNDFYTQPR

ALFNLMNDDQKTQLFHNIAASMEGVDEKIITRTLEHFEKISPDYAKGIKKALEK

>ABS44255.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAELKRVVVKPFDKDRFEVVENYEFELNVTKGIIEQGYKTDGASIPRIFWSLYPPYKSEYFTACVIHDWL

CSKAMHEKSIKNAYKLADLALKEAMLSLGVSKLTTYAFYYWCKYYHILKCFLKGYK

>ABS44254.1 hypothetical cytosolic protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFFSTIILASVLYAGGGKEMVLGKTKDFAERDMIELIQEFIEKNKAQIEQKAFKTREQARENVKNYQ

PKGLLSLKPALEDKIFYPDLTYTLDQDIKNANGDILYPKGFQFNPADYVKLSYAMVVINGNNKKEVKWFE

KSGFSNQVSYRLLLSEGSYYDLNQELKQEVFYLNPQIREKFKIEKTPSIIKQIDNKIQIHEICIPCMENN

KTKIIDNNLSKKEI

>ABS44253.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MISLDLLYYIVGILFLIFGILSFSNQAKDMKSRISGGIFWISYSFTFLLAGVLPHFVMGCIVILLALIAG

FNLLKPAKIEVSKEEKEYEIKHANIYKNKLFIPALMVPLITLIGTFLFPHLSFFENKNATLMALIIGIII

SSVVACFMFKASPKRAVKDAAHTMDHISWAALLPQILATLGVVFVSTGMGDQVSKLLSSYISLDNAFIVV

AVYCIAMALFTIVMGNAFAAFPVITAAIALPILIIQMHANPAIIGAIGMLSGFCGTLMTPMAANFNIVPA

ALLNLDDKNGVIKAQFMSGLVLLVANIFLMYFLAFRF

>ABS44252.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDFFFVEYRDPLVGLIILTILVFIVAVANYIWKIFASKDEEQKLEKFIKKFEMDNAHKELLRNSSLSFGN

LSFLAEIFTKSGEFEKATQIYLIVLEKCKDKQERELIFLSLAKVYFKAGFLERAKEVLLQALKLRPRNIQ

ALKLLKIVYLKLRSYKENLELLECLFELNEDVQKEHDFIKALELCTFNITDEEKKKKLLEFKIKDNPMLG

RLVFEKYRMFLGQNFFDICDLLYRENEAFNLENQDFLEFFYALGKISKHDDTHQFVFKNSNFKMLKILKD

NSFNAGLEFSYRCSECKNVMPLFFYHCPVCYEFNTCKIIYEVKNNETH

>ABS44251.1 hemolysin A [Campylobacter jejuni subsp. doylei 269.97]

MRFDFFISKRLNISRNKALELIENEEVLLNGKNFKASCDVKNFLENLKKAQDLNPEDVLLADELKLDLLS

EIYVSRAALKLKNFLEENDIEVKHKNCLDIGSSTGGFVQILLENKALKITALDVGSNQLHPSLRTNEKVI

LHENTDLRAFKSEEKFELITCDVSFISLVNLLYYINNLALKEMILLFKPQFEVGKNIKRDKKGVLKDDKA

ILKARMDFEKACAKLGWLLKNTQKSSIKGKEGNVEYFYYYIKN

>ABS44250.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQTIDQIFQTQIDIKKSTFLSFLCPFKDFKFLIETLKKEHPKAVHFVYAYRVLNDFNQIVEDKSDDGEPK

GTSGMPTLNVLRGYDLINAALITVRYFGGIKLGTGGLVRAYSDAANAVINNSSLLSFELKKNITIVIDLK

NLNRFEHFLKTYSFNFTKDFKDCKAILHIKLNQKEEQEFEIFCKNFAPFEIEKL

>ABS44249.1 deoxyuridine triphosphatase domain protein [Campylobacter jejuni subsp. doylei 269.97]

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIESFAWKHWKNISSPTNWEN

VRIEIVDIWHFILSLLLEEYRNKNGNDFKIIANEVISVSVFQDFCKEEEHPNESDIYGILNDIELIIHKC

SGFGFNLGELLSIYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQILE

QELDFDTIYKKLEECYKKA

>ABS44248.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIYLAQTDTTVGFLSKNLEEINALKGRNKNQPCLITTAKFSELKSLARVSNLFKNYVRRAKKTTFIYANK

KAIRVVKDCKHAEFLKKNGYFYSSSANQHGCKFDEEWARSVADIILDKNFFENIPSKILKLSKNKMIKIR

>ABS44247.1 sigma-54 dependent DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MNLVIVEDDINMRKSLEIALAEYEEFNIKSYKSATEALKKIDENTDLIITDINMPGIDGIEFVKACENKY

DFIIMTGNATLSRAIEAVRLGVKDFLTKPFDVDTLVEAIKRAKIIREKTADKKSKKNEKKEENKDFFSTS

PNLEKTLNLSQKAAKTDASVMFFGESGVGKEVFSRYIHTHSKRSNKPFVAINMAAIPANLIESELFGFEK

GAFTDANATKIGLFEMANEGTLFLDEIGEMPYEIQAKLLRALQEKEITRLGSTKSIKIDVRIISATNANL

DEKIKNGEFRSDLYYRLNTVPINIPPLRERKEEILGIAQKVLEDTCKEYDFKEKQLSQEAKNALLEYDFP

GNIRELISVVQRACILSENDEISSEDLFLEARSVKKDVKNLEKELICEVLLSVDYDKDQASQILGMDIKI

LNEKIKKYQIKDK

>ABS44246.1 putative nucleotidyl-sugar epimerase [Campylobacter jejuni subsp. doylei 269.97]

MAIEFDIKESEILKGVFIIKPNKFKDLRGEIWTAFTQEQLAHLAPVPFKHDKFITSKKDVIRGIHGDTKT

YKLATCLYGEILQVVVDCREDSPTYLKYESFVINPQNQLLILVPKGFGNAHLVRSNEAVYYYKCAYEGEY

VDAEEQFTYAWNDERIGVKWGVEKPTLSERDIRAGLK

>ABS44245.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDKLDFRSQDFSQTGKAMYELACELFPIPRSITGQGFRDSLEILNKTLGGGILKFHSIKSGTKVFDWIVP

DEWNVKEAYIITPEGEKICDFKKHNLHLLNYSEAIDQEIELEELQDHLYSIEEMPDAIPYVTSYYKRRWG

FCLTHNERKKLKKGKYKVYIDAKHDENGFLDYADFILPSTQNSKDEILISTYLCHPSMANNELSGPVVAI

FLAKWLLSLKERRYNYRFVIIPETIGSIVYLSKHLEHLKKHVKAGFVLSCLGDDHTYSLIHTPKENTLSD

KVALHTLKNKENFKAFSFLDRGSDERQYNAPLVNLGIVGVCRTRYGDYDGYHNSKDDLNFISEKGLMGGL

QSMQEMILNLEINAVYENTIVCEPNLGKRGLYHTLSAANDIPLACNFLAYCDGENDIIDIANILNMQAYE

FKELLEKIKFYGLVK

>ABS44244.1 peptidase, A24 family [Campylobacter jejuni subsp. doylei 269.97]

MIFFIIILGACLGSFCTSLASRIIEKKPFFISRSFCFSCDTKLKYYEIIPIFSYIFLKAKCRTCKCHLPI

SLLINEILGIILLILVYFLSQNFYDFLFLSLFLFNFFLLSLVDIKLRAVPQILLWSTFLFAFFYAFRESE

ILYFLIFKEFSGGFLLNAFSFGGFVFLLKSLVFFLMNFRKKDEILENLGDADIIIMSCIGGILGFEYGFL

VLFIASILTLPFFIFFKIKAIKEQELAMIPFLNIAFVAVVFYKNLGLF

>ABS44243.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEITDLPYLIIGIISGIASGLFGIGGGMIIVPSMFALGASAHHAIGISVLQMIFAAVFGSYINYKKKNLN

LKDGIMIGFGGLIGASFSGMLLKALSDVALTSVFLAVSCIFFIKYAFGIKENIVQNQRSVWVKNVILFIA

GAFTGIFAISLGIGGGLLIAPILAYFLGYDSKKVVSLSLFFVIFASISGIISFLNSGVIDSEVIHKGTLV

GIASMVGVFIGIKIIEKMHISAHRKILLCVYALSILGTTHSLLNKLNLINF

>ABS44242.1 translation elongation factor Ts [Campylobacter jejuni subsp. doylei 269.97]

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQNNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSAEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKTQGKPEKIWDNII

PGKMNSFIADNSQLDSKFTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>ABS44241.1 sex pilus assembly protein [Campylobacter jejuni subsp. doylei 269.97]

MKNPFIKFFSNDKSPIDAQKNQNKNKVLIFTGIFVIAGALLFLAGGGDKKESKEKVGNFNLVQDDPMAKT

RWVGEASNDLTLAKKRVDSLDTRNEELSKQVSDLKKIITDMKKENDANKRNYELNLKNIQKTQKKATENT

PATVLEDTPNNQEEDLYKNFPQPNKNTANAQKPSDYGLTHFGDVPELNEVTQTRYTPIQDSLSFTNIAKP

EEKEKVEKKSTRHVIPTGSIVKAVLLSGMDAPTMTQAKTEPLPVLMKVTDLSILPNRWGYDVNECFLMGE

GYGDLTSERAYIRVNNISCVTNKGQKIYMAMKGAATGEDGKLGLRGEVVTKQGALLARTLIAGFLQGVGE

GFANQNQIVTQNGFGGTTTTNSNMSASATLQTGAFKGLSKSAEKLADFYLKMADQVSPVIEIAAGREINI

ITTATLELKTLEEQQQDNVKKNNNKK

>ABS44240.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDTIDSENAKKINKTIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNISFKNLK

>ABS44239.1 ribosomal protein S2 [Campylobacter jejuni subsp. doylei 269.97]

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGALKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALPNEEKEITDEEKKEVLDESMSEEDFGEEQE

>ABS44238.1 dihydrodipicolinate synthase [Campylobacter jejuni subsp. doylei 269.97]

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPAGTTGESATLTHEEHRTCIEIAVEIC

KGTKVKVLAGAGSNATHEAVDLAKFAKEHGADGILSVAPYYNKPTQQGLYEHYKAIAQSVDTPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYIAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>ABS44237.1 rod shape-determining protein MreC [Campylobacter jejuni subsp. doylei 269.97]

MKNKIFYVLVLAFLVFISFYYGGLIKQNVLRVNDFVIGIFYNIKDYLGEKISEHFNQANQIQQLKARNKE

LEDIAVKVTSFANQLNRILEDQNSTKYLPQVSLTRVISYVQLNDYKKLWLDWSKIPVGKNRGLIYQGYTA

GIAINKNGRAMALLQGDDQCVFSVYIGKSKAPGLIQGEDGRIVVKFIPKWAKINIGDEILTSGLDNIFFS

DIPVGIVNRVDDEDMYQSVEVKPYVKISIPAYLYVVDNL

>ABS44236.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MQNGKFFLISFILVILFLLLYLFKGFLLVIIIASLMAVATSNINAKFLNLTKGHKFLASILTTACMVLLF

FAPFVYGMIELAKALKNFDINLVTQTLDYVKNYQFTLPESFNFLEPKIKEFLASIDLNSISKQILSYASN

FTKSGAKFLVDMVLICVFYFFANLYGTELVIYLKSIVPIDKKELDDVLSEVGNVMAVVLYSMVIVAIFQG

ALFGLITMFYGYDGILMGVIFAVSSLIPAIGGALIYVPVSLYEFASNNLNSALVIFIYSVIIISFIADTL

IKPLIIKWINKKLVKTPTKINELLIFLAMIAGISTFGFWGIILGPAILTFFVSTLRMYVILKDKNLI

>ABS44235.1 hypothetical protein JJD26997\_0944 [Campylobacter jejuni subsp. doylei 269.97]

MTLTINNADEKLLKAVQSIVSLSPKATLEIEQEIPSGETIEALSNPVSCGVFENYEDFKKALQD

>ABS44234.1 tRNA (guanine-N1)-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKFSFVSLFPNLMEFYFKDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLIQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLFEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>ABS44233.1 hypothetical protein JJD26997\_1723 [Campylobacter jejuni subsp. doylei 269.97]

MKFENLMREILGKKRFELLKFLCENADKNGFIMIKISELEEKLHQSKPTIIATFKFLEEKKLFKRLKNGF

YQLNIGDKNDT

>ABS44232.1 putative dnaK suppressor protein [Campylobacter jejuni subsp. doylei 269.97]

MKKNEIQNFKNILEERKKAILENLQSNSNEIEALHNSVPSDSVDFSVIETGSQIDFAISTNLKEELIEIE

DSLDKIKNGTYGICESCDDEIDSQRLKVKPHARYCITCRQIAEQGKKYEN

>ABS44231.1 hypothetical protein JJD26997\_0931 [Campylobacter jejuni subsp. doylei 269.97]

MKKVILSALTLSTSLFAINVIDNPSSDIININVSNSSVNRIVLPTQILDVAYSKEKGIDIKISGNQAFIK

FLPIQKERVRSVGKDRYEPVGEPEIVYDKAKGSEVFFVTANRTYSFALNPKNMDAETVIINDFSAQKDEI

LKYESDDPYMSTMGKITESILKGGVPQGYKVKKINKVISSDKTLITRELTNYDGLLYKATLLEVKNKTDK

AIRLNPKDYISIAKEAPKAISIYYNNEVNHLLPYSKAQIIIITKGGRNTNGGVFDGGMSK

>ABS44230.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQRYGQIIKIKKEKIQEYKNLHAKPYEGVCEMIKECNIQNYSIYLFGEYLFAYFEYVGADFEADMAKMAR

DENTQKWWKVTDPCQISLGYAGQKWLNMEEVFHLD

>ABS44229.1 phosphatase, Ppx/GppA family [Campylobacter jejuni subsp. doylei 269.97]

MAKKTAVVDLGSNSIRMVIFEKTSRYGFYTTCEYKRKVRLGENAYNNGKILQEEAMQRAEDALAFFKQCA

LKHKCKKIFIVGTSALRDAPNSKNFIKRIKDNLSLNIRCIDGKSESYLGGLAALNLLSPFKDGTTLDIGG

GSSELCLIKNNRIISCISLDIGTVRLKELFYDTGKMDSLEEFIKPILEQIPKEFCNQNLIAIGGSLRAIS

NSIMQKNSYPLKNLHDFRYMLDEEKGHILKIFNSNLDSLINFGIKKDRFDTIKKGIFIFLKIAEKIKAKQ

VITSGVGIREGVYLQDLLRPKITFPPNFNPSLKCLQDKFLQSKQKNKTPHFALQIFTTLKNLHKLNDNYK

HALLNAAKLCHIGEYLNFYFANEHSAHFVLGGLNYGFSHKEKALIASIIKLNGKKVNPYHLEPYKQLLPN

IHTISWLNFILCLAKTLSTNEDKIDFAFANNTLYIYQENKILNLPKDELKKIAKPATIALAINQKI

>ABS44228.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKILSHRGYWKNKQEKNSIAAFDRSFLNSYGLETDLRDMRGGGIVVSHDMANENCLKLEDFFKLYKKYNT

NLSLALNIKADGLQNLLKELIEKYEITNYFVFDMSVPDALLYIDLNFNVFTRQSEYEKEPSFYDKACGVW

MDEFYSHWIDKNIIKKHIDNSKLVCIVSPELHKRDYKKEWQEYKQIEKELHIQEQLMICTDYPDEARRFF

ND

>ABS44227.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEINEKEKEELVTLLNSLINAKDKALLSN

>ABS44226.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MFKISPCLICSFFIFSDVLASEPTFDYTYKFILKKDERASVQIKEIGYEDKVQNFDFYWTLFDNTNIIVH

SKFRKYPRQFVMSLRRNLDWVAQTLIPDYTNPHIDRARLILEFSGYNKGLATFTIYIEDKKSRLMVEFLD

PRKKALQNPPQNNQVVPMINFNEPQVKPLTNKENNSSN

>ABS44225.1 biopolymer transport exbD protein [Campylobacter jejuni subsp. doylei 269.97]

MLIRHIKMLKLPKNEGLNIVPFIDIMLVLLAIVLSISTFIAHGKIQISLPSSENATNISNNEKKLLITID

EKNTFYLNDKLADLNEVQNAIFSLDKKTIVELKSDKNAKFESFVKIIDFLKAKEHENFQIITEKNK

>ABS44224.1 surface-exposed lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKGIFLSIGIAVLFSACGNSIDEKTVKKYENQLNQTVKQEIASLSQDSGIKIEFSDFKCNADGDFIACL

SPNFKTLAKDNNDEYQELFQAKNIKIRSNEIYKGEANTSISIKEYYNDLFKSQKSIQSNLIFENFKLGEK

VVSDINTSLFQQDPKISSFINKLSSDSYTLSFDNSINKQENNYLDNLDIKFYNAKLNFNTNLNINLKEDL

LNYLDSKGIKFNTQTLAMDEQAINELLNITNYEQTSDFSNTIQKYIILNNFKIDSTLKTEGVFNSYITTV

KENLQTLKAQSQNEEQALIFDKALAILNNITQNDDYKLNLDLKFKNIPVSDYSTQGIDSIEKLSINNQDT

TEALKIILSFIMFSMLMGGASF

>ABS44223.1 Holliday junction DNA helicase RuvA [Campylobacter jejuni subsp. doylei 269.97]

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDINSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTRTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLR

>ABS44222.1 amino acid ABC transporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. doylei 269.97]

MSLFIQKNKNFKPLKPLSKSKIITNLILLILFLILFCYCSFSISAYHFDFSAITIYKEKFLQGFLNTLII

SFFSLLLSIILGGVFCAFSLSSIIFLRFLSTFYIELIRGTPLLVQVLLIYYIIANNLGLDNRYVAGVIIL

SCFSAAYLAEIFRAGILSISISQLESARALGLKEMQIFAYVIFPQALKNILAPLSGQFANLIKDSSLLSV

IAVNELTQSAQEINSYTFATLEAYVILAITYLVLTLPISIFSRYLERKCQK

>ABS44221.1 aspartate kinase, monofunctional class [Campylobacter jejuni subsp. doylei 269.97]

MLIVQKYGGTSVGTLERIEAVANRVIQSAQQGNRLVVVVSAMSGVTNTFIEQAEYFSKTPNGKDMDMLLS

SGERISCALLSIALNEKGYSAISFSGRKAGIITDSVFTKARIHHIDTKAIKSELQNGKIVVIAGFQGVDE

EGNVTTLGRGGSDLSAVAVAGALNADLCEIYTDVDGVYTTDPRIEPKAKKLDKISYEEMLELASLGAKVL

QNRSVELAKKLNVNLVTRSSFNNNEGTMITKEEGMEQALVSGIALDKNQARVTLRNVEDKPGIAAEIFSV

LANENINVDMIIQNVGVDGVTNLGFTVPQNELELAKNAMQKILSSKTTIESDSAVVKVSIVGVGMKSHSG

VASKAFKALADEGVNIGMISTSEIKISMIVHEKYGELAVRALHECYGLDK

>ABS44220.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEHKKALFYTFAIIHLFFWIIFSSLNHFKLDTFLSYEIAFFSVLLIIFASYLNYKKVIIKKSKNYEKDFN

FISSLFIKKKQNLSKIIHFKVLKDDLKPNVKEKIHFFAMFFTLFKLMAYVILVAGFLFLHRQDKLDIFAY

ICGISSLLVCVFIFILYIKKYESKKNY

>ABS44219.1 molybdenum cofactor biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MLIDQFDRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKATIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEASSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>ABS44218.1 citrate synthase [Campylobacter jejuni subsp. doylei 269.97]

MSNSVTITDNRNGKSYEFPIYDGTTGPSVVDMSSFYKQTGMFSYDEGLTSTATCKSKITYIDGENGILMH

RGYPIEWLAENKLYLDVVHLLLYKELPDATRLEAFRYEMKKRSFIHEGMHRLFDSFPDNAHPMAVLQGAV

SSLSAFYPDHLNMNVKEEYVEMAARIVAKIPTIVATAYRYKHGFPMAYPNLDRGFTENFLYMLRTYPYDH

VELKPIEVKALDTVFMLHADHEQNASTSTVRAVGSTHAHPYACIAAGIGALWGHAHGGANEGVIRMLEQI

GSVDRVDEFIKRAKDKNDPFRLMGFGHRVYKNFDPRAKVLKKLRDQLIDELGIDTNLIKVATRIEEIALS

DDYFVQRGLYPNVDFHSGLILKALGIPNEMFATLFVIGRTPGWIAQWMEQKEQESLKIVRPRQLYLGETS

KI

>ABS44217.1 multidrug resistance efflux transporter [Campylobacter jejuni subsp. doylei 269.97]

MENFNRTLLVCWFGVFTTSMGLSQIAPILPFYIKELGHVDTSEIAFYSGLAFGITPLFMAIFSPLWAFLG

AKYGYKNMLLRASFGMSVLTLWLSFAHSALEVVFVRGLTGIISGFTSAAVVFIAVIAPKEKVAYALGTFS

TASISGSLLGPLFGGFVAEFFSISAVFDVVAFLIACSFVTIYFFIHERKIQKEAKKNTQKVKENKTFIIV

LFITTFVMQFGTFGVMPILSIYVEQIHQGGNLALWAGIVVAASGISNLFFAPKLGKIADKIGPSKIIFGA

LIFCGICFYLQAVASNVYTLIFVRLLIGIGLGGLLPCVNALLKKSVSAKNLSVIFGFNQTCQFLGNFCGA

FGGGLMASHFSVEFVFTFVCLIFIINAFIFLAFEKKYIFSNQGL

>ABS44216.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MKSSISTKLTILIGILIVLAFGISSMISYLSSLNNSRSLLQNNQMTVLKNTATAFENANANKELTMQALA

KDLAKNLNNEKDIYTILADFKNLTLFDSAFFGYDKMGKTYLSSGDYLDLSKNYDVTTRAWYKGAKENNGI

VITPPYLSRSTGNIAIGYGIPVVVEGKIVGVVGSEYNLANYAKDVLSVGRSQNTYTAIYDPQGTILFHEK

TELMLQKNTLSTNITKIINQNTALLNAKTPFVVDNGEGEQYEAFCRNVVSDFYRMCTLTQSKIYSDMANE

ILFKQILIGIIAISVILLFIQLIIKKYLSPLAAIQTGLTSFFDFINHKTKNITAINIKSKDEFGQMANAI

NENILATKKGLEQDNQAVKESVQTVHVVESGNLTARITANPRNPQLIELKNVLNKLLDVLQARVGSDMNE

IQRVFNSYKSLDFTTEVKDANGAVELTTNALGDEIIKMLKQSSDFANALANESGKLQTAVQSLTTSSNSQ

AQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIEAARAGEHGRGF

AVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQTTKDNVEIANES

AIISSTVSDIANNILEDVKKKRF

>ABS44215.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFYGAIAFVVALLIAIYTILFTSFGNNIVANIAQKKIKESAGLDVNITHFNLHFSSLELQANIANMA

DFNLKGALSPFKLGFDLDYIVSLNQNYAKNLGLNLNQNLSFGGKIQGKASDFTLDGKGYLLGSNVLLNAR

MYNYGPIALNLDAQNLKIEEILHLLSYPSYAKGFLNVQAKISAQNLKPDGNIIIKLDTSYINYEVIKKDF

SLDLPLNSNPKAEILANVKEDKIYAVSKIYNDYLNLQTQKTLYDISKNTLSTDFNLSIPSLAKLKKLTKT

RLNGSLAVIGEASVINNILSSLNAQVIGLGGEVKANLKNNKIFADINEASLEKLLALAGYGGLVSGNLNA

KLLDADLDFSNFDLEAKIDNAKINTNELKKITKIELPNTIFSLDAKANAKNSNISYNALFASNLLNIKKF

QGTYNLKNNELNTDLNAFIDDLSQFSVIAGQKLQGKADLNAKAHIIGTQIQNLNANANLADGVIKADSNG

KKLDLNIDKLDLSKLFVITGMPNYASGIVNAKVNLDNIDFSNLNGKVNLEAKGILNAATLSKILNKNFPN

NTSYDLNTKINFKNNIAQFDSVLNSSLADLTKLQGSFDIGKMLLNSDFNLKINDFSKLGFLLDRKLKGKA

EFNGKVGFDKSLNFVVNSPNLFEGKLQSTLKDNLLLADLNGVDLSSLAQGLDFMDVYQGKADVKANYNLL

SEEGEVNLDMKEGKLKPNLITNALKILTLKDIANDVYRTANAKALIKKENIKLDLNIQADRSHILVQSGA

LNSKSGALNLPFDIKLDRVNFKGSITGTTENPKVNLKAGSVLNSIKNVVGGGVSNGAKNTGDKVDKAVNK

LLNKIF

>ABS44214.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIISSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>ABS44213.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNLEDLAKKTISEVSSIMEEQRRQNEILKEQELNRKTEIKDELSSMEFVCEDLDAPQDLGDKISMAKFEE

EQKVQNNIEISTQENKEFKKEEPFSQSEILNPSVMTEIQTLNEDIFLKHLRERILVLFEGLNSIKKDDLE

NRLNLTINFLEFLLANIEDKLKE

>ABS44212.1 lipid-A-disaccharide synthase [Campylobacter jejuni subsp. doylei 269.97]

MKTFLVCALEPSANLHLKEVLKAYKKDFSKFELHGIYDESLCKEFDLNSKPLYSSHEFSAMGFIEVLPLI

FKAKKAIKELVNLSFTQKMDGILCIDSPAFNIPFAKALKKAGSKIPRIYYILPQVWAWKKGRIPIIESHF

DILASILPFDNQFFNKSTYVGHPLLDELKEFKNQEDINNTLLKKDDEKTIAFLPGSRRSEITRLMPIFKE

LSQKFKGEKILCVPPFNLEKLEIYGDISEFKIENNTPKVLKKADFAFICSGTATLEAALVGTPFVLAYKA

KAIDIFIAKLFVKLKHIGLANIFCDFAKKEALNPEFLQDKVNVLNLYEAYNKYDYKAFFAKVDFLKEYLQ

FGSAKNLAKILSEI

>ABS44211.1 Hit family protein [Campylobacter jejuni subsp. doylei 269.97]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEELGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>ABS44210.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKHIPIRMCIVCKNRFDQNVLFRFKIVLGDIMPKEEHGRSGYLCQNCIEKEDKILQKAFFKICKNLNTK

ITQQGLKEIFLNGKD

>ABS44209.1 hypothetical protein JJD26997\_0327 [Campylobacter jejuni subsp. doylei 269.97]

MLSIEIKSDISKTKGGKKLIDFIKAKYSECFYIAKNNEEKELRLKALDTMAFLDLIIHKIKDEEDGK

>ABS44208.1 imidazole glycerol phosphate synthase, glutamine amidotransferase subunit [Campylobacter jejuni subsp. doylei 269.97]

MCFKMIALIDYKAGNLNSVAKAFEKIGATNFIAQNPKDLQKADKLLLPGVGSFKEAMKNLKELGFIEALK

EQVLVQKKPILGICLGMQLFLEKGYEGGVCEGLGFVEGEVVKFEEDLNLKIPHMGWNELEILKQEPLYQG

MEDKSDFYFVHSFYVRCKDEFVSAKAQYGHKFVASLQKDHIFATQFHPEKSQNLGLKLLENFVRL

>ABS44207.1 2-oxoglutarate:acceptor oxidoreductase, delta subunit [Campylobacter jejuni subsp. doylei 269.97]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>ABS44206.1 amino acid ABC transporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. doylei 269.97]

MDFDFILAQAPAFLTAAWLTIKLSFFGIIFSLIIGLFCILMSYFKIKILENICKLYIEFSRNTPLLIQLF

FLYYALPKFNIHLEQIPPLSLICLSVEETLIPSFACAIVGLSFLGGSYMAESLRAGFEAIRKHQFEAGLS

LGFSKFGNLRYVILPQALAISMPSISANIIFLIKETSVVSIIALPDLVNLMKSLNSLTYKTDELLFLLFM

GYLCIILPLSFILLKFEKRLLHA

>ABS44205.1 acetylornithine aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MDYKEQSHIIPTYKRFDIVLEKGQGVYLFDDKAKKYLDFSSGIGVCALGYNHAKFNAKIKAQVDKLLHTS

NLYYNENIATAAKNLAKASALERVFFTNSGTESIEGAMKTARKYAFNKGIKGGQFIAFKHSFHGRTLGAL

SLTANEKYQKPFKPLISGVKFAKYNDISSVEKRVNEKTCAIILESVQGEGGINPANKDFYKALRKLCDEK

DILLIADEIQCGMGRSGKFFAYEHAQILPDIMTSAKALGCGLSVGAFVINQKVASNSLEAGDHGSTYGGN

PLVCAGVNAVFEIFKEEKILENVNKLMPYLEQSLDELIKEFDFCKKRKGLGFMQGLSLDKSVKVAKVIQK

CQENALLLISCGENDLRFLPPLILQKEHIDEMSEKLRKALKSF

>ABS44204.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIHSSLKNATIMVELDTSCVILRSDEAKTIEVNFI

>ABS44203.1 hypothetical protein JJD26997\_1107 [Campylobacter jejuni subsp. doylei 269.97]

MKITEFGKDIGIIFDNGNTLCDYHEQECYEYNYADWCQLKKSALNYDFNEETFKIIPNYYGFKFGDKNRT

FSMPCYYGDYITIFYRDKYNNVLSKIDIKGE

>ABS44202.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MFLLDFLISLSFIFEISVLVLSFYFKNSRIFFLTLVLLGAKLPYFYTSFFQANLFVALFLPMIFTLFCLG

KYHALILSKKNISSITTLIFIGVLSIILPRNTTFNSAGLEFHFITLIFFKPVSELGFLFFLVGLILIFIK

TFKTKEYYLLVAFFAAYFQFLFQEGAGIRYFELASLVFCFYLLNHAYRLAFFDTLTKLPNEKSLTRFAKG

KNNYIIALLHFNELKDTKESYAKLILKQIAKILKRFKAKIFIVENDFILIFNDKNQALNHLAFLESTLKN

MEFNLENENFKPNFKLIWQESEENLDKNLQSLRARLLD

>ABS44201.1 aspartate 1-decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MNIALLKSKIHRASVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNINNGARFETYTIATQEEGVVCL

NGATARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGSIF

>ABS44200.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGRSGKNFLSLLENDKVGIFCAFDKDYNVFRAKVYNENLFSHLGFKDIEKCVFMDQIHSHKVIIYDKNLK

NLSCDGLISKEKNTALCVLSADCLPLILYHESGIIAALHSGRKGSFENILKECVDQIVMQNPHLDKNKFH

LFILPGICAKNYEIDGEILEFAKKEFREFVQDNKLDLKALVKFQAQNLGIGDIKDCGICNFDDESFFSYR

RDKTPKRFVSVVYLKD

>ABS44199.1 putative organic solvent tolerance protein [Campylobacter jejuni subsp. doylei 269.97]

MLGTSIALNAAQVDIYALDAKKEGDILTANNDVIIFSDFYFITANKAIYNEKTGDVELFGNVNILRGQNE

RSHSDYAKINLDSNQADFSNFFFSNNNLEVWFQSKTSHLNDKVFESKISAVSSCNVEDPDWEIRFSKGWL

NRETNFVHLYNARLYVKNTPVFYLPYFGFSADTHRQSGLLIPKIVLKSNEGLYYEQPIYIATQENWDLEL

DPQIRTNRGFGLYSTLRFLDSPYSTGELNFGAFRENSSYFHDENLKNQTHYGIELKYSRDDLIKSLLSDN

FQEGLWIDATYLNDVDYLNLGSRDYRDLNSLVTSKINYFLADENNFYGAYARYYIDTSKLSNNTTLQEYP

SFQYHRFLNNLFDERLRYSFDASFHNFYRPAGSYANELNLDLPISYHNAFFGDFLHFTFTERFYASFANY

SNDPERNHEHYFRNTHDFNLYTDLSKAYENFFHTLNLGVNYVLPGVKSGKITQDYLEEYDKENEHTSLYA

VQYFYNNEGQKKLKHRISLDYLNKQNEFYELENLLTYYFNENINLNSEVLYSYEQSRFTNVISQIEVNTN

SKFNWMFSHAYQNDEYGKYSFIGTRANYIATPNYNLFGGIWFDTQRAHANMWELGYTYQRKCWNYSLMYR

ERIDPQLTSGGITAKNQSGVYFIFNFYPLGGVKYDFSLAESENKI

>ABS44198.1 imidazoleglycerol-phosphate dehydratase/histidinol-phosphatase [Campylobacter jejuni subsp. doylei 269.97]

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKKFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLKYGALSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKVSIKTGIDFFDHMLEQIAVHGD

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFTLPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>ABS44197.1 hypothetical protein JJD26997\_1518 [Campylobacter jejuni subsp. doylei 269.97]

MKNGFKDIKNFTLYSLLMVIDVLLLVLKLINELKLIFDFKIAY

>ABS44196.1 ribosomal protein S4 [Campylobacter jejuni subsp. doylei 269.97]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>ABS44195.1 hypothetical protein JJD26997\_1323 [Campylobacter jejuni subsp. doylei 269.97]

MNKAFTLLELVFVILILGILSSLSLSFINTTKDEVKILKLKMDYEMLSSALALMRSQMRLKNLNFPEILD

NAQNNQAKEKLFYCLNDCDYSLLDAPIYSDFKSWIKIGKNHYRFALNVKEMVEFVYDSKEGLLKCTGSSR

CKDLI

>ABS44194.1 iron ABC transporter, ATP binding subunit [Campylobacter jejuni subsp. doylei 269.97]

MMLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMF

QNYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCKLL

LLDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSNQIAFLEKGKILAHANPKELYFKP

DFKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFYRLKLRYKNIE

FFMLLSSNYNLEEKINFDIINF

>ABS44193.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MRKAFTILELVFVIVILGILAAIALPKMSSSKDEAEISKSLNNLKTLINDISIYTLKNDHLSSIKTMSNV

SGVENADLSNFNGTKEVNFRVGDDKECLKLVFINRADFILMGISSNEASKNAIAANQTHEDLENVDFTSS

SSNKACVILSKNENFKNLASKTYLLIGQR

>ABS44192.1 integral membrane protein, TerC family [Campylobacter jejuni subsp. doylei 269.97]

MFEWIFSIDAWITLATLSALEIVLGIDNIIFLAILVSKLPPEYRDKGRILGLAFAMITRILLLLSLFWVM

KLATPLFSILGNEISGRDLVLLLGGLFLIVKSIKEIKEQISHQEESQSHFKASNKFWIVVAEIAVIDIVF

SLDSVITAVGIAQDVTIMIIAVIIAVAVMLFASKPIADFVEKYPSIKILALAFLVLIGVVLIAESFDIHI

DKAYIYTAMAFALVVQILNILDQRKEKNGQRR

>ABS44191.1 putative DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MKVLIIENEIYLAQSISIKLSDAGYSCEIINSFDEYNGEKYYDIVLLSTNTNNFLKAVGQFKHSIIILLI

SYISTDTVSNPLKLGASDYIQKPFMIEELIRKIKHYQDFRKLSILNKAYQNYIKSRLETIKIPEYNYKKL

KLPLILKSNKQSSADAFVFNYANECDITLSFIDLTSTNSVEKVMKLPTENNLLFLSNFQALKAAEKKKLL

DFIQNKNVILHTNSNTDDLKINCINLNDNEKNIDSNEILTIDEYVKYVIINYQNIFPDTDLSKKLGISRK

SLWEKRKKYEISKKK

>ABS44190.1 aspartate ammonia-lyase [Campylobacter jejuni subsp. doylei 269.97]

MGTRKEHDFIGELEISDEVYYGVQTFRAVENFDISHDRLKDFPRFVRALARVKKAAAMANHELGLLDKNI

QDAIIKACDKILEGGYYDQFVVDMIQGGAGTSTNMNANEVIANIGLELMGHKKGEYQYLHPNDHVNLSQS

TNDAYPTALHLALHDYLSDLAKAMEHLKKAYERKAEEFKNVLKMGRTQLQDAVPMTLGREFKTFAVMIGE

DIQRVLEARKLILEINLGGTAIGTGINSHPDYPKVVERKIREVTGFEYTVAEDLIEATQDTGAYVQISGV

LKRVATKLSKVCNDLRLLSSGPKCGLNEINLPKMQPGSSIMPGKVNPVIPEVVNQVCYFVIGADVTVTFA

CEGGQLQLNVFEPVAAYSLFNSIVMLEKAMYTLADKCIDGITANEKICSDFVYNSVGIVTALNPYIGYEN

SASIAKEAMNTGKRVADIALERGLLSKEQIDEILTPSNMLNPHMKAKK

>ABS44189.1 ribosomal protein L1 [Campylobacter jejuni subsp. doylei 269.97]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>ABS44188.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MSKIIPFREEIFHQINQILESQKAFIFLWGKSGSGKSVLLQRLAKKYNVDFINENFKDRGFLKEKIEFLI

LQDQSLIILDEVGMYDYAMLESVRIYSDSISFVLSSHKKLNILKKEHFKSRLSACFELKNISLLELDDYI

KLKFGMNFSNKCLKFLQKISQGNLRYIDKTLKSFYEINSFFDKNKSQEYILKLSALENGLLR

>ABS44187.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MYEKFLKRIFDFILALVLLVLFSPVILFIALLLKITQGSVIFTQNRPGLNEKIFKIHKFKTMSDERDEKG

ELLGDELRLKAFGKIVRSLSLDELLQLFNVLKGDMSFVGPRPLLVEYLPLYNEEQKLRHRVRPGITGWAQ

VNGRNAISWQKKFELDVYYVKNISFLFDLKIMFLTALKVLKRSGISKEDHVTTEKFNGKN

>ABS44186.1 phosphoheptose isomerase [Campylobacter jejuni subsp. doylei 269.97]

MVNYIKEHFTDSILVKEQILKDENLITLIKNASLEVIKAYKKGNKTLLAGNGGSAADAQHIAGEFVSRFY

FDRPGIASIALSTDTSILTAISNDYGYENLFARQVQAQGVSGDVFIGISTSGNSKNILKALEICKEKGIL

SIGLSGANGGAMNELCDYCIKVPSTCTPRIQEAHILIGHIICAIVEEELFGKGFSCKQ

>ABS44185.1 DNA binding domain, excisionase family [Campylobacter jejuni subsp. doylei 269.97]

MIEEYMSEKDLSKFLNISLTSLWRLRKENKIPYIKIGKTIRYEKNAIIKWLNTHSF

>ABS44184.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MSHIFLVIFCAALMLLLFLGMIAYLITNDGKKTIKKQKTSQKQNVVEKTKKFDTDLDKMIIAASDVKLTD

IELKELAKLYVQTHKLGSKTSKELDEATKKKLEFVSALAANINASAQTVSYLNKELKKISGSYKKEIDAY

EHMGLAKRKIKEDK

>ABS44183.1 hypothetical protein JJD26997\_0967 [Campylobacter jejuni subsp. doylei 269.97]

MKIQMKIIKQICKKEEKEVETIKDRKNKFKHEKGEKWERIRIILESFLKL

>ABS44182.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVENFLREYAKLIADYPEQINTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>ABS44181.1 phosphomannomutase/phosphoglucomutase [Campylobacter jejuni subsp. doylei 269.97]

MLDVIFREYDIRGLYGKELNEKSVKAIGFCLGQTMLNKGCKNVSVGYDARYSANELFNYLVSGLNKAGIE

IYDIGLVPTPLGYFSLYEGLKFDANVMITGSHNPKDYNGFKITINKESFFGVELKEFSKEVYKHLDDEIE

ENLEAQQYDILSLYVKFMCEQFSFLKDFNYKFGVDCTNGAAGVVIEPLIKVLNLKAHVMFAEPNGQFPNH

TPDPTEKENLSAIRGFLNQNQDYSLAFAFDGDADRMVALSKTHVFCGDELCYLFAKNIPNPRILGEVKCS

KNLFDEVAKFGTIFMGKTGHSNIKKMMKEKDIDLAAEVSGHIFFKHRYFGYDDGIYAFLRALELVYKGFD

LESMIKTLPKLYTTPEIKIPVNEEEKFKLVEEFQKEIEKGALKGVKSLCEIDGARIDFGDGWALLRASNT

SPYLITRFEATSLERVKELESMVFTLFDNIKSRLKN

>ABS44180.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MINPIQQSYVATTFNTNRIDKETKTNDTQKTENDKASKIAEQIKNGTYKIHPETMAVAIADSLI

>ABS44179.1 iron-sulfur cluster binding protein [Campylobacter jejuni subsp. doylei 269.97]

MSQKIPHEQIVQTKLNDKQMQENLMTAMHTLQKNRLNVIDARFKDWQGLRAKAKQAKNNALMSLEERLLE

FEKNATKNGIKVHWASSDEDACEIVYEIMKEKNITKLLKGKSMASEEIGLNHYLEKKGLKAIETDLGELI

LQLNEEPPLHIVVPAIHRNRHEIGQIFKEKLGANLENDEPESLNAVAREHLRKDFEGLKLGLSGVNFAMS

REGAFWLIENEGNGRMCTTAPDIHIALCGIEKVMESFEDAATMVSLLTPSATGQFIPTYNNIITGPRKNG

DLDGPKEVHVILFDHNRSKMLSHEDYYEALRCIRCGACMNFCPVYDQIGGHAYQTTYPGPIGEVISPNIF

GIDHTGDILNFCSLCGRCSEVCPVQIPLADLIRKLRCDKIGQGKNPPLGANNVHHNALEAFAFKQFKNIA

TNGDKWRFSLSKAHYFNWAVQNFASILPVIKKWHAFKELPQIKMDLYKEVQKLEGVSYE

>ABS44178.1 hypothetical protein JJD26997\_0503 [Campylobacter jejuni subsp. doylei 269.97]

MIKNSAKSSLTSFLLIDLSDTTSTFAASSKAFYVVHQF

>ABS44177.1 ferrochelatase [Campylobacter jejuni subsp. doylei 269.97]

MRLVLFLNMGGAMNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCDKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNENDEIILFPLYPHHSCTTVTSSLEILQDEIS

KQKIQAKVKTIDIFYKNKLYNEMIVSHILAKKNKFDAKILIFSAHSLPQSIIDKGDLYEKHVKDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFAQFILKYLSDLN

>ABS44176.1 lysine decarboxylase family protein [Campylobacter jejuni subsp. doylei 269.97]

MNEKISQDLEKFANIPKLKNAVTFFGSARLKEDNFYFAQAKKLANLCVKNGFCVISGGGGGIMCAANAGA

FECKNNANSIKSVGFNILLPHEQKLNDFVEYNITFESLAIRKMALIEKSLAFVIFPGGFGTLDELCEILT

LKQLEFKKDVPIILFGSEFWRGFDEFVRNSLLKLEVISKGDELKYKITDDLDFIINTLKEIK

>ABS44175.1 adenosylmethionine--8-amino-7-oxononanoate aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MQNQILKNLDLKHIWHPCTQMKDHETLPLIPIKKAKGVRLYDFDDKAYIDCVSSWWVNLFGHCNEKIANA

IKKQVDELEHVILAGFTHEPIIKLSARLCEKVGRNFNKCFYADNGSSAIEVALKMSFHYHLNKGLKKNKF

LSLNNSYHGETLGALSVGDVALYKDTYKALLLECLSTPVPQGKDYTKELEILKDILEKHSNEICAFILEP

LVQCAGNMHMYEAGFIDEAIKLCHAFNVQVIFDEIAVGFGRTGTLFALHQCEQSPDFICLAKGITGGFMP

LSVVLTKDEIYNAFYAPYSEQKAFLHSHSYTGNTLACAAANAVLDIFENENILEKNQILSTFIQQEFSKL

KKFDFLGNFRTCGMISAFDILSHKHERVGFFVFQKALKKGLLLRPLANTIYFMPPYIITKEQIVYVVESL

EQIFKEF

>ABS44174.1 tryptophanyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MRVLTGIQPSGDLHIGNYFGAIKQMVDAQEKSQMFIFIANYHAMTSSQDGEKLKQNSLKAAAAFLSLGID

AQKSVFWLQSDVKEVIELYWILSQFTPMGLLERAHSYKDKVAKGLSASHGLFSYPVLMTADILLFDTQVV

PVGKDQIQHVEIARDIALKVNNEWGEIFTLPEARVNEEVAVVVGTDGAKMSKSYQNTIDIFSSEKTLKKQ

ISSIVTDSTALEDPKDYENCNIFKIAKLFLDEAGQKELQIRYEKGGEGYGHFKMYLNELVNAYFKEAREK

YNELLEKPSHLKEILDFGATKARKIAQEKMQKIYEKIGL

>ABS44173.1 hypothetical protein JJD26997\_0695 [Campylobacter jejuni subsp. doylei 269.97]

MNKQEKAKERKAKRYALLKEAKELKRKQKIKIGLKIRKMKEKPLKNL

>ABS44172.1 phosphomethylpyrimidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MKAKGSELIPVLTIAGSDCSGGAGIQADLKTFSAHNLFGMSVVLSVVAENTARVISVHDIPTQSVDEQML

AVFEDIVPKATKIGMIGSCELMSCVAKNLSEFKPQNVVIDPVMFAKNGYALMPQENCDFFKQTIVKFADI

LTPNIPEAEFLCGFKIANEEQMIKAAKHLCSLGAKAVLLKGGHSEENANDVLYDGKEIYILKGERIETKN

THGTGCTLSSAIASNLAKGKDLFHAVSEAKEYVRNAIYYSLNLGKGCGPTNHFFKFLDEK

>ABS44171.1 ADP-heptose--LPS heptosyltransferase II [Campylobacter jejuni subsp. doylei 269.97]

MKIFIHLPTWLGDAVMASPALYAIKEHFKDAQFILYGSLVSTALFKEFPSSKIIIENKQSRYKQALSLRK

KLGKIDLSFAFRSAFSSKIILHILKTKQRYFFDKNKHKEEHQVLKYLYFIENSLHIKAYLKDLKLPFKLK

FQSPLVLKNGKKILGLNPGASFGSAKRWDASYFAKVALNFSQSHEILIFGAGKAEQELCDEIYQILKEQN

IKVKNLCNKTTIKTLCQNIAFCDFFITNDSGPMHISAVYKVKTVAIFGPTKFTQTSPWQNENARWVHLNL

ACMPCMQKTCPLKHHKCMKDLKPEVILKAIQNLTNI

>ABS44170.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDEVQKQQFIKLTYFLREVLGEKYEIVFHVITEDGAYIAAIANNHISGRSLDSPLTAFASELIQNKKYLE

KDFLCDYKALAGKSKLIRGSTFFIKNHDKLVGILCINHDTSIMRDLICKMIDLEKIGDMGEILGNISFSQ

NDSSIETLSHSIEDILVQSVDSSYLNSDYQLSINQKEEIAEKLYEKGIFNIKGAVPIVAKFLKISEPSVY

RYLKKFKK

>ABS44169.1 quinone-reactive Ni/Fe-hydrogenase, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MIDYHQIESRLSALEKLPSLKDNDSIAKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADR

LPVVWLHMAECTGCSESLLRSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVE

GGIPMGDTEHFLTIGAHGKTGYELSKMASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVIN

VPGCPPSEKNIVGNVLHYLLFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFC

LYKVGCKGPYTFNNCSRERFNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVS

DKIGIGVLTLTGVAIAAHAVISSMQKDKE

>ABS44168.1 amidophosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MCAVVGVINSKNTSTYAYYALFAMQHRGQEASGISVSNGKNIKTIKAKGEVSQIFNPDNLKTLEGEIAIG

HNRYSTAGNSSLNDAQPIAATSVLGDIALAHNGNLVNKEEVRSRLIQDGAIFQTNMDTENLVHLIARSKQ

ESLKDRFIESLKECIGAYCFVLASKDKLYVVRDPHGVRPLSLGRLKDGGYIVASETCAFDLIEAEFIRDV

KPGEMLIFTQGNDKFESIELFSQTPRICAFEYIYFARPDSIVEGKSVYEVRKKMGEALAKKFAYKADFVV

PVPDSGVSAAIGFAQYLQIPLEMAIVRNHYVGRTFIEPTQELRNLKVKLKLNPMRKVLEGKEIVVIDDSL

VRGTTSKKIISLLRAAGASKIHLAIACPEIKFPDTYGIDTPTFEELISANKNAEEVREYVEADTLSFLSI

EELTQSIGDERKYSLISFDGDYFIK

>ABS44167.1 glutamate synthase [NADPH] large chain [Campylobacter jejuni subsp. doylei 269.97]

MDLENILENNQSIGLYHPKNEHDACGIAAVANIRGIASYKVICDALEILMNLEHRGGAGAEENSGDGAGI

LIQIPHDFFKTQELGFELPKKGDYAVAQMFLSPNIDAKEEAKEIFLQGLKDKKLEFLGFREVPFNPSDIG

ASALKAMPYFLQAFVKKPSKISAGLEFERVLYNTRRLIEKRAINVPKFYFSSFSSRTIVYKGMLLSTQLS

DFYLDFKDVNMKSAIALVHSRFSTNTFPSWERAHPNRYMVHNGEINTIRGNVDSIRAREGLMQSEYFENL

DEIFPIIAKPSSDSAMFDNTLEFLALNGRTLEEAFMMMVPEPWHKNENMESKKRAFYEYHSLLMEPWDGP

AAIVFTDGVIMGASLDRNGFRPSRYYLTKDDMLILSSETGALKLDEKNIKAKKRLEPGKLLLVDTARGRV

VADNEIKEHYANAKPYKKWLKNLVELEKQKSGVYKHQFLKKDEVLKLQKAFGWSYDELKMSVAAMAQNGK

EAIAAMGVDTPLAILSKTYQPLYNYFKQLFAQVTNPPLDAIREEIVTSTRIYLGSEGNLLKPDENNAKRV

KIALPVISNEELFEVKALNKFQVKEFSILYDYSKKTLEKALDELCVKIEDEVKKGVSIIILSDKGVDEKN

AYIPALLAVSGVHNHLVRKNLRTHTSLIIESGEPREIHHFACLLGYGATVINPYLVYESIQKLIANKDLN

LSYEKAVENFIKASSSGIVKIASKMGVSTLQSYNGSVLFECLGLSSKVIDKYFTSTTSRIEGMDLEDFEK

ELIALHKHAFNDTHKALDSKGIHGFRSAKEEHLIDPLVIFNLQQACRNKDYKSFKKYSALVDEKQVNLRS

LMEFDFSEAISIDKVESVESIVKRFRTGAMSYGSISKEAHECLAQAMNKIGAKSNSGEGGEDEKRYEIKE

GVDKNSAIKQVASGRFGVDLNYLSHAKEIQIKVAQGAKPGEGGQLMGFKVYPWIAKARHSTAGVTLISPP

PHHDIYSIEDLAQLIYDLKNANKDAKISVKLVSENGIGTVAAGVAKAGANLILVSGYDGGTGASPRTSIP

HAGIPWELGLAETHQTLILNKLRDRVRLETDGKLMNGRDLAIAALLGAEEFGFATAPLIVLGCTMMRVCH

LNTCPFGIATQDTELRDRFKGKVDDVINFMYFIAEELREYMARLGFERLDDMIGRVDKLRQKSVQGKAGK

LNLDKILKSLPTYNRTAVHFKDYKDNKLEKTIDYRILLPLCKNAVEKKEPIKLSLEVGNQSRTFATMLSS

EILKTYGKDALDEDSIHIKAIGNAGNSFGAFLLKGIKLEIIGDSNDYLGKGLSGGKIIAKISNEATFSPE

ENIIAGNACLYGATKGEVYLDGIAGERFCVRNSGALAVVLGTGVHGCEYMTGGQVVVLGDVGANFAAGMS

GGVVYIFGRHNEAHVNTELVDIKDLNAKDEKELKAVIEKHITYTDSKKAKDILEKFDKKDFFKVMPRDYE

KMLKMLDLCKNEKDPNLAAFLKITQ

>ABS44166.1 oxidoreductase, 2-nitropropane dioxygenase family [Campylobacter jejuni subsp. doylei 269.97]

MNLQPLQIGKHTIKYPIFQGGMGLGISWDRLASAVSLNGGLGIISSVGTGYYEERKYASKELNAKPYGSE

NFYSRKGLQALINNARKVCGDAPLGCNILCASNDYARIARDACEVGFNVIVSGAGLPTNLPEFTADFPDV

ALVPIISSAKALKIICKRWQSRYNRLPDAVVLEGPKSGGHQGFTYEQCLDPNYQLEKLIAPVVEEVKNWG

SFPVIAAGGIWDKKDIKNAISLGASGVQMGTRFIGTFECDASEEFKSVLLASKEEDIELIKSPVGYPARG

VRTNLLNLVDKRMGPKINCISNCVAPCGRGKEATKVGYCIADRLFDAWSGKKETGLFFTGANGYRLDKLI

SVKELMEKLVNGE

>ABS44165.1 ribosomal protein L7/L12 [Campylobacter jejuni subsp. doylei 269.97]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAVPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>ABS44164.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAEEKENKGSNIVQIRLSDKQKDELQKKADEVGLPLTQYIIFLITKDLKAL

>ABS44163.1 glucosamine--fructose-6-phosphate aminotransferase, isomerizing [Campylobacter jejuni subsp. doylei 269.97]

MCGIVGYIGNNEKKQIILNGLKELEYRGYDSAGMAVMQEGELSFFKAVGKLENLANKCSDFESQGYGFAV

GHTRWATHGKPTEINAHPHLGQYSCVIHNGIIENYKEIKDKLEKEGVSFLSQTDTEVIVQLFEFYARNLG

VFEAWQKTIKELRGAFATLLVTKKDPNHVYFAKNAAPLIIGKNANKEWYFSSGDAPLIGSCDEVMYLEDL

SLGYASKDELVIYENDILKSLCFFKLSGDKAYAKKDGFRFFVEKEIYEQSRVMSEVLMGRIQGDEVVFDE

LNNEDLSQVDEITLCACGTSYHAAMASAYLFERIAKVKVKVEIASEFRYREAIIKKDSLFIVISQSGETA

DTLEALKIAKEQGAKTFAICNVDNSNIVRLAHLSLLTRAGIEKGVASTKAFATQVLTLWMLAIFMAQKRN

LNVSAEIKALLHTPNCVSVKQALHEKIHRLSKRYLDGHGFFFIGRDVFYPLALEGALKLKELSYFHAEGY

PAGEMKHGPIALADSKLYTIALMPKHMLYEKTKSNVEELIARDSTVLSISPLEFDLSDDFIKTNEQDHYM

CEFFEMMVITQLLAMEISIRLGNDVDMPRNLAKSVTVE

>ABS44162.1 hypothetical protein JJD26997\_0866 [Campylobacter jejuni subsp. doylei 269.97]

MKKFTEMSKDLIKHYGLDNVANETEINALAYALQDCCVMYNKKNELSFTDKQIDDFKSYIVEYHIKGDNE

PNNEQSVEDIVYSLHYSMLLSSVPEEIVDDIDRDLFINKVEMGIDGRYQVSFLCDDAESFLKRIKEYVML

GNELNEYTKFCLENTDNFCGCEEVF

>ABS44161.1 DNA ligase, ATP-dependent [Campylobacter jejuni subsp. doylei 269.97]

MRFIFLICCACLVFANEILLLSKFDKQDFNSKDFNAYLMSEKLDGVRGIWDGKYLKTRQNYKIKTPDFFT

KNFPPFAIDGELWIARNKFDEISALIRSGDSNLTLWKEVTYNIFDVPNACEEFQISTCTLKNRLAVLEEY

LQKYPSAYIKIIPQIPVENQNNLNQFYESIIKNQGEGIVIRKNLSPYEKGRSKNAMKLKPYDDAECELVG

FRKGKGKFENQVGALLCKMPNGQIIKIGSGLKDKDRKNPPKIGSIITYKFNGLTKNSLPRFPVFLRIRDE

NP

>ABS44160.1 hypothetical protein JJD26997\_1039 [Campylobacter jejuni subsp. doylei 269.97]

MILSTNLFISQAKMPNIAYIEKLKRENIIIRIKPYNPVYI

>ABS44159.1 thiamine biosynthesis protein:ExsB [Campylobacter jejuni subsp. doylei 269.97]

MISAKKSNLFILTKLFFKKGTQMKALALFSGGLDSMLAMKLITTQGIEVKALNINIGFGSTSDKSEIMKK

RAAMVGADFEMIDVRNSYLQEVLFNPQYGYGKHFNPCIDCHAFMFKTALAMLKEENASFIITGEVLGQRP

MSQRSDAMAKVKKLALDEEDLILRPMCAKNLPLTKPEREGWVDREKLEGISGRSRKRQLELAAKFGLEDF

ESPGGGCLLTLDSFAKKIRDFIEFDKDMQVNDAQLLKYGRHLRLPNGAKMIIGRNELENTLLKGLKTPKY

EVIELGDLIGAYSLVDEKISEKDLELALKIALTYTKHEAGKSYELTFKDKSYISTAFENKTKISEFFIS

>ABS44158.1 dihydrodipicolinate reductase [Campylobacter jejuni subsp. doylei 269.97]

MIKIGIYGAKGRMGKQIEECLKSETQAEISILYNKGGNLEELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLTIGTTGLDEKILHLMQSASKVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFFRNLKCVQL

>ABS44157.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKAIIDNIKILEQNAINKGLDELILMENAGLNLAKLIKKEAKKIRIQRKIKKVKILFLLGGGNNASDGLV

ALRNLKHAKAYKVGFKENTLFKKQEQILQNYAFKFCQKEPDFKKFHIIIDCILGTGSNRCLDEKTSLMIQ

KANQSKALKIACDIPTNLGFYPCFKADITLCMGALKEILLEDFAKEFVGRIKTANLGISSKKFYPNSQAF

LLEKKDLKTIDRKINANKGNFGHIYIVANASAGTLAGLGALNFGAGLVSLVAQKSFSPLLMLKEKIENNA

SAIALGMGLENLDFLKDEILQNTPLILDANCFLSETLLWYLNRKDVVITPHPKEFIRLYKMCFDEDLDIE

TLQKNRFFYARKFSQNYDCVLVLKGANPIIIQKEKLFVVNLGNQALAKGGSGDVLSGMIATHLGFGFSAL

EAAKNATLAHGFVAKKYKFNKNSFDALKLIEGLKCL

>ABS44156.1 DNA methylase [Campylobacter jejuni subsp. doylei 269.97]

MITGLKPIFTSKDENFILYQNDCNKLLPKFEKQFDLIFADPPYFLSNDGLSIQNGKIVSVNKGDWDKGND

IEKIDEFNLKWLSNAKIALQDTGSILICGTYHNIFSLGRILQKLDFKILNIITWQKTNPPPNFSCRYLTH

STEQIIWARKSHKYKHIFNYEILRFLNSNKQMRDVWTFNAIAPWEKTNGKHPTQKPLALLTRLILMASNE

DCLICDPFSGSSTTGIGANLLNRKFIGFEKESEFIEISIARKKELENNFNTIKSKINDLKLLGKNSLFQG

VI

>ABS44155.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGFNFVDTHINHFEQTQNFQELKQLVSSCTLCQFSKTRKFSLMEPKIKNVKLLILDVFGQKSENESGILL

NSKKGEKLKHYIYQILGLCDEDFYFSYLFKCFCNGKFDDFSLQSCLPFFWNELKLIQPAFLLCLGEYTFK

SLGFKDYHILKGEVFAYKNFFIMPSYDLDFIEKNPSYEKNFIQDLKKIKGFL

>ABS44154.1 heavy metal translocating P-type ATPase [Campylobacter jejuni subsp. doylei 269.97]

MKCEHCRLDYKQVQMIEYKGKFFCCKGCESVWEILHESGLDEFYEKLGNQTLSPVNFQNEMKNYDEFITK

TKEGFSEIYLMIHGIECAACVWLNEKILTKQEGILELDINHLNHKARIVFDEQSISLVQILRLIESIGYK

ASAYDASKASKKADLLKREFYSKLVVAIACVMNIMWIAVAKYAGFFSGMDKDTKDILNFAEFILCSPVLF

YTGSHFYKSAFKTLKMHSLNMDVLVISGASLAYVYSLWAMFFRVGEVYFDSVAMIVCFVFIGKYLEMFSK

KCALDTIDGLNDFLRNEVLVFNGKEFTPKEVQKVCLGDRILLKTGDKILIDGVCKSGEMSVDTSSLNGES

IPKLIQKEDEIFSACIVLDGSVEYEATKLYKDSKLSQIIGLLELASSKKAKLESLVNSLSAYFSRTVLLI

AFICFAFWFFYKEASFEISLVNAIAVLIIACPCALALATPVSNLVALGRALKKHILFKSSSVIEDLSKCD

YVVFDKTGILTKIELELKEVFLDKMLDLNEFYNFVKLSKHPISQNIASYLKQKGAKDLNLDFKKHSSIQA

KGLSAELNKGLLLGGSSKFLQEKGIATKEFDNTHFIFAKEGKILAFFEFDSVLREGVKELIAYLKKEKKE

LMILSGDHQKAVEKIAKKLEIQNYQAFCLPEDKMKTIENLSKNYKVLFVGDGVNDALALKYASVSMTLRE

GSDLAIESSDVLLLKNDLLSLKKAIKLSKNTFKIIKQNLAFSLFYNACTIPLAFLGMINPLFAAISMSFS

STIVVLNALRIKE

>ABS44153.1 flagellin modification protein, PseA [Campylobacter jejuni subsp. doylei 269.97]

MKFCKKCVMPDTKPDLHFDEEGVCDACRSQEAKNKKINWQEREKEFFELVKKYKKHPVYDCVIGVSGGKD

STFQVVKMLELGLNPLCVCFEPSVPTKIGRKNLENLNHLGVDLIHIKRDPKVYQKLAREAFIRTGDNEWQ

NHLGIFTSVPRIAVNFGVPLIIWGESPQIEYGGPASSKNKNILGREWLEEFGGLLGNRASDMLGVNGITE

KDLFLYTYPSDEELERVGVTGLFLGYYFKWDYKKILEISKKYGFLTLDHPVETTYENFENLDCYSNHVHD

YLKYCKYGFGRATDNACLDIRLGYISREEGVRLVQKYDGKPPKKAIKKYLKFGGFSEEEFQKIVDSFTNK

KIFKRDENGKFIRDYDGSLVRKDECVLK

>ABS44152.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MMKISFIIATLNSGGAERVLVTLANALCKEHEVSIIKFHAGESFYKLENEVQVTSLEQFRFDTLYHKIAS

RFKKFFALRKALKESKADVFISFLDTTNIACIAAKIGLKTPLIISEHSNEAYLKPKIWRFLRRVSYPFCD

ALSVLGSSDKVYYERFVKRVKLLLNPCHFSDEIPFDSSFEKENLVLFIGRLDHNKNPAMFLKAIAHLDKN

LQENYKFVIAGDGELRQELEYKVKSLGIKVDFLGRVENVKALYEKAKVLCLCSFVEGLPTVLIESLYFEV

CRISSSYYNGVKDLIKDNHDGLLVGCDDEIALAKKLELVLNDENFRKELVNNAKQRCKDFEISHIKEEWL

KLIVEVKNA

>ABS44151.1 hypothetical protein JJD26997\_0329 [Campylobacter jejuni subsp. doylei 269.97]

MDFITALKGGTGLGSSFADTLIKTSRFTPNLASSSGFLKGLKNSFGAWLFQNSDANKITHLDRLGNVLGG

AGALYGAYNQQKMAQKNYDLQKDGFTFNKYLANEELNRRKNMENKLQNVWSH

>ABS44150.1 crossover junction endodeoxyribonuclease RusA superfamily [Campylobacter jejuni subsp. doylei 269.97]

MQMATREYALYIELKDNPIPYKRTTQRAKFVSKDYLKYLEFKKLLQMEFLRQNKVQCFKAFDEKKFYSIE

LEIGFKNKKHGDCDNILKGVLDALFKNDKNVIKGEYELKSFEKSFLKVKISEFKGVENV

>ABS44149.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLGATVLLAKNMVVSASELPNNAKEFISKHFKTAQNII

>ABS44148.1 hypothetical protein JJD26997\_1114 [Campylobacter jejuni subsp. doylei 269.97]

MAKLNLKGAKMDIILGIGAVTLAIVSIALAYGFYKEKHKTQH

>ABS44147.1 putative potassium uptake protein TrkA [Campylobacter jejuni subsp. doylei 269.97]

MKNLNYGIIGLGKFGSVVADELIAGGHTVIVADKDEETLKSIQNPPSYAYILDSTNISALKEAGFHDVEV

VIVSIGENVEKSILTLMALKDIGVKNIIAKATSNIHGQILSKLGATKVIYPEKESAKRLVKEFLTKDADY

EVFDLSANTIRAIKINIDEKLAGNSLKHVAQNMKVISYKKLNSDWEILPDLETTTVYSGDVVILLGTVKE

LREFEH

>ABS44146.1 napD protein [Campylobacter jejuni subsp. doylei 269.97]

MNNLSSVLILAKEEYINDLKKAISEIPFCSVELCENEKIIVVIESENLEDELNSCKMLEKLPNIISINMV

FSYQDLNDDIQKAINSGTIETIEKNESAENVRYYDSVFNQFS

>ABS44145.1 hypothetical protein JJD26997\_1141 [Campylobacter jejuni subsp. doylei 269.97]

MLCARAKKLIIAKVKNSYNMIEDEVLKAYFMESFYYILSKCVPSVLLKNVEQGEKVFRHVRDNHFLIIPD

EPDFDNEEEHLMIDETLSFAVINYVCYLITRCEEKDFLALCDKIIYQYIANDGKELDNERTGL

>ABS44144.1 hydrolase, TatD family [Campylobacter jejuni subsp. doylei 269.97]

MFLNLDFQDGLRIVDTHCHLDSEAFKDDLDETLNRAFKNGIDKIIIPGADIKDLPDAATIAHKYKNIFFA

AGVHPYEINNYDEKILKQYLCDEKCIAVGECGLDYFRFKSDLAEEIQKEKENQKKIFIAQLELAIEFKKP

VIIHSREANHDTYEILHEYSKDLVGGVLHCFNASEHLLALFEEGFYFGIGGVLTFKNAKKLVEILPKIPK

DRLLLETDAPYLTPEPYRGKRNEPLLTQFVANKMCEVLNLSRKELLEICFNNSEKLFFKGY

>ABS44143.1 Cpp32 [Campylobacter jejuni subsp. doylei 269.97]

MNNVIIINNQEVVFENKDEQVFCTSLDIAKVFGKNHFHVLRDIENILNDLREIGDLQCKSNFGLVKYKDK

KGEFRPAYQISRDGFSLLAMGFTGKKALQWKMLFINAFNEMENIIKSNNQTTNYSDYEFIKKQNDILNQI

TCTQSNTIYVLQDSIRFLNNTISSMKEINKELKKITGIDKFLRNNRRI

>ABS44142.1 crossover junction endodeoxyribonuclease RuvC [Campylobacter jejuni subsp. doylei 269.97]

MNLKILGIDPGSKNCGYAIIERSKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDI

FFAYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPL

DITDAIAIALTHAANLRTRV

>ABS44141.1 transferase, hexapeptide repeat family [Campylobacter jejuni subsp. doylei 269.97]

MLIKFKNHSPKLGQNIFVAEGAKIIGEIEIGDESSIWFNCVLRADVNFIKIGKRTNIQDLSTVHVWHREF

DEKGKLKDAGFPTIIGDDVTIGHNCVIHACVIKNRVLIGMNAVIMDNALIEEDSIVGAGSVVTKGKKFPP

RSLILGNPAKFVRKLNDEEVRFLKQSALNYVDFKNEFLKDLQ

>ABS44140.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MISPMDMSLIKIIGDHYYIRRDKIVNKITHRGRLFFDKFERVDAPLNLNVMREHAAKKIVVAHDLITKDN

KVENIVFDYNGFNAERFYHRAQLILREEGFINFTAYKTKTPGHLHLYIHKGHTALDEGYSLASKLSMMFA

SKMPVEWKVFPSMDVPREFNILILPYEIYQKERGSSWSKHM

>ABS44139.1 macrolide-specific efflux protein macA [Campylobacter jejuni subsp. doylei 269.97]

MKKKIVLIILIAILGSIGAYFIFLNNDEKISYLTQKIQKKDISQTIEAVGKVYAKDQVDVGAQVSGQIIK

LYVDVGTHVKQGDLIAQIDKDKQQNDLDITKAQLESAKANLESKKVALEIASKQYQREQKLYAVKASSLE

NLETQKNNYYILKANVAELNAQVVQLEITLKNAQKDLGYTTITAPMDGVVINVAVDEGQTVNANQNTPTI

VRIANLDEMEVRMEIAEADVSKIKVGTELDFSLLNDPQKTYHAKIASIDPADTEVSDSSTSSSSSSSSSS

SSNSSNAIYYYAKFYVANKDDFLRIGMSIQNEIVVASVKAVLAVPTYAIKSDPKGYYVEILENQKAVKKY

VKLGIKDSINTQILEGVNENEELIVSSSANSLVPKMKLRF

>ABS44138.1 hypothetical protein JJD26997\_1483 [Campylobacter jejuni subsp. doylei 269.97]

MLFLFKKIFPQLFISVILEDKKNIVKASICRGNKLISSNEKTFDKSENLLEYIKNLSKHFLFYHTALFLN

AKEQGLIPSTNIQDCEHFNIGKISLQHILFNNALVYTATEHVEYYSELFEEYRGLDFLYSPFALLYYNMQ

KEKQPDDQILLYGFKQGHLLAIIVAKGNTILYGDFKIFEQELGLELELPSEDNQEIENNNDDTEVTLDNF

NEALNNKFDLLDQENNLETLDNNDNFNLDELNQFSNDMELCRYILTSIEKFYNDDKYAGVFINGILLYSE

SDINISAVDFLESETFLEIKTKQINTLDLMIELMRKELK

>ABS44137.1 Xaa-Pro dipeptidase [Campylobacter jejuni subsp. doylei 269.97]

MQTISSLYTAHYEVKKLLFIAHLSPFNDFKNLLNTLKKEHSKAVHFVWAYRFLNENHQIVEDKSDDGEPK

NTSALPCLNVLRGKELVNVSVIVVRYFGGIKLGTGGLVRAYGEAVNLAVKEAILEPFELKESLKFSLSFK

NVFKMEHFLKKSNITFQREFKETHIIFKLKLSQKEKVEFENFLKIFNPQELKIL

>ABS44136.1 hydrogenase expression/formation protein HypD [Campylobacter jejuni subsp. doylei 269.97]

MNFIDEFRDKESILALKKLIEQELKNPINIMEICGGHTHSIMKYALPSILPKEINFIHGPGCPVCVMPRV

RIDTAIKLASMKDTIFCTLGDLLRVPGSEISLLDLRAKGADVRALYSPLEVLEIAKQNSNKNIIFFAIGF

ETTTPMSALLLQKVIEEKINNVFFHINHITVPAPIEAIMNDENVKINAFLGPSHVSVITGYGIYEPLATK

FKTPIAVSGFEPVDILESVLNIIKQSNKGTFKVYNQYKRAVSKEGNVKAQNLVKKYFKVCDFEFRGLGLI

QEGGLELKEEFSAYDASKKLDCTVQSKNESKACICGQILRGLAKPYDCKVFGKACTPRSPIGSCMVSGEG

ACAAYYKYSKVNA

>ABS44135.1 transcription antitermination protein NusG [Campylobacter jejuni subsp. doylei 269.97]

MSTHKWYAIQTYAGSEMAVKRAIENLVKDNGIEEQLKEIVVPTEDVIEFKNGKEKISERSLYSGYVFALL

DLNTELWHRIQSLPKVGRFIGESKKPTPLTEKDINLILEKVYNRAAPKPKISFEEGENVRITEGPFANFT

AIVEEYDMVRGLLKLNVSIFGRSTPVEILYSQVEKII

>ABS44134.1 ubiquinone/menaquinone biosynthesis methyltransferase UbiE [Campylobacter jejuni subsp. doylei 269.97]

MQKQEKIIEMFNQIAPTYDKANRILSFGTDVAWRKKACRRVMSLYLKKDLKIADIACGTGDMIEIWQESA

LKMKKNILNIKGIDPSSGMLNVAKEKFPNVEFIEAGAQNLPLESQSLDILSISYGIRNVVERQKALSEFA

RVLQKDGILIVLEFTKREKGGFIAACRDFYLKNILPSIGGIISKNKSAYEYLPNSIEGFLSKDEFISEFE

KVGFKLLEFKSLSFGISSMFILQKI

>ABS44133.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MSVYFVHFLISVLPLSILMAFITPDKKCIFKSFLVVFLGFLFGYFAFFIAAQFLKTENLIFNFDFVFIGL

LLVSFIFYFWKKIEILNFILLGILSFCTALHYYFLSQDFPIFTSSLIDSEGISSLGFIALALLVCILIFF

FLKWQKNFNQKTSFILFLLLILIESDKALANILLTLMRNSIIETHAFLVSFVGKSNYFGVFGIYVYLFFI

TFLAFLSLKIRKKISKKQILDINYRKNEAKINLINRYFSSVFISCVMSFCIILYFFMVSSKPLTIDEPKE

ILPDKNGKFVFDIALLRDNKLHRFAYISAEGKVIRFFLINKREDGDSPVAVFDACMICGDMGYIKKDGQL

ICISCNVRIFLLSVGKSGGCNPIPLKYEYDGKKITIDIKDVIAGSNYFSQIKEIEVQDPVSKTKLINTQA

PFSYGYKGITYYFSNQNNYEEFKKDPMKYVEENEAQFLIQRRNDVG

>ABS44132.1 ribosomal protein L14 [Campylobacter jejuni subsp. doylei 269.97]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>ABS44131.1 hypothetical protein JJD26997\_0978 [Campylobacter jejuni subsp. doylei 269.97]

MFYGDNMRVRAYFRSSCEFSKMLCSFEMGCGFCFVLRFL

>ABS44130.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKYTLMILLALGISGCFVNERGISNRFYDDCKEYYDGSGTYHKDCLKNWVDIKMTP

>ABS44129.1 ribosomal protein L28 [Campylobacter jejuni subsp. doylei 269.97]

MARICQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTKKMRIAASTLRTLKKQNSK

>ABS44128.1 putative DNA primase [Campylobacter jejuni subsp. doylei 269.97]

MKYDIERLNNIPIMDVLESLGAISGKNKRIIHCFNITAHKNNDHNASLGIYESTNTCHCFACGIGGNPVN

VVKTMFNGNFKEACEYLHSQFNIPFLDGIQATYKKVFERPKPKAKDYVFFDPNKKYVEVEKLVPFVQNYS

TLTKAQKLKLVYTTIYRFSLSTEQKAKNLYYLKRGIKDLSLVEKIGFLNFNNIKKLENLLKEYFPIEDLI

EFKIFSEEKQAWKYAFNVALVPNFDLYSNRVVGFSLRVIDSTYNGAKEVNISCGNIVFAMPFGLENKSLK

ECEKIVITEGHIDCLSARNYYKQDSKTLFVSFAGTFSFREEILTVFKGKRVMLCFDKDEAGINGEKSLSE

KLSLLNIKNYSLTWDVADGKDLNDLLLADKMNSIKLKA

>ABS44127.1 transcriptional regulator, MerR family [Campylobacter jejuni subsp. doylei 269.97]

MEHHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRLELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>ABS44126.1 GDP-mannose 4,6-dehydratase [Campylobacter jejuni subsp. doylei 269.97]

MKKTALITGFTGQVGSQMADFLLENTDYDVIGMMRWQEPMDNIYHLSDRINKKDRISIFYADLNDYSSLQ

KLFESKKPDVIFHLAAQSYPKTSFDIPIETLQTNIIGTANILENIRILKAKEEYDPVVHICSSSEVYGKA

KAGVKLNEETAFHGASPYSISKIGTDYLGRFYGEAYNIRTFVTRMGTHSGPRRSDVFFESTVAKQIALIE

AGYQEPVIKVGNLSSVRTFQDARDAIRAYYLLSLESKKGNVPCGEAFNIAGEEAFKLPEVIDILLNFSDM

GGGGIEVRQVEDRMRPIDADYQMFDNSKIKSFIDWKAEIPVRQMLKDLLNHWRKEIKKGRIPLSR

>ABS44125.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MCLRIGCKYDIFSNQNKGEKMKTNNIFMALAIVLASLILAFGFNKALSDFKTLERSVSVKGLSQKEVEAD

TLILPIKFTRSNNNLANLYEELEQDKENIIKFLKEQGVKEDEINYNSPNIIDRLSDPYGNDTQAAYRYIG

TANLLIYTQNVKLGKSILEKISSLAKFGIVTKIDDYDIEYLYTKLNEIKPQMIEEATLNARNAAIKFAQD

SNSHLGKIKKASQGQFSISNRDKNTPYIKTIRVVSTIEYYLKD

>ABS44124.1 outer membrane ferric hydroxamate receptor FhuA [Campylobacter jejuni subsp. doylei 269.97]

MNKIFNSFLLISISISLTLAKESSYELNAISVVGSIEKGNQSIDYLSPKSVSIINSKQIQEEGAEQLDEI

TRYESGFISQIYGADLDTTDWLKLRGFDASLVLDGTAIYKGGYFGWSPDLYGLESIEIIKGSNSLSYGSS

QSGGVINLVSKRPQKTPVAEIGGKIGNLSQNGLFLDIGDKAFNTNSNFRIVGNYFRQNGQLNGTWQEHYY

FAPSLAIDMNNNTFLTLLSSFQYDQGVPTTGFFPVYGTIINTPQGTIKPNVNLGSPFSDYLKRKQYSLGY

EFIHYFDDELSFMQNYRYNMENKNQFATSFSALNQNNPNTATRNSIILDGIARSHTLDNRFILKNIYKKL

ENTLIGGVDYQYIYVNGKYGYGSASNINIFNPDHTPQIKSKVPTYLVKQSQLGLYIQNKSKLYDRWILDL

GMRFDKAKSNAKSFGSESNYNINHATFQTGLMYIFKDLGLMPFISYSEAFRPIAGNDGKGKDYKPYESRQ

HEIGFKYLPYFIDGELNFSYFDIQEKNALVNANPSASIPVSIQAGKQSAKGIELSSNIALNENINYALSY

THYFQTHTSLNALKIIRTPMIPKDVFGTKISHTLGIDQKQNFKSGFGIRYVGSSTDEAGNAGIKVPSYIL

YDLAFGYNYNKWNAQLNINNIFNKKYVSGCYYSCYYGEGIKGILSISYKY

>ABS44123.1 biotin--acetyl-CoA-carboxylase ligase [Campylobacter jejuni subsp. doylei 269.97]

MEKGLKVKIVCVESIDSTHLFLCEQIRNGKIDGNFAIYALEQTNGVGSRENSWQSSKGNLHLSFCIKEED

LPKDLPLASVSIYFAYLLKEVLQEKGSKIWLKWPNDLYLDDKKAGGVISAKISNFIIGGMGLNLKFAPQN

TAFCDIEISLKDLVSEFLQKVEKKILWKNIFSKYMLEFEKSRKFSVHHEGKVFSLENSFLYEDGSILLGD

KRVYSLR

>ABS44122.1 putative sugar-1-phosphate nucleotidyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNAIILAAGFGSRLMPLTKDQPKCMVEYKNKKIIDYEIEALKSAGINEIAVVGGYLNDVLKNYLNKYDIE

HFFINSKYDKTNMVHTFFCAKDFMLKCIKEKQDLIISYADIVYFQDCVQKLINIKEELAIVVDKSWLKLW

SKRFANPLEDAETLKMKNGYIIELGKKANAYDEIEAQYIGLFKFSYQFLSEVIAFYEMLDRDILYDNKNF

ENIYMTSFLQALIEKYNNAKAVEIDGNWCEIDFMSDLEVEIDK

>ABS44121.1 2-oxoglutarate:acceptor oxidoreductase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MREVIATGNVLIAKAAIDCGCKFFGGYPITPSSEIAHELSHMLPANDGTFIQMEDEISGISVAIGAAMSG

VKSMTASSGPGISLKAEQIGLAFIAEIPLVIVNVMRGGPSTGLPTRVAQGDLFQAKAPTHGDFASIAIAP

ASLEEAYTETIRAFNLAEKYMTPVFLLMDETVGHMNGKAVLPDLKDIKVYNRKKFEGDKKDYKPYAAGEN

EPATLNPFFTGYRYHVTGLHHGDIGFPTEDGTIVKKNMERLIGKIKNNQEDICAYEEYMLDDAEFLIIVY

GSVSRSAKEAIQRLREQGIKVGLFRPITLYPVAEKKIAEVVSKFKKVMISELNMGQYLEEIERVTSRRDF

ISLHRANGRPITPSEIIAKVKENI

>ABS44120.1 hypothetical protein JJD26997\_1593 [Campylobacter jejuni subsp. doylei 269.97]

MDKTKIVQNLNALFKQRAEFYSYFDENVAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>ABS44119.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTAYLHIGTTNTGNQEKQGFLMQNEEKLLKKAYIYPKSLRVANRHWALVDMVLELVQKENILKEESVLSH

ITNERLLRTIENFKSESALHKDKKFIFSAEGIVWDFSTKKHVEILEKIMRELGFTQIYIIVYFRDTLSYL

NSHCSQDHKNNMGYYSADFSPQDHPRRYVFDYEWICKTHAEVFGEENLIVRLLREDYVGGTLLKDFVYHL

GLEWDESFVLKQTKNESFNLLGMELMSRLNQKDLKQDNLNSLLFMARRKFEGSKEKRLKFAVQKDIAKAY

VDYFASSLEWVKNKYFPHKNSLFAPVNWEEYEQNYTLTHTLSKDWDDVADFIAQIIVSKNEIISSLKEQL

ELARKD

>ABS44118.1 hydrogenase, (NiFe)/(NiFeSe) small subunit family [Campylobacter jejuni subsp. doylei 269.97]

MAKLSNEELKNILENRIKKLENSTLKEDKVINEESVKILARHLSLGNEIPALAQRFFQIAPKTKLVWLHL

CECTGCSESLLRSELPSFDELIFDFFSLEYHETLMAANGTKAEELLEHVLEEDFILAVEGGVAAIDAFFL

TIGAQGESGYEILKKLSAKAKAIFAVGTCSSYGGIQAAYPNPSKTCGISEVLSQKVVNIPGCPPSDINII

ATLSFFALFGVLPELDEQNRPVWAYGKCLHDMCERKAKFESGIFAEHFGDEAAKNGACLFKIGCKGPYTY

NNCPKVKFNAKISWPVAAGHGCIACSEKNFWDEFGNYEKPMANIFSYAKLCNEELKQEFFLEGQIKILEQ

IDFEFESNMKLILQNIAKNKLGALLIENYKKSFEKNYAFIEQNFDENPMLSKDFWKYLEISFILVKGEFL

KDKNDFLIAAKNYAFKHASSYDFKLNMNAEKPKLDVSKSFRMTLIYLCGGLDFEGIAYSILKAFEDNIAK

ISSLKAS

>ABS44117.1 hypothetical protein JJD26997\_1225 [Campylobacter jejuni subsp. doylei 269.97]

MVFLIPLLIIIGVIFGIDYAYFKNQDLKVQVKKEQKELNSSLEKEKKEYIEKLFKTK

>ABS44116.1 hypothetical protein JJD26997\_1925 [Campylobacter jejuni subsp. doylei 269.97]

MIYDSALCFLDMPSLKNKNLCEKIGVNSINISCLEDKNLKAKFYKCEIASLSFVLALLCKLSDEGQFCDL

DEGYLSAESCFGEEEAGEVLAFLKEAKYLIIDKNIHFYKDSENIKYFLNFLSVKYGLKILDGDEEECDFK

KVKLNTLKELDNYDGLVLFRANLQDKNLHCSKQFLQIAKCKDQSEVEILAKDFSLKTKLCLDENLQGTIA

FLNHENSGFDFTPIRIKEAK

>ABS44115.1 lipid A biosynthesis lauroyl acyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKNSDRIYLSLYYILKFFVTFMPDCILHFLALIVARITFYLNKKHRKIIDTNLQICFPQYTQKERDKLSL

KIYENFAQFGIDCLQNQNTTKEKILNKVNFINENFLIDALALKRPIIFITAHYGNWEILSLAYAAKYGAI

SIVGKKLKSEVMYEILSRSRTQFDIELIDKKGGIRQMLNALKKERALGILTDQDCTENESVRLKFFNKEV

NYQMGASLIAQRSNALIIPIYAYKEDGKFCIEFFKAKDSQNASLEELTLYQAQSCEEMIKKRPWEYFFFH

RRFASYNEEIYKDTK

>ABS44114.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRKIIFILAFAFIIAILYIIFDFYIIKDSKKITKADFSTPLTCDLNVKDCIYSFNNKEVLISLNPKPLQS

LDVTNLKIVNLGNYNNLGIKIYGLNMYMGEIKPKIHRLNSTDYESKIVLATCVLDTMRFRVEFMDNNKPI

GFYFDFELKK

>ABS44113.1 porphobilinogen synthase [Campylobacter jejuni subsp. doylei 269.97]

MLKRFRRLRLNDRLRAIVRENSLSVNDLIYPLFVVNGRGIKKEISSMPDVFQMSLDEILKECQNVINLGI

KAIILFGVLENEKKDSCGSDALDDEGLVARSIREIKKNFPDLFIISDLCFCEYTDHGHCGIIDPKTKSVD

NDATLEISAKQALVHARAGVDMMAPSGMMDGIITTLREALDKEGFENLPIMAYSTKFASSYYGPFRDVAE

SAPSYGDRKSYQMDFANGKEALEESLEDEAQGADILMVKPALAYLDVVKEISLHSNLPLCVYNVSGEYAM

LKAAKNAGVIEYEKVLYETMIAFKRAGVKLIITYHAKELAKMLKGEK

>ABS44112.1 ribosomal protein L31 [Campylobacter jejuni subsp. doylei 269.97]

MKKEIHPEYVECKVSCACGNTFATKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAM

>ABS44111.1 hypothetical protein JJD26997\_1711 [Campylobacter jejuni subsp. doylei 269.97]

MPSFIASFKIPQCAAVITSPFFTSPRLTFEASTVFPALKLWMRGKALKLAPIFKIFFYLACFLLILL

>ABS44110.1 periplasmic binding protein [Campylobacter jejuni subsp. doylei 269.97]

MRILFYFITLIACLNAKEVVIKDILDREVKVDLPAKRIVLGFYYTDFLAVGGIEAFDKVVGFVKDGWAVY

AKNSYEFYAQFIPRIKNLADVGDPQFGTFSAEKVLSLKPDLLILAAWQYEVIREDLAIFEKHNIPVVVID

YNQESVAKHSLSTEILGQILGQEEKALELVDFYKSRISVIQERIKSASLPKPKIYIEFGNKGPQENSFTF

GDDMWGALIELAGGENIAKNLVKKWGVINPELVLTANPDIIIITGRESDLEKNKEAMVMGFDIEENEALK

RLERFKFRKGYENLNAIIHNKLFGAYHRASTTLADVAMVEFIAKTLYPSLFKDIDPLKTYLDFHQKFLLA

KPQGTFMIKAKNAK

>ABS44109.1 dipeptidyl-peptidase [Campylobacter jejuni subsp. doylei 269.97]

MKKIIKDFKFEVKVIENIWITLKDGTRLSSRIWLPQTDEKLPAILEYIPYRKNDGTRTRDEPMHGYFAGN

GYVVVRADMRGSGESDGLLKDEYLKQEQDDALELIEWIAKQEWCNGKVGMMGKSWGGFNSLQVAARRPKN

LKAIIVVGFTDDRYNEDIHYKGGCLLNDNFWWGNIMLAYQARFVDPKIDPNGREKWLRRLENMPLWPALW

MEHNLKDEYWKHGSVSENYEDIQVPVFALDGWADSYTNPIFTLMQGLKVPRKAIIGPWAHVYPHDGFPAP

AMGFLQEALKWWDKWLKDEDNDVLACPMIQAYIEDPLKPSSKVSEVKGRFVGLESYPSKDINYCTYFLNP

YRLTQEKSKQSIKINTPQNHGLLAGEWMGAAVLGESPADQRLDDGLAVVFESEILQDELDVLGYPLLKVK

LNSDKPKAMLFAQLSEVREDGFVQRVSYGVLNLALNKERSEFTPLIKDEWIERELRLDCCGHRFAKGSKI

RLSLATTFWPMFWPMPENVTLSLDLNECDFALPVFSGKDSNKVNLEAQSAPLTPLTLFKEGRVDRSINYD

ILSDTYTCITDGVGGVFGEGVYRFDEIDVLVEHNLKRELVLQNENPLSAKYTITQKMKIGRENCMMDADI

VLTQTSDKEYFYIKGKMQVKENEKLVFDKNYNYKTLRKSL

>ABS44108.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. doylei 269.97]

MNEKFNINIAWFLIILGGIIECFWVSGLKYSTEIWHYILTAIGVCISFTCFLKACERLEISITYSVFVGI

GTIGVVLNEMFIFNEAVSIVKLVLIAILLLSIIALKWVSKKA

>ABS44107.1 flagellar motor switch protein [Campylobacter jejuni subsp. doylei 269.97]

MFTNECINTIEGLTGKSAEFSEYKEFDVNASDTLKAPLVYAIFDIANGGKIGILAGTVLMSAIGEWMMGE

EEITKNDKLGPDEMDAAKEAIQNIISAFSTTLGAQKDIPKMDFSIESCEFVPESVDFKDFKKLFLYDVKI

GDLEEQISLAMDQTLHNILSGKPAETGNASADSNHNAEEKAIMLSEELKNINLIMDVRLPVRVRIGNKKM

LLKDVLTMDIGSVVELNQLANDPLEILIGDKRIAYGEVVIVDGNFGVQITEIGSKKERLEQLR

>ABS44106.1 DedA family protein [Campylobacter jejuni subsp. doylei 269.97]

MEEFLKNLLYQYKDLAYIIIFLWCILEGELALILAGIFAQQGHVNLGFVIFIAGLGGFVGDQIYFYIGRY

NKRYIQKKLKAQRRKFAVAHLLLQRFGWPIIFIQRYMYGFRTIIPMSIGITRYSAKKFAIINLFSAWVWA

SITILLAWYFGEQIWKMVTWAEEHWYYAAIIIIVFLSLLLFGFKQMEKAILKDKRKKS

>ABS44105.1 anti-codon nuclease masking agent [Campylobacter jejuni subsp. doylei 269.97]

MNKIEKLLNELCPNGVEFKSLGEVANFRRGSFPQPYTKTEWYGGEDSAPFVQVADVGDNMKLTETTKQTI

SKIAQSKSVFVPKNTVIVTLQGSIGRVAITQYDSYVDRTLAIFQSYKIPINIKFFAYVLFMKFDEEKKKA

RGGIIKTITVEEFKQFQIPIPPPSI

>ABS44104.1 N-acetyl-gamma-glutamyl-phosphate reductase [Campylobacter jejuni subsp. doylei 269.97]

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPDTPLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAIYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFNSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYGLASHRHTP

EIEEHLSYVAKEKITLQFTPHLVPMQRGILISAYANLKENLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSIDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>ABS44103.1 FKBP-type peptidyl-prolyl cis-trans isomerase SlyD [Campylobacter jejuni subsp. doylei 269.97]

MTIEKNSVVSMFYELKDANTNEVLESNLYSQPISFILGKGQILESLEEEVMKLDCPSNADVVIKKEKGLG

EYDENAVQTLPKEQFAGIDLKVGMELFGEGENGETVRVTVKEIGENDVTIDYNHPYAGRDLLFSLNIIDA

RAASEDEILTGIIAGSHSCGCGSGHGHGGGGCCGGGGGGGCGCH

>ABS44102.1 putative sodium transporter [Campylobacter jejuni subsp. doylei 269.97]

MSSKFSKIGFILAVAGSAVGLGNAWKFPTLVGQSGGSAFILLYIILTLGVGFVIFLAELSIGKISEKDPV

NAYEKLAPSNKKAWSYVGFTMVGAILIVSFYTLVIGWIVKYVFLSITGNLPMDLEASKAQFGFFTSEDFL

SQFICFTLVFLCVFYIVSKGLKNGIEKLNVWMMPSLFILLILMLVYAISKDGFMMAVKFLFVPDFSKINT

SNVLEALGLAFFSLSLGVGTIITYSANLPDKTNFITSTLNIIFINLLVGLLMGLVVFTFIFEFGYNPNQQ

GPGLVFISLATLFEKIGVIGCIFGAAFFISLIFAGITSAVSMIEPFAFYLINTFGMSRKKALILIGIVVY

ILGMLCILSSLKSTQFGFFGMSFFDLLDSISSKVIMPLGGILAAIFVGFVMKKEALKILFKPYMRGIFFE

LWYVFLRFISPLAVVIVMIAAFLK

>ABS44101.1 adenylosuccinate synthetase [Campylobacter jejuni subsp. doylei 269.97]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>ABS44100.1 branched-chain amino acid aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MIHVEKIWMDGKLVDFKDATLHFLTHSLHYGNAVFEGTRAYKTDKGLAIFRLEEHTKRLLESAKITLLNC

PFSQKELENAQIELLRANAFKENTYIRPLIFLGDGVMGLYHIKAPVRVGIAAWEWGAYLGEEGLEKGIKV

KISSFARNSVKSCMGKAKASANYLNSQIAKFEAIEAGYEEALMLDEEGFIAEGTGECFFIVKDGVLITPP

NDFSLKSITQDTVLRIAHDLGTTVLRQRISRDEVYTADEAFFTGTAAEITPINNIDARTIGNGLRGSVTK

KLQDAYFDVVYGRNEKYASMLTYI

>ABS44099.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MPTLLEINGFKFFFYSNEHEPKHIHVMKGNEFAKINLEDLQVRFSSFKNKDLSFILETVKKHRLEFERRW

NEYFS

>ABS44098.1 HIT family protein [Campylobacter jejuni subsp. doylei 269.97]

MQEKTIFELIVEGKLPCNKVLESDDFLAFHDIAPKAPIHILIIPKKHFKDFQEFDPELMAKMTSFIQELA

VLLGVDKSGYRLVTNCGKNSGQEVFHLHFHMLGGFELPKEKIKKENPQALF

>ABS44097.1 flagellin A [Campylobacter jejuni subsp. doylei 269.97]

MGFRINTNVGALNAKANADLNSKNLDASLSRLSSGLRINSAADDASGMAIADSLRSQANTLGQAINNGND

ALGILQTADKAMDEQLKILDTIKTKATQAAQDGQSLKTRTMLQADINRLMEELDNIANTTSFNGKQLLSG

NFINQEFQIGASSNQTVKATIGATQSSKIGLTRFETGGRISSGGKVQFTLKNYNGIDDFKFQEVTISTSV

GTGLGALADEINKNADKTGVRATFKVETRGVAAVKGGSTGDDFAINGVKIGKVEFKDSDGNGALVSAINS

VKDTTGVEASIDENGKLLLTSREGRGIKIEGNIGGGAFINKDMKENYGRLSLVKNDGKDIFISGSGLSFA

GFGASNFISQASVSLRESKGQIDANVADAMGFGSVNKGMILGASSISAYMSSAGSGFSEGSGFSMGKGSY

STTLSSACVLISATSAISQVYDVSAGSGFSSGSNLSQFAKMKTSAGAFNVKAETAGVTTLKGAMAVMDIA

ETAIANLDQIRADIGSVQNQVTSTINNITVTQVNVKSAESQIRDVDFASESANYSKANILAQSGSYAMAQ

ANAVQQNVLRLLQ

>ABS44096.1 hypothetical protein JJD26997\_0675 [Campylobacter jejuni subsp. doylei 269.97]

MGFLCFKLRKNHFYSFEKSVIWEFFQNYLEIITCFLKYCL

>ABS44095.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNLWDKKAKTYTRYQNTLNTIQKQTFEYLQNLKISFQDKSIIDIGCGTGVWTLHLAKEAKEILALDSANA

MLEILQEDAKKLNFNNIKCENLSFETWMQNNPNAKFDLAFLSMSPVLKDEKDYANFLNLAKIKIYLGWTD

YRKSDFLDPIFKYFNTGFKGFYKKDLENYLLEKNIFFHKIVFHETRKVQRTKEEAIENALWHLSMNEITA

SKETVSSFIENDIIETIESKIKLLIINNL

>ABS44094.1 DNA polymerase III, delta prime subunit-like protein [Campylobacter jejuni subsp. doylei 269.97]

MFISKIIISEDFLGIKEEMINNFGIKKLRFFMPQNEFLLDDARAVEKESYIAEIEEKIIVLMADSYRIEA

QNFLLKLLEEPPKNIKFLIVVPSKNLLLPTIKSRLICEKRKVEKEVKKLDLDLKIMDLKMLFDFLQKNEN

LDKNELMDQIALLAKECVKYKDFNAEELEFFYESYELAKLNSKSGVLLATLLLNYYTKK

>ABS44093.1 MATE efflux family protein [Campylobacter jejuni subsp. doylei 269.97]

MAKKQLSLTRLSFPIFWDLLSKYLTMIINTAMVSHYSNFLVGAMGAGNQILDLFIIIFSFLSVGCSVVIA

QAIGAKDHVLARKVIHQSLFLNALLGFVCGVFILWHGEYLLYLLKIPQELLKDSEIYLNMLAICLFFDAI

GIVLAAIVRVYNMAYWVMLIGFLMDIVVICGNYYVLHHTKSELFGVGLSNIFARIVAIVALLVILFYKLK

IHLKIKEMIKLEKEVLKKVLNIGGFSAGENLLWIVQYTIAFAFVASLGEASLSVQTIYFQISMLIMLIGQ

ATSIANEIIVGKLVGARYENIAYKHAWRALYFSVVASALVALLNYLCQDFTMQILGLEEELKNLMIPLFA

LSIFLEISRTFNIVMVNSLRASGDAKFPFFSGLVFMMGVSLPVGYVLCFHFNLGILGVWIGFCADEFLRG

MVNSYRWKSKKWQGKALI

>ABS44092.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILFLLLAFNCAFGEEIYASFNVEASKQSKLALESIGLVQKIPVEIGQKVNKGELLLALDQESEKIAL

QNAQNSYQLALVEYENTKSKMQKIKAVENVIDKQSYEDMKAKFDAANLNLNKAKINIAYYKNIMTKKELR

APYDAIIANKFIQVGEGVGGVAQPLIEIFSYPQSKLILSFDEKYKDKVKLGDDFFYKIDQNGTEFKGKIS

LIYPSIEVKTRKIYAEVQTTNLTPGLFGEGRIITKD

>ABS44091.1 homoserine dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKVAILGYGTVGSAVVKFLLENDKLIRARCGKSITPVIALTRSPKKNALIPITHSIEEILNADVDVFVEL

MGGVDEAFKIVSEILKKKKAVVTANKAMLAYHRYELENLAKNLAFGYEASVAGGIPIIKVLKEGLSANNI

LAIKGILNGTSNYILSFMSQKNMSFEQALQIAQNLGYAEADPTFDIEGQDAAHKLLVLSSIAYNLKAKPE

DILIEGISEIAPEDMYFANEFEFTIKLLGIAKVCENKVELRVHPTMIDKEKMLAKVDGVMNAISINGDLL

GESLYYGAGAGGEATASAVISDLMDIARDQVKAPMLGFVNTLEYELLSKDEIYTKYYLRVKVEDKIGVLS

KITQLMSENNISIDSFLQKPKKNDENYSTLFFTTHLTYEKSIQNLLEILHKQDFIKTKPFMMRIE

>ABS44090.1 S-adenosylmethionine synthetase [Campylobacter jejuni subsp. doylei 269.97]

MYLFTSEVVSAGHPDKCADIIADTIVDILLKNDKNSRVASEVFVAGNKVVIGGEVKSNHKLSKTDYDNLV

KDVLKNIGYDGAGHFSKEQCLHPDEVDVMVFLNEQSPDINQGVDQEDGEIGAGDQGIMFGFASCEAEEYM

PAAISYARMLCDRVYAYAKANPHELGVDIKTQVTIDYGTKANFENCKPQSIHTIVVSAPCVESMNIEDLR

SLVMKLILDSNLPKELFDPNETRILINPTGKYVNHSSLHDSGLTGRKLIVDSFGGYSPIGGGAQSSKDYT

KVDRSGLYAGRWLAKNIVAAGLAKKCIVQLSYAIGVAKPTSVSVDCMGTNTSVNDDVLSDFVMQNFSLTP

NWIRDKFHLDKPSKEIFLYADVAARGQVGQKDYPWEKLDALEQFKALM

>ABS44089.1 DNA-binding protein Roi [Campylobacter jejuni subsp. doylei 269.97]

MNLEIFKKDENKEISLTSLEIAELTGKEHRNVTRDIETYLEKVVEGGVLKFEQCYQSPKNGQSYKCYRLP

KREVLILVSGYSVELRAKIIDRLEYLENELKKQSYKPLTHKEALELGLKLLEENEKLELENVNLKNEAKE

NAPLIHFANRIKDTNDAILIRDFAKILYEKNKIEIGEKRLFAFLRDNGFLMSDNKPYQKCIEQGLFKVSE

TTISTIKGDRLVSTTKITGKGQIKIANLLLERMNHAV

>ABS44088.1 iron permease, FTR1 family [Campylobacter jejuni subsp. doylei 269.97]

MKIFKIIFLIISVFLANSAFARVDDYINEANLIKDMLKQSIETYKKGDNLGAKKLSEDAYFQHFENMEGP

IGRNIGRKAITMERKFVNLRRMYKDEAPLTQVNALIDSLYYDLDEVAPILQNGYRLKAEASDINYDKAKA

EKSSLEANAKREADAEALIAQMRGVDKKNLAQNSLTTQAPTPTNNDTSKLADDNASADLQAAAAMDARLQ

FILDNISTKFSQAANAFKEKNHQASKDFLNDALFSDYRNTKVEILVNKFTKAGNDQKIQQAIRTLIRQIN

DAKIDEKDLRDGLDNIEEQIFDVFLQIPNSELSSLQISGFNDETKGKDYAKVSNDIKLALDGILKNYDGF

SASIVDDLQGIYLDIFEASGMENKIGAVDSGLKLKIESLFSKGVALIKASADKKELEATFNDLEQLIASS

VDKIQDSTPYSLFIWALGIILREGLEALIIVVAIVSYLVQSGNKNRLNIAYSALFTGVILSFVTAFGVSW

LFKENAGQSRELIEGITMLIAVLLLFYVGFWLLSNAQNKKWTSFIKQGAIDAISNNSTKILWITVFLAVY

REGAETVLFYQALLFDAKTSTDFSAVFGGLGLGILILIVLYFLLKAGAIRIPVKQFFYITSYIIFYMVFV

FTGKGIAELIEGKVIIPSLIPMNFEPILWLGIYPYYETLIPQFIVLIMLIIGILITKQISKKGVKS

>ABS44087.1 hypothetical protein JJD26997\_1048 [Campylobacter jejuni subsp. doylei 269.97]

MTLDFDFVYNADNDIFEYLLRFYAKNYNYTLSKEENIYHFSIDADEENLKTFCDSLNFMSHSVFLKKFDV

KAGQDFNPCMPEDKEFLKFSYITHLNSNAYQEKKLLNKNEWGVFCECEFSSNLSEFEKINEENFNTFLNL

AFDLLSQEKKIYLKDKNGIYEFSLFKNEFIGDFLLPCDIKAINSVFVCSNENLKLLASLEKPLMKLRLNA

MFRKNHHLDFNDFKIRLARDLFCFALGLKLFENEYKFLSVKKIEEYQKDFYISALDEQVVVWEGFEFINA

KARGLIFSKEDKNMARISYLVSRYKEKVFILELSKDYEDILLINKELNLLKLSLPKHSKELYEEIKKDEI

GARLLENFSKEFPLLDESFELQNNFYSLLGLVGRVLNRGKNLQESASELLKIADESKMPRGVKIDYRLKE

DKSFDYTRTLRSTMSFMLAGVDSANIAYGAVESLAYFLRDTYDELREKKQSDLALISGSLFEHKSLLKNT

LKHLKNCQLSDVPLRI

>ABS44086.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFLSTFFRILRCNPFFKGGFDYPKVSK

NFYPMNLCFKPMFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>ABS44085.1 putative aspartate racemase [Campylobacter jejuni subsp. doylei 269.97]

MKTIGIIGGMSFESTITYYKTINQAINDKLKSLNSANILLYSVNFEEIENLQSQDKWQEAAQILSQCAKK

LELAGASFIIIATNTMHKVFDEIQQNINIPILHIAKSSAKALKQENIQKIGLLGTKYTMAQDFYKKMLIE

ENISVIIPSDEDIQIVNDIIFNELCKGEIKQDSKEKYLNIIKKLQEKGAKGVLLACTEIGLLISKNDTNI

KIFDTSLIHALDAANEALKDL

>ABS44084.1 hypothetical protein JJD26997\_0054 [Campylobacter jejuni subsp. doylei 269.97]

MSYNCYIFNVFQIFFSKAKFLKAWIIQKFNLNYKVSKLGTLLALKSYEIKILKRKLKCQNH

>ABS44083.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MAAKILLLEDDLSLSEIIEEFLNDEGYEVFLCDNVQEALDMAYERYFDLWILDVKVPLGDGFSLLKELRK

SGKQTPAIFMTSLNTTNDLKQGFDAGCDDYIKKPFELVELSIRVKALLKRAFSHKNEDFEDLGDGFRFEF

TTQILYHNNKALTLPSKEIKLLSLLLKNKNNFLSTERIFEELWDYDEEPSDLSLTAYVKNLRKILGKEKI

INQRGRGYCYG

>ABS44082.1 ferredoxin, 4Fe-4S [Campylobacter jejuni subsp. doylei 269.97]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>ABS44081.1 polyribonucleotide nucleotidyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQYSIEINKNTEIFDIDKVAKQATGVLMRQGKSVVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPGG

YVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPMK

APVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQTT

SQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKKAI

NQMAKSERASELNKIAKEILNLEIAKDWSEESILNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISIE

TNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPGR

RELGHGNLAKRALYPSVDENYPYVIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLIF

EDNKYAVLTDIMGLEDHDGDMDFKVAGSKDGITALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEEA

TKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAKD

YIINITSSQKGTKKGSKDKDISDFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKIKHLDLSENQSL

KVKISEIKNGKISVDLCE

>ABS44080.1 transcription-repair coupling factor [Campylobacter jejuni subsp. doylei 269.97]

MQASFYEYLQNPKICELLLCKDEKQADLLAQVSRFKGLKTFVLPDFRAQFGDDLRAFSKELFDLCKILNA

YYKEEEKKILISPLNTVLKKLPSKKHLQNYYIDKKQNFDLKFFEDEISRLGYEFVDIVQDKGEISIRADI

IDIFCINEENPIRILLFGEEIESIRYFDLQSQKSIPNELEHFEICPFLKYFDKENYEIFKDKLEDFQSDT

LIHDINSLGFWCIDDFFDYLEFDFLACEKFDINEYEKDISFVNAKILPQAKKFKELQSSYNKDFFEFHKN

KKITLLAKNEALFKTLELEDTQNIHFIKSDLRLNLISPEELIISLNQKEKQKTRKKASLIIDELKNGDYI

VHEDYGVGKFLGLEMIVISGAKKEFVAIEYQNSDKLLLPVENLYLIDKYLGVSGSIPSLDKLGKTSFIKL

KEKLKTKLLAIASEIVIMAAKRSLVQAKKITVDLNRQTDFIASAGFIYTSDQDKACHEILQDFQNGKVMD

RLLSGDVGFGKTEVAMNAIYPVVKSGFCAFLFAPTTLLSHQHYKILKKRFDPFGIKVFKLDRFTSSAEKK

QVLQNLKENKACVVVGTHALLSVECENLALVIIDEEHKFGVKQKEKLKEITQNSHILSMSATPIPRSLNQ

ALSSIKSYSVLQTPPEDRMDVRTFVKENDDVLLKEAIARELRRGGQIFYIHNHIASIEQCKKHLLELFST

LRILILHSKIDAKVQEEEMLKFENKEYDLLLSTSIVESGIDLPNANTIIVEKSDRFGMADLHQLRGRVGR

SDKQGYCYFLIEDKNAITKDALKRLVSLESNSFLGAGSVLAYHDLEIRGGGNLLGVDQSGHIEQIGYSLY

LKMLEDELNALSKNEVDQKENKLDLKLNVNAFLNSDLISEDRLRLELYRRLSKCEQVHEVYEIEGEIEDR

FGKLDVYTKQFLSLIIIKILALNKFKSISNYEQNIQFTALNDEKELIKAKSKDDDDILEAILTHLRKA

>ABS44079.1 khg/kdpg aldolase [Campylobacter jejuni subsp. doylei 269.97]

MQTKEILEISKIIPVITIYDLKTSVDLAKALLDGGIRILEITLRTNNAIEAIKLIANEVPQVIVGAGTIL

NFKMLEEVKNAGAKFAISPGLNSIFAKEAQNIDITLIPGVATASEIMLALEFNYRNLKFFPAEASGGIAM

LKSLAAPFHEVKFCPTGGINLNNMKHYLNLNNVSCIGGSWLSPKELILEKKWDKITQITKQSLEKSL

>ABS44078.1 NADH-quinone oxidoreductase, A subunit [Campylobacter jejuni subsp. doylei 269.97]

MSHIDASHPYFGIFLMLILASVIFFGLVFLASKIGNNFAAKNRKKLGLGIYECGPIPVKQANKINSQFFI

IALIFILLDIEVVFLFPWALIFKDLGWFGLLEVFVFIVLLGVGFLYAYKKGAFAWQSIK

>ABS44077.1 autoinducer-2 production protein LuxS [Campylobacter jejuni subsp. doylei 269.97]

MPLLDSFKVDHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMREHLNS

NAVEIIDISPMGCRTGFYMSLIGTPDEKSVVKAWENSMQDVLKVKSQEDIPELNIYQCGSCKLHSLDEAK

QIAQKVLNSGIGVMNNAELKLENL

>ABS44076.1 phosphopantothenoylcysteine decarboxylase/phosphopantothenate--cysteine ligase [Campylobacter jejuni subsp. doylei 269.97]

MKTILLAISGSIAFYKSYELISLFKKEGFRVKVLLSNGLLKFASKMSFEALADEVLCEENESWKNSNNHI

TFSKDVDLVLFAPASVNSINKLALGIADNLFIQTLIAANKPLIIAPAANTNMFHHFSTQNSLKILKENKA

LMIEPICKILACKDEGVGALAEVKDIFNITKRELLKEKFWCDKSVVITGGGTREKIDDVRCVSNFSSGKM

AKAIADAFYFLGARVKLLSSVEFDTPYELCKFESSKDLKELLDKNLSHDFLIMTAAVSDFILQSVKGKIK

KNEHLQGLNLHLSLNEDLLKTCKFQGKKIGFKMEFDSQNALENAKKSLKDKQLDMVCLNIIDQENYFGSD

QNELYFITLNNENKSTLQSKEKLAFELVKWCEKL

>ABS44075.1 autotransporter beta-domain protein [Campylobacter jejuni subsp. doylei 269.97]

MINQGTIKGKIGIENNNGFTGTITVKTFENKKNIDGHIYMGIWGGNGGTISIETFNNEGTITTSNNDGVI

YNDGVIYFEGTTHIKTFKNTGTIESKNGKNSITVKAKNSQTPTLENFINDGTIKGKIGIENNNGGFNGTI

TVGTFENKKTIDGHIYMGIWGGNGTINIENFTNEGTITSNNNDGGVYFEKGNIHIETFRNTGTIKGDDDG

KNGQGVYFKDIRVVKTFENTGFISGSGDNSQAGGLMTGGGVSMSGGTIDNFINKGTIKSTGKTNDPAGVK

LNWATVKTFENTNTGLISGINGFLTTKGTIETFKNSGTIESTSTGNGEAAIKIQTVNGNFSTITHFINEG

TIKSDSNGVLIESGDKIGTLTNQGTIETKLNGISFFDSGPEGSPGEADLGKIVLESGSSIKAGKNGINID

HETTARSIRVDSIEVKAGASVSGNEAGIYLGKGKEITAPITVSGTVSGGNAGIVNEGRMAKGITHDGEAE

LVISNQGLVDKGDDGNTVTNDGSGSVRIKEWLVTTDESTHRLRTVHVGGKNKANVRVTNITVDQSGLDLN

QLNDITNIISGVSPNNIADSVKTNGGGEISLSFDPLSGRLSTDVQLNASIAGASFRSSLATASKRATFID

NVMANAMQSFSLDSSGKAQKIALSEKGNLYADASDYIKNDLTRDYIKNDYIKSDLTQANYGLNKEHALFI

LPYLSSQSVELSLNEESKGHTKGTIIGYSTLKDSGIYGVYAGYEDTKMDSTYFDVNNISYYTGLKYFNTL

FTTAKGQEVYIKAQAQAALIKNDFTKRIGKNEAKAKAHSYTYGIHTAWGMNFIADKNIFSPEAGFAYEGS

YTEAFSMQDTRGQATVRGGERTYANHLNLFSTKTSFTWFRDWLPNLKTSVELGAKFNVNPKVKARARFGN

MKVNDEFHLPRVRKFASTSLIVPVNEAFYFSLNYNGMFDEKGNTHTGFAQFNYLW

>ABS44074.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNIIEQMLKKYNPQSETELINALKEIFQEITLLGLYRGGFFNKAAFYGGTSLRILYGLERFSEDLDFSLL

EKNKNFDIEKYFPSIVSEFEALGLEISYLFDYLFVRLST

>ABS44073.1 nucleoside diphosphate kinase [Campylobacter jejuni subsp. doylei 269.97]

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIY

>ABS44072.1 lipoprotein, NLPA family [Campylobacter jejuni subsp. doylei 269.97]

MNLFKIIILACILNLSSLFAQSITIGATPNPFGSLLELMKDDFKNKGYELKIVEFSDYILPNRALEEKEL

DANLYQHKPFLEEYNLKKGSNLIATTPVLIAPVGVYSKKIKNLENLKEGARVAIPNDATNESRALELLEK

AKLIELNKNTLKTPLDINKNPKKLKFIELKAAQLPRALDDVDIAIINSNFALGAGLNPSKDTIFREDKNS

PYVNYVVVRSEDKNSEKTKAIDEILRSDKFKAIINEHYKDILIPAF

>ABS44071.1 histidinol-phosphate aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MKFNEFLNHLSNYEPGKDIELIAKEYGVKEVIKLASNENPFGTPSKAIECLRQNANKAHLYPDDSMVELK

SALAQKYKIQNENIIIGAGSDQVIEFAIHSKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHNLD

EFKKLYETHKDEIKLIFLCLPNNPLGECLDASEVIEFIKGVHKDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFENVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVVAMDDDEFTKKTLE

NNFSQMQLYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENERFFTEFDKILR

>ABS44070.1 cation ABC transporter, periplasmic cation-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIIFFILSLAISHTFIQAKNLEQDQNTSGNIISVSIAPQAFFVKKIAVDTLDVNIILPPNSNEHNFEF

KPNTMKKLEKSDIYFTIGLEFEKVFTDKFKQNFPKLQVVNMQKNIALIQTHDTHEHSHEHEHFDPHTWLD

PILVQTMALNIYDVLIQKYPQNKNLYKQNLDKFLAELDSLNLQIASKLEKLKNREFVVYHPSWTYFAKRY

NLIQIPVEILGKEPKSKDLQKLITLMKNKNLKVIFVQNGFPENAAKTLAKECDAKIYKIDHLSYDWENEL

LKTADAFSHNL

>ABS44069.1 ATP-dependent protease La [Campylobacter jejuni subsp. doylei 269.97]

MQIEEIQNYPANLPVLVEDELFLYPFMITPIFINDSSNMKALDLAIKNDSMLFVAPAKLENGRNFDEIYN

CGVIGTIMRKVPLPDGRVKILFQGYAKGKIIEQISNKPLEAKIELIKEDFLEGTKKEALLEVLKEKVKNL

ANISHYFSPDLLRTIEEGFDASRICDLILNTVRIKKQVAYEFFVLTDLEQKLVKLIDLIAQEIEANKIQK

EIKNKVHSRIDKVNKEYFLKEQLRQIQKELGSDTQKEDEVREYQKRLELKKKFMHEDAYKEIKKQIEKFE

RIHQDNSEASMIQTYIETALDVPFEKISKKKLDIKEVSKQLNHDHYALNKPKERIEEYFAVRELLEKRKI

AEKDSAKVILCLYGPPGVGKTSLANSVSKALKRELIRIALGGLEDVNELRGHRRTYIGAMPGRITQGLIE

AKQINPVIVLDEIDKLNRSFRGDPSAVLLEILDPEQNSKFRDYYLNFNIDLSKVIFIATANDISNIPAPL

RDRMEFIELSSYAPSEKFHIMKKYLIPDELKKHGLKSNELSIDDETIELIISDYTRESGVRNLRRKVAEL

CRKSAKKLLLENINKVIINTKNLNEFLDKKVFEIEKNNGENQVGQVNGLAWTSVGGDVLKVEAVKIKGKG

ELTLTGSLGDVMKESARIAFSMIKVLIDEGKIKIPKKMIIDPKVNVYDSYNIHIHVPDGATPKDGPSAGI

TISTAIASIFSDKKVKADIAMTGEIDLKGKVLPIGGLKEKLIAAYKADIKTALIPRKNYERDLKDIPSEV

RDNMEIIAVDTFSDVLKYTLV

>ABS44068.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKTSNTFSIIEYQAFSKEDLKEIFKEKAEGFYKELEDFAKNNENLLGFKNKNSLKAKNYVGIIQTKSGVL

EILPKCTNLDSYKKEDSSSNHDKEKLRRCYELDNISKNNDFYEKDFKFNPKNLLINMLKTLKNSPFKKSQ

ISSLQSSKIPLFEVFITMFLDEFDSVYKKGLMRSYLSCEENRAFLKGKLLFNEHIKQNLIHKERFFTSND

EFVLDIAPNRLIKSTLNFLKSKTSLNKFRLIKAMQMLDEVEFSKNYEKDFSYKISRHFDCYENLLLWCKI

FLKNESFMPYHGKNEAFALLFPMEKIFEDYVAYMLKKVNPAQDIKVQNNGKYLISKNDENCFMLKPDLYI

ENKMILDTKWKIPNDSKDEKKQGIAQSDLYQMFAYACKFKIYDIKIVYPLCEKTQDLQRKIAEKFFVFKA

SEHLYFKEQGQKDIKVQVCFAPLPF

>ABS44067.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIFWAFLVVIGAIYFGNMFFGQYSLDTLLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>ABS44066.1 motility accessory factor [Campylobacter jejuni subsp. doylei 269.97]

MTFIPTQKELFNKNIEALSNVFLKESLKQIKSSKFELILGKDKLDINLKDTSIKNNGGGYSENLLYQDPI

KELQTMLNTYSDKYLLYPVLYFYGFGNGILFKALLQNKNHQHIVVFEKDIEIIWVIFHILDFSNELQNAR

LMILENDKLQTQDYNELCSSKPFFQFSRIYFLELMSHYYERFHEDVLKINHKLAETFKKVILMHGNDSTD

ALQGIEQFVYNLPSMITHPSYEELLAKRKHLSDTAIIVSTGPSLTKQLPLLKKYASKATLFCADSAYPIL

AKQGIRPDYVLSLERVLETSEFFNNDFKEFDKDILFVLKSYAHPHTTKYLQKNNRNFMLVSTYANFINYL

KLDDFGYFTMGFSVANMAYHLALLLQYKNIILIGQDLAYSKDGSSHPDEHIFGTLDGEKKETISYDLQTT

AYGGEGLVYTQEVWNLFRSIFEQDITNYHIPTYNCTEGGARIEGAIEKPFLWACENLLAKDLNKPFEKLE

PLSLKKQNEFLLKAYYKVCQSIKHCRDFSKILSNDFENIQSIYLSLNEKEEYLNLAIRKIDEFKNKLEDI

KQMQDLYEILGPLLTQFELNLARIYVLNPKTKEDVFNKSILWIKEHLEFMELVYGHIKAQESALIKNILP

LEEKLKERKLDKGMERVRR

>ABS44065.1 DNA repair protein RadA [Campylobacter jejuni subsp. doylei 269.97]

MAKKHILFECQTCGNQQSKWLGKCPDCGAWDSFVELKAEQIKVLKELAQVNMKTSEAVCIEDVELEYFTR

YSTDDNELDLVLGGGLVEGSLVLIGGSPGVGKSTLLLKIASNLAKQDKKVLYVSGEESKAQIKLRADRLE

ANTPNLFLLTELCLENILEELHKKDYSILIVDSIQTLYSNKITSAAGSITQVREITFELMRVSKAYNIST

FIIGHITKEGAIAGPRVLEHMVDVVLYFEGDATKEIRLLRGFKNRFGGTNEVGIFEMTSKGLISAKDLAN

RFFTRGKAISGSALGVVMEGSRALVLEVQALVCESSYPKRSATGYEKNRLDMLLALLERKLEIPLGHYDV

FVNISGGVKVSETAADLAVVAAIISSFKNRPLSKDSIFIGELSLNGEIREVFSLDTRLKEAKMQKFKNAI

VPSKPSEDIGLKCFVAKELSQVLEWM

>ABS44064.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDLKEIAQFLDDNAPAFLATLGTCGNPRVRPIQSPLLVGDKIYFCTANTKGLFKHIKNYNGIEFCSCAKD

GTFLRLRANAVFEPNLEVKKMMFEKYPYLVNLYETPQNPKFEVFYLDHLSARMQFMNGEFKLFKA

>ABS44063.1 hypothetical protein JJD26997\_0508 [Campylobacter jejuni subsp. doylei 269.97]

MTRFANFYGVIMVLSFIVSWQIFNAYFNFFVFLILFFVSYKIWQFKKK

>ABS44062.1 phage protein [Campylobacter jejuni subsp. doylei 269.97]

MKLKDFDFRVWNNGKYHYPIKINNDIVDINLSMGINDEIELFTGLYDKNGKKIYVGDILKYTRWCEQYME

DAEYSETIYEIVCFDIKLGLYSKLLNGECGWFFEHFINDKNKTVEEMEIIGNIHENKELLK

>ABS44061.1 ATP-dependent Clp protease, ATP-binding subunit ClpA [Campylobacter jejuni subsp. doylei 269.97]

MKYQENLQKYLDNAKNLSLINHHEFVTCEHVLFALLKLSTDFKDIFEEFSDGDLELLETELKNHISQNNK

VIKQEIEPTISVVLDEILLLSKNKNNEIKIIDFLEKLIQDSRSYSSYLLKKHNINLNKIQELQNHENIQN

LSNHTSDLTLLAQNGKIDPLIGRKFELERMMQILSRRKKNNPILVGEAGVGKTAIVEGLALAIAEKKVPK

NLQNAKIFSLDMASILAGTKYRGDFEKRIKEILNELEKIPNAILFIDEIHTIVGAGSTGESHTDFSNLLK

PALSNGTLKCIGATTFMEYKNTFDKNKPLSRRFAKINVDEPSQEESLQILKGLKNKYEEFHHIKLNDEIL

QYAVIWGKKFFNDKFLPDCAIDLVDELGASFALNPKAKKNANLKDLKNVLAKMTHHHKMFEFDQNKALMN

LKTNLKAKIFGQDEVIDSLVSSLKQSFAGFKNSNTPRGVFLFTGSSGVGKTELCKALAEFLGLNLERFDM

SEYAEKHAISKLIGSPAGYIGFEEGGLLSNAIRKNPFSLVLFDEIEKAHPDLSNTFLQIFDNAELTDNSG

LKVDFKNTIIIMTSNLGLKESNELGFLSKNEEKSNRAIKDFFAPEFINRIDKILHFNDLNDAILVKIIEK

ELDEISKNLNNIKLSVDDKAKIYLAKKAYNKEFGVRLLKRIISEEIGEKISDEILFGKLKKGGIAKIKLG

KNGKLEFIF

>ABS44060.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MSREIFLQEDSLITSKTDLKGKIVYANDDFLKYAGYSTMGEVLNKPHNIVRHKEMPKTIFKYLWDYMKEG

KEIFAYVKNKTKDNNYYWVFANVTPSIDINNNIIGYYSVRRMPNKSAISTIESLYSDLLRVEQQQGLNKS

VEMLENFCKDADKTYNELIFSLQEAK

>ABS44059.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSLSKLFDFYSVFEGFEKLNILNFEDDVFANIERILLDDYLKIKSYFALDETSFYALTLLAKNNRKRFSI

NRKIQHFKALSTLKYLLETGIIKLEYSKEAKKIKDKRQKIKKELRSYVVQDKIIFGNHFTRFFFYFLKPN

EKLILQNRYKEVLECIKEKFEFYQSFCFEQLSRELLEKKFNINGVQSYWDKNLEFDLYYQDENLCFVGEV

KFKNKKICKNILNLLKSKAKSLNLAPNYYIIISKNGFSKEFYKICEQNLLLLDLNDFKILLEE

>ABS44058.1 anthranilate synthase component II [Campylobacter jejuni subsp. doylei 269.97]

MILLIDNYDSFVFNVKSMLEQLSNDEILARRNDEISLSEIKNLNPTHIILSPGPKHPSQSGICLEIFKAR

LNIPVLGICLGHQALALAFDSLVVKMQEPMHAKSSLIKQCKENELFSNLPLNFSVMRYHSLEVKQLSDEL

EILALDEKGVIMALRHKNLPYYGVQFHPESYFSEYGLQLFSNFLKQDIKKSQKQENPLSFYLQKMSENHF

LQSDDFEQICKIIMSKGYEILQVAALLILITEKSLNEKSLSVFVRQILRYSQTFSDESEMIDICGTGGDG

FKSINVSTTSAFILAALGVKVAKHGNRAISSSSGSTDVLEALNIATPNTLELALKQLNNQGLSFLHAPFF

HPLVGELKEIRSRLGVRTVFNVLGPLLHPNLKLKYQLMGNYHAPVHRLLIEVLKNLGRKKALVVRGNDGM

DELSICDESKIYELCEGEILEYSICPEQFGFKRAFHSEIIGSSAYENAKDLKDILSGKMQGAKFDLVVLN

AMFALYIANKASSPLAAKDIILEAIYSGKVMEYFKEYQAHAKA

>ABS44057.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVIENLNDVLFEKCIEDILSMGKNRVFDLFDFMDIDDKIPRNILQIYLIEILLSMEKNKFIKAKKIFKIH

FLNCETYECILNEIIRLFFKKKYLKARDIILHYLNKNPKDMYLFYVCHMIDFNFGFKDSMLKVLDVMQIK

PENKFYSYYEGIKAFILSENSIYKQSFLAAKQALKMNKKDIYALHVICHYYYDTKKFVQGKKLMQNQRDL

WMNNYSMRLHLSWHYALFLFYTHDLENIEKIYKFLRVKNNENALEDLDASSLAFRLKVLYNMRIDFIEAD

IKALFDSWNCFKELGFYFFNDFHAALVFVLANRVDLIDVLIKKTRLSLPFGFYKHKIKILKAIKYYHLKR

YDKVIYLLDEKMDYSFMGGSRAQRNIIYEILKQAKLNLRRVNG

>ABS44056.1 dTDP-4-dehydrorhamnose 3,5-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MAMDFAIKESKILSGVYIITPNFFEDFRGEIWSVFEDKAFVNLLPKGLNFVLDKFTLSKPNVLRGIHGDH

KSWKLVTCVSGEIQQVVVDCRKESPTYLKYESFNISSKQKKLILIPPFFGNAHYVLGDKEALYYYKWAYE

GEYVDAEDQFTYAWNDERIGIKWQGENPILSERDLKVLRG

>ABS44055.1 integral membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MGVFLVLLGGIFWAVIGAFGVTFYSLSAREVILKYGLFWIMGWASLFASFVFLLILQFDKGLIHYAFNLK

AFFSMSGIVFIGTIGAFCLYLKGVEYIGALRASMIASIEPVAAALMSFLFLKTRYSLLDIFAFVLIILSV

ILNAKKTKVS

>ABS44054.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDERILEFIKNEQLLSWAMIDEKGVYTASAFYVFDEKNLAFIIASHEGTKHIRLASENSSIALNIAKENK

IAFLKGVQAKAEFKIASKEQKEIYFSKFPFAKLDKSAKIYVLELFWLKFTNNALGLSKKLEFCKK

>ABS44053.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKLSLILACSASLFAASNSEISDFYSKSIKAQFPNATVSVSNRQKVGNTGFESVIVSVELNGQKQENIL

FTKDSLITPDLINLKTGISYAQEYEMKKFQEARENFTKNAKAVAQKETMVIALGDKNKPAIYVFSDPECP

YCREHLAQIDDELKNYQVNYILTPVHGKSAFEKSALIYKKAKKAKNDKEKIAILNKYYDANIKNYPKVSD

AELKEVFSLYEKYRSLGLSATPTIIK

>ABS44052.1 transcriptional regulator, Cro/CI family [Campylobacter jejuni subsp. doylei 269.97]

MFIKELRERLNLTQSEFAKNLNINQAIVSRYENKKLTPTSEFIIRLIKTFNANPNFIFFGKEPYLNENTY

KNEISQELNQLIDELSLYENEKILF

>ABS44051.1 threonine dehydratase [Campylobacter jejuni subsp. doylei 269.97]

MLELNKIYKAKQQISGFVNKTPFIHSSFLSDICQSEIYLKNENLQITGAYKIRGAYNKIANLSAEQKQHG

VIAASAGNHAQGVAISAKKFGIKAVIVMPESTPLLKVSATKALGAEVILKGDNFDEAYAFATSYAKENNL

SFIHPFDDEFVMAGQGTLMLEMLDEISDLDMIIAPVGGGGLISGIASAAKQINPNIKIIGVGAKGAPAMY

ESFHAKKIKNAKSVRTIADGIAVRDANPINFNIILECVDDFIQVDDEEIANAVLFLLEKHKIIVEGAGAA

SVAALLHQKINTQNHKKIGVVLSGGNIDAQMLNIIIEKGLFKSYRKMQIHVTLVDKPGALLHLTDSLKIA

NANIVKIDYDRFSTKLDYGDAMISITLETKGKEHQEEIRKILTQKAFNFYESF

>ABS44050.1 peptidase family protein [Campylobacter jejuni subsp. doylei 269.97]

MDRYNKGGYSLIKKELRPFKLNTPKSLHFDFSPFSLF

>ABS44049.1 histidyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MINALKGMKDLLDKDAYYYEKVIQTCEEVVKNYGFTFINTPHLELCILFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLECMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGIGFAMGIERIIAILEQKEEKVQREGIYLCAMDKIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEVQNESLFYKNLVKKEEKMIKISDLKKVL

>ABS44048.1 biotin synthetase [Campylobacter jejuni subsp. doylei 269.97]

MQIMLCAISNIASGNCSEDCKYCTQSAHVRTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEENRLSFRKSLQELQPFSTPINFFIANENLKLQTPRLSADEALKIVR

DTKEALPQSVVMVAGGREVVLQERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>ABS44047.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

KILPFVPEGLRAEFSYILGIREGRNDESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>ABS44046.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNYKLDEMIRGWFVGNFDPSVFKTNDVEVGVKEYKKGDTEEKHHHKIATEITVIISGKVRMNDRIYSKG

DIVMIYPGEATDFEALEDTTNVVVKLPGANDDKYLGECQ

>ABS44045.1 putative sex pilus assembly [Campylobacter jejuni subsp. doylei 269.97]

MAKTENGYVEINKFIDTKPMFGNWEVDTLAIFSIFIAIAIMFARGAIAFGIFFALGVVAAKYYEKLKKSR

VKGFFFHIIYMLGLRQPKTLPPSYMRYFLGA

>ABS44044.1 phosphatidate cytidylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFNTTRIISALVMIGAIIIIALIDQFFINFIVFAVLLYLSFSEAKKLFALENISIIPLAIAFILGSLSYK

ALLFGILALLLVVGYLVYKKASLKPALIYIYPSLPILALWQVYFDQGMFALFWLIIVVTACDSGAYFIGK

LMGKTPFSPTSPNKTLEGVIGGLICASVIGTILGVFVYSFCLSLLCSFFVAIFAVIGDLLESYFKREAGL

KDSGDLIPGHGGVLDRIDAVIIAAFVMVALL

>ABS44043.1 chemotaxis protein CheV [Campylobacter jejuni subsp. doylei 269.97]

MFDENIVKTGSNEMELVDFRIFKQGHDKIYEGIYGVNVSKVKEIIKIPSLTELPGVPDYIEGIFDLRGVV

IPVVNLAKWMQITEPESTMLKPRVIITEFSNILIGFIVHEAKRIRRINWKDIEPATFSTGSGALDKGKIT

GVTRIENDEVLLILDLESVVEDLGIYAPKTDIDFGKIEKFTGTALILDDSMTARKRVKEMMQQMGFQVVE

AKDGVEGINKLEELSQVYGESLNDTLKIIVSDVEMPQMDGFHFAARIKEDPRFKDIPIVFNSSLSNEFMN

DKGVQEAGGEGYLVKFNASDFFNEIAKVIKKHQSQEQG

>ABS44042.1 capsular polysaccharide ABC transporter, periplasmic polysaccharide-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILILFFSCILCFGAVDVSQIIASEEQTSRTATMEQILSSNYDTANKENNLTKIHQILVFGAHLFNGN

FKNYNQRVYNPDYKIAVGDQISLKIWGAVEFSQVLVVDSQGNIFIPKVGAVNLLGVKNSALVSVIKARVN

KIYKSNVFVYADMNAYQNVSVFVTGSVNAPGLYQGLSSDSVIQYLDKAGGINLEYGSFRDIQILRNNSVI

KNIDLYDFLLKGQMYLFPFRSGDVILVGNVQNYAFVDGDVQRPFRFELSNDIKTLADLARVSGAKPIVTN

AIVKSYGEDHKLDVSAYNKMQFSKVLLRTGDEVEFHPEYVSENITISVNGEHNGLKTLVVGKGTTLEDIS

KLIKANPQSNMQALQVFRKSVARTQKELINAQLKELETLALTSSSVTAQGAAIRAQQAKTILEFIQRAKQ

VEPKGQIVIDNPKSYNSVILEDGDTISVPSKNNLIIIQGEVSLPGAFLYDKGKDLRYYINLAGGYGERAD

TSKVLVIRSNGKAEKYHSGIDMKPGDSVLVLPKVDSENLQIFSMLTQILYQIAVATNVVLNL

>ABS44041.1 thiol:disulfide interchange protein DsbD [Campylobacter jejuni subsp. doylei 269.97]

MRIFGIILLSICLCFASILSLNEAFNVKSNSYNNSISIDIELGKDIYLYSNKIKLYINEKDISSLINLPQ

SSTRGNENVYYRKLNLALPNLLLERFAKNNTNLIKLEFQGCSEQGLCYNPQTWYFDLISKKNTFEISKPY

KAQKTDKKTKIESEESSIANFLTTDNFFWILLSFFGYGLLLSLTPCILPMIPILSSLIIAKSNAKFSKKY

SFFLSFIYVFFMSLAYAIAGVIASFLGTSIQGILQKPIILILFALIFIAFAFAMFGAFRFELPLRFQTFI

HKKSEKGKGVVGIAIMGFLSALIVGPCVAAPLAGALIYIANTGNALLGGSALFIMSFGMGIPLLFIGLGL

GFIKPGFWMEKVKIFFSFVMLAMAIWILSRIIEENYILIAYGILGVFFSVFMGIFEKSFAIISKIKKSIL

ILILAYSLSIFLGGLFGAKNFLNPLNFNTISTSKPALSYDYINNFEQLKQEIQTSIKPIMLDFTASWCEN

CKLLDELTFSDERIIQKMQNYKLIKVDVSQNNNEQIKTMKEFNVFGPPVLILFENGKEKLKITGFISADD

LLKKLEP

>ABS44040.1 tetraacyldisaccharide 4'-kinase [Campylobacter jejuni subsp. doylei 269.97]

MSEEKKYELWLDNYFFKPNFWQKCLAFVLLPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENVKGVIVSEDRVKGIK

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFILPSGSYRLPKFYERRADFIALEGRDFLRYSF

VKKNLKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>ABS44039.1 GTPase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQSIILIGKPNVGKSSLFNKMARQRIAITSDISGTTRDANKTEIYIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVINKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHQEFLIPDEEENLEDFLEYYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESIVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDTHEGFNELDERIAGLVVKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>ABS44038.1 conserved hypothetical protein TIGR00486 [Campylobacter jejuni subsp. doylei 269.97]

MKLSKIYNFLDQLSSFNIQESWDNSGILLGDKDNEISTVYLSLDIDENIIKEASENSLIITHHPLIFKGL

KDLYDKAYPRAFIKKMICKNISLISMHTNYDLSHLNTYFTEEILGFKISFKDEFLIYVENSMSFEALCDR

VKKKLNLQILRVSDCGKKDIKRIAICTGSGGDLISKVDADCFLSGDFKYHQALEALSNQISLIDLGHFES

ERYFSQCLAKDLKNLPLQVIITVSKNPFQYF

>ABS44037.1 carbon starvation protein A [Campylobacter jejuni subsp. doylei 269.97]

MTQLSTKILWLFVATLGAICFGYLALQNGESVSAIYLVVAAVCIYMIGYRFYGRFVAYKVLELDKNRATP

ALVENDGRDFVPTNKAVLFGHHFAAIAGAGPLVGPILAAQMGYLPSMLWILIGGVLAGAVHDFVVLFIST

RRKGRSLGEMIKDEMGKFAGGIAMVAIFGIMLIIIAILAMVVVKALAESPWGLFTIAMTIPIAIFMGIYM

RFIRPGRVGEASIIGFVLLILAIHYGSVIAADPYWAKIFTLEAPTLAIVMMAYGFIASVLPVWFLLAPRD

YLSTFLKIGVIVVMAVAIVLVAPDLQMPKANTQYFDGTGPVFAGGIFPFLFITIACGAISGFHALISSGT

TPKMLENETHALTVGYGSMLAESAVAIMALICACILHPGLYFAINSSSASIGTDVVNVAQTISNWGFSIT

PEEITTLTTNIGEHTILSRTGGAPTFAIGVALILHELFGGVDLMAFWYHFAILFEALFILTAVDAGTRAC

RFMVQDILGNVYKPLGNTHNYPAGLLATALSVAGWGYFLYQGAIDPKGGIYTLWPLFGVSNQMLAGMALL

LATTILVKMGKARYTWVTLIPAVFVLVATLYGGIQKIMPYEEGNKVANAVSHVATVSIQSQKIKDLEFKL

NNTKDEKEISAIKKEISIATQSKVGNLINAILCVFFMIATLLVIISCIGVCLGKIKIPLKETKYIKIDEF

QKI

>ABS44036.1 hypothetical protein JJD26997\_0267 [Campylobacter jejuni subsp. doylei 269.97]

MLFGFDDKQEFIPQIYRYLNKQELMLTFLTQYNASVDSALKIPVSYAKNTKSLKMIFGNFLHDIMHVSFS

KIQNINIKLNAYAFYFQKRKSLIFNTKISKNVDLLKLLRIYLYGICFDAQILFSSYVYDKVSFQNNGKNI

DQDGDLIIIDKKFAILPLCKEINTHNLKIENEIHGLLNLIKENNFEKIYIVCPRNKNFTHFIEIKHFLCD

LNKTMLKLVPYKISNQIIRRK

>ABS44035.1 TPR domain protein [Campylobacter jejuni subsp. doylei 269.97]

MAEQEDIILEKPEDSLNQPRLDESLEGFKGQEGQAPEDEEFASLPEELPRENSDSGFKFTRESVPEDVST

FEEVESQEPISWYKDRKFMSLVCLSLGIVCILVFTLFYLTFSEGKIKPDIIASKPLEQPVVMPDESYKYN

DMQRIDGMIQKANALYLKGEVEQALKVYEQVAVYNESLSNYNLGVSQMNENKFQEAFESFKKAIANGENQ

SVAAINAAVCALKLNDKEKFRYYIDLAQVYLPKEGKSKLYDYYLSLINYYKGYYPEALQMLQRTDVEPYS

DVAKYLSAKIYAKMDFDSKAIQQLNSQGNFESSLSLGLLYARIGEYAKAKVALSTAMKIERDFNQSLAAL

TLVDIKTGNYQDMLVRLQNSYDNDKDRYKILDTYKIQVRLNKYLFNIVVAQNSFSKDLLKKQKDQFDLLF

YFAPYQVFDSKQVALYIKKANVTDFVDDSTDAGIYLDTSKALSSTNVKIANIINYALNQKLRLANQEFQK

LIKDYPEHSILHYNLALTYAQMQNYELAYKHFSSSYHLNPKNYLAGAFAMFCAKLIDIDTTKLYNEILDN

IAADSNFKANMQKSMLFLVNNNYISMLPYLDEIKKDTPLSLIFEAIVAKNNNLNNQVDVKIAKLRSELPE

DILANILYFNSLNSNLNIKEYAQNAQIHFKNLKLDYRSVFGGPSIAREFYVNLVHIAGLLNLERQKFKEL

INVSGVKDEGILQTLAYLDIFAQQYEEAYALYNSLIDDYGAKDTKTLFLAAVAAVGANNPNSAIALLQLS

KLTDKNNKESKAALGMLYQEVKNYEAAISQYKTLPNNFKSEFFTFDINNN

>ABS44034.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIVLMFFLFSISLFGADFITLKEYSKMLYENPRGISCKECHGADGSERILGYYMKNGIQTAYKVPSIQN

LGFENFKNSLNQSKDAKSTMPNYSLTNDEIVTLYNYIKQFSKEEK

>ABS44033.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIPHFIASFEVANYTRKSLRQRKGYLKLSNTIAYGGLSVDALALYIQLAKLSEKTIVSEIYLREFIKVKN

NQRMSLNRLRMAKKELIELRLLEIKKLRKGSLNFYEWILKDENYQIKKHFNQALTLLKSSDEKLSKTLKN

NASSIDRKLTPENEKNQNSLYIETRTHARDNKFINNINNINNINNINNINNINNINNKEFIKKENLENLK

NKETKEKENCVFDKTPSFIVDFNKLDKEDLELMANKLNNKQALKAKAIKAYKERNITNFSLEDWILWVDY

KLEKEKAPTMATFNHNLNQLVSFGMSAKESISNSISSGWKGLFEVKAQSGFKKYDKNIKFDFERDEKKMA

EFEDMLDRVYGKSDGKREIDLDKMVGGNDDSLSWADMFNYKDKHTHLIDVEVLD

>ABS44032.1 glucose-6-phosphate 1-dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKNFNFVLFGATGDLAMRKIFPSLYQAFIDGLIPSLDKIIATSRSTLSTEQFIEELNNRSKIHIKNYNDN

KWEEFTQFITYLSINLNEAKDFEFLREKINKKSQNIVIYFSISPEFFIKACKNLAQVHLNQSHIKIILEK

PLGMDLQSCRAINNEIAKYYSENQIYRIDHYLGKESIQNLLILRSYNPIFTSLWSKEHIDYVEISVFETL

GVESRGEFYDDTGALRDMVQNHILQVLSLVAMKIPENFDAESIRQAKLELLKNLKPLSDNDIKNNVIRAQ

YIKSGEFKSYLSEDNVKNDSQTETFVAIKVELLDENWKSVPFYIRTGKRMADSFAQIIVHFKNKEHLNLN

PNKLIIRLQPDNQISLNLRVKKIGKTIDYEEKNLILNLNNSSIMQPYERLILDAIQGNQTLFNHKEELEA

AWTWIDPILKNWRANKTPLYYYLAGSWGPKEVFELIKKDKHEWHHF

>ABS44031.1 L-fucose permease [Campylobacter jejuni subsp. doylei 269.97]

MTDSKNIKIAIVLVTSLFFLWGVSYGLIDVMNKNFQNHLHISQHESGFLQFAYFSAYFIIALPAGYIANR

FSYKMGIIFGLALYAIGALLIIPATNLASFHLFLFAFFILACGIGSLETSANPYMTKLGDEKNASFRINA

AQSFNGLGQFVGPIIGGALFLSITKQEEGASKEQIEAALVANMGNVQLVYIGIAAIVILILIAFVANKLP

EGSAVSDDYKQKDDSKPIYVFKHRHFNLGLLAQFLYIANQVAAGAFFINYVVEHNEGLKDAQGAYYFSIA

LVAFMLGRIVSTPLMKIIKGEKILGFYSLINVLICFSLYFASGFFSIVLLIALFFFMSISFPTIFAVATK

NLPLNQVKLGGSLLVMSIVGGAIMPIIIGFINDHYGTGAGYLAMAPLFLYVAWYGFIGSKVRKNAKDF

>ABS44030.1 S-adenosylmethionine:tRNA ribosyltransferase-isomerase [Campylobacter jejuni subsp. doylei 269.97]

MINKDLLLSSYDYTLANELIANYPTNPKEDARLLVFDRKNKEIFHTTFKNLQDFLPNCAIFFNDTKVIKA

RIYGNKASGGKIELFLHQPFLNSHNPLFLAQIKGRVKKDEILYFKEDLKAYIVELLNEGLRKVQFFQNDK

TLDTSNLYNLLDKIGHIPLPPYIKREDEKSDLKDYQSIFAKNLGAVAAPTASLHFSEIMLENLRKKHEIY

HLTLHVGAGTFKGVECENIQEHKMHSEFFNIPKRACEIIDSKQAILGVGTTVTRTIEYYARTKTKNGFCD

LFLHPQNPPIRQNHLLTNFHLPKSTLIMLVSAFIGREQCLKLYELAIKEKYRFYSYGDAMLIL

>ABS44029.1 oxidoreductase, 2OG-Fe(II) oxygenase family [Campylobacter jejuni subsp. doylei 269.97]

MNLPILDLQDYEKDKKTFLKNLREITSKIGFFYLTNFGVDRKLNKHLFKLGKDFFNLPRSSKELISMVHS

PQFRGYTSEGFEYTAGAKDYREQLDIGTERDALNWNLNSPLWQRLEGPNLWPKEIPELKNTFLAWHEQTK

KACLKLLQAFAECLSLPSDAFNQLYGVNSYEHCKILRYPKRSPKSKQGVGSHKDGGLITFVFQEEQSELE

AFIDGKWLSIPPLEDSVVVNIGEFLELATNGYLKATIHRVNLSSKERFSIAYFLGVQLDKNIPVFTLSPE

LAKESKGVDTDPKNPLLRNVASNYFKRMIRSHPDVARIYHSDLIEKFSFA

>ABS44028.1 putative molybdopterin biosynthesis MoeA protein [Campylobacter jejuni subsp. doylei 269.97]

MLMSYEESLKILHSHIKTYEKIEKIALTECLGRILAQDIKASKNQPEFPTSAMDGYAIKFEDQDKPLKIL

GLTPAGTMPQFSVQNGTCVKTFTGSLMSEGSDTLAPVENVRVENDTLFIEKKVPQAFAVRAVGENYKKDE

ILLKKGTRLNYSEIALLAELGFFHISVFIKPIVGVLSSGSEIKDLGEALENPAQIRSSNHIAIANLAKNL

NCDTRVFPLLKDDEKATFSTLESALQSCDILITTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIA

KANEKFIIALPGFPYSAMVMFNLYAREILNSWLLQPKDYICKAFLQGSYKKKTPYLEFVACNIKFENGRI

LANLEGKKEGSSAIINNLNNKAALMVVPKECEILENESLVDIIFMP

>ABS44027.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKIYFMLVIAGIFAGCVPSANSATKNSSANSTAPSQDVIVQKVDKDDVRDIIREEKMLAPDASETELSF

TAVGEGIAPMNTVSTAQALALAKRAAITDAYRQLASKLYGVKVNGKDTVKDAMLRSSTITAQVNGLIKNA

SIIDENFNQGLYRVNLELKIDADKWKELFAY

>ABS44026.1 ribosomal protein L13 [Campylobacter jejuni subsp. doylei 269.97]

MAKVKIMTKITKPNEVKREWVVLDAEGKRFGRLLTEVATILRGKNKPCFTPNVDCGDYVIIINASKAVFT

GANKAEDKLYHRHSGYFGSVKSEKFGDLLEKNPAKLYKLAVRGMLPKTNLGRAMLKKLKIYAGSEHPHTA

QIAKEGK

>ABS44025.1 NADP-dependent malic enzyme, truncation [Campylobacter jejuni subsp. doylei 269.97]

MNLKEEALKYHLGGKIDIVPSKPMATSHDLSLAYSPGVAEPCLEIAKDNELAYTYTNKANLVAIVSDGSA

VLGLGNIGAQASKPVMEGKACLFKKFANVNAYDIEIDVHSIEEIVNFCKALAPAVGGINLEDIAAPKCFE

IEAALQDLGIPVMHDDQHGTAIISTAGLMNAMEISGKKFKDIKVVVSGAGAAGIASAKMYRNLGVENIIL

VDSKGVISKDRNDLTSRKLEFVVDSKEKTLKEALKGADVFLGLSAPKILDDEMVLSMAKDPVIFALANPI

PEVMPEDVARLRKDAIVGTGRSDYPNQINNVLGFPFIFRGALDVRASKITENMKVAAAKALADLAKLPVS

DAVKKAYNLNHLEFGRDYVIPKPFDERVKAAVSTAVAAAAVKDGVAKVKNFDEKAYFESLK

>ABS44024.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MELKLARTLINEKPKNISLEKIEEAIEKEGQKFFYFDKDNTHKQLIALVNHFEKKGVSIYHRTVKYGLDD

NDFMYEVHIL

>ABS44023.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGDIFDLLIGEISATHEFAKPYIELLEELALKIEIIYLEGNHDFNLSCFFKRVKIFNLQEQPLKLNLHTS

KGNNLVLNNAFIKLAHGDIFLPPLLQFTLKTLRNHYLLIFLNFLNIITRNFISNKILQNQNKKNLFYQIK

DFENLAKKRYERYENLGFWVCEGHYHQNHQINKENIKYLNLASFAYERSFFVVEYQQEIKFREQKLRGQN

V

>ABS44022.1 inner membrane protein, 60 kDa [Campylobacter jejuni subsp. doylei 269.97]

MNNSNNIFQQKRILLAVVISFLFFVVYDYFFIPKQPLKIEQNITQQNQQNTSINNIPNIQNTTTNTPSAA

LVSQDSMISKVQSKHFEAQIDSFGRISAFYLKDKKYQNEKGEFINLVSKENSPYPLEMRFSDPSINSEAF

KIPYAANANNLFVDENGSQVLKLTQNLSGLKIEKDITFYAKGNYEIEVKLSKNANYFISPGYRPNIAVDS

YTVHGALVVDNKETIETYKDGDVEKDESANNVVMTSAFDRYYANFFYNFDKPLNVAISKDANKNPIVFAY

SDNEFKAGGYIGSKEHVILRSIDPRLEAVVEYGWFTFIAKPMFEFLNFFHQYIGNWGWAIVVMTLIVRII

LFPLTYKSMISMNKLKDLAPKMKDIRERYKGDPQKMNMHMMELYKKHGANPMSGCLPILLQIPIFFAIYR

VLLNAIELKAAPWAFWIHDLSVMDPYFILPILMGATMFLQQLITPMTIQDPMQAKIMKFLPVIFTFFFIT

FPAGLTLYWFVNNLCSLVQQWVINKIFAKEHHKKQAEHEK

>ABS44021.1 tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKNLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGTHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYNHDKVIASGFIE

>ABS44020.1 thiamine biosynthesis protein ThiF [Campylobacter jejuni subsp. doylei 269.97]

MMRVKFNGKELDTDFKTSLEFFENISKNENDVWIINGFATKENIALNEDDELFCIERNTLPPKDALDAMM

RARHTPKLHDKLKNGRVAVCGLGGLGSHIVINLARSGVGYLKLIDFDVIEPSNLNRQAYRVSDLGKFKTE

ALKEQISEINPYISVEICTLKIDEDNLKSLFKDIDIVCEAFDSAIAKAMMAQNFHRFYKDSILICASGLA

GYGDNNSIQTRKIAKNFYVCGDLVNGAKVGNGLMAPRVNICAGHQSNLVLELLANKE

>ABS44019.1 NADH-quinone oxidoreductase, K subunit [Campylobacter jejuni subsp. doylei 269.97]

MIEKYFFIAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>ABS44018.1 putative pillus assembly protein [Campylobacter jejuni subsp. doylei 269.97]

MTARLKNYYLLVSIKSHTEEDVISYKHILKNILTSNNFSPVVAEPEILKPMLYELFNGNHDINNIPSYDR

TCYLNRQVIMPTTEILIQDDELKIDGRSFISLTPQTFPQEAHIADFGEKLGDYISRALDNNQFKDTFLIT

ASICALSKKKTTRVRNNHSMLLTQKWSEAIFRQFAAARKESVSILERIDNQKEKLYAFDLNVIVSGDTYD

EASLNASTIISYWNKGGGKAIVLDEALGIHQLNLIASLPMGINKEYMFDITAKYRSMFPDQISQFIPLEA

DYKLNIPNLILFSRRAQIAFVSSSNYNAYLVATSGAGKSVFLNMLAFSSYARGDRIFIIDQDNSFIKLCE

AVGGQYLALDPSKPISFNPFSGLKNNDRDSFMEDLEYLSNLIYMLGSSKNQDRALEDERLIKAKTQAIME

ELFLSKGNTMEVTDIRDELAKIDDQRFRDFADQLRPFCKEGIYGKYFNGPCEFNIEKEFIVTEFKGLEGY

DDLKDPLIMLLIYHINQLMYMSSDRKSRIQIIIDEAHRFLGKNPKMDDFIEQAYRRARKYGASAIIATQG

FDDIYNAKDGGLSRAGTVIINNSAYKIFMKQTETSVNMLIKSEVFSLSETDKEILRSIMTIKGEYSELFL

MTPDDVKLPYRLVMDNYFYYLTTTDATDKAKIKELTDQGISLGEAIELLANTKTKSNETK

>ABS44017.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFNKNKLFRQVHIYLSLFFLPCALLFALTGIVYIFGINQDVGLKVEQYQLSKVIESGKEREALIEYLKTN

GLKVPSNTNIIKSKDKGITIGGTHYSANITQKSTNEYSITLKTRSLLGDMIMLHKDKGAWYFSVLSVGFG

ITLFMLYISGLMITLFANKKDRSKQFAVLGVGVVVTLLLAYLSL

>ABS44016.1 carboxyl-terminal protease [Campylobacter jejuni subsp. doylei 269.97]

MMELILKTKRFFAGLAGFATTFILCLFLISHLEAKVDRKEDQVQKRLEALDKLTKTLTIVEQYYVDDQNI

RDLVDKSLSGLLSNLDAHSSFLNEKDFNDMKIQTNGEFGGLGITVSMKDGALTVVSPIEGTPADKAGIKS

GDIILKINDEATLGINLNDAVDKMRGKPKTQITLTIFRKGATKPFDVTLTREIIKIESVYAKMIENENIL

YLRVTNFDKSVVDVASKELKKYPNVKGVILDLRNNPGGLLNQAIGLVNLFVDKGVIVSQKGRIASENQEY

KADPKNKISNTSLVVLVNGGSASASEIVSGALQDLKRGVIVGENTFGKGSIQQIIPINKTEALRLTIARY

YLPSGRTIQAVGVKPDIEVFPGKVNTQEDGFSIKESDLKQHLESELEKIDKNKREDKQENKDNKNLISQK

RINDDAQLKSAIDTIKILNIKQGQ

>ABS44015.1 replicative DNA helicase [Campylobacter jejuni subsp. doylei 269.97]

MQQEYYDLDLERAILSSCIMSEEAYASIAGDIGPKDFSLKAHEDIFKAIIACSNNKEPISISFLRKHKKI

DEQILAEILATPSMIDLPAYVNELREKSIKRQLLSFAHLLPTRINENRVVSEIADEMGKEIFSITNRVNS

KDIKEVDMVISELFEEFKKRKILENKNIIGLDTGFEGLNKMTKGFKGGELIIIAARPGMGKTTLCLNFID

KALRQNKGVVLFSLEMPATQIMQRMLSSKTSIPLQKILTADLNDDEWERLGDACNDYSQKKLYIYDSGYA

TIADVRAILRRLKSQDESIGLCVIDYIGLMMSNSNFNDRHLQVSEISRGLKLLARELDMPIIALSQLNRG

LEQRANKRPLMSDLRESGAIEQDADAILFVYRDEVYREQEEKERENKAKAEGKTYQRIFIPNAMQENAEI

IVGKNRNGPVGTIEVVFLKEKSCFVDKPIGYEATEFTDQL

>ABS44014.1 prevent-host-death family protein [Campylobacter jejuni subsp. doylei 269.97]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>ABS44013.1 DNA polymerase III, gamma/tau subunits [Campylobacter jejuni subsp. doylei 269.97]

MLQALAIKYRPKTFDELIGQKTVSVSLKYALNHNRLAHAYLFSGLRGSGKTSSARIFSRALVCEQGPSDT

PCGTCKHCIAALEGKHIDIIEMDAASNRGLEDIQALIEQTKYTPSMARFKIFIIDEVHMLTPQAANALLK

TLEEPPSYVKFILATTDPLKLPATVLSRTQHFRFKQIPQSEILNHLKEILHKENVKFEEEALKFIARSGN

GSLRDTLTLLDQAIIFCQNEINTSKITDMLGFLDPQKIKAFYQAILAKNKEKVFAYLEELQDYEASSVID

EMLFYLKESFFAKSTEFSTLIYERFFRILSKAKNMLCDDDGFTLCVMTFMMMEASHLKEIDTQIQEIKQE

NITNITPKITATPIIPNLEKKIEKNAYEILLDSIYNRNFELGECFKQSTKFISFENNTLNISSNAQGQNR

DMLNKNFKLIQELFKTEFGENTKINVQKALTIDENKLQSLTQELPNNENKNIDIQSSINMLKEGAKKFDP

QEDLKEALKDCFGEPSIEN

>ABS44012.1 putative 3-octaprenyl-4-hydroxybenzoate carboxy-lyase [Campylobacter jejuni subsp. doylei 269.97]

MKEFIQILKENDLLRVIEEPVDVDLEIAHLAYIEAKKGEKGKALLFKNPIDKKLNKQYKFPVLMNTFCNE

KALNLAFGRDYEEVAEEILKLTKLHIPTNFKAKIDFFMNLLSFKNIPPKRLKKNKALYDYEILNSLEELP

ILKTWEDDAGKFITMGQVYTQNLDKTQNNLGMYRLQMSDKNELLMHWQIHKDGANFYHEYKNAGFKKMPV

SVAIGGDPLCIWCSQAPLPKGIFELLLYGFIKKTPAKLTLCENGIFVPYDSDVVIEGYVDLEEFKIEGPF

GDHTGFYTPAELFPVMKVEKIYAKKDAIYQATVVGKPPLEDKIMGLGTERIFLPLLQTSVPDLMDYNMPE

NGVFHNLILAKIDAKYPAHAQQIMHAFWGVGQMSFVKHAIFVDKNAPSLKDYDTLIPYILDRFNTNKILI

SEGICDQLDHASPNSCFGGKAGLDACEETQVEELEILEDEKLLELFKTKVELLNLKQFYKESKSPIVCIL

LDKKEKIEQSFNKLLELKKYFRILVFLDTENKLENPYMLVWRVVNNIDAKRDIFIKEERLGVDASAKGEA

EGYLRAWPKQTDCTKSVIEDLILRNILENNPDLFNKFEIF

>ABS44011.1 thymidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MLKMILGTMKAGKSAKLIDEVSNILFQDEVIIIRPSCDIREFFTRKYKNDELKRFNFGNENTSLSSYRFI

FVDEIQFFKKDFLEQIINLSRKKEITITVAGLLNDVKGNTWDNVETLKSYADEILHLKADCDCCGKKESA

IFHIGDGGINNNYFVFCEECYKM

>ABS44010.1 hippurate hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MNLIPEILDLQGEFEKIRHQIHENPELGFNELCTAKLVAQKLKEFGYEVYKEIGKTGVVGVLKKGNSDKK

IGLRADMDALPLQECTNLPYKSKKENVMHACGHDGHTTSLLLAAKYLASQNYNGTLNLYFQPAEEGLGGA

KAMIEDGLFEKFDSDYVFGWHNMPFGSDKKFYLKKGAMMASSDSYSIEVIGRGGHGSAPEKAKDPIYAAS

LLVVALQSIVSRNVDPQNSAVISIGAFNAGHAFNIIPDIATIKMSVRALDNETRKLTEEKIYKICKGIAQ

TNDIEIKINKNVVAPVTINNDEAVDFASEVAKELFGEKNCEFNHRPLMVSEDFGFFCEMKKCAYAFLENE

NDIYLHNSSYVFNDKLLARAASYYAKLALKYLE

>ABS44009.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKPEDKMAFDAFVVEIQRNMIRNKKGQE

>ABS44008.1 hypothetical protein JJD26997\_0315 [Campylobacter jejuni subsp. doylei 269.97]

MTLTIENAIKVIKAMAKPFNAKVRVKKPNLEKELLNDEKEF

>ABS44007.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSDLIMLAQLSQGYRYNSDSLILADFILKQGIKGAVFDVGAGCGIVGILLKKNITNLSLSLIDIQKENIE

LIEKNLKSNQIQGDIFHDDFNQFQSVKKFDFIVCNPPFYRQGACKSEDQHKTISKFQEFLPLYSFLAKAN

SILKPNGTLYFCYEALALDEICFILKDMKMKITKLCFVHTHQNKKARLVLIQVKKSSKSPCEILPPFFVY

ENEILSRQMQEIHLRFRLKSYDI

>ABS44006.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILLSFAFFASLASANTINAIAVVVDKEPITTYDIDQTMKALKIDRNKALGILINEKMEISQMKQLGI

VVNDLELDDAINKMLTQNKTTLNAFKANLKSKNQSYEQFRANFKKDLEKRKLYEKISNMAKTDFSDDGAK

KFFEQNKDKFTFYTQINANIYLSNNPQTLENIKNTKKIILKPQNASLNTSNTDPRLLGLLSQIPVGDFSP

VLNGKNGYELYEVKSKDGAQTPEYEQVKNEVLNAYVSEQRQNFIQDYFDKLRSKINIEYLR

>ABS44005.1 putative site-specific recombinase, phage integrase family [Campylobacter jejuni subsp. doylei 269.97]

MLNDTKIKALKAKDKKYYIADFDNLLLCIYPSGKKTFIFNYKCPKTLRYKRITLGEYPTLNLANARKQRD

NLKVNLAENDSIREKSEITFKELALEKMELKKLELSEKTYKSYVSYLQRFAFGIYGEIILDKLQIKDILK

SFEKFRKENIREGADKFFTLLNEIFRHGVIKEYIKSNPMANLNRKELLINKASKNHATLLETKEIKALVD

NIIDYKGYISVKIAAMFSLLTAQRSFSIRSAKWEDIDLENGIWYIPQEDMKMKRAHTIPLNSQCVYMLKK

YKEMSINTGYLFYSLRSKSEIISDNTIRSMFRRMGYSNDDFTPHGFRAMFSTLAHENRNKHQMSSDIIEL

CLAHVEKNKIKSAYNHALNLKEKAILMQWWGDYLDEIAELNQQVRNIFL

>ABS44004.1 protein-export membrane protein SecF [Campylobacter jejuni subsp. doylei 269.97]

MQFFSEKKIYNFMRMRFAAISLSFILFFGSIYLLWDRGLQYGIDFSGGTLVQLKYENAAPITQIREILEK

QGTFQNLSVTEFGSNEEVTIRFLGSNDNVSNDIGEHISTLLKDTGKFEVRRADVVGPKVGDELRNKGLMA

IAVSLIAILIYIALRFEWRFALAAIISEIHDVVITLGAISLFKIDVNLDTLAAVLTVLGYSLNDTIIIFD

RIREGIKTSKKTELAPIINESVSATLSRTVLTSGLTLATVVILYFFGGEMIQGFSLALIVGIIAGTLSSI

FVASPILLWFKFSVLEFRNKEIEKAKRKQDQERNRAMYEKGTV

>ABS44003.1 radical SAM enzyme, Cfr family [Campylobacter jejuni subsp. doylei 269.97]

MKELVNILDFLPEELGEKIKPMFRVKQIYQWIYQKYANNFSDMSSLPKDLRLELAQNFHFSPVKCVKNEQ

SKDGSIKYLFELIDGLRVESVLLPMKEEKIDTEGKRISHARYTICVSSQVGCKSSCSFCLTAKGGLKRNL

SAGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSSKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>ABS44002.1 phosphoribosylformylglycinamidine cyclo-ligase [Campylobacter jejuni subsp. doylei 269.97]

MKISYEDAGVSIDNGNAFVEAIKPLVKETFNDNVVGGIGSFAGAFRMPSGFKKPVILGATDGVGTKLRLA

IDAKKYDTIGQDLVAMCVNDLICNFATPLFFLDYYATAKLEVEVAKAVVSGIAKGCKMANCALIGGETAE

MPGMYAKDDFDLAGFAVGMAEEDEIDRSKFVKNGDILLALPSSGLHSNGYSLARKVLFESLKLKFDDKIE

GKNLIDILLEPTRIYVRDFLTLKPYISVLAHITGGGLVENLPRVLPRGMGATIRKHHLKTPEIFYTIGQA

VEENEMYRSFNMGVGLVMVVDPSNVSKVLENSDAFIMGEICINEGIVLE

>ABS44001.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MVEVKNLTMRFANQLLFENVNLKLVRGQRYGLIGANGAGKSTFLKILSGEIESSSGEIVFDEGLKIAVLG

QDQFAFENYTIKDAVMCANKRLYEALKEKEKLYMSEEFTDEINERLGELEIITAEEDPNYDCETRCEKIL

SSLKIKDFDALMSALQSADKFKVLLAQVLFLGADVLFLDEPTNNLDLEAISWLENELLRHEGTLVVISHD

RHFLNKICTRILDVDFKQIRDFTGNYDDWYMASTLLAKQAELKRDKTLKEREELENFIRRFSANASKAKQ

ATSRAKALEKLELEEIKISSRRDPSIVFRTNREIGNEVLEFKGIGKAYDKQLFSNLELKIEKNDKIALIG

ANGVGKSTLAKIIANVISPDSGSIYLGTTIELGYFPQDTSNLICENLKLYEWLMSEKFKDLDEIRKCLGR

MLFSGSDQEKMAASLSGGEKHRLMLSRLMLERPNFLLLDEPDNHLDLESIIVLGEALYNFKGVVLCISHD

RELVSAFANRIWHLENGKLTDFRGTYQEFLGENDG

>ABS44000.1 hypothetical protein JJD26997\_1745 [Campylobacter jejuni subsp. doylei 269.97]

MDREVFYIAGYDPKSYRFYYDLFKKNLKDYSHVFNIKADISKIEKNEQFPFFKISCEGVQTKYHFLTWND

IVKKNWSENYKDALTDCYSFFRIYTITGLFIKFGKESIYQLITGYYPFFYVLFSLLFSLVLAFGSFAFLQ

NYMHFSLAIIIGCFLGFLLNHFLFKLGKKLAVFWIARICAFCAAWQDKKIGTMQERIKLFANVIVEKLKQ

NENKQDYELILVAHSVGTIVCIEVLECILRQNLDLSLLRKLKILTLGECIPLVSYQKKADKFRKKLEFVS

RFDLKWYDYTSIIDGACFPQVDFFRTSGVNAKFTPPFSNAKFHTLYEKQEYKKIKRDKNKAHFLYLYSIS

VKGDYDFFSFIIMPKFLEEKVKI

>ABS43999.1 hypothetical protein JJD26997\_0724 [Campylobacter jejuni subsp. doylei 269.97]

METLSANSSLIGGSYAGCSKLHLVKKETEQMGNEKLINEINWINALPQNLKANFPNILEYQCGESNTWYL

MPFYDLENLREKILSGKFSSEQTLYFMDKILHFSFKNLNCKRNKEVPEDYLFKKYFNRVLQRMEALENIT

PYNTILKAKHIIINQKIYPNLKELINKLIAFEEESGFFTPKELVMAHGDLHFQNILIDELNDNFILLDPR

GDAWLDIYYDLGKIWHSCNGLYDFIHTELSEMTILKQDNDSIEFNFTLSDDKELIKTYENIKNAIIKLLE

TKFAKELNDQNWLLKTLFAEAMHFASLMHFHLKYDGIENRSVCLYLQSIILCDYLLTNLQGIKTHIRGGG

K

>ABS43998.1 molybdenum cofactor biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MDTINIGILTLSDRASSGIYEDKATAEIERVLNSYIKNDIIYHKELIPDDYDLIIKKLLYLADEKKCDLI

VTSGGTGPALRDVTPEATETVCDKMMPGFGELMRLESLKYVPTAILSRQSAGIRNKSFIINLPGNPKAIK

ECLEPVFPAIPYCIDLIEGAYIEANDEVIKVFRPKKKCQN

>ABS43997.1 L-asparaginase [Campylobacter jejuni subsp. doylei 269.97]

MKKLLLCVLVFLSIGACMAEAKPKIAILATGGTIAGSIDSAVATTGYTAGVVGVDVLIKAVPQIQDLANI

SGEQIANIDSSNMRDEIWLKLAKEINKLFAEGVDGVVITHGTDTMEETVYFLNLTIKSDKPVVLVGAMRP

STAISADGPKNLYNAVALAADKESKGKGVMVAMNDKILSARGVVKTHSLNVDAFSSPDFGDLGYIIDGKV

FFYNNIAKAHTKNTPFDVSKLTSLPKVDILYSYSNDGSGVAAKALFEHGTKGVVVAGSGAGSIHEDQKNV

LKELMKKGLDVVVSSRVVAGHVAVSDSDKKLGFISAEDLNPQKARVLLMLALTKTSDPKKIQEYFLKY

>ABS43996.1 RNA polymerase sigma-54 factor [Campylobacter jejuni subsp. doylei 269.97]

MLKQKITQAPKTKISQTLRSWLPILQANIEDLKENLDKFAEDNPFLNVQHSIQTHDKGKNYFDSFYKHNV

NSAFVDSKGLAKKSVYELLNEQILPPLFPTNKSQELAKKIIECLNEEGYFEYDEEFLKEYSLEEIERVRA

RFKFLDPVGVGAKDYKEAFLFTLENMELDEDIDEFCRMLIMDFENIQNYTKEPLYKEALAVLKRFSTPPF

LEYFEDSRIIVPDIFVYKENGEIKVKINDDYYPEISIQTDGLEHDFLSHYIKEAKNLVDALAMRKATLYK

IGLMIVEYQYDFFMGKEIKPMTFKDLALDLERNASTISRAVANKYLSCERGLIPLRDFFAFALDEEGETS

NVGVKEFVANLVKNEDRNKPLSDSKILELIKEEFKVDIGRRTITKYRKHLNIASSTDRKKLYELEG

>ABS43995.1 putative 3-oxoacyl-(acyl-carrier-protein) synthase [Campylobacter jejuni subsp. doylei 269.97]

MKTRFDKAKISGICVSVPEHKICIDDELESVFSNDIKTLKRMKKVIGLNTRYICDENTCVSDLGKHATNT

LLQGLNIDKNSLDALIVVTQSPDFFMPSTACYLHQLLNLSSKTIAFDLGQACAGYLYGLFVAHSLIQSGL

GKILLVCGDTLSKFIHPKNMNLAPIFGDGVSATLIEKTDFNEAFFDLGSDGRHFDKLIIPKGAMRIPKAD

IFNDDSLMQTEEFRQLENLYMDGANIFNMALECEPKSFKEILEFSKVEEKDITFHLFHQSNAYLVDCIKE

ELKLNDDKVPNFIMEKYANLSACSLPALLCELDTPKEFKASLSAFGAGLSWGSAVLNFKDLYTKDILIYT

KEK

>ABS43994.1 conserved hypothetical protein TIGR00044 [Campylobacter jejuni subsp. doylei 269.97]

MTLEQILEKTKNIRLVAASKYVDASIIEKLFDQGIVEFGENQVQALAQKKENLDEKKLNIKWHFIGTLQS

NKINLLIKQKPILWHSCNGIKIAKAMDKRLDYKLNTLLEINSANENSKSGLNPNQAIEEYLQIQEECPNL

NLCGVMSIGSHSQDRESIIKSFETTFKIYEILQKHGAKICSMGMSNDFEIAIKCGSNLVRLGSILFKNLK

>ABS43993.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MNKIEMLKQHFKEIAKLNSSEQVWQMPFFAALGVGIVLGFSVFFGKLNYGLIAMIGALSFLYVPNTPLYH

RMAVVMCCSFGIVSSFFLGILTHFLPSVFDFIPIGLVAMGSSVLIRYYNIGAPGYFFFVFSCVLGAYSPF

EAKDFIFLVGLVFLGAMVANLMALLYSIVVIYGFKNALPSEIPPREYIGFDAIFVDSLIMGSFVAFSIFL

GTFLELERSYWIAISCTAIMQGVTLNSIWIKQIQRIIGTALGVCFAWWLLSKQFHDIELVLLIMFLFFIG

QFLVNRNYALAMIFFTPYATYLSEAANFMSENADTLILTRLIDVVMGSILGLLGGFVIYKPYLRVYFERI

AKYIFRIKQKA

>ABS43992.1 UTP-glucose-1-phosphate uridylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MLQTCIFPAAGYGTRFLPATKTLPKEMLPILTKPLIHYGVDEALEAGMENMGFVTGRGKRALEDYFDISY

ELEHQILGTKKEYLLDEIRSLINRCTFTFTRQNQMKGLGDAVLKGRSLVGDEAFGVILADDLCVNEEGLN

VMAQMVKIYEKYRCTIIAVMEVPKEQVSNYGVISGNFVEDNLIMVNSMIEKPSPDEAPSNLAIIGRYILT

PDIFGILENTQAGKNGEIQLTDALLTQATNGMVLAYKFQGKRFDCGSVEGFVEATNYFLRKK

>ABS43991.1 rhomboid family protein [Campylobacter jejuni subsp. doylei 269.97]

MLTIFLILLNILCYFLISYDYYNILGLNILFFNGAYWQLLSSMFLHGNLIHLILNMIVLFQFGRILETYL

GALRFIFIYFIGGLLCSLLSVFYVYFDFKYFGENINVIGASGAICVLMGFYAVLDKNSTKGLIVAILLMS

FAPLLMGVNVAWYGHIFGFMCGYILAKIKEVK

>ABS43990.1 translation initiation factor IF-1 [Campylobacter jejuni subsp. doylei 269.97]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>ABS43989.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEIKFTQNNYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>ABS43988.1 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase [Campylobacter jejuni subsp. doylei 269.97]

MLKIQGAKYFEKSRFFPFFSQNIRSFKYLALIGLGSNIEPEKKRFDMLFRAMMDDKRFKILSTSPMLINE

AFGFKEQKDFTNAVMLIQTNLHARALLKVLLYYEVKFKRKRTFKYAPRTLDLDLLYFSQKVKRDKWCEVP

HKEAKERVSVILPLGMI

>ABS43987.1 ribosomal protein L17 [Campylobacter jejuni subsp. doylei 269.97]

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRAYVERLITRARLGDFNAHRAVFASL

QNKNATNKLVTEIAPKFKDRNGGYTKIIKTRIRRGDAAEMAFIEFVA

>ABS43986.1 ribosomal protein S17 [Campylobacter jejuni subsp. doylei 269.97]

MAFKREIQGVVVKIAGEKTVSVLVERKVVHPKYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>ABS43985.1 acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKNLCIIPARGGSKRIPRKNIIDFLGKPLIAYSIENALNSGIFDEVILSSDDEEIIEVALKYGAKAPFVR

DENLSDDYTSSTAVVQNAIEILQSQNQIYDNTCCLYATAPLLNKDILKQAYEKFIQNQSKFLFAATEFEY

PVQRAFYLNENNQVHMFDEKHYKSRSQDLTKAYHDAGAFYFGTSKAWLEEDFMFKPHSSVFVLPRNLVCD

IDTMQDLEFAKILYKANQCL

>ABS43984.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIPFSKINTKEYPFKLNLENMIFEGNLVKINPKLVKINAMMQGFIYRPCDSCGTELELEIKENLELFAS

DGIFKDEANELSNTIEFFDGHIDLIEVAISELEAYLSDYFYCINCNN

>ABS43983.1 membrane protein, putative [Campylobacter jejuni subsp. doylei 269.97]

MENLIIYAFIYLLGSISFGLILTKFFAKTDIKKEGSRSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWAVTGK

IFKISSLASLAALLAFIVSSFIFNYDLEIHTHAPVFIIAFIIVYKHLPNIKRLIFKEECKVI

>ABS43982.1 aconitate hydratase 2 [Campylobacter jejuni subsp. doylei 269.97]

MSFMQEYPKLVEERAALGIPPLPLNANQTQELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKDKISTPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDAAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIQCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQTGSLEK

IKELKKSAREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNTLLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVCPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDSVGTGGDSHTRFPI

GISFPAGSGLVAFAGVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIININLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTDEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>ABS43981.1 putative hemin ABC transporter, periplasmic hemin-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILIIMSLFLITLNAKERLVVLDPASIETLFMFKAEDQIVGIAHLQHSNIYPKDQTSKLTSVGTFSNP

SLEKIVALKPSLVILSSYSLNLEEGLKNFGIKSINLKADRLEDITKNITILGQITKKEKEAELLKQEFAQ

NLKKLSNKPLNKSAIYLYSSNPLMAFNDNSLIADILRLIGIKNLSPQSQISRPVISAEYILKQNPDILIL

GIGAKNNLLDTNALLKNTKAVKTGSIYFNKDTPILLRLSPKIIDRIQEFKTKLENNNF

>ABS43980.1 N-acetylneuraminic acid synthetase [Campylobacter jejuni subsp. doylei 269.97]

MKKTLIIAEAGVNHNGDLNLAKKLIEIAADSGADFVKFQSFKAKNCISTKAKKAPYQLKTTANDESQLQM

VQKLELDLKAHKELILHAKKCNITFLSTPFDLESVDLLNELGLKIFKIPSGEITNLPYLKKIAKLNKKII

LSTGMANLGEIEQVLNVLCKNGTKRQNITLLHCTTEYPAPFDEVNLKAMQSLKDAFKLDVGYSDHTRGIH

ISLAAVALGACVIEKHFTLDKNMSGPDHKASLEPHELKMLCTQIRQIQKAMGDGIKKASKSERKNINIVR

KSLVAKKDIQKGEIFNEENLTTKRPANGISAMRYEEFLGKIATKNYKEDELIRE

>ABS43979.1 putative toluene tolerance protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLILALFFNAFALQLDEISSTMQKNIDASLKLLQDSKEDKKQAADGIFKLFDSIIDYKLMAKLSLS

KNYSKLNSKEQEKFTTAFEASLKKSFTDKLSLYKYQVLKVKNGELKNEKRYFLTTSMVVDGEEKNIIFKF

YNNNNNWLIYDVDVLGVSIVQTYRSQFGDILANQGFDALLQKLESIVIE

>ABS43978.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MRCINCGAFALLCFCDLCELELSEFSLNARKLDNNFKVYSFYKYHEIQHLLHSKHHFYGYFVYKMLAKLS

FAKFKDFFDPRMTINVVALDDKVEDMLYSHSAILARYLKTKFVKPVFNVLKAQNHIKYSGKSLEFRQKHK

RNYKLLKTIHEPVILVDDIVTTGSSLLEAKKVLEENKISVLFALVLADAKV

>ABS43977.1 HAD-superfamily hydrolase, subfamily IA, variant 1 family protein [Campylobacter jejuni subsp. doylei 269.97]

MNKTILFDLDGTLIDSTDAILNSFQGAFKALGLTSKNNEEIKNLIGYPLEQMFRMLYPDKVNLSKEFVLA

YREIYAQIYLEQTTLLPKAKEALELGSEIADLGIVTTKGGKFTPILLDYLGVKKFFKTLITLEDVTNPKP

SSEPIILALERLNKTQENAYMIGDTILDIQAAISANITPLALTCGYGNENELKAHSTVFLNAYEAVNYIT

RLN

>ABS43976.1 hypothetical protein JJD26997\_0133 [Campylobacter jejuni subsp. doylei 269.97]

MALSYELCCKLFDKNFENLNYTKEELFFIRECYSECGKVMDMLGEDTIEKLLKEKETIILPNVTKYAKDS

INEYFENKKMKCLKN

>ABS43975.1 hypothetical protein JJD26997\_1719 [Campylobacter jejuni subsp. doylei 269.97]

MKEMYIITPTEKPSPKESTLKSSFLEKKAIEPIAVEKPAKRVNSIAIEIYSNVNCINILK

>ABS43974.1 ATP phosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQENTRLRIAIQKSGRLSKESMKLLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELKRQSLGENPNYKLLKKLDFGFCRLSLALPQENKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSIEVAPRANLADAICDLVSSGATLQANNLKEIKVIYESRACLIQKENALIKEKQALV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>ABS43973.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEWLLLASIPLIVLGFALKINPFLVVTSVGIYAGLVSGFDFVKVVSDIGKSFVDNRYVAIIWLILPLLAV

LERKGLREQAKNLISKIKVASTGRILMSYFVFRQVTAALGLLSLGGHAQMIRPLIAPMAEAAAKLKFKNL

THKDSQKIKAFSAGTDNVAVFFGEDIFIAVHSILLIKAFYESNGIIVEPLHLSVWAIPTGILALIIHCSR

LYLFDKRLEKTYKGLGNDKS

>ABS43972.1 hypothetical protein JJD26997\_1942 [Campylobacter jejuni subsp. doylei 269.97]

MALMPEFCKNQIFRVVNKFYIFKFKQGVFNFLSIAFDPKIIFFFID

>ABS43971.1 type II restriction-modification enzyme [Campylobacter jejuni subsp. doylei 269.97]

MKFEAINEKEFLNPYHRKKPILETELNEFIKTLKDYKINLENNLKNNEDSLVANALSKFFENLSFQCEVK

SIHKGNSGIDLALKKDGLTQVIIEAKLPNSREFFSPSRPNCKALHECVLYYLRERKALNSSLKHIIITDF

YSFFIFKADLFEELFNKNKYFKEAFENFESKNSLFKGNTDEIYKEFEKILNGDSTLKGLFVDLKPILEQD

KLSFSKLKPLFKIFSKDCLLSEFNPNDANSLNNAFYKELLYILGLCESKQNSKLIIAKSEESKEEQGTFY

TAINSKLKEENFETILKLLILWLNRILFLKLIESNLVRFNDDKNLKFLNFKKIPDFDKLSELFFEVLAKE

KSTRKKSEFAYLPYLNSSLFEKQSIENTLEISSLSNDLKLFYYKNTVLKDDKCKAKKGQVGLLEYLFEFL

DSFDFGSDDEQSEILSQKELISSSVLGNVFEKLNGYKEGSFYTPSFITSYMCKESITKVVLDKFNAQFDL

DAKNISELRNFLRKEDKKAQKELLNSIKICDPAVGSGHFLVSALNVMLSIYDELNLFDEEFYLEVQNDEI

LITGRKGKFIEYKRPNTPKDKAHLIQQELFHTKKDIIENNLFGVDINPNSCEITKLRLWIELLKHSFYQS

FDDENYHDLKTLPNIDINIKCGNSLVSYFETGKSLSHYPNIKERMGKYKRIVKDYKEGFYTDKSHINQEI

KNLKISFKNFCFADKFKKEMKGFNDKCEKYSKKYGNFLAVDDENLKFFVSANLTLFDFDEKEATKEFANL

KKEYDNIFNLESNHPFEWRFEFPEILDDDGNFKGFDLIIGNPPYIKEAENKELFANTKKLRTYQGKMDIW

YHFVGRGFDMLKNNGYLAFIATNNWITNSGAKKLRNIVLEESQILSLVDFSSFMVFDSASIQTMIMQFQK

IKPPKNYEFHFAKITTQTPIYEDALSLLKNEKTQNNEILKINLTPKKFIDKTLNFTKSDYEELFNKIQKY

GKFYLEEREVANGIHPHYDFINNRINSNHNFAFKTGQGIFGLSEEEKEKLKLTKLENNLVKPYYDTQNFL

KFFFKKNNHQWLIYTNSSFKNPNSMDNYPNLKKHLDKFQNVITSDNKPYGLHRARDEKFFTGSPRIVALR

KCVGEPKFSYVDFDCYVSATFYVIKTQRINVKYLTAILNSKLIAFWLKHKGKMQGNNYQIDKEPLLNIPI

VTINSKNQKIADEFINLVDEILKAKEQDKNANTQELENKINSLVYKLYNLNEEEIKIIENKE

>ABS43970.1 acyl carrier protein [Campylobacter jejuni subsp. doylei 269.97]

MATFDDVKAVVAEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>ABS43969.1 5,10-methylenetetrahydrofolate reductase [Campylobacter jejuni subsp. doylei 269.97]

MCSFSFEIFPPRRDENIKNLNAILDDLGQLSPNFISVTFGAGGSINSKNTLETASLIQEEYKIPSIVHLP

CIHSSKEKIISILQECKERQLDKILALRGDVCNDLEKSKDFSYASDLISFIQKQGEFEIYAACYPEKHNE

SKNFIEDIHHLKTKVNAGTDKLITQLFYDNEDFYTFKQNCALAGIDIPIYAGIMPITNKRQVLKISQLCG

AKIPPKFAKILEKYENNTLALEDAGIAYACDQIVDLITSGVDGIHLYTMNKPKAAIKIYEAVKHLLKEEL

RA

>ABS43968.1 hypothetical protein JJD26997\_0928 [Campylobacter jejuni subsp. doylei 269.97]

MKKNFFLLALFLGFFITSAFAGNTDGIGAKGLWDIVSGWLNDTYVSRIIALLLFCVGVWRAFAGSILQFF

LMLGFAVLVTQGSTIIEAINTAIF

>ABS43967.1 putative transporter [Campylobacter jejuni subsp. doylei 269.97]

MNYIELLKNNKNIRILASVQFIVYFGAWFSQTGVFTLLVELNAPTWATATSAMLAFLPGVLLAPINGVIV

EKNKPKKLLLSMISIELISIFCLIFVTSLSMLWLLFILIFVRLCVASIYFQAEMSLLAKILTPQELKHAN

EMHSVIWAISYTAGMASAGIFIYFLGVKTAFLFDCVLILIGISFLARLSIPDFHQKTQSRFFTMIKEGFF

YVLNNKIIFHLILFHAFIGLTAYETLVTLLAQHQYKEVLSAALVIGFLNAVRACSLAIGPMVLSKFINDK

NLFYMYLGQGFGIILWALTQFNFYISFLGLIGAGFFTSALWAYTYTMIQKNADKEYHGRVIAYTDMIYLS

FSAIISMLMGFLFEMGLSLELITGLLGVIFIFAAFYWKWFYKKYL

>ABS43966.1 thioredoxin-disulfide reductase [Campylobacter jejuni subsp. doylei 269.97]

MLDVAIIGGGPAGLSAGLYATRGGLKNVVMFEKGMPGGQITSSSEIENYPGVAQVMDGISFMAPWNEQCM

RFGLKHEMVGVEQILKNSDGSFTIKLEGGKTELAKAVIVCTGSAPKRAGFKGEDEFFGKGVSTCATCDGF

FYKNKEVAVLGGGDTALEEALYLANICSKVYLIHRRDEFRAAPFTVEKVKKNKKIELITSASVDEVYGDK

MGVTGVKVKLKDGSIRDLNVPGIFTFVGLNVRNEILKQDDGKFLCNMEEGGQVSVDLKMQTNVAGLFAAG

DLRKDAPKQVICAAGDGAVAALSAMAYIESLH

>ABS43965.1 hypothetical protein JJD26997\_0955 [Campylobacter jejuni subsp. doylei 269.97]

MMIPYFSKFCKYFCYEMPIFWVFEWGDLFFQINWEKITFFI

>ABS43964.1 3-phosphoshikimate 1-carboxyvinyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQTPVNTILENIAADKSISHRFAIFSLLTQGENKARNYLLAQDTLNTLEIIKNLGAKIEQKDSCVKIIPP

KEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKFLNNRPMRRISKPLTQIGARIYGRNEANLAP

LCIEGQNLKAFNYKSEISSAQVKTAMILSAFRADNICTFSEISLSRNHSENMLKAMKAPMRVSNDGLNLE

ISPLKKPLKAQNIIIPNDPSSAFYFALAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMTITQND

FETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSNLVNAKELRVKESDRIAVMVENLKLC

GVEAKEFDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILSNLGAR

IDY

>ABS43963.1 folC bifunctional protein [Campylobacter jejuni subsp. doylei 269.97]

MSNIMKVENFLAQKSINYDKIDRFLMFRMYEKYKKYFKNIPIIQLIGTNGKGSTGRYLTQLLENLNYKIG

HYTSPHIFSFNERFYLNGKIASDEELEQAHIRLEEIFKQDLQKLSYFEYTTFLAMILFQKCDFIVLEAGV

GGEYDATSVFERKMNIFTRIGFDHVQILGNSLEDIARTKLKVMAPIALISDEQEQNVLKLVKKIAFLKKA

DLQVSSLNPFLKENFEIYCKKFVLPCFLKHNLKLALKACEILTSQEKTLKALKKLQELNLQGRCQEISPN

FFIDVGHNPMAAEAMLDKFQGEKINLIYNAYLDKDIFQILNTLKPVIDTIQIYKYKSAERKLADDEIYSI

ASKLGIQCKEFVKLEENKKNLVFGSFMLVENFLKEWCGKK

>ABS43962.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MWIFFRFISGIYLKNFFIIFFSLLGFYCGIDLLLNFKDLPKAANLDLLYVMFLSFSAVPYVLPISLIFAL

VVSLISMIRANEFVSFYALGLSRNYVILFPFLWALFFCCIYIGLNFTSFAYANDYKRNILKNGTIMNQSG

EVFLKFNNNFVYISKINNGQNSAQNIKIFNINDFNLSSFVSAKNAHFEGESWILRDGNIALLPKNYELAN

DGLKIQDFSELKSLEGFKPKIIEGVASNSDYSISDALESFELFKAQNVNTDALKINLYKFIFTPFFAPFL

MLIMYYFFPVIARFFNLAFVTFIAFVVILMVWGVLFLLTRLSENSVIASEIGIVVPIIILGCLSAYMYYK

HR

>ABS43961.1 4-oxalocrotonate tautomerase family protein [Campylobacter jejuni subsp. doylei 269.97]

MPIVNIKLAKPALSKEQKAELIADVSELLSTKYHKAKERVVVMIEDIEPYDIGFGGESVEAIKAKANK

>ABS43960.1 tRNA delta(2)-isopentenylpyrophosphate transferase [Campylobacter jejuni subsp. doylei 269.97]

MFFEIALIGTTASGKTYIADTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELAWDKEILKKRIQTRTKEMLDNGLLDEA

KILFYKFDHKLKALNSIGLKECKEYLDGEISFKDLENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAT

LRMKFSIEK

>ABS43959.1 putative McrBC restriction endonuclease system, McrB subunit [Campylobacter jejuni subsp. doylei 269.97]

MEIIFKQDEKDNFISAINFLIHEVETCIQRNVLTQHGKVSVKGTSQKDINIKLDFLKKYNYSYKIGLGNA

GGFLNEDSWIIFVRNDLLASNLINGEKLTATKGIYIFIAFSGYFSDDKHIQLRFGFPQGDMNLSRCNAVD

QMDRSGKLRYFDFKYKDFEKETNQIVKDFQDMINYFNIFDKNDFKLRAEFSTFIPLNQILYGPPGTGKTY

HTIDKALEIISKEEKIQIPSEDDRINRKKLFDEYVKNGQIVFTTFHQSYGYEEFVEGIKPDINSKEVKYK

IENGVFKEFCEKALDNYENSILNADELNKKIELKEKFENFLNWLLETNEPIGKTKGGNFFVVDINDKTVM

IYSEGVERFDGNFNLSISIFMELLKCKDEFNNAAEMFKKVFNRDYADRTHTYYFNLVKKFKAYEKQSVAK

IENNKNNDNSLKPYVIIIDEINRGNVSKIFGELITLIEPSKRIGVEEELKVTLPYSKKEFGVPKNVYIIG

TMNTADRSITSLDTALRRRFEFIEMMPDVSKLSMDCEGINLQELLKAINTRIEYLLDREKTIGHAFFISV

ENKDYLKNMTEFIESDKIVYKFSDSNNWSKDTFIKIYE

>ABS43958.1 queuine tRNA-ribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSRHLFTPKSVLDTQYDFHSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIGPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARE

MREAILNNSFTQFKKNFYHLRGK

>ABS43957.1 ribosomal protein L22 [Campylobacter jejuni subsp. doylei 269.97]

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVIVKSCR

VDVAAVLKRFRPRARGSASRIRKPTSHILVEVVKAEVKAEEKKTVAKKTTTTKAPAKKTTSTKKATAKKE

S

>ABS43956.1 ribosomal protein S15 [Campylobacter jejuni subsp. doylei 269.97]

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIIELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>ABS43955.1 hypothetical protein JJD26997\_0868 [Campylobacter jejuni subsp. doylei 269.97]

MALSYELCCKLFDKNFENLNYTKEELFFIRECYSECGKVMDMLGEDTIEKLLKEKETIILPNVTKYAKDS

INEYFENKKMKCLKN

>ABS43954.1 OstA family protein [Campylobacter jejuni subsp. doylei 269.97]

MVARQIILLLVCVSVTWATQIEVKALNFYSDENKGESILSGNVEVIRGDDILNSEKLIIYTDKNHKPIRY

EAMQNASFKIILKGKTYKGSGDKFIYNVIKDTYEINGHAYINELGSNQKLFGDKIIVDRKANIYRVESKD

QKPARFVFDLKDQ

>ABS43953.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIVCAGGNENFSFAKAIGIGLVESAFHLSQLCLKEKPSKLIFIGTCGLYDKGEILEIYRSSHAFNMEFSK

ISHAFYTPVKYEICLEKENVSRETIKINSSNYICQNSKAAKEFSKLGFFAENMEAFSVLSVAKNLDIGAE

CILCATNFCNENAHEDFIKNHQKAKEKLEEYLKKHHYI

>ABS43952.1 hypothetical protein JJD26997\_0927 [Campylobacter jejuni subsp. doylei 269.97]

MDNLENKIEHLELGYKKQNSTCSIQEIRLPVFAPIKRYTPSSAIYKDFLKNKRTRTINTQWGNVTIRGSL

LTQIHKDILDLIILNNTKIQILKDQRISVDFCISNVLKSYGDAGFNYKWFKNILEDIMGAVIKIKLENQT

EFYFHIISAMGYNEKGDFGGIILSKEYLDFYQKTIAINYNKEIQSIVLIENSLIKSIIRFFLSHNQINIT

LENLLIALGLEINTKNRYFRKIKQEIKESKNIFSNFKIKFNENKNTFEYKGNNSVNFLFTN

>ABS43951.1 arabinose-5-phosphate isomerase [Campylobacter jejuni subsp. doylei 269.97]

MNTLEIAKEIFEKEAQAIFDLAKNLDENFSQAVNLILNTKGRCIVSGMGKSGHIGAKIAATLASTGTPSF

FIHPGEALHGDLGMLTPEDVLIAISNSGETEEILKIIPAIKKRKIPLIVMCGKENSTLVKQSDIFLNIAV

EKEACPLQLAPMSSTTATLVMGDALAAALMKVRNFKPDDFALFHPGGSLGRKLLTKVKDLMVSSNLPIVH

PDTEFNDLVNVMTSGKLGLCVVLENEKLVGIITDGDLRRALKASDKPRFDFKAKEIMSTNPKVVDADAMA

SEAEEIMLKYKIKEIIVGKEARVVGIIQLYAIGNV

>ABS43950.1 capsule polysaccharide export protein KpsC [Campylobacter jejuni subsp. doylei 269.97]

MKYYSISKKLIANVRNFYTISLYKKNSKINKDDLFLGWGRKKSGLKAMNLAKKHKAKFILLEDGFIPSLN

LGVENSPSFSMVKDDIGIYYDATQPSRLENLLNTYEFKDEEIKQAKKAIELIKKYKISKYNNNFDIPDDY

FHKDEKRVLIITQTVNDASLEFGLAKDFKTLDMIKDAIKENPKSKIYIKIHPDVLSGKKQSDLDINSLPK

ECILITENFNPIALLEFFDKVYTKTSGMGFEALMQECECVCYGMPFYAGWGLTKDKLECKRRIQKRSLEE

VFYAAYILYTEYFNPYLNQKSDIFNTIKTLVKYKDIEKVNSNRLFMLGFTLWKRYFIKPFFKAKDNEIIF

LNSLKSLVRYKLKENDKFFIWGKRIDYNALKTILIKKAQDENLLHFTPKISLVEDGFIRSISLGSDLTRP

FSLIVDNKGLYIDPNKPSKLEELLQNEIFDENILNRAKNIIKILLENKFSKYNGLKHENLKINAKIGQKI

ILIPAQVEDDASMILGGFGLSTLDLLKEVRAKNQDAYIIFKPHPDVLSGNRVGLKDEKLILEFCDEIVKD

CSIDSAIKIADEIHTITSTSGFDALLRAKKVFTYGMPFYAGWGLTKDKHKCERRTRKLSLEELVAGALIT

YPRYINPKTKILCEIEVCLDIMLNLQKDYFSKSYLKIIIDLRNFLLRRMRRIVENIIK

>ABS43949.1 heat-inducible transcription repressor [Campylobacter jejuni subsp. doylei 269.97]

MKSRDKKDLILDSIIQTYLLDNVPIGSNELNSNLCIPASTIRVYLKRLSDEGLITQLHISSGRILTILTM

QNYWQSFWKKEQDQDINIKSENFLKELSKEFEIYCLVYGGRSLVLKEVLEFKEELALKHEKEAWNFLQSL

IGFDLFTIEKIASLRQNLIYYRSNEERVYQIYQNDEFVKLLDCGVHRYFKESLEFEPLFKESFMGLKVDT

QFLGEDVNIILAGSVYTDYKKILQYIKEAA

>ABS43948.1 hypothetical protein JJD26997\_0018 [Campylobacter jejuni subsp. doylei 269.97]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>ABS43947.1 hdod domain superfamily [Campylobacter jejuni subsp. doylei 269.97]

MNNLLEKNINEVNEMLIKSLDDLPPLPETIQKLQEYIATHGSNIAIDEVADIISTDPLITANLLHLTNSA

YYGFSKEIKTVNQALVLLGVNNVKNMIIADYAKSSFVINLSPYGIETDRFLALIHEQTDFISTWLMKEDK

MLCLNLIPCVMMLRLGIMVFSNFLIQNKIDKKFLLHLSKNNFNNILRLEREFLGIEVVWARN

>ABS43946.1 hypothetical protein JJD26997\_0318 [Campylobacter jejuni subsp. doylei 269.97]

MDDKDLNLLKNIPYLMEKIKELENRIKQLEQAQQPQHYSLETPNYLGEI

>ABS43945.1 hypothetical protein JJD26997\_0976 [Campylobacter jejuni subsp. doylei 269.97]

MWAYHQDERVILIIEQGINRDGSRGINEVINEVINEGKNEY

>ABS43944.1 amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIEVKNLQKKYGELEVLKNINTTISKGDVIAIIGPSGGGKSTFLRCINRLELADSGEILINKQNILDKEI

DINKIRQKVSMVFQHFNLFANKNVMENLYLTPIKTGILSQEEAIKKAKTLLAKVGLADKENIMPHKLSGG

QKQRIAIARSLMMNPDVILFDEPTSALDPEMIGEVLSIMKDVAKEGLTMLVVTHEMGFARNVANRIFFMD

KGKIAVDASPKEVFENPSNERLREFLNKVLNH

>ABS43943.1 amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MSILKIENLQKYYGLHHALKDVNLEVKAKEVVVILGPSGCGKSTLLRCINGLEEIASGNIYIDNEKINKD

FKEWPRMRQKVGMVFQSYELFEHLSVEENILLGPMKVQKRQKDEVLKEAKIWLEKVGLLHKIHAYPRELS

GGQKQRIAIIRSLCMNPELMLFDEVTAALDPEIVREVLEVMLNLAKEGMTMLIVTHEMGFAKAVADKIIF

MDEGKIIEENDPESFFENPKSERAKKFLNLFDYHK

>ABS43942.1 galactosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MINKKVGIVIPVYNVELYLRECLESVINQTYKNFTALLINDGSSDNSLEIAKEYARKDERFIIISKENNG

LSSARNVGIEFFEGKYHFKESESEEDLFKFCLNNELNPYKIHFLYQNKNKLNEEKIDYLIFLDSDDFWKL

DCLEQCVKRMEGVDVLWFGVKPFYDGIKEGDWKSNLEWFDYDKELIISKRDWLRRIFEKKQHFFYFSWSG

MINFHFLQKIGLKFINEILQEDDSFGILLFLQANFIYVYPKEMIVYRLRSKSIMNYSNENKKVAQYFRKQ

TEVFELEEDKRAYHLASSFVRATLALDAFLQECDDEEANFIISHYLMPTYASSSFRILSFEKDPLEIMER

CVRLKKYMKDLSYFNFSLKEETIYDVGREALKDLKKFPNILKLPFKICKMMKRYRVKQNIFKKNCERFDL

WELYYNVKNDYINKMHLSYKFGVLFFKAYKYRYFGSFLFIPFALPFVIYSWSVARKNSRGGGGAIC

>ABS43941.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. doylei 269.97]

MKSLTHLSSYRALSTHFSIIKDLHMRVLFKEDENRGFRYFLQSGDLKLDYSKNRISDETLKLLFDLANEC

SLKNKIKAMFEGQKINNTENRAVLHTALRNKTNRSVKIDDMDIMPNVREVLAKMQKFSDSLRTGSWLGYT

NQIITDVVNIGIGGSDLGALMVCKALKNYAHPRLHMHFVSNVDGTQLQDVLERVHPASTLFIVASKTFST

QETLTNAFTARKWFLKHALDEKHIAKHFVAVSTNKEAVKDFGIEPENMFEFWNWVGGRYSLWSAIGLAIM

IYLGKENFSSLLEGAYLMDEHFYNEPFEKNMPVIMALIGIWYINFFDAGSHIIAPYDSVLRYFPKFIQQL

DMESNGKQIRKNGKKVDYDTGPIIWGDTGINAQHAFFQLLHQGTHLSPIDLIASLNKKGNLPDHHEILLS

NVFAQAEAFMRGKTLEEVQEEMAKKGLKEDQIQKLAPHRVFSGNRPSNILLLDEIHPRSIGSLVALYEHK

IFVQGVIWDINSFDQWGVELGKELAKTILSELKGGKTQEHDSSTNHLIQIYKNFNSN

>ABS43940.1 hypothetical protein JJD26997\_1581 [Campylobacter jejuni subsp. doylei 269.97]

MKFFLLVFCFVNLALAQVYKGELYFYHLQDKEIFAIVYDNAPMTPLFDRDKNQTSSSFLIVDDINGNLEI

PLVKTNDFWQDERKKYKINSSKMLTYDNKNFQGENLGTTTLELIETQDGIRIKRSLDFIGFNDDFKEFHP

VHKSVFSFEQIRQKPIFLQDGKISFEEWYYFYEDDMSRAILELNNFVYDINTHVLVKLNDLYNTENQKFQ

NLLHEKLKNTCDECFEDLQNLQFNNNFLLNNGKLKICYLPFEGHFLDENICVEFNEDELKEFKK

>ABS43939.1 methyltransferase domain family [Campylobacter jejuni subsp. doylei 269.97]

MNNSTLWENIFSQKEWGKYPSESLIRFIARNFYNVQDRSKINILELGFGTGTNLWFCAKEGFNVSGIEWS

KTGVERFKQRLENENLSHCIQEIKIGDYEQKLDEFEDESFDAIIDHCSLCCNDFEKTKKIFNKAIMKLKI

NGKFFSSTISKGIEGYDNANDDFQLPKSGIYTHVGMIRYSNKKDLKKLYKNKYFKWTNLQTQSLEANNKL

IDKLFIIEGERI

>ABS43938.1 putative chemotaxis protein MotB [Campylobacter jejuni subsp. doylei 269.97]

MKNESKEDSNFWIAYADLMAGLLFVFILLIGAIVVKYVLTQSDLKEIKDNLNKQEARLEESKEELRNKEA

IVFKLSSDLNNASSALNLANSQKAELEANIINYKQLSKDLNSTLDNKDKQILILLGQLEKKDEELKNLQE

DFQKAKEKVQNLGLIRENLSKELQSKLDNNITIDEKTGSISLSAEVLFDKDSYVLKNGVKASLRKILSEY

FDAILEDPKIFSNIENIIIEGHTDSDGSYIYNLDLSQKRAYEVMNFIYTFYKSDKFQKLLMASGRSFSDP

VFVNGVEDKDKSRRIEIKFSIKNDNALKDVEKFFEFH

>ABS43937.1 DNA polymerase III [Campylobacter jejuni subsp. doylei 269.97]

MYKKELQTLLSKDSIPNFFFLYGADNFQSELYAEFIKEKYKPDETLKLFFEEYNFTRASDFLSAGSLFSE

KKMLEIKTSKKIPTKDLKILVELCKNNTDNFFLLELYDESSKQSDIEKIFSPHFVRFFKVNGAKEGVELL

SIKAKQLGVEITQNALFTLFTSFDENLYLAASELNKFSGLRVDEKTIEQYCYSLNTGSFESFFEKILKKQ

DFKSDLEKILDNFNEIALINSLHNSFYRLFKIALYTKVNGKIDFKELLGYTPPPQVGQNLSTQAFSLKIE

QYKEIFTLLLKSEYELKTNSKLVKKDFLISNLLQLARILKG

>ABS43936.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>ABS43935.1 peptidyl-arginine deiminase family protein [Campylobacter jejuni subsp. doylei 269.97]

MIKSIPEWSEQEYLMLSLPHEKSDWNPYLEEILQSYKEFVKAVSEFQKVLLIAPKQSDFENFKDIKNVEY

FKCDTNDTWIRDFGAIDIVENGRLKALDFTFNAWGNKFQSELDNAVNSKLFKEKFKEGLKKVDFILEGGS

IDFNGEGVMLTSSHCLLNENRNSHLNKTQIDTKLKEIFGLKQIIWLENGFIKGDDTDHHIDTLARFIDKN

TIAHCICEDEEDEHYLPLQKMKEELKKTGFDLVELPIPKPLYYEGRRLGATYANFVFINNALIVPFYKDK

NDEIIAKRLSKALPSHKIIGVDARVFLRQNGSLHCSCQNRFKGLR

>ABS43934.1 GTP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKELFQKIWQNELQFLNFDAKFQDKSKLDTAECAIILSVDKDNYERYFLLKEFQELCKKIDLRVDIFSIQ

NAQICILNLFKSGFVPKQDLLKALKILEKISKNTKMFDFISQEKVQSIDQKALFQNDFKELNTINLELQK

LSFDENLKLRLQKTLEKFQNLEFNIAITGVMNAGKSSLLNALLKEDFLGVSNIPETANLTVLSYGKSEEA

KIYFWDKKEWQNILESSHFNADLKEFIDKLDKSVNIEDFIKDKPLIQNIALCELKNFSSAKNKISALIKK

IEIKSHLEFLQNNISIVDTPGLDDVVVQREIVTNEYLKESDFLIHLMNASQSLTQKDADFLVHCLLNSRL

SKFLIILTKADLLSKKDLEEVIVYTKESLKSRLVDLDENLVEKIDFLCVSAKMASDFYKGLASKESLQKS

GMQDFENYLFNELYAGEKSKIALRAYKKELHLELKNILSEYEMQNRLIKENKQGVSEENQKLLLELQKQN

TLLREAQNEISNSITKLKNIDSGIDNLVLLLAKKLKERLIDEFKYLKNNAQKLNISRILNIVDITTKDGI

NDILREIKFENIKKIEELKTNLSLKYDFLKDDFDNGFEGFKDGILKNIDSIFQSEKFALLRLKIKKLSNL

KSDLYELETNLDMVIFDTFKEFKMSEILNSLDINGAFFEFLNEKLKHYEKNQKSKLESLEKVLQSLKSQD

ANILNSFEENLEKIEKLKQLEMGLLNAD

>ABS43933.1 Cju26 [Campylobacter jejuni subsp. doylei 269.97]

MKRFYFLFFSTLFFAPSFLFGATEIANSNLIYTWGYGDVMNEIMQAVKGLTTETGYIVNAALAISLLLFS

IKKAIDGQTSPVFELGKMFMLFAVVWHMFLKAPNDNNHRFMIHDEVTSKDYVISQIPIGIGKSFALMTQF

EKVILGAMEKHFSTPQSTNFSNAGLGFSLQVMSTLPSVKLSAIDATLQKNIDFYFRNCVSVGILLNKQGR

NLFSNSDNLMRDLFTNIGNGSQFTPLFTSDNNIENKSIVPCSEAGPQIVEMIENNTDEAMKIHAALLSMA

DDMENYEHKFFGAAQIYNEQAVSARSYFQQAMVMFASQDAIINTAKSVGLNPASVASNTAYADQQFYASM

QAQGHLAQTYLPLAKAYLTAIIIGLSWVVALLSIVFGSYAYIKMYFTLCIWIALWTPILCIINYLNDYNL

MKVTQVITGGKEALSLRDNILIFKEVASRSNFMNYLVMSTPVLAYAIAKASEHGFVTFASGLSQTLAGAS

RAAGSFANQQALSTQTSMAAPRGDEVIAYNTGIMSLQGATSVGSSRYSTTSIAGGGTTVTDVNTGSKVSG

DMQGVTAANIAGLSASDMKSKQASLAGEVSQGISDALKTGQTSQSVANMAFDHSASHGINAQAQEIFKAS

STMAFDKMAQAGDQRAQELMSALKAGGSIASVVDGSVNITEKDGTSRTFTFTDKEMQQWSKDFGDNVAST

YARDDSARASLNNAFSTFTGKEFSQVHSAINKYSSVESFASNVNSDSVPKALNNYIRSGDDAAITNAWNS

GNIGKAMAMASDDFQRWSVNNPQQLSKYFNAGDFSSPQNTIGSVGMQNYYSPSTASAIHKGNYGTVDSAT

VGFGNSYEADKKSMKEGHFKTTGQNTAWGQGNSQGTVQQEVQGQVNNAVNQFSKGAPARTVDDGVKVAEM

AADGAKGSFTIL

>ABS43932.1 DNA repair protein RecN [Campylobacter jejuni subsp. doylei 269.97]

MINRIFMKENLGFKKAELEISKGLTVFTGLSGAGKSVLFKGILSAFSLSESEAKIVEIELDDKLDLESFG

IESEEENVFKLLKEKNTKYFINNQSIAKKSLQNLSKTFIKYLSAKENNEFGNEKFLNLLDALEMQENTNF

ISFLEDFKKDFNAYSQISNELNAILEEEKKVEELKELARVQIEKISSINPKIGEYEELLILKKKLSKKDK

LEEAWSKAERIFELEKVVIEALNLSEVDASFFSECLNELRVICENQKMEDLDFDVETLLDRIENLSYLIK

RYESIENALEVLKQKKHELEHYENLSFKKKELEKKFQELKQKLEEKAQILSQTRKKNLKKLEKCLNNYLK

DLYMKDASLMLKESEKILILGKDEIMLDINLAHLKNLSSGELNRLRLAFIATECKILNAGKGILFLDEID

ANLSGKEAMSIAKVLEELSKFYQIFAISHLPQLSSKAHNHFLVEKNGEESKVKKLDQEERIKELARMVSG

ELVSDEAIEFAKTLFKN

>ABS43931.1 lysyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEAGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNAEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLVVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMIDFSKPFERITYKDALCKYGGLDRDLIEDKEKILAKLKTDGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVSDFPISISPLSRRSDENSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>ABS43930.1 oxidoreductase, Gfo/Idh/MocA family [Campylobacter jejuni subsp. doylei 269.97]

MKIGIIGLGKMGQNHLNELSKNSHFKLNALFDLCKNPNLNIFDDIFYDDLDKFLNQNNDIIIIATPTNSH

LAIAKKVFKQCKCVLIEKPLALNLKEIDEISNLAKEYSVKVGVGFCERFNPAVLALKKELENEEIISINI

QRFSPYPQRISDVGILQDLAVHDLDLLCFLSKQEITKTNLLKKYTQDQTRESESIILCELEKCITSIHQS

WNSTQKLRKIHLITKNHFYEANLNDFSLLKDGNFIELTQQSPLFGEHEALLKLIDNQPNHLASTSDAYKV

QEILERFA

>ABS43929.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRKTQRDVMVLASYRREISLNTRMSKDKTKYSRKEKHKKAYYA

>ABS43928.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MSNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLYPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>ABS43927.1 hypothetical protein JJD26997\_1533 [Campylobacter jejuni subsp. doylei 269.97]

MILKNLIKTLSILDFNKNDNCIEKSLKYEAILHEFFAIF

>ABS43926.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIFDKNFSYAFNENACEKCGGKCCTGESGNIFASKEELEVLRKHLNLESEEFAEKYLKKVGFKMSFKEVK

FEDGFACIFFDTQKRNCSIYDFRPKQCRTFPFWEYFKTHQKELEKECIGICYLS

>ABS43925.1 hypothetical protein JJD26997\_2036 [Campylobacter jejuni subsp. doylei 269.97]

MAIDRKDCNISIGKGTHLKRHKDKINAFLFRMQNGGKEKQHAFTIPLRPAWNENEYIGLMPDKTF

>ABS43924.1 oxidoreductase, zinc-binding dehydrogenase family [Campylobacter jejuni subsp. doylei 269.97]

MQYKILENNRIASKGYAMLSKDAKFTPFEFSRHAIGDNDILIKILYAGICHSDIHTARSEWGEATYPCVP

GHEIAGEVIAVGKNVSKFKVGDYAGVGCMVNSCGKCDACKRSQEQFCENGKTIFTYNSCDVFHGNENTYG

GYSNKIVVSEKFAICVPKNAPMDKVAPLLCAGITTYSPLRFSKTKEESSVAIAGFGGLGMMAVKYAVKMG

AKVSVFARNENKKADALAMGVSSFYTSTDKNIVKERFDLIISTIPTPYDPAIYLDLLKFGGEMAIVGLPP

VEDKVNIGINELVHKAGKKVYGSLIGGIAETQEMLDFSLKHEIYPETELITPQEIDKAYENLTSGKAKFR

YVIDMTKE

>ABS43923.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQNYKKLGIEHFYKKDFKTAKMYFSIAYEKRKNKRLLNFICLCDLALKSPKEASLLFDFYIEHYKISSID

KDLEEILGTIEFKKQENKQENEFEDGHALNYQDFLKSEEELGFQKSFENIIHSTKLVIDNRDDFLDFLEK

LLDNGYKDMTLNYIENVMPHFWANDRFIKLQEKLIGFKSEIKT

>ABS43922.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIEAIDLQSALTEASRSLECSVMDLEYEIIQHPRKGFFGFGRKKAIIEAKAKKRILKKNPKKEFTSSKN

HKSETHEPKQEIKIEIKNEKNKSQKEKYTVKSDEIFDSFHRESKGVRNTQDILDEIRIQLVKLLESFQFK

IKLSELRMYDEDCVLIRLDGEDAALMIGKEAHRYKAISYLLHNWINLKYNLLVRLEIAQFLENQIQGMQL

YLQSVIEKIKIHGRGQTKPLDGILIKIALEQLRAEFPDKYVGIKQNNDQRFVVINDFFKKDE

>ABS43921.1 argininosuccinate lyase [Campylobacter jejuni subsp. doylei 269.97]

MKNEMWSGRFSGASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIVKGLEQVRSE

IEQGKFIFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEHAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELAGFSPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFVLDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGLFDSVKTAKDSLIILNVMLKE

IRINKENMLNACKKGHLLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPIFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILQEFIKKL

>ABS43920.1 ribonuclease III [Campylobacter jejuni subsp. doylei 269.97]

MKNIEKLEQSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFTKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLME

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGSLQ

>ABS43919.1 hypothetical protein JJD26997\_0942 [Campylobacter jejuni subsp. doylei 269.97]

MDKAVNMKLKITFIVFLVLILTNIGILFISKNEIFTKTLIGLIATAFILYYALAWIKTIKSIKKDSSKSG

VKNLFIGILKLPYELVKVVLKIIKKTFSFFFGLIDAWVDDTVKSRNNSFEMSSSVSDNYFDGYASGMITG

PNSALGASARDD

>ABS43918.1 molybdopterin-guanine dinucleotide biosynthesis protein MobB [Campylobacter jejuni subsp. doylei 269.97]

MKQLIIAFSGPSNSGKTTLITKIADNFLQQNLKVLIIKHDPADKAQFDLNSKDSFKFFQSGAEVMVLSPT

RTTFFSHENRDILKALKLSPDFDICLVEGLKTLDLPRISVFCKEIDESYFTFSNAIASYEKISHPYLAWL

DLNDIQAICQYILKNAKNLQGEL

>ABS43917.1 thiG protein [Campylobacter jejuni subsp. doylei 269.97]

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSSIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDVGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGTPAQACEAMQMGVSAVMVNT

AIAEAKDIALMARAFSLAVNAGRAAFLAGLASVSEAKASSPLTGFLRD

>ABS43916.1 putative methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQENLLEKQFLNHPLYAKIQELKALNLACNFSLDDSVNLSTNSQAKDEILTITKKLKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMGEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPNYGLKFDVIFCLGVIYHRSDPIKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>ABS43915.1 phosphate ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDDEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>ABS43914.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. doylei 269.97]

MRKNILIFFCFFLFVDISLANAINEKTKSLEENKRIQEQLNKKLEDLASDILNGEKSLKDLSLQIESLNS

QTSKLEASAKAQNQELNTLTSQNEDLLKSKSNMEGKLISLMAKDFAYDLPIPQGYIESEESFMAFEILGS

LSKVLNEEIFKISKDYEGISRLIDNKQAQIKRINESLKDYNAQLAKLQSLKQKQISEINKQKTDRAIYAK

KLDDLQAQQEELRKTLNQLKIINHKEDTNSNKNDTKIVKNNQQIRQLGSSYQGSSVKRYTGKKTIAPLDS

FTVKQKFGNYIDPVYNLKIFNENVVLRSNKSDAVVKNVLDGKIVFAKDTSMLARVVIVEHDNGIHTIYAH

LDKIAPNIKVGKNIKKGAVVGRIKNDLTFEVTQKNFHINPLELISLN

>ABS43913.1 cysteinyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MRLLDSATKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLANGNRVKFARNYTDIDDKI

LKKMAQSCQTLEEITEFYIKSYEEDMRTLNVLDPDFKPRATHYIIAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSSRNLEENISRLSNEVQKRNESDFVLWKFDENFYESEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKIYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNI

SKALALLDDFISNANLELDKESKNKILKQNIKEALSELAKIFGFGFMDATLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLSSKKITLLDTPNGTIWEKMNA

>ABS43912.1 hypothetical protein JJD26997\_0493 [Campylobacter jejuni subsp. doylei 269.97]

MTKNKEKALRVKYLRNLEKFFNGAISALKKEDFDKTKFEERMLKNAKFFEKNPAVNLNSTYAKNLEFFVN

ACLDFSKEKSELLNLANALDKQKKQGEKKEKHKNYLKDYE

>ABS43911.1 pyrroline-5-carboxylate reductase [Campylobacter jejuni subsp. doylei 269.97]

MLYILANGAMATALAYGLKDDYEICIVGRSIEKLQALTKEGFKTLLYKDFNIEGKDVLLAFKPYALENIA

QMLKGQARILISVLANVDFEKLQTIKAQNYVRIMPNTAAKYKASTTPYILKNSHFENEILDILKTFGSAY

KLDNEMQMDAAMAISGCAPAFLALIAESIANAGVHEGLSKELSLNLTRSLFKSSSALLEHEHPAIIKENI

CSPGGVTIKGIKILEQKGIRGSFFEAINASSTK

>ABS43910.1 crossover junction endodeoxyribonuclease RusA superfamily [Campylobacter jejuni subsp. doylei 269.97]

MATREYALYIELKDNPIPYKRTTQRAKFVSKDYLKYLEFKKLLQMEFLRQNKVQCFKAFDEKKFYSIELE

IGFKNKKHGDCDNILKGVLDALFKNDKNVIKGEYELKSFEKSFLKVKISEFKGVENV

>ABS43909.1 HAD-superfamily hydrolase, subfamily IA, variant 1 family protein [Campylobacter jejuni subsp. doylei 269.97]

MINVFFDMDGTLIDSANAISCAVNEIRQDLNLAPLSRKIIMQTINTPNIDWAKELYNIENFHHSSFKEGY

EKYFIKHYEQSVVLFEGVKELLEFLKSKNCFLAIATNAPQSSLSNILKKHQIIPYFDKILGVSLSIEPKP

HPMMLELLKSEAPYKTSVFIGDSQKDKECAKNANLPYFHAKWYQKDLKENEFSNASELKGFLEKYL

>ABS43908.1 amino acid adenylation domain protein [Campylobacter jejuni subsp. doylei 269.97]

MTTHIYDFLEKSLIKFSNKTAFVEPFAKERKEITYKDFDLFSKKLASEILKTLKNDNPTQVPVLIILPKG

IDCLISFFGVALSGNFYTLLDEKSPKERVEKVIEVLKPKLFITSKDLNFNLDLPTLYTQDFESFDIDESL

IKHAKEKHIDTNLLYVFFTSGSTGIPKGVSIAHKSVIDYTFWVCETFKFDENEILANQAPFYFDNSILDI

FSSVKSGATLHLLPNHLFAFPNKILECLEKEKVSTIFWVPSVLIYFANTEALNNFSLNTLKKILFCGEIM

PNKQLNIWRKHLPNALFANLYGPTEITDVCSFYIINRTFKDEELLPIGKACKNTELLVFDENMNFISPKQ

IGVKGELFVRGTSLSLGYYNDKEKTKQAFIQNPLHDNYLDLLYKTGDIVSYNEFGELLCYGRVDNQIKYM

GHRIELGEIESVINSHANIKNSACIFKEDIICFYESEEEIDLKAFLKDKLPSYMIPKNFITIDKFKLNQN

GKIDRKVLNEKI

>ABS43907.1 putative hemin ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MLNLNTRSKILVIIGLLVAYIIASFIALCLGDENLNPKELFSYIFSQDEILRQIIIDGRLPRIIMAILIG

MLLASSGAITQNVFSNPIADPYIIGIASAATFGAVLAYLLKLNDYYYGILGFVCSAFFALGVFKISSKAS

IATLLIIGIAASSFLGAFTSFFTYLIGEDSFKIVAWLMGNIGNASWFRVGILILPLIFCLFYFYAHKNEL

NILLSGDDEARNLGVNAQKLKINLLIVSSLAVSFAVAFSGLIGFVGLIIPHTIRLLLKNYDNALVIPLCT

AFGGLFLLICDTLARTLLAPVQIPIGILTAFFGAPIFLYLALSARRFL

>ABS43906.1 putative membrane-associated zinc metalloprotease [Campylobacter jejuni subsp. doylei 269.97]

MISLLFLIVILILGVKFYSIEFLATILVLSFLIFFHELGHFLAARSLGVKVEVFSIGFGKSLIEREFKGT

NYRLSALPLGGYVKLKGQDDMRPGFENLDKDSYSILSPLKKIYILFAGPFFNLILAFFLYIIIGNLGLNK

LAPQIANIAPNSAAQEIGLQKNDTILEINGIKIQSFDEISKHLSLEPLKILIDREGKKLEFILTPKIGQG

YNDFGQIVEKPQLGVSPNGISTLVKHQGLESFKYAIQESFQASTLIIKGIAKLISGEVEAKNLGGIITMT

EITSKAAQNSFTLLLFITALISINLGILNLLPIPMLDGGHILFNLYEMIFRCKVSQRAFEYLSYAGMAML

LSLMLFATYNDISRIIGE

>ABS43905.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLIIATCKAYKEGNATLKNLQKRLENLHFQCELKAWQDIKARNLDPNTLILPLAVWDYSLEYANFLHFLN

ELERKKIRILNPIEILKMNADKSYLKILEKANLPIIPSVIFKQNEVFNLSQIPFEKAVIKPLVGQSGNGV

RFLKQKTPTKAEFPHGALIQPFIESVEELGEFCLIFFGGKFTYAIHRQTQKDWRANSNYGVKIAPLKNPS

KAHIDLALKALKTIKISNLLYARVDLLPQKNDEALINEVELIEPNLYFDFHENALETFMKNLLYFYQKAN

C

>ABS43904.1 hypothetical protein JJD26997\_1680 [Campylobacter jejuni subsp. doylei 269.97]

MSGTGLIFTECELIINQNRYPKLSDFDNKQRYIYDVDGKYCIIDCEIIQDNFFWIYIRYGKTKPYSDKVI

NTETKEVFLNKRDVKEAELRKQIFCMYDYKHATFYISNISQKKFLQEFLQKTFKYEFNIKNYYINPDEFV

KEIISINEITFWADNNLFSGDIFNAVKDVLGEGEYSKFCFKLETGNNGIFDKKKILTFLNLMKNKKTNQE

ITKIKCVGKDDGGFEKIFNFETYLSKKPINALQDENAMYNPENVKNALLAKLND

>ABS43903.1 adenine-specific DNA methylase [Campylobacter jejuni subsp. doylei 269.97]

MDYKKAFYSKLEDCYLGVKIKNSQNQAKNGFTNLLAIKEKYFQKIKDYLDTQKLYTDTYNKLYNFFSTYL

NETGTPFFYDTPMYKNIYARVYSNSKDTSLFYKTQNLYYVKSDTIYNPLSLQSEDKKYTLNFLTDEYEQN

ADNNKSKINFYLQNIQDDNINIKVINSKNHDGTNVFKQNPSEFSDVFLKTLKNAQINIKEEELKKLFKTY

KKQNEVDFFIHKNAKEFLKEQFDLWLFSYVNDSITDWTKEKIDEINTLKQIAFAIIDLIADFENELKAIW

LKPKFAKNTHYVFSIDTIKTYANNADEILKSIYKDVKFNEQITEWKELNFINDEFDIKFINDEKYKFLPL

DTKYLSEENYFKLLESFENLDEILNGELVKADNFQALNSLMPKYQGKIDLIYIDPPFNTGSDFDYKDKFQ

DSTWLSLMHNRLELAKEFLSDKGSFYLHLDENADYFGRILLNEFFGEMECKKITFDTNATKDEEADLFGY

KSFGNNFVLKSSTILFLKKTNSIFNKLWKPNRNSSLLNLGQLDLIGISTIETPKKITDYEYYVQIWKNGK

LCHEKIDIKDEKIYPLGDIWNDLYSFTQSEMRVSENISFYSSQKPENMLRRIIQSSSDENSVVMDFFVGS

GTTLVVSHKLNRKYLGVEMGEHFYEKYLTFNKDTKQYEYRLGLLGRMKNVIAGDIEFCAIDKKRRSSLSK

MINFKGGGAFRYYELESYEESLENCEYKLDENSLIDYRKSRKFIKALKKGENICLDMNAYDKEFDIFLTM

SNLLGLKIKNIFIDENGIKSCKFENNEIINLENIDLIKYPKLKNLIWWEK

>ABS43902.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLDKTLDLPLHHIGVACKNLEKERECFFKLGFYKEAEFIDEKQGVRGEFIIPCNEVFPQYRFELLQNLSD

KGPLDSYLKNNTKMYHLAYESKNIAQDLTLLEQQGGICIVPIMQASYFAKLCFIMMPNRLLIELVELK

>ABS43901.1 RND efflux system, membrane fusion protein CmeA [Campylobacter jejuni subsp. doylei 269.97]

MKLFQKNTILVLGVVFLLTACSKEEAPKIQMPPQPVTTMSAKSEDLPLNFTYPAKLVSDYDVIIKPQVSG

VIVNKLFKAGDKVKRGQTLFIIEQAKFKASVDSAYGQALMAKATFENASKDFNRSEALFSKNAISQKEYD

SSLATFNNAKASLASARAQLANARIDLDHTEIKAPFDGTIGDALVNIGDYVSTSTTELVRVTNLNPIYAD

FFISDTDKLNLVRNTQSGKWDLDSIHANLNLNGETVQGKLYFIDSVIDANSGTVKAKAVFDNNNSTLLPG

AFATITSEGFIQKNGFKVPQIAIKQDQNDVYVLLVKNGKVEKSSVHISYQNNEYAIIDKGLQNGDKIILD

NFKKIQVGSEVKEIGAQ

>ABS43900.1 hypothetical protein JJD26997\_2031 [Campylobacter jejuni subsp. doylei 269.97]

MNLILENPSEKLIKAVKAMAKIENTKVKLKKEKKLTINGFMPEFEKKI

>ABS43899.1 aminotransferase, DegT/DnrJ/EryC1/StrS family [Campylobacter jejuni subsp. doylei 269.97]

MLTYSHQNIDQSDIDTLTKALKDEILTGGKKVNEFEEALCEYMGVKHACVLNSATSALHLAYTALDVKEK

IVLTTPLTFAATANAALITGAKVEFIDIKNDGNIDEKKLEARLLKESENIGAISVVDFAGNSVEMDEISN

LAKKYNIPLIDDASHALGALYKSEKVGKKADLSIFSFHPVKPITTFEGGAVVSDNEELIDKIKLLRSHGI

VKKRLWDSDMVELGYNYRLSDVACALGINQLKKLDHNLEKREEIASFYDKEFEKNPYFSTIKIKDYKKSS

RHLYPILLFPEFYCQKEELFESLLHAGIGVQVHYKPTYEFSFYKKLLGEIKLQNADNFYKAELSIPCHQE

MNLKDAKFVKDTLFSILEKVKKGYCG

>ABS43898.1 putative sugar transferase [Campylobacter jejuni subsp. doylei 269.97]

MHCPLCQSENNQKELFKTVNAFTSSGKLDKNPTQIKTTITTGDGGGGYCKGNNTITFTQCQDCGYIYNST

FDLNKISKEYQSEGYFSRKIVSKDMSNNVKMIKDKCLKYINKNNICLEIAPGSGDMVNALIHDVKFMYTI

DPSLVSLEIENINNLKHIHGFFNYNILKDKLEYKINFIMFRHLLEHINTPLNFLKDVVKLLENNGIIYIE

VPNIKEFIEYRRFYEIFNDHCGYYQKNILINTLKSLGCEFIDEIFLYREQHMGLFFRKNTNIRYKYKLDF

KLFDKNIYISFQENIRKLNNLLHDYKNIAIYGSGAHGNTIITFIDNPEKIKKCFDLDIRKQGMYLQNSSI

IIQEPNIENFKDLEAIIIAAPLYEEEIIKSLKERGYKGDIIATEKNILLQK

>ABS43897.1 hypothetical protein JJD26997\_1077 [Campylobacter jejuni subsp. doylei 269.97]

MRRLSILLMILIVINITACDSKTENYYKNHPSEEKAKTKECKENGTLSEDCINALKVGVKPTNEESKYSP

NTPKKSDNQILEALKQNDLKKEKITKDINQSSENNESIIIPPIAETPSEIYPSKITENNQSSIFSDDVNI

TQEKLS

>ABS43896.1 hypothetical protein JJD26997\_0807 [Campylobacter jejuni subsp. doylei 269.97]

MQKNTKILFMLLWVEFYDFVLFAFFWIFLLRYSFRKMMPFGCR

>ABS43895.1 ribosomal protein S18 [Campylobacter jejuni subsp. doylei 269.97]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>ABS43894.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MLKKEYLKNPYLVLFAMIILAYVFSVFCRFYWVWWASEFNEYFFNNQLMIISNDGYAFAEGTRDMIAGFH

QPNDLSYYGSSLSTLTYWLYKITPFSFESIILYMSTFLSSLLVIPIILLANEYKCPLMGFVAALLASIAN

SYYNRTMSGYYDTDMLVIVLPMFILFFMVRMILKKDFFSLIALPLFIGIYLWWYPSSYTLNVALIGLFLI

YTLIFHRKEKIFYIAVILSSLTLSNIAWFYQSAIIVILFALFALEQKRLNFMIIGILGSATLIFLILSGG

VDPILYQLKFYIFRSDESANLTQGFMYFNVNQTIQEVENVDLSEFMRRISGSEIVFLFSLFGFVWLLRKH

KSMIIALPILVLGFLALKGGLRFTIYSVPVMALGFGFLLSEFKAILAKKYSQLTSNICIVFTTVLTLTPV

FIHIYNYKAPTVFSQNEASLLNQLKNIANREDYVVTWWDYGYPVRYYSDVKTLVDGGKHLGKDNFFPSFA

LSKDEQAAANMARLSVEYTEKSFYAPQNDILKTDILQAMMKDYNQSNVDLFLVSLSKPDFKIDTLKTRDI

YLYMPARMSLIFSTVASFSFINLDTGVLDKPFTFSTAYPLDVKNGEIYLSNGVVLSDDFRSFKIGDNVVS

VNSIVEINSIKQGEYKITPIDDKAQFYIFYLKDSAIPYAQFILMNKTMFNSAYVQMFFLGNYDKNLFDLV

INSRDAKVFKLKI

>ABS43893.1 anaerobic C4-dicarboxylate membrane transporter DcuA [Campylobacter jejuni subsp. doylei 269.97]

MIILQVIVLLGAIFIGIRLGGIAIGYAGGLGVVVLGLVLGMKPGNIPWDVILIIAAAIAAISAMQQAGGL

DYMVRVTEKILRSSPKFINYLAPACGWLLTILAGTGNAVFSLMPVVVDVAKSQNIKPSVPLSLMVVSSQI

GITASPVSAAVVYMSGVLEPLGWNYPTLIGIWIGTTFIACMLTAFIVSLITPMDLSKDNVYQKRLKAGLV

KDAGAILHGEDKPGAKLSVGIFLITVLAVVLYATAISSNIKWIDPVVVPRDAAIMSFLLTAATLITWLCK

VEPGKILDTSVFKSGMTACVCVFGVAWLGNTFVAGHEAAIKEVAGDWVKQTPAMLAVAFFFASMLLYSQA

ATAKAIVPVIITALGISAANPHDSYMLVACFAAVSALFVLPTYPTLLGAVQMDDTGTTRIGKFIFNHSFF

IPGVLAIAIAVALGFVLAPMLI

>ABS43892.1 integral membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MLKVIKHNLGIYFMILACLDFALMGACAKILSKEMSSIEIMFFRNIIGIFFIVYLLKRSKAHKEGGHFWL

LVFRGVVGTLSLYMFFYNVSNITLGGAFAFQKTAPIFITLIAFVVFKENIGIKGWIGILIAFGGVLLIAQ

PWAHNLNHSGFDLKNSVIGITSGFLAALALTSVRELRKSYTTEQIAFSFILLGTLMPLISMISAEFFEPQ

HLDSLHLDFILAPFVMPSFTAWLIIAIMGTLGTIYQIHVTKAYGIAKQAGVVAGVSYLDVVFSMIVGIIL

GDNLPSTMVFLGIISIIFGGLILVKNKGKK

>ABS43891.1 ankyrin repeat protein [Campylobacter jejuni subsp. doylei 269.97]

MASDALNCDNIKNNKTLLNESLNSDYLNIASSCKESLKNQDFTKKLYAISNEIRGSNSSCNGVAYWPKLQ

QFDFLLLKIAIDPIAYQKTLDTPDYVFS

>ABS43890.1 GDP-fucose synthetase [Campylobacter jejuni subsp. doylei 269.97]

MQTNSKIYIAGHKGTAGTALVENLQKRGFNNLVLKTRQELDLVNQQAVAKFFKEEKPEYVFLAAVLPCGA

ANVAQRADFIYENLMIQNNVIHNSYLNNVKKLVFFGSGYMYPENAKNPLKEEYLFQGNLEYGAYSFGTAK

IAGTIMCESYNLQYGTNFITLVLNNLYGTKANFDFGKSRVLPALLRKFHLAKLLNEGNITQILQDLKMNN

FEEAKEYLHNFGISKKSVEIWGTGKVRREFIHSDDLADVAIYTMQNIDFKDLIKDRKSKNTHINIGIGID

YSIKEVALMVKNIVGFSGELIFNTSRPDSTMDRLMDCSKIHSLGWKHKIDLEKGIQMMYEWYKNNNGGGG

IKL

>ABS43889.1 ISHa1675 transposase B [Campylobacter jejuni subsp. doylei 269.97]

MLSAVKYRIYPTKAQKELIHKHFGCARVVYNHFLDYRQKQFAKGIKETYFTMQKELTLLKKQDEYKYLNE

CASQSLQMALRQLVTALDNFFAKRAKYPNFKSKKNARQSYAIPQNIKLDNKKVYASKFTEGIKTKIHRKL

DKDCIIKQAFISKIADEYYIAISYENNKSLPKPKVIENAVGLDMGLENLIIRSDCVIYKNHKFLQDKENK

LIKLQKQLSKKQKGSNNYAKTKLKVAKAHQKITRARDDYLHKISDEITNLYDFIAVENLNIKGLIKNKHL

SKSIANASWGKFINLLTYKAENKGKTLMQIDKFFPSSQICSNCGSNTGKKPLHIRSFTCPNCNTKHHRDL

NASINIRNYALGIIDDRYKIKLDKSRVGITQSYACKDSSSGVSKYGYILDTSYLSLKQEAHLL

>ABS43888.1 holo-(acyl-carrier-protein) synthase [Campylobacter jejuni subsp. doylei 269.97]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDERNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>ABS43887.1 lytic transglycosylase, catalytic [Campylobacter jejuni subsp. doylei 269.97]

MPRLKKQYGINENDLLSPKINIFVGAEILRMCLDKHGLNEEGITCYNGRIINNPYGKEVIKLLKKARITN

GKIN

>ABS43886.1 death-on-curing family protein [Campylobacter jejuni subsp. doylei 269.97]

MKYIELSEAIAIHEKIIEKTGGLSGYNETQIGYLASALEHIKNDDYYPTITDKITHLIFSCVKFHPFADG

NKRTSIFLGMHFLDLDGKYNDKFAEVMEDIVVGVADDSITKDDLNQILQNFIDKNISNK

>ABS43885.1 amino acid ABC transporter, permease protein PEB1 [Campylobacter jejuni subsp. doylei 269.97]

MNESVGFVEHLRQILTSWGLYNENSISPFAVWKFLDALDNKDAFINGFIYTLEVSILALFIATIFGTIGG

VMATSRFKIIRAYTRIYVELFQNVPLVIQIFFLFYALPVLGIRLDIFTIGVLGVGAYHGAYVSEVVRSGI

LAVPRGQFEASASQGFTYIQQMRYIIVPQTIRIILPPMTNQMVNLIKNTSVLLIVGGAELMHSADSYAAD

YGNYASAYIFAAVLYFIICYPLAYFAKAYENKLKKAHLTK

>ABS43884.1 2,3-bisphosphoglycerate-independent phosphoglycerate mutase [Campylobacter jejuni subsp. doylei 269.97]

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIKNKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVSPKSGLNFIKDLKGFCENLGVHFATLCGRFYSMDRDKRWDRVKEYYECLLGKAYKVPNLLE

YLQKSYDENITDEFIKATQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKVFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLISSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQASGVSKIKANMGLSNIAASVLKILDLEIPKEMNEA

LF

>ABS43883.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIKFLSIITILSLSLNAHIIISADNLPSVSKEFLQHNFKAPIGIVQKDKNSYEVYLSDGTELEFDIDGA

WKEIKNKAFPFDLDFLPQNLANTITSEFPNTKAREIERKINHYKIKLNNDVKILIDFNGTILHKEIDD

>ABS43882.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSEFLTHPFKPFFDKDSKILILGSFPSVKSRQYGFYYQHPRNRFWPILETLFNVKLENITEQQAFLRKKH

IALWDVLQSCKIKNSDDKTISYAKANDLNLILSQAKIQAIFTTGQSAYKFFVKFHPRLETIALPSTSPAN

LNFSFEQLLQNYEIIKKFTK

>ABS43881.1 exodeoxyribonuclease VII, large subunit [Campylobacter jejuni subsp. doylei 269.97]

MTVSELNLKVKALLESYFENIILSGEISKITLHGSGHWYFDLKDEKSSISCAMFKGANLKVGFKPAVGDF

LELCGSVSLYAESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALRKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVSDFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLIQLWNHKM

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQISQKEAKIL

>ABS43880.1 putative ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MNTNFKFQNNTLFIFGIWDKTSIYKLKIKDFLALIQSKEVIFDFKDLKEIDTAGVRFFLALENDLKDKNI

KITKEGLNSRFQTLFELCEKNYQRLNKTKKSHKNFSEYFIDLGKLSLELLKILRKFINFTGAFFTSLFLC

LKNPKNFRFIAFLYHIENSAFKALPIVILTALLVGVVLAYQAAYQLAQFGANIFIVDLMGISATRELAPL

IAAIVIAGRSASSYTAQIGVMKITDEIAAMNTMGFRSFEFIIIPRVMALVVAMPLIVAISDAISIIGGMM

VAKLNLDISFAEFLRRFREAVDIKHIFIGLVKAPIFGFLIGLIACFRGFEVKNTTQSIGIYTTKSVVNAI

FWVIAFDALFSVILTSAGI

>ABS43879.1 flagellar hook protein [Campylobacter jejuni subsp. doylei 269.97]

MMRSLWSGVSGLQAHQVAMDVEGNNISNVNTTGFKYSRADFGTMFSQTVKIATTPTDGRGGQNPLQIGLG

VSVSSTTRIHSQGSVQITDKNTDVAINGDGFFMVSDDGGLTNYLTRSGDFKLDAYGNFVNNAGFVVQGWN

INWDTQSIDSSRTPQNIFIDPGMHIPAAQSTEVAIKANLNSGLNIGTASTPLYSLDSVHGFNQKTGETKD

ENDVGTTQFYTTSKNAIEVAEKGVDAGALFNAKGQGLNLRDGQGIWVSYTDAKYSTNKVGVNAFDPNLQQ

NQTVAFWGNGNQKTRLDIVINGVVIQTDTIGSIDEAITYINTFTVPTDAREGTGVRAVKNADGSGIDFIN

TNSDGTTDNMKNINLVVTNANTAGELWNAVWDTNNKTFSFNQGNNGGQQPTINKNGSSLWTANTMTPNPP

NANNAITLNGTDRAQIITAHKYIYNSSPQTLPPLYNPDGGDKYIPGNLGATNADPTWAGATKADIASQNY

YNAVIKGSFLNTNIRTFHTTEDLRELLQRDARYGVDYDGSGKFAAADVNENVKVVVNSSGAFSLTNVNKT

TQSPTLSTGNNNIGQGPLNFTSKNMNFNITAYTDERGTVSTNDAFTKIFKGLDGSFPTGNQVKQSEILKL

SAFSAGLEIYDSLGSKHTLEVQFVKQSTTQDGGNEWQMIIRVPEPAEINATGEGPNNIIVGTARFNNDGS

LSNYNPRTINFSPNNGAAPNQQIKLSFGTSGSNDGLVSSNSASTLTGQATDGYPSGNLKPEGIRVDDKGN

ILGEFTNGKTFAVAKMAMASVANNSGLEEIGGNLFKVTANSGNIVVGEAGTGGRGEMKTAALEMSNVDLS

RSLTELIIIQRGYQANSKTISTSDQMLQTLIQLKQ

>ABS43878.1 adenine phosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MIKLTQEEQKYLLDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>ABS43877.1 cytochrome c family protein [Campylobacter jejuni subsp. doylei 269.97]

MQKAKNLITLSFFLLVLSACSNDEKNISKTQNIDQEVVQIEQNDEKTELSDSNLPLPVDDEAQSSDDEHE

ANPSIISSLYKQKCATCHGEKGELKPKNSTAIKTLGNKIFIQKIKTIKDKNHSFLSDEQIQNLADFINKG

K

>ABS43876.1 mechanosensitive ion channel family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIIFSLCFFILYLGAQEFKFIDANISKEDEGIYALVEKYVDLNNQIKEFKKNNDENSSTFNGILSEFE

KDKKTILAKIPDMIVGQKINEEAVARFLKAKEKLLDVQKKNINKPYIYTDATLNLVYFNIVESFYSSLFE

VEKLFKNTASSEDLIATVDKAMENLQNSSNVNLDSFKSKITNPEELEKITLKERYISNAVDSYSEILKYL

RSNADLLESNYIFSLLELQVWIDRINEAIGVGFINIGKIVISALVLVFFISLRCFFANIVYFFLVQLFYR

DKNDVDDIKVIVIENIKKPVGFFLIVYAISICLTIATYPAPLSINLSNFFHIVYAVLIAWLILKMLDGYG

MVLVSKLAQKSGKKEVVNLIIKILYFVIIIIALLYILAQLGFNISAIIASLGIGGLAVALAAKDIIANFF

ASILLLFDNSFNQGDWVEVSGIEGTVVEIGLRKTTIRTFDNCLVFLPNSTIMGANIKNWSKRRMGRHVRM

YLGVGYDATPEKLEQCVKDLREFLHTSDLVAHDEDSALKYGDHTTKYRQNLVSINDLEGYKNACYVALSE

FADSSINIELYFYTKEIGGKDFREARQSLMLEFMRIIEKNGLTFAFPSRSIYIENLPPLDLQAKAIK

>ABS43875.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSNEVVLKEENKSQINFNPYELALVKGDLSKLSDVERANYVKNLCESLGLNMLTKPFEYIVLNGKLTLYA

NKSATDQLRQVRKVSITKTEVAQVGDIYMVTAYAATPDGRTDCDTGALNIKNLGGDNLANAIMKAITKAK

RRVTLSICGLGMLDESELETIKQKRFLNANEDLKVWDGDEKAIENKAQEIKALGAQLRKFMSDKGLSTEE

QNNFIKKHSLFTSEKIQEVLSNKDEFLTQLKGEL

>ABS43874.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIILTILFLLTLTQAKEIQVYESLTCGCCDLWADYMKAKGYEVSVHKTNDFLKIKEKMGIKDEYQSCH

TGVIEGYAIEGHVPESAIAWLLENKPKDVIGISAPGMPQGSPGMEQGYNEKYPVILMKKDGSYELYGYFV

GDKKL

>ABS43873.1 cytochrome d ubiquinol oxidase, subunit I [Campylobacter jejuni subsp. doylei 269.97]

MNELSSVDWSRAQFALTALYHFLFVPLTLGLSFMIAIMETIYVKTKNERWKKITKFWLSLFAINFAIGVA

TGIIMEFEFGTNWANYSWFVGDIFGAPLAVEGIMAFFLEATFFAVMFFGWDKVSKSFHLLSTWCVAIGSN

LSAFWILVANGWMQYPVGMSFNPDTARNEMQSFFEVALSPMAISKFLHTIGSGYVISALFVMGISAWFML

KGRYIIEAKKSLVVGASFGLVCSIFLFFSGDESAYRVTQTQPMKLAAMEGVYQGEHRAGLVPFGILNPKK

TIENNKSVFLFDITIPYALSILGNRDPNSFVPGIEDLIYGNESKGIEPMQNRIDRGKIAIQALKDYKLAK

ESNDTVAMANHKSILETHFKDFGYGYLEKPSDTIPPVALTFYSFHIMVALGSFFFLLFIVTLYLAMANDI

EKFRKVLWVCLLSIPLGYIAAEAGWIVAEVGRQPWAIQDLLPVHIAATQLGKVNVQISFWIFAVLFTALL

IAEVKIILTQIKKGFDAHAGHTLLMGKGEK

>ABS43872.1 hypothetical protein JJD26997\_0855 [Campylobacter jejuni subsp. doylei 269.97]

MNDGFKIVPSKHFAERLQERKVDLSLVVLIYQEIAKNPFQKIYKLINNNSTIVFAVDRDNGIITIITGYP

VK

>ABS43871.1 hypothetical protein JJD26997\_0846 [Campylobacter jejuni subsp. doylei 269.97]

MIIITVPHFIITVPHFFKKREFFTYKKLKIMENRGKFIIITVPLAKK

>ABS43870.1 DNA gyrase, A subunit [Campylobacter jejuni subsp. doylei 269.97]

MENIFSKDSDIELVDIENSIKSSYLDYSMSVIIGRALPDARDGLKPVHRRILYAMQNDEAKSRTDFVKSA

RIVGAVIGRYHPHGDTAVYDALVRMAQDFSMRYPSITGQGNFGSIDGDSAAAMRYTEAKMSKLSHELLKD

IDKDTVDFVPNYDGSESEPDVLPSRVPNLLLNGSSGIAVGMATNIPPHSLNELIDGLLYLLDNKDVSLEE

IMQFIKGPDFPTGGIIYGKKGIIEAYRTGRGRVKVRAKTHIEKKTNKDVIVIDELPYQTNKARLIEQIAE

LVKEKQIEGISEVRDESNKEGIRVVIELKREAMSEIVLNNLFKSTTMESTFGVIMLAIHNKEPKIFSLLE

LLNLFLTHRKTVIIRRTIFELQKARVRAHILEGLKIALDNIDEVIALIKNSSDNNTARDSLVAKFGLSEL

QANAILDMKLGRLTGLEREKIENELAELMKEIARLEEILKSETLLENLIRDELKEIRSKFDVPRITQIED

DYDDIDIEDLIPNENMVVTITHRGYIKRVPSKQYEKQKRGGKGKLAVTTYDDDFIESFFTANTHDTLMFV

TDRGQLYWLKVYKIPEGSRTAKGKAVVNLINLQAEEKIMAIIPTTDFDESKSLCFFTKNGIVKRTNLSEY

QNIRSIGVRAINLNENDELVTAIIVQRDEDEIFASGGEENLENQEIENLDDENLENEESASTQGKMLFAV

TKKGMCIKFPLVKVREIGRVSRGVTAIKFKEKNDELVGAVVIENDEQEILSVSAKGIGKRTNAGEYRLQS

RGGKGVICMKLTEKTKDLISVVIVDETMDLMALTSSGKMIRVDMQSIRKAGRNTSGVIVVNVENDEVVSI

AKCPKEENDEDELSDENFGLDL

>ABS43869.1 recombination protein RecR [Campylobacter jejuni subsp. doylei 269.97]

MAKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERSKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQILLKLNISELIFALTHSIN

SDATIFFIEDKFKDLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>ABS43868.1 6,7-dimethyl-8-ribityllumazine synthase [Campylobacter jejuni subsp. doylei 269.97]

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKKENLSLILVPGAFELPYALKKAIES

EKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLTKEL

>ABS43867.1 orotidine 5'-phosphate decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MKLCVALDLSTKEECLQLTKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGIDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQKNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>ABS43866.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIKIKNLKKYYGKELVINDVSLEIKKGEIYAIVGHSGAGKSTLLRCINGLENYQEGSLKVFDQEIKDLSQ

KKSKELRMLRKDIGMIFQNFALMECKNVFENVAMPLRTHYTRCKFHAKLFSKEYMSEKEIAQKVNSLLEI

VGLDHKNKSYPRELSGGQKQRVAIARALALNPKILLSDEATSALDPNTTKNILELISKINAEFGITVVLV

THEMDVVKDIAQKALLLEHGQIIGSGAIDELFLRPNAKMKEFLGESDFLPEHGLNIKLYFPKEVAQNSVI

THMARTLNIDFNIVWGKIEKLNGKALGNLVININEKDKDKVLDYIEKSGVLWEVAS

>ABS43865.1 TctC protein [Campylobacter jejuni subsp. doylei 269.97]

MKLKLLILALLASIALAKEPNRPECIAPAKPGGGFDLTCKLAQVSLMQTGIISKPIRTTYMPGGVGVVAY

NTMNTSKSKDPDVIVAFSSGTLLNIATGKHGKYDENDVKWLAAVGVDYGAIVVRADSPYKDLKDLLEALK

KDPKAVSFGAGGSVGGQDWMQTALLAKAAGIDVSNVRYVAFEGGGDALTSLLGNHISAVSLGMAESLPHL

EAGTIRVLAVFAEDRLKTENKAKDVPTAREQGYDVVWPTIRGFYMASNAPEDAYNWWLEAFGKLYESKEF

KEQRELRGLFKFNKKGKELDAFVKKQTNTFRELAKEYKLIK

>ABS43864.1 flavodoxin [Campylobacter jejuni subsp. doylei 269.97]

MSVAVIYGSAMGNTEGAANTIASKLGISDVFNISDIDAAKINSYDKLICGTSTWGSGDLQDDWDGFDFSG

LSLGGKTIAVFGMGDSESYSDTFCGGMGKLAQNLKDAGANLVGEVSTDGYTFETSDAVVDGKFVGLALDN

DNQEDQTESRIDAWVEQIKPYFA

>ABS43863.1 lipooligosaccharide biosynthesis glycosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MPQLSIIIPLFNSCDFILRALQSCINQTLKDIEILIIDDKSKDNSLNMVLEFAKKDPRIKIFQNEENLGT

FASRDLGVLHSSSDFIMFLDSDDFLTLDACEIAFKEMKKGFDLLCFDAFVHRVKTKQFYRFKQDGVFNQK

EFLEFLSKQRHFCWSVWAKCFRKDIILKSFEKIKIDERLSYGEDVLFCYVYFMFCEKIAVFKTCIYHYEF

NPNGRYENKNKEILNQNYQDKKKSNELIRKLSLDFENDTFHQKLFEVLKKEEMDLKNRIKKK

>ABS43862.1 cysteine-rich domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKVYFYATCLGSAAMQQSVLNAIKLLRREGIEVIFKKNQTCCAQPSFNSGYFDESREIALYNVDLFDKD

YPIVVPSGSCAGMMSHDYKELFKNRPESSKIKDFSSRVIELSQYLDEVLKVDYEDKGAPIKVTWHSNCHA

LRVQKSIQASKNLIKKLQNVELVELQYEEECCGFGGTFSVKEPEISNAMVRSKIKDIQNSGAKYLISGDG

GCLLNIDGTMKRMGLDIKGMHLYDFLLKRLEGERL

>ABS43861.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLCPVCNVDLVMSDRSGVEIDYCPKCRGVWLDRGELDKIIERSVPNTANFNQDPIQESRYNDSAYHQHNG

FYKKKKKVG

>ABS43860.1 glutamate synthase, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MGNTRGFLDFKRMDFKKIAPKERILNYKEFITLLDKKEQEIQGGRCMDCGVAFCHTGVMSEGKDVGCPLN

NLIPEWNDLIYRSLWEEAYERLDLTNPFPEFTGRVCPAPCEDSCVCAINGTSVSIKNNELSIIENAFKEN

LVRVNKPKQYNGKKIAIIGSGPAGLACANTLNSLGYKVSVFERSDKIGGLLMYGIPDMKLDKSIVDRRVD

LLKKSGIEFKVNENIDSKDKVSKLLKEFDALVLCTGASKPIDLDIEGRKLKGVEFALDFLTQNTKTLLKT

GKGADAAKGKNVLVIGSGDTSVDCIAVATRQGAKSIVRFERSPKKPLQRSQNNPWPLKADIFTTDYGLEE

AIAVYGKDPREYQKMTKKFLGKTYVEGVEANDLKREFKEGKAINVEIPNSKKTYKVDLVLLAMGFSGCEE

AIAKNFGVKLDEKNNISTENFQTTHKKIFACGDARKGQSLVVWAIKDGIECALSLHQNLAK

>ABS43859.1 NifU family protein [Campylobacter jejuni subsp. doylei 269.97]

MGKNSLIGGSIWDEYSQKVQDRMNNPQHMGEFSEEDAKVRNAKLIVADFGAESCGDAVRLFWLVDEKTDK

IIDAKFKSFGCGTAIASSDTMVDLCIGKTVDEAVKITNLDVEFAMRDNPETPAVPPQKMHCSVMAYDVIK

QAAAHYKGISPEDFEDQIIVCECARVSLGTIKEVIKLNDLHSVEEITQYTKAGAFCKSCIKPGGHEKRDY

YLVDILAETRAEIDREKLKNTMKSDVAFDEMTVVGQLKAVESVLDAEIRPMLHNDGGDLEVIDIQKAEGA

AIDVYIRYLGACSGCSSGSGATLYAIETILQEELSPNIRVMPV

>ABS43858.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHIKDELSQYLANYK

K

>ABS43857.1 thioesterase family protein [Campylobacter jejuni subsp. doylei 269.97]

MRDMGEPKLKIVAMPSDTNPAGNIFGGWILSQIDLAGAIAARELSPERVVTISMDKVVFKEPVFIGDIIS

CYSKIVNVGNTSISVEVEITAQRVDSQGCTSCINVTSALVTYVSVTRDGKKKPISEELKRIHGFLNA

>ABS43856.1 putative guanylate kinase [Campylobacter jejuni subsp. doylei 269.97]

MQGFVLLISGPSGAGKSTLLKKLFDEFEDELYFSISSTTRKPREGEKNGIHYHFISHEEFQKGIDSDHFL

EWAKVHENFYGTSLKHTQDALDNGKIVVFDIDVQGFKIARQKMADKIVSVFITTKNKDELKKRLIKRNTD

TIIQLEKRLQNASDEMKELSEYDYLIINNELKQSYEALRAILIAYKFRTKGQNLGQIQNIWNEGE

>ABS43855.1 hypothetical protein JJD26997\_0763 [Campylobacter jejuni subsp. doylei 269.97]

MTQSENIEEQWVCEISYSDQDLKVLPRTSLGLIDDNMPKTTKFNFLNSHKDELSDCFIGARISVKDIVNT

DLLHAQSETYVKILPLRFTVEFGKQNAIIYYLKKK

>ABS43854.1 site-specific recombinase, phage integrase family [Campylobacter jejuni subsp. doylei 269.97]

MLINNSCKLTGEKVEVDDELEYFKENIQDSDYIMQTSTGKHLNRSNAFLIVNNIYAKALISKKGLHLLRH

TLAMRLTAKGTNLVVIQKILRHANLNTTTIYAKATNDTIKAALLNN

>ABS43853.1 CoA-binding domain protein [Campylobacter jejuni subsp. doylei 269.97]

MNEKETISIEEKIDTLILFRKGEVALEILPKLVEKNIKNLWLQLGISNEKAKEECKKLDINFIQNRCIML

EYPDFKTKEK

>ABS43852.1 putative deoxycytidine triphosphate deaminase [Campylobacter jejuni subsp. doylei 269.97]

MGLKADNWIRKMALEHKMIEPFCEANIGKGVVSYGLSSYGYDICVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>ABS43851.1 putative sugar transferase [Campylobacter jejuni subsp. doylei 269.97]

MLISILIPSYNSASYIKECLESVLAQSCEKLEILCIDAYSNDGTLDILREFARKDQRIKLILSERKSFGH

QLNLGLENANGEYFSIVESDDLAHPLMCERLLNLALTTKCDIVKANLTSFTQDKQELLKIISNENFYGRI

LDEKDRKDVLKEGFIINVSALYSLDLIKKFDLKLNETSGAAYQDTGFWFELFSVAKTWYFHNESLYFYRQ

DNPNASTKSREKIYAICDEFDFIEHFLKKQNLGHLRELFLYRKFKSYWWNLKRIDKSYREEFLMRFANDF

KEENLKVGIFSAGEFEELRKIIYNPHIFAKALSSPLFALKKFFARFKKSLL

>ABS43850.1 methionine aminopeptidase, type I [Campylobacter jejuni subsp. doylei 269.97]

MIELKKPDEIEKLRIANQIVAKTLNFLENEIKIGMSLKQIDKMAEDYILSLGAKPSFKGLYGFPGVICTS

LNQVCIHGIPDDKIIKEGDILGLDVGSLIDGYYGDAARTIAIGEVSPTDKALISCAKDALYHAIDIIQDG

MRFKELSAALGEFIHARGFVPLRGYCGHGIGRKPHGEPEILNYLEKGSSAKSGPKIKNGMVFCIEPMICQ

KDGTPKHYNGKWDVGSIDGLNAAHYEHCVAVINGRAEILSMI

>ABS43849.1 cation efflux family protein [Campylobacter jejuni subsp. doylei 269.97]

MYKFLSHEPLANKSCHHDHEEHSHEHHHSHADARSMDKKILKISLLMTFSMMLVQFIYSILSNSLALLSD

TLHMFSDVFALALSFLAIIAVEKWQDHQKTFGYFRLEVLVAFINALTIILSALFIIYEAIEKFINPKEID

AKTMIIVAILGFLVNGINALMMFKGANLENVNMKSAFLHMMSDLLGSLAVIIGGIVVYFSGIVYIDTILA

IILSILLLRWAIILLKQSANVLLESSPVNIEKVRQVLLLNPSVDEVVDLHITQITNKMLVASMHLKVRIC

DLKEFEKLSQDLSHKLLHEFKIGHITIQPIRSENEI

>ABS43848.1 oxidoreductase, FAD-dependent [Campylobacter jejuni subsp. doylei 269.97]

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIITESGFGIGLNFFLTLKRFLE

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLRFYEEFKELLEHFLKFYPKAKEGIYRFYFEDCFLDLVF

EDITILKELDFKADVWYLDGFSPNKNSQMFDENLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKSKVKLGEFSELSFIEASRFYRQILDLNFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLDTQFPLSSKAYICPIKDDLQVIGASYDRLDASLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEAFYKEEYKALLWTKDKEQKPAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLVRKLKKGL

>ABS43847.1 hypothetical protein JJD26997\_0815 [Campylobacter jejuni subsp. doylei 269.97]

MLIWINECQKKLKNILNLYQALEFYKDIVEIISNQKDNKMGILNFLKEEDKKGENHIDLILEIIKEKDEI

FIKIYR

>ABS43846.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MNYKLSLSPLFVLEIIASVLFIVFFGFGNFLFFILLSMIFGVVLLGVFWKNMLEFQMGGLKDMLTQFSFV

IAGFLLIFPGIITSVFGIFVFCFGIALKIMTKSKYHYTKQEHQNSNEEIIDVEIIEDRK

>ABS43845.1 flagellar biosynthetic protein FliP [Campylobacter jejuni subsp. doylei 269.97]

MKKILLFLLLSMSLFAAEATIPTINLSLSAPNTPNQLVTTLNIVIVLTILALAPSIVFVMTSFLRLIVVF

SFLRQAMGTQSMPPNTILVTLALILTFFIMEPVATKSYNEGIKPYLAEQIGYEEAFIKGTKPFKDFMLKN

TREKDLALFYRIRNLPNPKTIDDVPLTVLVPAFMISELKTAFEIGFLIYLPFLVIDMVVSSVLMAMGMMM

LPPTMISLPFKLLIFVLVDGWNLLVQRLVESFVT

>ABS43844.1 hypothetical protein JJD26997\_0953 [Campylobacter jejuni subsp. doylei 269.97]

MAFSHEKFITKILLQENIEKIGKKLEKQKTRFATIKNPL

>ABS43843.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MLKFKILIIEDDVDLNELLVLKLKSSDYEVISLVDFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLFFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>ABS43842.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQISNLGELLNATLIHEGSVLSVEGFAINLNELKAGFAFFNNDEKEIVQAIEKGAYAIITENDITIEDKE

IFYFRVENLEQALVRFLRFFCEDKECEFLLFKSYELSLCKAFYFNILKGNIFADFEKLIKAKKGEIFCYC

EENYLNKLCAYSHGLKDANFTLLSRSSFFFTTLICKNLYFKNLNLPFFYANSFAKIISFLKEKNQKIIFD

FNKIDDFKIYFIDDKFEITPFGSSSQAFIVSNNQNTFEFWKEKFKNIKDFKIASKNSLFCDFSYNQLSDL

RKLKNFKYCLILENYDIFEQEFENKENQTPSLF

>ABS43841.1 peptide ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MLKRLVFSIVVAFFSTFLCFVLLHFSKGSIAYANGVNSQSKEFVQRIEQNLGLDKPLLEQYKIWLFKALK

GDLGISFLSGESVLKLIKERIFNTLILGSSALMLLFLLSVFLALLGYYYKESFIDKIITFLAFNFFALPP

FVLALLFVLIFGIFWKIFPVMGSSDIGFEDDFLNRLEHLILPVLVLVLSHLALFLRIARNFINESFSQIF

IQNLYARALREKDIYFLVLKYSLSSIVAYFGGSALSFMMGAYVVESVFAYDGLGSLLFKSIIFKDYPVVL

ALIFFSVLLVAFFTFLSDIVARILNPRLRRLDFV

>ABS43840.1 diaminopimelate epimerase [Campylobacter jejuni subsp. doylei 269.97]

MKFYKYCASGNDFVITNADRKEDRSSLAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPSMIFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEKLGKTWQLCDTGVPHLV

HFCQSLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEMGFAYKNEELFFEGKVKYCFEANYNFS

>ABS43839.1 transcriptional regulator, Fur family [Campylobacter jejuni subsp. doylei 269.97]

MELLQMLKKHELKATPQRLCVLKILKRHEHPNIDELYAEIKKEYPSISLATVYKNLHTLQEQGLVVEINV

LNQKTCYDIYEEEHIHVVCSKCGSIEDLSFKDTKLYEYQEHLEKKIGNLVNHLSVCAYVDSCKKCH

>ABS43838.1 tRNA (guanine-N(7)-)-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MPNFKSKKIKEINLPYSKDDVEFLWFAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKAQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWGKKPHRRVIGK

DFCKECARVLVQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECQNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

SEHCYLHLDKTIDFAFKEPFKIQENIKAINELKEILKVQFKI

>ABS43837.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIENIENNGNLAYDISAAWADLSVESIKANLEWALSHPYLNQWLENADASEALEVKKELKKREITKKRDE

AINGGVEYNGKVFQSSEKDRNLLTSTISLFSITRQVPEGFKWIAKDNEAVSFTLEDLIALGGVMANAVNA

SMIKARNLKDKIEQASSLEELDLITWDS

>ABS43836.1 Sec-independent protein translocase TatC [Campylobacter jejuni subsp. doylei 269.97]

MFEELRPHLIELRKRLFISVACIIVMFIVCFALRSSILDILKAPLIAVLPEVAKHVNVIEVQEALFTAMK

LSFFAAFIFSLPVIFWQFWKFVAPGLYDNEKRLVVPFVSFASIMFALGACFCYFVVVPLAFKFLINFGLN

EDFNPVITLGTYVDFFTKVVVAFGLAFEMPVIAFFFAKIGLIDDSFLKRHFRIAVLVIFVFSAFMTPPDV

LSQFLMAGPLCGLYGLSILIVQKVNPTPKDKESDK

>ABS43835.1 flagellar basal-body rod protein FlgB [Campylobacter jejuni subsp. doylei 269.97]

MINPFKSKELITGALAGRNLRNQLINANLANVDTPFYKARDIEFETALVNRANEIFKKNDNKELQLAVTE

EGHQKPWKFPDPSKSTIYLRDGHLARNDANTVDLDVETTEMSKNTVMITALDGVLRRQSNIFSSILDASS

KLS

>ABS43834.1 putative flagellar hook-associated protein FlgK [Campylobacter jejuni subsp. doylei 269.97]

MGIFGTLYTGVTGLKASEVQIATTGNNISNANATFYTRQRVVQTTNGYITTGGVQVGTGTAIESIVRLHD

EYSYYKLKSASNQLEYTKYMASTLQEIAQRFPDLQNTGILQDLENYNKAWNDFASNPNENATKIALVKAS

QTLTESVNNTFATLDKIQKKVNDDIKNTVDEINKIGEEIATINKQIYGQEALSTEHANELRDRRDELELT

LSKLVSAVASKNEINQDNRLDTTITDPGHQYNLSIEGFSVVDGINFHPLKLDYDDKNKSYSIYYETPDEK

VRDLTAKISGGQLGAQLDLRGRNYSKSEGKYEDGIIQGYMDSLDTFAKTMINETNNLYASSAKSSVTSDY

LSGLKGDIPLVNYDRTIQPGSFDIVIYDDKGDKKLTKTITIDVNTTMNDIMRQINANTDDNNDHNANNDV

DDHINASFNYDAKTGDGLFQINAKSGYKVAIEDKGTNFAGAFSIGGFFSGTDASDMKVKDSILNDPSTVR

ASSNGVDSGNDMANKIIQLQYEKVNFYNEDGTIDNLTMEEYYRKLTGKIASDGENNNVVNSSNETLYNSV

YSEYQSKSGVNTNEELVALIQYQSSYGAAAKIVSTVDQMLDTLLGLKS

>ABS43833.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDLEKLRLARSLYYQCLGELFVFSFSEERLSKLQEYLKTMQECLFDENLKSNFDILLKHLDDENSIQAFF

KEYDLLFLSLKNSIPTTFSYIEEGFENSNPLLCVRQILAKSKIRRNEKFFKESEDSVGFCLLLMSEFLRQ

NEDHLAKELFEKVINKSIDEFLGDVFMNKNANLYKEIASIALAFMEFERLCFEVEKPAKINSKKVQNDLS

RSEFLRREANKQRRTSEKSQGIS

>ABS43832.1 serine transporter [Campylobacter jejuni subsp. doylei 269.97]

MNTPKWTSYDTRWVLSLFGTAVGAGILFLPIKAGVGGFWPVVVMTAIIFPMVYLSHRALSRFVSQVNGDD

KDITHAAEEYFGRKVSVFISVLYFFAIFPICLAYCVGITNTFESFIYHQFLPFLNLEGTFADLIRAMYQV

SVDSQGKTVASLFPFYRLLLAFILVSIFMLIMLFSEELITRVCEWLVYPLCAILFIFSLYLIPQWSFESF

SAIPGAKEFITVVWLTLPVLVFSFNHSPAISTFSLSVKRQYKEHSVKKADQILFRTSTMLLFFVMFFVIS

CVLSLSPTELNEARVQNIPVLSYFANKLDNPFISYSGPLVAFLAISSSFFGHYFGAREGACGIVRKCCKL

VGNENPDLKIIAICTTLVMYIIMLITAYINPSILGFIESLGGPIIAAILFLMPIIAIYTVSKMKKFQNKA

LDAFVFITGVLTIVTVIYTF

>ABS43831.1 transketolase [Campylobacter jejuni subsp. doylei 269.97]

MNIQILQEQANTLRFLSADMVQKANSGHPGAPLGLADILSVLSYHLKHNPKNPTWLNRDRLVFSGGHASA

LLYSFLHLSGYDLSLEDLKNFRQLHSKTPGHPEISTLGVEIATGPLGQGVANAVGFAMAAKKAQNLLGGD

LIDHKIYCLCGDGDLQEGISYEACSLAGLHKLDNFILVYDSNNISIEGDVGLAFNENIKMRFEAQGFEVL

SINGHDYEEINKALEQAKKTTKPCLIIAKTTIAKGAGELEGSHKSHGAPLGEEVIKKAKEQAGFDPNISF

HIPQASKIRFESAVELGDLEEAKWKDKLEKSGKKELLERLLNPAFSKIAYPDFKGKDLATRDSNGEILNV

LAKNLEGFLGGSADLGPSNKTELHGMGDFVEGKNIHFGIREHAMAAINNAFARYGIFLPFSATFFIFSEY

LKPAARIAALMKIKHFFIFTHDSIGVGEDGPTHQPIEQLSTFRAMPNFLTFRPADGVENVKAWQIALNAD

IPSAFVLSRQKLKALNEPVFGDVKNGAYLLKESKDAKFTLLASGSEVWLCLESANELEKQGFACNVVSMP

CFELFEKQDKAYQERLLKGEVIGVEAAHSNELYKFCHKVYGIKSFGESGKDKDVFEHFDFSVSKLMNFIL

SK

>ABS43830.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKLKDFDFRIWLNGSYIYLNEIGFEKINQNYFLRCCGDNEKIYEKYKFYINADIPKETYEKRTQLEDSEL

ELYTGFKDKNGVKIFENDIVLFMPNDSEKFLYTINYDKERGFFFSDDCNLDDEYCEGYTEVIGNIHENKE

LVDFMEKEKEAFKEFHQKFKNKYDENGTPVKEFYEEDTRLSIYFKQELEKLLNDGLYK

>ABS43829.1 folB domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQSHIKIKFHFKCIIGILDFERRKKQKIIIKLKAKANEFLNYAEVITKIKKWYKKEEFYTLEESLDFVSL

NLKKDFPDLTNLNIKIFKPHIIKNAIVGVKLKKKY

>ABS43828.1 acetyltransferase, GNAT family [Campylobacter jejuni subsp. doylei 269.97]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLDEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>ABS43827.1 beta-hydroxyacyl-(acyl-carrier-protein) dehydratase FabZ [Campylobacter jejuni subsp. doylei 269.97]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVRGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>ABS43826.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MVTLDTRGKVCPFPLVEAKNLVQTLKSGEELEILFDCTQATETIPQWAAEEGHEIVNFELLGDAEWRIKL

IKK

>ABS43825.1 putative methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKQGDFTEVAKHYHNRPAYSPFLLEKLVACINDKNKNLKDLNIVEVGAGTGKLTKMLGEIFGCQISAVEP

NDNMREEGQKFTQNLSNISWHKGSGEETCMSNNQADWVIMASSFHWTDPKKSLPEFNRILTGGGYFTAIW

NPRHIVEGSVFDEIEKEIKHIVPELARVSSGTQDVKKWEEILVSTGDFTDCFFMECDYKEFWDKERYLGA

WHSVNDIQAQAGEKRWKEILEMIEAKISHMQSIEIPYKIRAWTARKA

>ABS43824.1 putative methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQKLVEQVWDYTEHAKFYSYRPNYAPKTIDMLISLVGKKDIKVADIGAGTGNLSIMLLERGCKVVSVEPN

DAMREIGIERTKGQKIDWVRATGLNSTLQNSEFDWVTFGSSFNVMGRNEALEEAHRLLKSEGYFSCMWNH

RDLNDPIQKIAEDIIVEFVPNYTRGTRREDQRPIIESRKDLFDNIVYIEEDFYFHQSIENYINAWKSVKN

PYWDLETDEGNELFNKISDKISQRLPKEFSIKYTTRCWSAKKI

>ABS43823.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>ABS43822.1 putative tungstate ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MDYIFDGFKQALFLLFNADESVISAIKTTLLSSSISIVLALLIGFPLGFILGFFDFKFKRFIKLIIDTSL

SFPTVAVGLILYALISSRGPLGEFGLLFTIKALILGQFILALPIVIALFSNLIENMNKKHFLLIKSFHLS

PLKLVLTMIYELRFALISVVALAYGRIVAEVGVAMIVGGNIKYDTRTITTAISLETNKGEFASGIALALV

LILIAFCLNFITHKLKRT

>ABS43821.1 hypothetical protein JJD26997\_1151 [Campylobacter jejuni subsp. doylei 269.97]

MQTGQVISKIEIQKVRIPGELLTLSPLEKPIAKNELDILNAYSMLFYKYKQCEIQINKIKELNNE

>ABS43820.1 flagellum-specific ATP synthase FliI [Campylobacter jejuni subsp. doylei 269.97]

MNLEKLRSKLGKENLSAIFGEITKISATSIEIRGLKTGIGDIVKLVSNENENLNTLAMVVEIKEQFSYLS

PFSFIEGFKIGDRAFISDAGMQIGVSDELLGRVVDPFMRPKDGKGAIEVTKYMPIMRAPIDAMKRGLIEE

VFPVGVKTIDALLTCGVGQKLGIFAGSGVGKSTLMGMIVKNSKAPIKVVALIGERGREIPEFIQKNLGGK

LDDTVIIVATSDDSALMRKYGAFCAMSVAEYFKEQGKDVLFIMDSVTRFAMAQREIGLALGEPPTTKGYP

PSVLSLLPQLMERTGKEEGKGTITAFFTVLVDGDDMSDPIADQSRSILDGHIVLSRELTDFGIYPPINIQ

NSASRVMSDIISPEHKLWARKFKRLNSLLKENEVLLRIGAYQKGSDKELDEAISKKEFMQKFLGQNPEES

FEFNQTLELLSQIDTPNISLPPTQNINIGSASATLPNPNLK

>ABS43819.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MAKNEGYICVFDCESVPDVELIRKTLGFEGSDLEISLRALQWQKEQSGSEFLPLPYHKIISICAVLSDNF

GKFIKVNKIDGQNEKEMIENFFNFIENYEPKLVSFNGKNFDMPVLVLRALKYNLKAATYLDTQSDKWNNY

KTRFSELKHCDLLESLGSNGRGIKLDTLCSMVGLPGKYDMHGDEVMKLFYGNELEKIHEYCESDVLNTYM

LFLKYELIKGNVSEEDYVDFLSCMRDFLRAKKANRSYTEVFAKACESEILKVQP

>ABS43818.1 hypothetical protein JJD26997\_0353 [Campylobacter jejuni subsp. doylei 269.97]

MFKKLSNFKQFSKKKALIGSFALLSSASIASAAVTVNSTTGVMSGTLDMAPFFSAVTVVVAALAVIVAVK

AGIRLLRGI

>ABS43817.1 peptidyl-prolyl cis-trans isomerase D-like protein [Campylobacter jejuni subsp. doylei 269.97]

MLTWMQHHKKYLVVTIWVSTIAFVGAGFLGWGAYDFNLNRSSSVATVGNEKIGFSEFDTRYRQILSYYNQ

ISNGALTPENAEQLGIKNIALSSLVEDKLLLNFAKDLGIGVNENEILQKLANTREFQDPTGDFNKTIYYE

LLNANNLTPKDYETQLANEVTTDKLNQIFNIPSKDEELKMLASSYFMQDVLSIAKIDYDKKNIKINEEDL

KKLWNEHKENYKTKKIYEISTYFLPVSNEKIDDKELEKFYNQDENKLKYKDFAGKVMDFQSAKNEVAKDY

ALMQLKNVANAKFLDLKNGKDNFQKDQNISESDVYYPIDLLNKAKNGGVLRPAPYNNGYIIVKLNKVDPI

RNKTFEEAREEVLPMYLSEQARKNLEEKTKNSLVNFKGDDIGFVSRDSSRESVKLSDKILNDSEFAYFLM

NVFNTDQNSSYVIINDNKAILYKINQQKLDMSSDKFEQYKTMLEQNLQNLKANELKQELVDELKKIYPIK

IYYKGN

>ABS43816.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDEE

INEFKRWLIKI

>ABS43815.1 putative acylneuraminate cytidylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKFTAIIPVKGNSSRLPYKNILPLGDENLLTRKIRQVKESKIANRIIVSSDSKIMLEMARNLGVETDLRP

KDLVDESRPFSDLLAYFADIVKEGHFVYTCATSPFFDENLMRQSKEKYLFALENNYDSLIAIYKFRHFLL

DEKGPFNFKPGKKHLNSQDLKPFDFFTNGIIYTPVENIAKFNYFYGPNPFRFEVGQKEALDIDTKEDYLS

ALAFLDEERLLKKAYEAFNRGGGGQL

>ABS43814.1 hypothetical protein JJD26997\_0253 [Campylobacter jejuni subsp. doylei 269.97]

MKNTLIIFENSLSNLGKDKASDLLEDLSFNLSYKQISHNPHEAKKVLNSLLVEFLTILKKLDFCDDENVA

KVIKALVKASVVDAQNSLYEYISEAELLNKRIENQKNLIKNQISDNFFEFENILQEYSFCDEFSGGLNDA

ILFDIEMLGILKETAESAFLTTLEKAEDIELTSSEIAKNLVYNAICEAHFEKERILKISSIILNTAFEIA

NESMAYAKDLCLGVIKGTRDGIVLAMEKFKASLTYANFEEDLSLKSKELIGIEDDFIALLKKEIQLQNDP

CKSIVENLLEHELDNLFAKFRRLAGESREQLILVLNDIKKNPKINDFNKLTQRKLNRFKQEIFELEKIAS

EKYKDLNSKKAKKLGVRLWEKAKKFVKK

>ABS43813.1 di-/tripeptide transporter [Campylobacter jejuni subsp. doylei 269.97]

MKGTQNLDTSFFGHPKPLLSLSLAELWERFSFYGIRPLLYLFMIASFEKSGMNLKPEEASAIMGIFASCL

YLAALPGGWLADNYLGQKRAILLGALTIAFGHLCIAFSYFNNKMIFVGMVFLVIGTGLFKTCASVMVGML

YKKDDARRDSGFTLFYMCFNFGAFAAPLICGFLQKEYGWHFGFGAGGIGMLLAVIIFYLKTMPDLKEFDE

KVGIDSTWDRPSKKSKNAFYIIIVSGIVLLGAIFLILGGFIKLDAQVINKNIILTILACAGIYFLYLFAF

TSLKIEEKRNLIIFIVLFLAAALFWSVYEQQYTSFNFFAEKLTDKTILNYEIPTIWFQSLGGLFVILFAP

FSAFIWTICAKNNKEISSIIKFALGLLGAALAFLIMALASNHAISLNGDANTLRENLENSSQIILVSPWW

LVSSFLLMVLGELCLSPVGLSIMTKIAPNLIKSQVMGLWFVASALGNALAGFIGGKASEENIAYLPNLFY

QCMWILLGAVIILLILKKPINKILKN

>ABS43812.1 putative outer membrane component of efflux system [Campylobacter jejuni subsp. doylei 269.97]

MRFINIILFLPLVLFGSNLKELINLSQKNEQYLIKQIQIEQAKLTSKEAFRNYLPSLSLNSAYVANNKDR

FIIDPQESLFAKVSLHFLLFDGGAREANLRALESREKLSLLDKEQNKNYLALNAITLYFNTLSLEKILLA

NQQKIAFLKSTFERLQKFYDAGLSPKDELESIKAKYHLSLLELSQNELKLANIQKEIKILSNTDFKVQGN

AFLENPQQEKSQNYEVMIAKEQISLAKESVNLAKAEYFPKFYIQDNFNFYKNNYNPKVPAPFVNLADQFL

EKYSQGNQFILGMEWKIFDFNARAKEVEKERLNVQIANANARLSERKNKEELNYLDKSLKVLQEQILALN

LSLNAANLAFESVDKKYQAGLVSYVEYLQALEAKFKAQSDLELAKNEFEITKANYYFNAGIDLNSKVKE

>ABS43811.1 3-deoxy-D-manno-octulosonate cytidylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MIIIPARLKSSRFHEKILCDIGGVPMFVATARRVSSVDEVCIALDDEKVLSIAKEYGLNAVLTSKDHESG

TDRINEACKKLFLKDDEIIINVQADEPFIECENLLKFKEFASSFLDKKAFMVSCYKKITQEEAMDPNLVK

VLCDKEGYALYFSRAKIPYERENYEESFKGHLGIYAYSVKALREFCSLSSSALERAEKLEQLRAMENGKK

IKMLEISTKSMGIDTKEDYEKALQRIK

>ABS43810.1 high affinity branched-chain amino acid ABC transporter, periplasmic amino acid-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKSLILASILSLSLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSTLSNGDKVSLAIIDTKGDK

LESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDKKIYSSRVCFMDSFQG

SSLAKYVFSKLNYKSSVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRILRVNSGDKDFRAIVAQVKSLNP

EFIFLPLYYSEASLFARQSKLAGLNIPMGSADGVADQTFISLAGDASEGYIFTDSFDANNPTTKLSKEFI

SVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCINEKIHQTKNYQGVSGVISIDQTGNATRS

VVVKEIKNQKQNYKDIINP

>ABS43809.1 putative tungsten ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIEISNLFFNYQNKEVLKIKNLKLDTSKISILMGANGSGKSTFLRILKFLEGDFSNNISYFGNFKLNNKQ

KREIYLVFPEPILLNRSVRANFLFTLKTYGIKEDIKECIKESLMCLNLDESILNKYPNELSSGQSQKIAF

AIALSVRARYYLLDEPSAFLDKNTTLLFKKAILKMHKNFNTGFLVASHDKHFLDSLAQKKLYLHSGEILE

FENTNVFELENQGVKFGNFIDFSNCKKYKDFKKPPSKIAINPYKISFFNSKNIPKNNHEFILDKCYIIAL

RSRKSDVFIRISCMDKILEFVLEKQEFLKSDLKLYEELSLYFYEDAICFLN

>ABS43808.1 posphopantetheine adenylyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>ABS43807.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKNKSIAIFIDAENIPAKYAKSIFDIASDYGEVIIKRIYGDWTQKNIQGWREQIAEYSLIAMQQFNFAAN

KNSSDMYLITEIMSIFYEKNIDIFVIVSSDSDYTSLIQKLRENKKQVIGMGLEKSIKSYVNAFSEFFYLD

QDESKKEDILSKDYLRALINITEQLIDEKGRAEYAQIRTNMNRKYSDFHPQNYGFKNFRALIQKFLPKMK

KFEEEREKNIYFLVKKDYESYY

>ABS43806.1 serine acetyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNFWGIIKEDFSQPNVQDPAFNSCIELFFNYPGVWAIVNYRFAHFFYIRNFKRIARIISGISQFLTGVDL

HPGAELGRRVFIDHANGVVIGQTAIIEDDVLIYQGVTLGGTSLKKGIKRHPTIKKGVIIGSGAKVLGNIT

IGENAKIGSNAVVVKDVGANLTAVGIPAYIIEERKNKNIRAIGANCDDKLEKLEKKILELENLILKQLES

QK

>ABS43805.1 ribosomal protein L9 [Campylobacter jejuni subsp. doylei 269.97]

MKVLLIKDVKALGKAGEIKEVKDGYGQNFLIAKGFAKAATNEVLRKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTLKSLGIHEVSVKLGHAIHAKF

NISIKAE

>ABS43804.1 ADP-L-glycero-D-mannoheptose-6-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MKIAITGGAGFIGSQLALNLQEKHEILIIDKMRSSATFENGNLQSFGHFKNLLEFDGELFAGDINDEKVL

KKIEDFKPEIIFHQAAISDTTVFDQTKVLQTNLNTFKDFIELSIDLNAKLIYASSASVYGDAKSPQTVDK

DEEPKNPYAFSKLMMDKLVKKYYDKAHLVGLRYFNVYGKGEFYKNKTASMVLQFGHQILAGKNPCLFEGS

DQIYRDFTYIKDVISANLVALDSKCGVYNVGSGKARTFQDIVDILQKELKTDLPCEYIPNPYVKSYQFHT

EAKLDQTWDYQPKFSLEEGIKDYLGEIKRLFEKEVNA

>ABS43803.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFDYSKYENATEKQLIHALTLAEKRAEKLNSQLKENNELFKFLQKKLKNSFSTKKTKKAEQRRPELDEAI

EDYKNGNVEHYANVEEAFKALSAE

>ABS43802.1 YihY family protein [Campylobacter jejuni subsp. doylei 269.97]

MKNFFTILLNLRDKEILNYAAALSFYTVLSLIPILFVCFSVFTQISSFKAYYEKAKQVIFAFLIPTQQDV

VATYIDTFLKNSVNLGIVGLVAMAFTSLAFFSGYDFVINRITKNEPKGLWQSISSYWTLLTLVPLGLGLS

FYISGFIQQTLDDYKIGFNFFEILPFVIIWGLFFTSYSSSVHKGTLKSLALVSFGAGAIWYIGKNLFVYY

VVYNKTYASVYGSFSTILFFFIWIYISWIIYLFGLKLYYFLNHNHNEGNKIRKNTKKSQIFKSHRD

>ABS43801.1 transformation system protein [Campylobacter jejuni subsp. doylei 269.97]

MCFGALFAQENFEEYFKLIDKENRINFNTLQNPFVNPTFEKLRRIKITAIMLDKVKIYDRWYKKGDMIDD

AIIHEISTKEIKFQYDNLEIAIQINKNDKININ

>ABS43800.1 phosphatidylserine decarboxylase-related protein [Campylobacter jejuni subsp. doylei 269.97]

MKDFIAKDGYLSLIILSLIFIFVWIFYSFSILLLALIVICIFLFRTPKREPVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSVKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>ABS43799.1 phosphoenolpyruvate carboxykinase (ATP) [Campylobacter jejuni subsp. doylei 269.97]

MKKFDNLGLDNIKEIFHNLSYDELNAHEKVNNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKVNQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKGDVALFFGLSGTGKTTLSTDPKRKLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKYEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSITKCEFENFEVFDLAIPKALEGVESTLLNPINTWSDKNAY

TETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>ABS43798.1 phosphate acetyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFHIYKFKEKMMANLYLMRSRSDELNTIISTNLLKNYSKIYKNIAIYCPVIYIHRVPVLQGWLEEFNINQ

TVKSAYGFTFREAMEEFSKDPHNFFNVILEEYEELKRKYDFVLVNSFCEFGILDGFDLSIKLAKNLNTPI

AAIINDEDKLIAQKYFDHALDGRNYVLINENFNFEEVQKLEEYDFITPHRFKYELIKQSVKNKKTVVLPE

SNDERILKATEILLKSKVVDLILLGDEEKIKQDAARLSLDLSTIQIINPLNSEYNQEFTSILYEARKSKG

MSLEEAKMLVQDKTYFGTLLIHTGKADAMVSGASTTTAETIRPALQLIKTKEGISSVSGIFFMGLEDQVL

AFADCAVNPSPTAEQLAINAYVSAMTAKSFGLEPKIALLSYSSGDSGKGESVDLVKEALKIAKEKYPELN

IDGPMQFDCAYDPKTAAKKMPNSKIAGHANVYIFPDLNAANICYKAVQRTANALAIGPILQGLKKPVNDL

SRGCLVDDIVDTVILSAIQAQ

>ABS43797.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSAAKSQPAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYRLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>ABS43796.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKLRIFSSSRQIREYYNQKKQQNALLDSAIHIGEFLDKVCLSNFHKASSYESLLLMQEACLKSKDLEKKL

GISVEFFAFLKNNEYLFSFFKELSLEKKSIEDLKNNDYYATYNEHLEILDEVYKNYLALLEKNSFYDDLS

LPKNYTLNKDFLDEYEAIVYDLQGFLSKFEENLLSEISQIKEVVLSFKTSKFNLEYLLKLDFLKIFDLKI

NTHYEINLSKQEILKEEIFKTRNSKIKLKSFELRALQCAFVMDEISHFVRKGLKPENIVVITPDESFCEF

LRLFDKDNMLNFASGISIKESLFYQKFQALYESASSASFVYKNQEDYFEDTQMIFDYHNTLLHSLKLDFI

EFKKYFDEKCDFEYFEKLLALFLENEKQELIYLIRKELYFIKDLLKNQSLTLKELIHLFFMQISQLSLSD

VGGGKVTVMGLLESRGLCFDGVILVDFNEEFIPKRSVNELFLNNEVRKKAGLISYDRRENLQRFYYESLM

NNALEVSICFVENEEKSKSRFLDELDFDFFYETHIHQKAYLNALKLDYEGIKPNLTPIKAPILKHNPFEF

PLSFSRFNLLENQKRTYYYRYILNLAEPRVLSEESKAKNQGNFIHKMLEIYYKNYANNDFDIRNFANLLD

KEYQKYNISELDLEVFKLKFIQFAKNEKEHFSKGFYVAHTELELNNILKLGTDSIKLKGTIDRIDSSKEG

NLIIDYKSGKVPSNSYQLAFYQALYDENASVGFYDLNSMQILHQKAKSLDELRERLKDLVLMSKEEIEFE

NEQDEYCPYKLIYKKELK

>ABS43795.1 ATP synthase F1, delta subunit [Campylobacter jejuni subsp. doylei 269.97]

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFHIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVHSKEKLSQENLKDLEVKLNKKFNANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYVLKII

>ABS43794.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKTKRTDRVSFLTQLISESKSGYENYKPHFKELQDAYLLENKIMQKLRKRNKSSIYIPKINAKVKYLITS

LNEVYFNSERMADIETYINSDDTIIELWQNAIDFYSGKINMFKIFQPLFLDVLLVGTSIAKLTWHKGMPR

IERVGIDSIFFDPNALNSEDVGYIVNEIYLTYNEIYERQKLGFYKKLETPKLLDEEDEYKKVKLYDIYER

KNDDAWVVSTLFENHLLRNEVILQDGQPFVWGSMLPQLKKIDNENYVSAYGEPIMASAMPLQDEINITRN

LLIDAVRTHIMPKIMLPKSMGVSREDIETLGKPLYTDDPKGVQILPPPDVNSAGMNLQLLESELTEVTGV

SPQNNGAQTAHNETATEISIKAQEGGRRSADYIRQYNETFIEPLFDRFAMLVFKYGEDNFFKGFQREDIP

SFRFKIQTGTGAMNKEIRRAGIQASMQVFSQLYQMYMSIGDTNSAYGIINASKELTKELLPILGVKNVNS

LFAFENKIQQGETNAEY

>ABS43793.1 thiF family protein [Campylobacter jejuni subsp. doylei 269.97]

MNDRFKRIKWLVGEEKFQKISQTKVLVCGLGGVGGICVDALYRSGFKNLTLIDADKFEITNQNRQIHSEN

IGEEKAKVFERIYKAKGIVSKIDEKFFKNFDLSEFDLIIDAIDDIPAKVALAHLIDFKKQIFISSTGGAR

KLDPTRIKTTSIFKTHGDALAKKFRYELRKSGFKGNFDVVFSDEEAHCKDLGSFMGVTASFGLALASLAL

RKVLAR

>ABS43792.1 cytochrome c family protein [Campylobacter jejuni subsp. doylei 269.97]

MIVRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDM

SPEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHN

IFLK

>ABS43791.1 GTP cyclohydrolase II [Campylobacter jejuni subsp. doylei 269.97]

MKIKISEIANLPSKWGNFQIQSFKENEKEHLCIFKNTPKDTLNLRIHSECLTGDALGSLKCDCGEQLEFS

LRYIEKNGGMVIYLRQEGRGIGLFNKINAYALQDKGFDTIKANHQLGFKADERTYEIVEFILKHYEISKV

NLLTNNPEKLDSIKEKIIARIPILIEPNRFNAEYLSIKQTQMGHLK

>ABS43790.1 Ser/Thr protein phosphatase family protein [Campylobacter jejuni subsp. doylei 269.97]

MIFLIFSFIVLLIFGLANVYIYKRLIKKITLFKYFYKIFAFIFIVFFLAQAVFLIFRRDEYLSDTWYEIL

AMLYAPTYCLFFMTLVWDFIKLILALMGKRDKKYNLILRLIFEFSLIVLSVFLIYVSINNALKTPEVKSV

DIEIPNLKQDLKIAMLTDIHLGKNLHENFLDKLITKVNLQSPDMVVIVGDLIDTNPKDLENYISKLNDFN

STYGTFYALGNHEYYHGINEVLDLFRKHTNMKILVNQNLDLGFINIAGLGDLAGLDKGLYAPDLARVKVD

LNTSKPSILLTHQPKTALLYDLSDFDLVLSGHTHGGQVFPFMFLVKLQQGFVHGLYDLGEKTKFYVSSGA

GFWGPSLRVFAPSEIVILNLKGKK

>ABS43789.1 heat shock protein HtpG [Campylobacter jejuni subsp. doylei 269.97]

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKNDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEINDASKEEQGTSITLYLKDDEFAHAYKIENIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKLDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNETFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>ABS43788.1 transcription termination factor Rho [Campylobacter jejuni subsp. doylei 269.97]

MEKEKKQHQRTHVPVEGYKIEELKLLDLENLVKIANECEIENPRELRRQELIFEILKAQTKKGGFILFTG

ILEISSEGYGFLRGMDSNLSDSVNDAYVSNSQIRKFALRVGDIVTGQVREPKDQEKYYALLKIEAINYLP

LQEAKERPLFDNLTPIFPTEKIKLEYDAMKLTGRILDLFTPIGKGQRGLIVAPPRTGKTELMKELATAIA

KNHPEMHLIVLLVDERPEEVTDMQRCVKGEVFSSTFDLPAYNHVRVAELVIEKAKRMVETGKDVIILLDS

ITRLARAYNTATPSSGKVLSGGVDANALHKPKRFFGAARNIENGGSLTIVATALIDTGSRMDDVIFEEFK

GTGNSEIVLDRNISDRRIYPAINIIKSGTRKEELLQGVANLQKIWAIRSAISQMDDVEALKFLYSKMLKT

KDNVELLSIMNE

>ABS43787.1 WGR domain superfamily [Campylobacter jejuni subsp. doylei 269.97]

MNNVLLHRITEKGSIRYYSIEIVATLFEEYVVERVYGNVRFKSCTGRKNNVFSSFNEAQIFFEKLKKQKM

KKGYAEFLHKK

>ABS43786.1 motility accessory factor [Campylobacter jejuni subsp. doylei 269.97]

MLEKNIQALLSGVNEPLGNKLLNFIQNKTCFRFNMDENLNIYDKTHNVFMYENLEEEINFFYQSILEKTL

RYPFICIYGIGNALLIKNLAKHYKHLFVFESEIELFILALSTIDLSEELCSGKIYLVDIEEERVDIQLLI

LFDMKDMFEYLSLYEMFVNNVYYKKFYEDIWHRADELCEKNIEVIVRNLISNLNIGFECYSHLLQNIPSM

LESIPFQRILSQRKNRFENAIVVSAGPSLAKQLPLLKAYQDKAVIFCADGALSMLEKESIVPDYVTNLDF

TDLAMKFFQNKENKLSLNILSCATHPNLVCLLDNKSVILRDDPLYQRFNLNDFGYIDTGTHVSHFSYTLA

LALGFKNIIMIGQDLAFDEKGNSHSKGFSYGEQFSGEKTVPTLQVPAYAGKGEVLTHITWNDYRIKLEYL

FACNDQKAKFYNATEGGARIHFTEELSFKECCEKLLTKEKPKFELPKSLTKNRSDKLLVKFKEKIQKDQE

NAKRFLKDALALKRILENILAKDFILPLEFLEKVYQNIENFNHSLDTDEFIQDGILKAVIYERGLRISLV

YKENILDHASFISAYIKAYHEWLLYFIEKLEQRINIIINSLKELP

>ABS43785.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKKELIKINNLNKEFGKVKALNNINLSVYEGEWLAIMGPSGSGKSTLLNILSLMDTPSSGEYILDNENLE

QMDEEQKITLRREKIGLVFQQFHLIPYLNALENVMLSQYYHSSVDEEDAKMVLEKVGLSHRLTHLPSQLS

GGEQQRVCIARALINNPELLLADEPTGNLDEANEKIVLQTLQKLKNEGKTIVLITHNPDLAKFADRTLIL

QHGVLK

>ABS43784.1 putative pyrazinamidase/nicotinamidase [Campylobacter jejuni subsp. doylei 269.97]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>ABS43783.1 4-hydroxythreonine-4-phosphate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKKLAISIGDINGIGLEILVRSHEELSKICTPFYFIHESLLDKALKLLNLKLFNAKIVAFKDSKDYEFKF

LKKENSLEIYSFCLPLGFKVDENFKIKAGKIDAKSGLYGFLSFKVASYFVYEKHAHALLTLPIHKKAWED

AGLKYKGHTDALRDFFKKNAIMMLGCKELFVGLFSEHVPLAKVSKKITFKNLSIFLKDFYKETHFKKMGL

LGFNPHAGDYGVIGGEEEKIMEKSIAFVNAFLHSKKDEKFFKKALKDENLQKELLLKFKGKGVYLPYPLV

ADTAFTKAGLKNCNRLVAMYHDLALAPLKALYFDKSINVSLNLPIIRVSVDHGTAFDKAYKNAKINTKSY

FEAAKFALEISHRYV

>ABS43782.1 phosphoribosylaminoimidazole carboxylase, catalytic subunit [Campylobacter jejuni subsp. doylei 269.97]

MNFVSILMGSKSDYETMKEAAKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMPGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRFEKEKKLVSDSKEVEVLL

>ABS43781.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>ABS43780.1 enoyl-(acyl-carrier-protein) reductase [Campylobacter jejuni subsp. doylei 269.97]

MIMKGKKGLILGVANNKSIAYGIAKACFEQGAQLAFTFLNDALKKRVEPIAQEFNSNFVYELDVNNNEHL

DSIAEKIKKDLGEIDFVVHAVAFAPKEALENSFLETSKEAFDIAMQTSVYSLLSLTRAVLPILKEKGSIL

TLSYLGGVKYVPHYNVMGVAKAALESSVRYLARDLGVKGIRVNAISAGPIKTLAASGIGDFRMILKYNEI

NSPLKRNVSIEDVGNSAMYLLSDLANGVTGEIHYVDAGYNIMGMGDVEKNEEGQTVLCWDNQKG

>ABS43779.1 motility accessory factor [Campylobacter jejuni subsp. doylei 269.97]

MNLLEKNIQALLSGVNEPLGNKLLNFIQNKTCSRFNMDENLNIYDKTHNVFMYENLEEELNFFYQSILEK

TLRYPFICIYGIGNALLIRNLAKHYKHLFVFESEIELFILALSTLDLSEELKFYKIVLFDCAAEDLEIQI

AMVFDQQSILEYLSLYEMFMGAHYYLKYYETSILSLNELCIKSASVAIRNADISCFLPLLTHGQFLQNIP

SMLTSIPFQRILSQRKNQFDNAIVVSAGPSLAKQLPLLKAYQEKAVIFCADGALSTLEKEGIVPDYVTNL

DFSHWALKFFQNKEILKQSIIALECATHPSMVEDLKNLNCMIVLRNKALYQRFNLNDFGYIDTGTHVSHF

SYTLALALGFKNIIMIGQDLAFDEEGNSHSKGYDFGTKVSSEESIEKFKVPAYAGKGEVLTHITWNDYRI

KLEYLFACNDQKAKFYNATEGGARIHFTEELSFKECCEKLLTKEKPKFELPKSLTKNRSDKLLVKFKEKI

QKDQENAKRFLKDALALKQILENILAKDFILPLEFLEKVYQNIENFNHSLDTDEFIQDEVLRGAFAYRGK

MIADVLKLHIQDKTHFISAYIKAYDEWLLYFIEKLEQKYESLLKV

>ABS43778.1 inorganic pyrophosphatase [Campylobacter jejuni subsp. doylei 269.97]

MDLSKIKIGNIPNKINAVIEIPYGSNIKYEIDKDSGAIMVDRVMASAMFYPANYGFIANTLADDGDPVDI

LVLNEYPIQAGAVIPCRLIGVLIMEDESGMDEKLLAVPNSKIDARYDNIKTYTDLPQATLSKIKNFFETY

KILEPNKWVKVQDFKDEKVAIEILEKAIKNYK

>ABS43777.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MENDVLKDLMNVITDDDKAQEANHEGDAIAENEATNEPTQVADNEGDYKAMFEAYKSENDNKLNALMSEL

EALKNPKPREQNEQREQYLKELGLDGLDEKLKRLEELDKKQKDKEEQDALIAKYAQVESELRKAYPDADL

KAMAELATKLKGLGEGNIDSWKTLLHLVGKSNNVKKAEDLSSTNNNVRLSDFNDKLKKGAVSEIDLGKEL

LSLI

>ABS43776.1 ATPase, ParA family [Campylobacter jejuni subsp. doylei 269.97]

MNNQANKLRNLMSQNGTKKSQNTHFMAIISGKGGVGKSIISANLANVLANNGYKIGLFDADIGLANLDVI

LNVRIQKNLLHILRGECSLEDILIEVKPNLWLIPGESGDEILKYNDKNIYERFLNQASILDKLDFLIIDT

GAGIGGNILNFLEMADEVIVVTVPDPAAITDAYATIKTTSKTKENLLMLFNIVKNENEALKIFENIKKIA

DANINNPLNLEFLGHLSASKDVSSSIKKRTLFTDENTASSDELKALASKLLYRLERKVLDNVSNRSFSSF

FRKIIERF

>ABS43775.1 radical SAM domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKILFGPVSSRRFGRSLGIDLSPSKKQCNFDCVYCELDPKKAQEKQDEIISIDKIISEVKAMLEKNVEFD

FLTLTANGEPSLYPHLNELILSLRSITKNKKLLILSNGTAVLDEDKFNALLKLDVVKFSLDSAVAKTFYR

IDRALKNIDLEKMIEKMADFRARFNGDLIMEILVVKDLNDNEEEFKALNQALKKIMPLRVDLSTIDRPPA

YAIKKVSEEKLLELSKLIDSTPVLLAKRHYEGEKLSFNEEELLKILHLRSQSEIDIEAKFDEQSKTLLNQ

LIKEKKVKILDLAGVKFYKV

>ABS43774.1 MiaB-like tRNA modifying enzyme [Campylobacter jejuni subsp. doylei 269.97]

MKEKVFFKTFGCRTNIYDTELLKSYVKDYEIINDENKAQIIVVNSCTVTNGADSGIKSYVNTMKKKGIKV

ILTGCGAVSKGKELLDKKQVFGVLGASNKDKINEFLGAKTSFYELGNLNFIDKDIVCEYENHTKAFVKIQ

EGCDFACSYCIIPSVRGKSRSVDEKALLKQVEILGANGYSEIVLTGTNIGSYGLKNGTTLGKLLQKMGQI

SGIKRIRLGSLEPAQLDESFLEILDETWLERHLHIALQHTSEKMLRIMRRRSHTDNDLKLFNTIASKGYA

LGTDFIVAHPGESEELWQEALKKFKEFPLTHIHAFIFSPRNNTHSATMKDVINGTLAKERLNTLKSIVEK

NNYEFRKKNQVSLEVLVENQKDGFFEGYDQFFNKVKIKSDKDIAKEWIVISECEVQEKSNFANLKG

>ABS43773.1 penicillin-binding protein 2 [Campylobacter jejuni subsp. doylei 269.97]

MRMRLVVGFILLFFIFLLSRVYYLSIKSNVYYEELAKQNAIKTEFLPPVRGQIMDRNGTLLAINDLGFSI

SIKPYLSIKKSNKGILDKELSELANLFPDLNASKLAEIYKRNDSYYNQDFIKVVDFIPYDEIIPHYSELN

LNKTIKIDPVVKRKYPFGKLASHIIGYVGKANLQDVQENEIAKLSNYTGKSGIERYYNDILQGEKGTRVY

KVNALNQEVEQLSYTPAMSNDIELTIDIELQSYLTSLFERNAGAAIIMNVNDGSILAAGSFPEYDLNPFV

TGISFKDWDELSNSLDHPFTNKLINGYYPPGSAVKMGVGLAFLNSKNISPSTQYVCNGSIELGGRFFRCW

NRSGHGPVDLKQAIKYSCDVYFYNGSLQVGIDQISETLSRIGFGAKTGVDLPSEFVGTLPSKEWKMQRYR

QSWFQGDTLNTAIGQGNFLATPMQIARYTAQIAKGGEVIPRFLKSIENNNTTIENQMDENKKEIFTLFEK

SQLPYIRDAMYAVANEQGGTSYRYLHNLDVKVAAKTGTAQVVGFSQTDTNRVDEKQFEYYTRSHAWLTSY

APYSKPKYVVTVLLEHGGRNITSGATVAKIYQKMIELGYFK

>ABS43772.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAFYNPQRVVFNPDTGVIQNAGKVGGVLYDIMSKSFDDKVKAHEFKQKQDLRKQQIELNQAMQNNQLLQN

EFNNALALQKFDLERQRQAQDNALNWAKYKEDKDYNQKYLDYLTGKNSNIVTHKTNNNSGFNIDANGNLT

ELQTMKDVFSKENNGGDLYNFAKTAKTQNINLNDIYGFGDTLSQKLRNTPFNNSKNLKQEFADKLKAEIN

LALVNITSGRMSNEDRHRLEELVKTDNFYFFDKYAKHDIEKAVEILYRVKNDALKKEYMDIWKTERYLKD

RDNIEKYYSNMHKKLENEKAMIKDFIKGGNILASKGQRVPLNKILSQQAQQPLNQDFLQQNNMITFR

>ABS43771.1 ribosomal protein L24 [Campylobacter jejuni subsp. doylei 269.97]

MAVKLKIKKGDNVKVVTGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>ABS43770.1 phosphoribosylformylglycinamidine synthase II [Campylobacter jejuni subsp. doylei 269.97]

MDKETIKAHKISDEEYTQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMSAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHNEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGICKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVIGEVTNTEKME

LFWHDELVGLIPIEPLSEKAPILNRPISEPKYLSEIKDYKFELKSSIQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGKLGASVIRIKENGVSVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFGGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSGFDDEKMIFDESASRAIVGLSKENEETFLTLTKEFGVKAYKLGVSTSQ

KHFKLDSIELNKAELDKLYFESFQEQIQ

>ABS43769.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLILALFIVLKNGIVISSIQFDFLKLEQLYIKLDKKLIVRAKNITINETQNSEISSQTHSSDNASTEILK

ITKNLKYLYTFVEEIDIQNLNIKDNHVRILFKDNEFFIDNDLLFLKLTLQHQNKELVADIKKLLLKDYDL

NIDGNLSINTKSQFYYFQGRASGELLDFNASISYKDKNLAYKIEDLNIRNITEIFKRVNKRIELPQDVNL

WVVYRAKGEFYHLDYLQGFIDFAKDNYYLDNISASGYVNNVKVRLDDKMNAIEIPKLDLNLNKQKLDFIF

NKAFYNGADLSSSKVYLYDLFDEKKAGIYLRIKSDNLKFDEKLAKALEDYHFSLPFYQKSGKIKSDLELK

IDFHDKGEIFYGGILALENASISLADFNITKAFVKLNQNDLNIENASVKNGFLEADFNAKFDLQKQQGNF

NTQISRLYFDNGELLDLKNQNVEVKLDYSQNVNISIPQWSLILNFKDGLEANLNNPKILFSFSPLLKKFG

FINAKNVYYKTLNFEDFNASVNDAYFKNNLLISGQTPYENDSFDIVKNKGIMEIRTQSDTASAKISSDNK

EIHLKNLNYIYKKDSNSSNSTFDISANTQNISFSGANVALILADSNKTLAFDRVEADLKGNTLNLKGSRG

NAKFDLYYSSNDLNLNVSNIDDNYLNEFLQKQAVQDGVFNLNIKGNGLEYFDGQIDFKNTYVKDLKGINQ

LVSFIDTVPSLLMFKFPTFNQQGLSLHDGKIIFNRKKDLLSVLAINLNGDSVDIYGLGSANLRLNTVDFS

LELKTLKSASEAISKMPILNYVILGKNQEISTNLKIDGSIDDPKFHTEILTDTLKTPFNLIKNIIQLPAN

LLN

>ABS43768.1 flavodoxin-like fold domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKNF

>ABS43767.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVEIRFAKLEEVSKIMEFIKNHWNKNHVFAYSKEALDFQYLDKYNQRYNIVLGLENNIIQSILGFTLLSQ

YDNKLKTNKDLWFGIWKSIKPAFGLALIKFLLETLKPKSIGNAGLSEHGIKYYKLFLYDKIEPLKHFYIK

NDKKNIFHIADFKNSPSIHSLKSINLTYKILNLEEFIKSNIKFNFIPYKSKQYFINKYHNHPFYEYQFLG

IFEKSTLKCIFITREIVINNTKCIRIIDFLGNFTNNAYALFQDFLSQYDYEYIDLLCYINDFSKITNMGF

IEKNKEIITNYFEPFIKENQEIYFAYKCNHKNYAFFKGDSDQDRINKL

>ABS43766.1 dna methylase-type I restriction-modification system [Campylobacter jejuni subsp. doylei 269.97]

MIEEILKDSDYKLDLFSKKAIAELETKIIVKTNKNNQIIYYANCLVRDKEIKLTPEEIVRQLYIDKLLNE

YNYPKDMIKIEFGVHFGREVKRADIVIMDKIQITTPYIIIEVKKPKLKDGKEQLKSYCNATGATMAVWCN

GKEISYYHRKDPNYFESIPNIPASNQTLPDLLKVKFTFDDLIKEDILKNQKRSLKNLVTEMEDEVLANAG

VDVFEECFKLIFIKLFDELEGARDRTKSLEFRNYGESDSELKQKIEKLFDKAKKKWEGVFNNDEKIKLSP

SHLSVCVSSLQNVKLFNSNLEVIDDAFEYLVNKSSKGEKGQYFTPRYVIDMCVKMLNPKKDESMIDTASG

SCGFPIHTCFYVWRSIYKERSIEASHLFTAQEKIPECQDYVKEKVFGIDFDEKSVRVSKMLNLIAGDGHT

NVLYLNSIDFDRWDEWVKDDEDWQDVYFEGFKRLKNLRATKNQNRDFNFDILMANPPFAGDIKESRILAR

YELGKKENGKPQSKVGRDILFIERNLDMLRPGGRMAIVLPQGRFNNSSDKYIREFIAQKARILAVVGLHG

NVFKPHTGTKTSVLFLQKWDDKLCPKCEDYNIFFATMSEPSKDNSGEKIYYPLLDSHDHLVVKHDLFHPH

LEGDEPIKQKNENQEDFDKRMQEYRLNMEKYKDLQKDGIAEAFIEFAKSENLSFWKE

>ABS43765.1 RlfA [Campylobacter jejuni subsp. doylei 269.97]

MDNMKEFKIFCDESNHLSYKDNPTLCSKVMVLGALKVPSSEIIKINKTIKYLKHKYKYNKEIKWTKLNLS

QKGFYDELLEFFFSSVYMWFKAILIPNKTILQHDIYNQGDHDLFYYKMYYQALHNLIDIDTKIKIYLDYK

DTKSGDKIKGLEKVLFNKFKQSVNIKIFTIQSHESNIIQLVDLLIGAISYKARDDIKHTSKIKNHIVDKI

ETLANIELDAGTPPWENKFNIFRIQLSKGEQ

>ABS43764.1 preprotein translocase, SecE subunit [Campylobacter jejuni subsp. doylei 269.97]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>ABS43763.1 ribosomal protein S21 [Campylobacter jejuni subsp. doylei 269.97]

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>ABS43762.1 A/G-specific adenine glycosylase [Campylobacter jejuni subsp. doylei 269.97]

MQKKELEKLQENLLLWYEKNGRKTLPWRNLQSQNCDESLKHIDRAYGVYISEIMLQQTQVKSVLERFYFP

FLQKFPTLESLANANEDELLKAWQGLGYYTRARNLKKAALECVDKFGAKLPKEVENLKKLSGIGAYTAGA

IACFGYDQKVSFVDGNIRRVLSRLFALENPSMKELEKRAKELLNVNHAFDHNQALLDIGALVCVSKNAKC

GICPLYDFCQGKFNTELYPRAKKILYESVNLNLFLFEFNKKFAIGQSQDRLYKGMYNFPFFKEGEYKLSK

DMSFVGEFKHGYTKYKLNIKVYHQILNNENKNYEFKTLKELESTALSALSLKALKLIKL

>ABS43761.1 hypothetical protein JJD26997\_1202 [Campylobacter jejuni subsp. doylei 269.97]

MELDQILLYVFIFLNLFALFGLFLGNKKKNQFNDKKFYKICPCKKMAENGSLSTICIYSAVGGFFYSVLS

IGFIGFGNWSLNFIFLLALLSVFLGWKLKLD

>ABS43760.1 putative periplasmic protein [Campylobacter jejuni subsp. doylei 269.97]

MLLLEFINTNLSLKDERTTGDTYEEIIKQSINVNDSSTQEQTQNITNIIDKVNSKIKASASEGTGLTRED

AINNAIIEAIGKMSGVNINSLKKSNTGVSTDSSGSNIQDNYSEQISKATKGRADTYEINSVEQDANGRYV

ANVAIFKTTTTKKYQAPGLSADNRRSITVFDSTPDPAKRGIGSALQQKIIYRISGDILNAIYPLKVASVE

NNEVVFSQSLNQGDVYECFALGKAIKDAYTKENTGRVESKTANIEITRTSPKLSYAKITEGSVKVGDIYR

PLSDTGSGNGYTIGCGANYQIQEGGGVNLGF

>ABS43759.1 aspartate aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MLTKRSQVLEESITLAITALANELKAKGEDIISFSAGEPDFETPQAIKHAAISAIEKGCGKYTAVAGIPE

VLKAIQTKFKKDNNLDYETSEIITNVGAKHSLFECIECLVEKDDEVIIPSPYWVSYPEMVKFAGGKPVFI

KGLEENGFKITAEQLKKAITPKTKVLMLNSPSNPVGSIYSKEELTQIAKVLEGTRITVLSDEMYEKLRYD

GFDFVAFASVSEDALKRTVTINGLSKCGAMPGWRFGYMASKNKALISAVKRLQGQSTSNICSITQHAAIP

ALNGGCDKDIEKMRQAFEKRRDLALNMLKQIPNISVYKPEGAFYLFVNIQKIEKDSMKFCQKLLEQEKVA

VVPGIGFGMDGYFRLSYAISDEFIKKGLERIAYFIANYK

>ABS43758.1 hypothetical protein JJD26997\_2033 [Campylobacter jejuni subsp. doylei 269.97]

MNLILENVSDDLAKAIKAMAKIAKSKASVLNDYELKAYKEYLEDLQDAKIGEVAYKEYLESGKKATLASD

LYKELGL

>ABS43757.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQAVCKYAEEQREDRAVPVATLIRLSMGYGISYTNAPDVGGQTYTKRPPFGRCH

>ABS43756.1 ribosomal protein L2 [Campylobacter jejuni subsp. doylei 269.97]

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPAHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANITIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRCKKASDKLIISRRKGK

>ABS43755.1 diacylglycerol kinase [Campylobacter jejuni subsp. doylei 269.97]

MKPKYHFLNNARYALEGIFALFKNEMAFKIELCVIIPAIVFSFFLKVSFLEHLLLISVLILILIIEALNS

AIEACVDLITNEWHEKAKIAKDCASAAVFFSVLLALFVWGFILYSIYL

>ABS43754.1 ribosomal large subunit pseudouridine synthase, RluA family [Campylobacter jejuni subsp. doylei 269.97]

MQTFLVDKNSRLDVFLAKKLNQSRNQVALLIEKDCVQVNDKIQDKNSFKLKNGDIISITSLKLYDEIKPQ

FEVDFDIDILYEDEDLLVLNKPSNLVVHGASSVKNATLVDWLIEKKYTLSNLGGEIRAGLVHRLDKDTSG

AILIAKNNFTHQKLSEQLADKSMGRIYLALIDLPLKEDKIIVEKFLMRSPSNAIKKIAIDKENKFSKNAK

SAFINVVKTENLTLMAAKLFTGRTHQIRAHLASLNRHILGDSLYGYKGKYDCRIMLHAYFLYFIHPKTKE

QIFVKAPLMEDFKNIMFEQINLGENDEKISLEFLLEFFNSFA

>ABS43753.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDFLNLTNKLKKHYSYETIKKIRINKMVPSFKKQIEFKKLYGIPHEFWVDVRSNLTNIPTRGRKRKDRE

>ABS43752.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MVISKLGRKLALKHEADDVINVKMNNLEFIPLAYDKNGYVISYKAKLNLDFNVVFKDGSSQAFSTSGSYD

FEISPNSIISDSARYEAIRAASSEAFDEFISVIAIKGQKRDSKY

>ABS43751.1 ribosomal protein S14 [Campylobacter jejuni subsp. doylei 269.97]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>ABS43750.1 ribosomal protein L27 [Campylobacter jejuni subsp. doylei 269.97]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>ABS43749.1 isocitrate dehydrogenase, NADP-dependent [Campylobacter jejuni subsp. doylei 269.97]

MKTKTNFKLTLAFFFICNILKNENKNKYFKGLKMQITYTLTDESPALATYSFLPIVKAFLSRAHIGVKTS

DISLSGRILATFSEYLKEEQRCEDALELLGELVKRSDANLIKTPNISASIPQLKAAIKELQDKGYMLPNY

PDEPKNDEELQIKTKYQKVLGSAVNPVLRQGNSDRRSTKAVKDYAKNNPYRVVEFNPNSKTRVSYMKEGD

FFSNEKAVLIDQNCVANIEFTSIDGKNEILKEGLKLEKNEILDATFMDVEKLQEFYAKEIKASKDDDVLF

SLHLKATMMKVSDPILFGYAVKVFFKELFIEFQDEFEKLGINPNNGLSELLSKIENSSKKDEILKKYNEI

LAKSTDISMVNSDKGITNLHVPSDVIVDASMPAMLKNGARLWDKKGREKDTNAVIPDQTYATIYEAVIED

LHKNGTLNPSKLGSVSNVGLMAKKAQEYGSHDKTFVAKEEGTFKIVSNGKVLLEHKVRKGDIYRANQAKF

DAVLNWIDLGVERSELSGAEAIFWLDSKRASNKIMITLVQNRLKEKGKNIAILAPKEACLRSLELIREGK

DVISITGNVLRDYLTDLFPILELGTSAKMLSVVPMLNGGAMFETGAGGSAPKQVEQLVEENHLRWDSLGE

FLALQASLEFYANKCSNHKAKVLAECLDEAIGEWLENNKAPSRKVKEDDNRTSHFYLAMYFANHLARQAS

DMEFQSFFKDIALELSSNEEKIRAEFNDAQGVKVDLGGYYKFDDEKANQIMRPSVTFNAILEKIGQK

>ABS43748.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRIFLALFLFFNSLFALSELEEGLKLCEANKFDKAYEIFKNLCEKDISKACFSLAFMHESAKGVSKDLNQ

AYKFYDKACKLGLPNACSNMALLLQNQGYKNEALLAFNKACTLGESLSCNNIALFYEKEKDGQMASSFYK

RSCDLKNARACYQLGSLYDKGELVKASIKSALAFYSKSCTLGFGEACYLLGRYNQLEKQDLTKAKRYFGM

ACDQKHQEACAAYKELNSKDIELY

>ABS43747.1 hypothetical protein JJD26997\_1333 [Campylobacter jejuni subsp. doylei 269.97]

MEQNLLTPLLYFLRNIESKNFSLMKFGYNFTIFKSILTKDIL

>ABS43746.1 DNA polymerase III, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MSQFTHLHLHTEYSLLDGANKLKELALTLKKQGATSVAMTDHGNMFGAIDFYQTMKAQGLKPIIGMEAYL

HNHDELDDKSSRQRFHLCLYAKNEIGYQNLMYLSSQSYIKGLYYYPRINKKLLEDYNEGLICSSACLQGE

VNWHLNTYSERNVRFGAKGYEAAKEAALWYKKVFKDDFYFEIMRHGIGDQRMIDDDIIRLSKELNIKIIA

TNDTHYTFKERAAAHEVFMCIAMGKKLNDPDRMRHSVHEFYVKSPEQMSELFVDIPEAIENTQEVAQKCN

LELNLGNPTPPNFKFTREYAKDHNITLPEETKEFSFDNDDIVFEELCKKGLEERLKFIDESKHEEYKQRL

EVEINIIKNMKFSGYMLIVHDFIKVAKDKGIPVGPGRGSAAGSLVSYCLRITDLDPIPYSLLFERFLNPE

RVSMPDIDVDFCQDRRAEVIDYVIDKYGADKVAQVITFGKLLAKGVIRDVARVCDMSIQDADELAKLVPE

ELKITLDAAYEKEPKIKEFIDRHPKGPEVWEYARALEGLNRNAGMHAAGVVISNESLWKKTPLFRQSKND

ERHLVTQYSKDHLEDVDLIKFDFLGLKTLTVINNAIKLIKKRYNKDIIWETIDVNDSKVYKTIQSGNTLG

IFQIESGGMQSLNARLKPERFEDIIAVLALYRPGPMESGMLDDFIDRKHGLKSIEYPFDSLEKVLEPTYG

VIVYQEQVMQIVQIIGGFSLGGADVVRRAMGKKDPEKMKKLKTDFADGAEKQGYDRAKAEDLWDLIVKFA

GYGFNKSHSAAYALITFQTAYLKTYYPSEFMAALLTSEENKVDKIAVYIDEMKKMNIKLLPPSINKAIRE

FSALEQDGKDAIIYGLGAIKSVGIAPVENLLEARQDGEFKDINDFLGKIDPAKINRRTLENLIKAGAFDE

FGFTRKALFDNIENLTEASRKIAEVRKNAASSLFGEEELTSGVQVNFIPKNEEFEVMEKLGYEKEILGIY

VSGHPLDRFYEQINAIDYVKSLDFEGLKNNGEILSIGKIEDFKSMMSKNNKRYGRIEILDYYSSFDATVF

ESNVEEIENIIKDENLKNNAYGFVLGFKAEGEEKPSFFLKAIKNLQSLEDGEVKAIKKFGAKKDFKNKEE

NHFTAEPKEFEKNIIELDLTRLNRELIYEIHEIARNAHNPNEKNNKKLILKVISTGSCLLYHTDFIISDS

IVEEISNKYA

>ABS43745.1 phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter jejuni subsp. doylei 269.97]

MNLHRLILSLFLMPKFINWAKKKNASQPIYEHAPQNHQIKSHTPTMGGVIFVFCAIFASLLCIKFDNLFA

LMGLLCLISFCFIGVIDDLGKILKKNNHSGLSPKAKMFGLIFASFLCLAPLYFSGILSADFYIPFYKYPL

FNMYIFALFFWILVLISSSNAVNLTDGLDGTVPSIFSLATLGVFLYLSGNLIYSEYLFLPKINGLGELVV

ICAALIGALMGFLWFNCYPAQIFMGDSGSLALGGFIGFLAVVSKNEILLLLVGFVFVLETISVILQVGSF

KIWGKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASLKLR

>ABS43744.1 acyl carrier protein [Campylobacter jejuni subsp. doylei 269.97]

MEKQFYEILENILETKVDENTNLSMENCKNWTSLAHIDIIMSLEEEFEIKFNKEDLSLLKSQNALLEKIQ

TLKAEK

>ABS43743.1 hypothetical protein JJD26997\_1057 [Campylobacter jejuni subsp. doylei 269.97]

MGVPLEVSKGLSPLSQDGIYFRREVKNVSKMFPSFFKLPLLF

>ABS43742.1 ATP synthase F0, B' subunit [Campylobacter jejuni subsp. doylei 269.97]

MFEDMHPSIMLATMAIFLAMIVILNSMLYKPLLKFMDERNDSIKNDENKVKENSQEVLGVNDELEAIHIN

TREEIQKIKQSAVAAAKEEAEQILRSKKEELERKMASFYADLAVQKKELQEHLNIHLPELKQALQNNIKK

I

>ABS43741.1 protein TonB [Campylobacter jejuni subsp. doylei 269.97]

MKTFINNHKNQSSLITLFVFTPLFFVFLYSKNFLHIQPNDVIKENKFNMAIKHFVQNSSDIKPTQPTQTI

QEPSNIQPKEPVQEIIKKPKPRKEKPIIKPKKIIPPTNAKAISQSKKDTSSQQPIAQQQTPQTNSYQSVS

LTSNSELLKEIKSAIDEALIYPRQARKMRMSGEVLVEFTWTKNKKLENLKILKPSKYDFLNKSALETIHI

ASKKFPQYEKTFHIKIPLIYKLNYK

>ABS43740.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKNILLSLMLVFLFTGCFNNKPKCDDEDIKLTLKSILDDEWVYVEYGLNEQSLRAHFKPLFDLKDYANEV

VYTSFESFITEDSKDKKTSFCMASLKFTYPQMPNEMREKYSRGALKGVLFDGGEYETQISYSTRFSDDKK

QVFVELLDY

>ABS43739.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MALDWGKLFNKDLFKNFTPLPLSYEIDFSHYKHLIKAVILSGGNDLSFYSPNVLSKKRDLYEKQVIEICL

KEKMPLLGICRGAQMIAYYFNSHISPCENHIGKHEVFFSKEKFISNSFHNFAIEKLGEDLVELCLAKDNT

IEAFKHKYENIFGIMWHIERENGLNNIQILKEWFSLIKE

>ABS43738.1 tRNA pseudouridine synthase B [Campylobacter jejuni subsp. doylei 269.97]

MNKIFAAFKPRGLSSNSFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYAKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKKIQNIKEFDLAILKQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YINLKPNFIKDLNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>ABS43737.1 modification methylase BslI [Campylobacter jejuni subsp. doylei 269.97]

MSVCKTNLKSNLFSKNLNNNYLDTILNKSEKYLKQVLDKKEYKEFLNRVNFIYKFKSKKEIIKAFKKTYY

DFMKQSYQKQYKYNEKLDIFINDKTNKKIIWGDCFKTLKKMKSESIACMVTSPPYYNAREYAKWDNLNTY

FADMKKILKECYRVLDNHRVFIFNVGDIFDNDNLFTTSTWGKRRLPLGAYFINLFEKVGFTFVDDIIWDK

GEVQSQRHKNGDKPYPFYQYPMNCYEHILVFHKHRQDNLRYPCPVCGCLQVNGNAYTEKGLKSWECKNLD

CFERSAANRGKRFSAKTYFTQNEAFNQNSQIDKDFIYVWRRDIKKINPVIKINSKKQNFLGHSAPFPKEI

PEFAIRMFSYKGEKVLDPFMGIGTSVKVANELGRIGIGIERDLKLKESIYKFLDRDDLGEYKL

>ABS43736.1 hypothetical protein JJD26997\_1910 [Campylobacter jejuni subsp. doylei 269.97]

MKKIKNTNSSPTNTKNFVETESDFVLVSFQKNVDCNKYGLCLTDKHDKYSELNQKHYNTELLKLFDYLCK

KTWQEVNNLRRDMNYGLEILKVENIRNLRQHISTTFNELNQKTMYIFRFKDYRACGYRHNSTFYLVCIDY

DFSLYNHGK

>ABS43735.1 iron [Campylobacter jejuni subsp. doylei 269.97]

MLKLENFSVHRKDLCVVNQINLSLQRGKIYAILGANGAGKSSLLGAIFGEFVSSGQLKFDDKDLSKKLIG

YMPQDNYIEASLTALEVVLLGLGNQLGMYLSDMQIKKAAKIMEELSILHLAQRDISTLSGGQRQMVNFAS

VLLKEPQILLLDEPVSALDLHHQCVLLENVKKHTKEQNLLTLVILHDLSLASQFADELIILHEAKIKAKD

KPENVLNKDLLKEVYRIDADIFYCKRGLPCVLAKSAVKLKRKENENFN

>ABS43734.1 signal recognition particle-docking protein FtsY [Campylobacter jejuni subsp. doylei 269.97]

MFNFFKKGLAKTLENIVGVKGENKKITKDLLEEILLEADVSYEIVEEIIYYLPPQNEVKKEDLKRVMGSY

FLYEKKETNQEKPFVELILGVNGAGKTTSIAKLAYLYKNQNQKVILGACDTFRAGAIEQLKLWAQKVDVD

IVLTAQGHDPSAVAFDTISKAKAKDFDRVIIDTAGRLQNQKNLAHELEKIVRISNKALEGAPHRKILVLD

GTQGNAGILQAKAFNELVKLDGVIITKLDGTAKGGVLFSIARELELPIFYVGVGESKEDLIEFNINAFLD

TILESVFQ

>ABS43733.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIGDMNELLLKSVEVLPPLPDTVSKLRKYVSEANSNIETMKVAEIISSDPLMTAKLLQLANSPYYGFTRE

ITTINQVITLLGVGNIINIVTADSIRDNFKIDVSPYGLNTQNFLKTCNEEATFITNWLNDEDKKLSHLLV

PCAMLLRLGIVIFSNFLIQNHKDKDFLAFLNKNENLALAENEFLGVDHISFLGFLLHRWNFDDVLIESIC

FVRTPHAAREEVKKSAYALAITDHLFAPHDGSSPFNAKAAVALLEEAKTQGINFDLDNLLSKLPSKAKEN

LDKED

>ABS43732.1 thioredoxin domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILALFLISLAFFLNACSKEKEIQNDFMFEEYHKGDKIVLNSVNDGSKTLIRTDKGFVVEGEEGKVLM

FDFFGTFCTPCKEEALDLSKLWKNNSSKFIIMGLTHFEDVSDETVKKFADDYGAYYFLSNGSSNDRIIAQ

ILKDIDYQNMEQLPFKVVLKNGIYQKISDYWNNNAPTNFYLGKIPTELMQEDLNKIYKGK

>ABS43731.1 nucleoside transporter, NCS1 family [Campylobacter jejuni subsp. doylei 269.97]

MNEKNHLLEEAILPVWNNQRTIGFLTFIWMWISMAVIIATFSLGETGIKSLALWEVIGLIFLANVAIAIV

MVLVADIGTEHGLSFSVYLRAPFGIKGTHLPSIARGIGASIWFGIQTYLGALALNGISEYLFSFNNWFIW

YIIFAAVQIISTGMGIRTIELITSIAAPCIIAVTVWMYFTLDVMAQTKGINIWSFAGTDNINLLVFFFAN

MSFWSALAIDIPNLTRFLKTPSGEKNFFKRNKNVFIAQLIALPMTQAWIGAIGAISFIATGIWNPIEVIQ

NNGTGFTMVVLLVMVILSQWSTNAPANLIPAALAFINAGAPKLHYFTAVVISGIAGTIIMPWLILDNLFI

FLGYYGAVLSGIGGIIVADYYVLRKRRLNVPHLYSYEGQFVFAKGFNWAGLIAWAVGGVVAIALPSISYL

VGFAVGFVVYLFVMKTWILPKYPQVELENLSDDFLGTSADMNWVYENENFKRVASKDLVVVAREDR

>ABS43730.1 hydrolase, carbon-nitrogen family [Campylobacter jejuni subsp. doylei 269.97]

MKIALIQQKFHSNKEQTIKKTCEFIKEVSKQGAELVCLGELHQSEYFCQSENVDFFDYANDYEKDVKFWA

NIAKKNQIVLITSLFEKRSAGLYHNTAVVFEKDGSIAGKYRKMHIPDDPCFYEKFYFTPGDLGFEPINTS

LGKLGVLICWDQWYPEAARIMALKGAEILIYPTAIGWFDKDKDEEKQKQLNAWLGVQKGHAIANGLHVVA

INRVGFEKDTSGVEEGIRFWGNSFVFGPQGEELCLLDSQNECVKIIEIDKKRSENVRRWWPFLRDRRIEY

FADLTKRFID

>ABS43729.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFALLALTSLLTSSAFAGDFLAKVSNGALSDNSQGVKALNLDEMKEVRGGGYFSRW

>ABS43728.1 NADH-quinone oxidoreductase, J subunit [Campylobacter jejuni subsp. doylei 269.97]

MIENLAFVFFSVVVLGFFGIAVLSKNMLYSLSALVGGMVFLSGFYFLLDAEFLGVIQIIVYSGAVLGLYS

FAMMFFDASKEFKEQLKAKKSFFTLVVLSAILLLAMLIGFKYQNISTDLPLNDPALFDFNKQLALAIFSK

YLLAFEFIAILLLIALVCAITLTHKELTKEKQ

>ABS43727.1 DnaJ domain protein [Campylobacter jejuni subsp. doylei 269.97]

MEERMDEFKRRMNYYVIALLAKIAKSDGRVSENEAEMIKDLLDANAKDEKERAFLKASFNEHKENLSDAF

YVAKDFLKEVPLPKNECFNVLRVLVFMALIDTDFNAKKREILEQIAKAFDIAKSDLDAFIASLSNLKSTK

KELSLDEAFAILELPNNADLNAVKKQYRNLAKKYHPDILNANNVSEEELKIGVEKFQKINEAYEKVKKHL

ER

>ABS43726.1 putative malate:quinone oxidoreductase [Campylobacter jejuni subsp. doylei 269.97]

MIQQEFDVLVIGAGISGAALFYELARYTNIKNIALIEKYNTAATLNSKGTSNSQTIHCGDIETNYTLEKA

RKVKRTADMIVKYGFMQNAQNNFMFSHQKMALAVGDIECDYMKKRYEEFKELYPYIKFFDKAKIKQIEPK

VVLGEDCNQDRPENICAMGVESGEVFTTVDFGKMSINLIEQAQKQNKNTFVAFNQEIVHIEKKDDIFILK

TSNHQEYHAKSVVVNAGAHSLYLAHKMNLGMDKSCWPVAGSFYLTKQKLLNGKVYMVQNPKLPFAALHGD

PDLLADMNTRFGPTALVIPKLERYHGLKSVPEFFEALKLDKTVLKVTFNMFKDATIRNYIFYNYLFELPF

IDKSLFVKDAKKIVPSLKASDIYYAKGFGGVRPQVIDKTKGELMLGEASITETPGIIFNMTPSPGATSCL

GNAERDAKLICNYLGMEFNGDKFSSELL

>ABS43725.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFNWKKIQELNLKEVAAKTQIELDFLEALVEKNFAVLSRFNVKGFIKILSREYELDFSDFNEEYEAYLNE

NNPTPQTKSKMITSKLDAYSQKSSNAWPFLIVLIVLVAIGSGIYYFDRLKTFFKDEQNNTSATVIDIIGQ

AQENLKSLGGNNVVVIDNNKAQETNQTESVLPSQNISLQENDKNISIENNISENNTTLLDEEKNTQIQED

TNTLKTDSLKEAHFKTSTKIWIGLIDLKSLKKTSFVKEKDFNISLDKDQLILTGAAALTMFDQENKEQKF

PAGISKRFLIKDGKITSISAAEFVKLNKGKEW

>ABS43724.1 uracil-DNA glycosylase [Campylobacter jejuni subsp. doylei 269.97]

MKEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIVI

LGQDPYHQENQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSFWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAVIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>ABS43723.1 CTP synthase [Campylobacter jejuni subsp. doylei 269.97]

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKASILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILNPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESAEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFDEKCENPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEAKSVKERHRHRYEANPKYRVDFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICGFIKAAINYEDN

>ABS43722.1 ribosomal protein S9 [Campylobacter jejuni subsp. doylei 269.97]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>ABS43721.1 hypothetical protein JJD26997\_0645 [Campylobacter jejuni subsp. doylei 269.97]

MSKAFTLFELIISLILFTFITSLLSKPLMDFYHLNFTTLHTNNLITQAHLNLLKIEKLIQNCINITFSQN

TLKCLLKDELISLKDNKLYLINSALILENNHTLYSPHSDFKTQLQNRKDLYNDNEHISYAYKINKIEKIS

ILENGISANFTGSFIPLQAQLVIKLQNEELIYEIKPKFNEQLSQQGLISKNISSFNLQNNKLKICLKRQT

KYCLKKRILL

>ABS43720.1 quinone-reactive Ni/Fe-hydrogenase, large subunit [Campylobacter jejuni subsp. doylei 269.97]

MSQRIIVDPITRIEGHLRVEVVVDDNNVVKEAYAGSTLWRGIETIVKGRDPRDAGFMTQRICGVCTFSHY

KAGIVAVENALGITPPLNALLTRTLMNATLFLHDHIVHFYQLHGLDWADVVSALSADVKKASDEAFKYTP

NPYATGADKLLEVQQRLKTFVDKGNLGPFANAYYGHPTYRLTPEQNLIVLSHYLECLRIQRIIAQCMAIF

GAKNPHPQSLTVGGVTCVMDLLDPARMGEYMVKFQEVQDFVNRAYYPDLAMAGKAYAHEASVLNDIGVNN

LYTFKEFQIGRDEWLFESGIIKNGDLSKVYEVEEDKITEEATHSWYADNEPLHPYEGKTNPNYTGLVDGE

SMDHHGNNVHSKVFDTKGKYSWIKAPRYEGNPMQVGPLANIVVNYAKGNPNVVPVVDEFLKETGLPLNAV

FSTLGRTAARCIEAKIVANNALKAFNNLVENLKVDQSTCAPYVIDNSKEYKGRYMGHVPRGTLSHWCRIK

NGVIENWQAVVPSTWNASPKDANGVGGSYEQCLIGLKIADVKQPLEIIRKIHSYDPCIACAVHVMDTKGN

NLSEYKVNVNL

>ABS43719.1 ribosome-binding factor A [Campylobacter jejuni subsp. doylei 269.97]

MNPSEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNIHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>ABS43718.1 2-oxoglutarate:acceptor oxidoreductase, gamma subunit [Campylobacter jejuni subsp. doylei 269.97]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKETMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>ABS43717.1 sensor histidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MLFIVLLKIEGSAYNEEESLKQENLIKNLLISYENTSGAKIGSYLENSGFNAIQNPHLVKTIRNNGQLLF

KADGELCTLSSLKYHSNLYFDIQCKNFDGLYEDNTSDRVYNLLLIGFFSFSLLVVFMYFSVLKSLEPLKK

LRRQVAEVTNGEQPDFLDYQEDEVGKIAFEFQKAFKKNQELIQSRQLFLRTIMHELKTPIGKGRIISEMI

KEDRQKERLIAIFLRMDSLINEFAKIENLFSKNYNLHFKPSRFSAILEEAKEHLMRDDFNKVVKVDIRYD

ALINVDMEIFSVILKNLIDNALKYSSNGTCELFCCKECFTIKNPGKPLAEPIEHYLEAFTREKHNQVKGM

GLGLYIVSEVCKLHNFDLIYFYDDGKHCFKIFFGDKEK

>ABS43716.1 putative flagellar assembly protein FliH [Campylobacter jejuni subsp. doylei 269.97]

MVNRSNVISGGASDQHVVEGYRFKVISEFDNHTGEKKHTQTPDEENANISLNDEKPVEDNQAIAPIQAVM

ETQIPTFQPSFVEDLLKKTDEMSSNIIKLQMQIESQENEFNNRLNSELKNAKEKFTKEGYEKAKEEFQKE

LGDFKDKYLKSIAKLDNACENLENFIEKNEKELADTAIDIAKEVILKELELNSSKIAYALAKDLIGDLKG

ASAIELKVNAEDYEYLKEQFDQNAHIKISLDDAISKGSVVIISDAGNIESNLNSRLTKIKKMVNNE

>ABS43715.1 oligoendopeptidase F [Campylobacter jejuni subsp. doylei 269.97]

MLEWDLSALFHDKEALQNFTQDQIQQSLNFKKNYENKLYALNANEFLQALKDYEHLNQALGKIMTYAYLL

FAKNTQNGSFYAQYEEECKKIEENLLFFELEFCELAPEKSQEFTTFCKDYDFYLSNLLQNKRYNLSKNEE

RIILYLSNTGANAFSRLFDESMSALKIPFKGKKLSEEEILSKMYDEDRKIRKKAAKKFSKVLQKNSRLLS

FIINMIKTERKNISLLRGYENAEISRHISNQISQKSVDSLIASAQKHFDLVSQFYKRKKQILGYDELKDY

DRYAPIGKEASFDFKTSKNIVLEAFQAFSPQFYDIAKNAFDQGWIDVYPQENKQGGAFSHSATSDAHPFV

LLNYTDKRRDLFTLAHELGHTIHQKLSYNVSYLNQNTPLTTAETASVFAEMLVFDFTKDKLKKEELLSLY

ANKIEDIFATFYRQINFTCFERRLHAQENELNTEEINKIWMEESQKMFQDSVKLTKNYASWWSYIPHFIH

SPFYCYAYAYAQLLVLALYGLYKSKKCENFKELYIKMLSLGGSVSPKELVGMFGFDIEDENFWEIGIKEI

QKLINEFMELQSC

>ABS43714.1 capsule biosynthesis phosphatase [Campylobacter jejuni subsp. doylei 269.97]

MKTLLIDLDGTLTIDEENVDYIDKKPNLDLIQTLKEYKRQGFKINIFTSRNMRTFDGELEKIKTHTLPTI

ITWLQKHDVPYDEIIIGKPWCGYDGFYVDDKAIRPSEFISLNYEQIKELLKKENPHKDGGNK

>ABS43713.1 hypothetical protein JJD26997\_1281 [Campylobacter jejuni subsp. doylei 269.97]

MFFKKKISQKQKEKPKIPINDAILDDRLCKFKNKVQKISKDEALASLLARQLSRLDRANKF

>ABS43712.1 aldehyde dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MTTYLNYIDGEFIPHNGDFIEVLNPATKEVISRVASASLEDTKRAIEAAKKAQKSWEAKPAIERANHLRE

IASLIRKNANFLTEVLMQEQGKIRALASIEINFTADYMDYTAEWARRYEGEIIQSDRANEHIYLYKSAIG

VIGGILPWNFPFFLIARKMAPALLTGNTIVIKPSSETPNNAFEFAKLVSQSSLPKGVFNLVAGKGSVVGY

ELSSNENIGMVSLTGSVEAGARVMEAAAKNIIKVSLELGGKAPAIVCKDADIDLAVEAIKASRICNNGQV

CNCAERAYVHTSIYDEFVDKFVKAMSKVSVGNTLKGDFDMGPLVNQAGVDNALAMLQRATAKGAVVECGG

KITDTSGYYFPASVLTNVKHEDEIMQKEIFAPILPIAKFDTLDEAIDMANDCEYGLTSSIYTQNLDIAMR

ASREIKFGETYINRENFEAMQGFHAGFRKSGIGGADGKHGLEEYLATHVVYLQYNTDKQ

>ABS43711.1 hydrogenase accessory protein HypB [Campylobacter jejuni subsp. doylei 269.97]

MCKDCGCSINSTHTHDHHDHHHENPSLKESKTIEVISKILSKNDEEAKHNRAHFNEASTLCINLMSSPGS

GKTTLLESTIKALKNELKIAVIEGDLETNNDALRVKNAGALAYQITTGQSCHLDAFMVHEALHHLAIDDV

DLLFIENVGNLVCPASYDLGEHLNVVLLSVTEGSDKPQKYPVMFKKADMVLITKADLAHHFDFDVKEATS

LIKELNPRADIITLDAKNGTNMELWYKVLKLKKELF

>ABS43710.1 undecaprenyl diphosphate synthase [Campylobacter jejuni subsp. doylei 269.97]

MNELKHLAVVMDGNRRWARAKGFLTKLGYSQGVKTMQKLMEVCMEENISNLSLFAFSTENWKRPKDEIDF

IFELLDHCLDEALEKFEKNNVRLRAIGDLSRLEDKVREKITLVEEKTKHCDALCINLAISYGARDEIIRA

AKRVIEKRLELNEENLTQNLDLPLDVDLMLRVGNAKRLSNFLLWQCSYAEIYFSETLFPSLTKREFKRII

KEFRNRERTFGK

>ABS43709.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEKFIKQFSFIALENIFRELPNKITHSFNDINDIKLPKLMYPIFYGSYDWHSSVHSHWLLVKILKDFSHF

APKDEIIKALDSQFSKEKAEGELKYLQNPAHKGFERPYGWGWFLKLALEINLLAKENDKAEIWAKNLESI

ADFFVKEFKEFLPKMDYPIRVGTHFNSSFALYFALEYARFKKDQELEYCIIQSAKKWFLNDKNMQALEPC

GDEFLSPVLMEAVLLSAVLPKNDFVKFFKAYLPNLEAKEPATLFTPVSVSDRSDGKIAHLDGLNLSRAWC

FKMLSNFCDENLKILLRNNATEHFDKAITHIKDDYLGSHWLGSFALLAMDVDIL

>ABS43708.1 preprotein translocase, SecA subunit [Campylobacter jejuni subsp. doylei 269.97]

MFLNTLKAVFGTKNDREVKKYFKRVVQINALEGKYQNLSDDELKAEFEKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVVLSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKAEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPEKPEGDFVVDEKNRSVLITEAGI

AKAEKLFGVENLYSLENAILAHQLDQALKAHNLFEKDVHYVLRNKEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLAKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDIRAKISQNIAEYSANVMNDYMLDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNVWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQQEAQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>ABS43707.1 iron-sulfur cluster-binding domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQGHITKYTKKRYFVYLIASIIIFALPFIRINENHFFLLSFDHSKLNLFFISFSTQEFYLMPFVLIFLFL

FIFFITTLGGRIWCAWSCPQTIFRVIYRDIIQTKFLKIRKNINNKQKEYEGQYFKKFLGVIIFYFISLVA

VSNLLWYFIPPEDFFNYIQNLGEHLLLLGILFCASLLFTLDITYLQEKFCVYVCPYARIQSVMFDHDTMQ

VIYDEKRGGLIYDGYTKLHKKPPEGECIGCEACVRICPTHIDIRKGMQLECINCLECADACSKVQSKFNR

PSLINWTSAKAIETRSKVHYLRFRTIAYFIVLLIALLALIIMGSKKESMLLNINRSSELYNISNVKGELV

ISNAYTFLFQNTDSKPHEYYFTANLEGINDGIEIIRPNKPFKLKAGEQVKKIVVIKATKNLANNDKKDII

FPLHIKAYAKDNKKISVFRKSIFVYPKNTLIKDKNEPK

>ABS43706.1 UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol N-acetylglucosamine transferase [Campylobacter jejuni subsp. doylei 269.97]

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEARFKEKFFLSSKGVVNQNKFGK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEFSPYPVANKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADVFDFSSNLGEKMKNADLAISRAGASTLFELCANTLPAIFIPYPYATKNHQYFNAK

FLQDQALCQIFTQDSINLDDFFKAMLKLNLEDISTRLQNIAQKNGGDILLEKALSNNLAFIR

>ABS43705.1 ribosomal protein S7 [Campylobacter jejuni subsp. doylei 269.97]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>ABS43704.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFSVHFSGSKALLLRFKQEISPQINAYVLSTEQRIQKALKEGEIYGIDELVSAYASLLIYFNPCVLSLNS

LLDFLEKIKKDIKLTKQNSSLCIEVPLCYDEEFGLDLEFVCKHNQISKEELISLHTKPYYLVFMLGFMAG

FPYLGGLDERLFTPRLSSPRAKIEAGSVGIADKQTGVYPISSPGGWQIIARTPLEFFDKEDEKNPTLLKA

GMFLKFKAISKDEFFKIQEQVAKKVYQKEIYEYKNH

>ABS43703.1 DNA polymerase type I [Campylobacter jejuni subsp. doylei 269.97]

MKTLTIIDTFGFFFRLYYALKGFKNSQGQASGMVSGFANFIYGLKNEYKSDYIIFALDSKGKTFRSEIDP

SYKQNRTPPPPELLEQIPICIEMIEKMGFISVSREGYEADDIIASFVKTCENKDIFVRIITQDKDLYQLI

KDGKTSIYSPISKNDYDEVACLEKYGVKPNQIRDFLALCGDNSDNIPGVKGIGAKGAKTLLDEFGSIEGI

YENLTLIRNERSRNLLLEGKENAFLSKKLASLYENLEVQDLIEKATYPDEEPLLKILEILEHYELNTLLK

KLRQNPDNKDKNLGFKATLIQDENKLFEILNTLDKESIIAFDTETTGLDTKEAKIVGFSFCMSENEAFYV

PLTHNYLGVSKQISLESAKKAIELIFNHFVIGHNLKYDFKIIQNNFGLNLPQKYADTMILAWLKNPSLRV

NMDDLALRLFNYETLHFESLVKKGENFASVELEKACKYAAEDAYITLRFYLYFLKNLEIPLLELAKNCEF

DFIKIIMMMEENGIKLDTNALEALMKKFENEIKILSEEIYTLCEDRFNLNSPKQVGDILFEKLKLPSGKK

GKTGYSTDEKVLHALLDKHPVITKILDYRELAKLYSTYCEPLLKLALKDKNSRIYSSFLQTGTATGRLSS

KDPNLQNIPAHGQYAKDYKSCFVAKDGFSFTSLDYSQIELRMLAHFSEDEKLLNAFTNDEDIHARTAIMI

FGESNYETRSVAKSINFGLIYGMGYKTLSQNLKIEAHLAKSYIEKYFENFTSIKKYFETVKNEAKQNGFI

TTLSGRKRYFDFENAKPMQIAMYERESINSILQGSAADIIKLAMLEINKELNEDKKLILQIHDELIFEVK

DDLCENFVKKTRDIMENIVKLKVKLKTSSSIAKNWGDLK

>ABS43702.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. doylei 269.97]

MSLTLWLFGAQNLELVKGQALFLELDKKDFLSLKNNDKNIPTFTHPKNQEKILAIFSLPYKNPPQNTKLI

AFYKDKKEEIFIKTLEGNYKSEKLQVENKKIFPPKTVQERIAKELKEANAIYSSYTPKTLFNGAFNISLN

SFITSDFGKARTFNGKVASYHSGTDFRAATGTPIYAANSGIVKIAKDRYFAGNSVVIDHGFGIYSQYYHL

SKINVKVGQKIEKGELIGLSGASGRVSGPHLHFGILAGGKQVDPLDFVSKFNAIFQ

>ABS43701.1 hypothetical protein JJD26997\_0974 [Campylobacter jejuni subsp. doylei 269.97]

MIKISTTILIIVCYLHASTFFGDSKRGWFYYELADNNNSQEKNETKVQKRMNADDLFIASIPLNNLDLLT

AEEFTETFEKVRKIAIMNPTKTNVMTMQIMNKWQVDQSEKFAKVWVLNLLENPNLEYPEIRDDKFGRSEM

FRQKQEKINNFYKAHQDDFSYVVFVSNLNKESNEKQKGIYRSLQSDYGVNVEYVNVDERKDLISKFKLTT

TPENFFVYKNSKGEAIWQRVKSGLTNKDDIINNTLFLFDNAILEKDK

>ABS43700.1 dihydropteroate synthase [Campylobacter jejuni subsp. doylei 269.97]

MKFFKINPNTDFNLLCSLINPHKMGQKIMSEKTKTHYIFIKDISTPAANILKQDALRVGAELITHKEVIT

AKITHSNALLMASKEQIQKLIAKEKLQDFGLKNLALFLQKDFLKPKKAELMAVINVNEDSFNAKSRVSEK

DFEKRLNDFLALKPEYIDIGAVSSRPGSEYCGKEEEFKRLKKILDLIHEKNYHEKAIFSLDSFDEYCLEY

ALNKGFKLINDITSLRNLNLAKLASKYEAKYCLMHMQNNPNNMQDNPFYEDLLDEMTLFFKEKLELLESF

GVKESILDVGIGFGKSAEHNMILIKHLEHFLQFNKPLLIGASRKSVINAYFQSEIKDRLAGTLYLHLKAF

ENGASIIRVHDLYEHKQLFALVQAMDNIGV

>ABS43699.1 acetolactate synthase, large subunit, biosynthetic type [Campylobacter jejuni subsp. doylei 269.97]

MKELNGSAMICEALKEENIKIVFGYPGGAALNIYDEIYNQKYFKHILVRHEQAALHAADAYARMSGEVGV

AIVTSGPGFTNAITGLATAYSDSIPLVLISGQVANSLIGTDAFQEIDAVGISRPCVKHNYLVTCIEEFPR

ILKEAFYIARSGRPGPVHIDVPKDVSATLGLWEYPKEISMKTYKPVYKGNSKQIKKLAQLLKEAKRPLFY

LGGGCISSNASEQIRELVKFTKIPAVETLMALGTLRSDDVFNLKMAGMHGSYAANMALSECDLLVSIGAR

FDDRITGKTSEFAKHATIVHVDIDPSSISKIINAHYPIVGDIKEVLKELLEELKKENFNTTFKEWHETLK

RYNELYPLSYEDSNEVLKPQWVIEECAKMAPDARIITDVGQHQMWVAQFYPFNYPRQLATSGGQGTMGYS

LPAALGAKLAVGEEVVINFVGDGSVLMNVQELMTAHEYGIKTINIILNNAFLGMVRQWQSMFYKEHFSQT

DLSTQPDFIKIAQGFGCEGYEISSKEEFIQAFSQALKSDKTSLLNVKIDRFEDVLPMVPAGGAIYNMILP

KAKDRQ

>ABS43698.1 hypothetical protein JJD26997\_0913 [Campylobacter jejuni subsp. doylei 269.97]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>ABS43697.1 ribosomal protein S6 [Campylobacter jejuni subsp. doylei 269.97]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>ABS43696.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLEDDFIKERQNIRQKMLKFSRAINQGKPLDDDLRDEISSDDILRRRFKKKNPNKFLEELDEEYESKHTK

KSNIYLKEDLINVKLEEKQSLAKKIFSFGRKKINEIKNIQTKPKIQTKNDQNPIQDKKEKKESIKSIEKI

QKTESKIQNSQTIEKQPDIKQSLENLQKQITPQENKQELPKPSNQAQEKQQNDEDTQKAKNVLLEGFSNA

TKEDRSLNFNHLLFAALLVGFGLFLFAPQIYIRNQIYYLSREIATLRIEESVLNEENKDLKRRLENMRFQ

NQILDYLE

>ABS43695.1 protein-export membrane protein SecD [Campylobacter jejuni subsp. doylei 269.97]

MRNSKINYRLIIFIAVFIFGVTFSLPSFLQSECGAKINLGLDLQGGLYMLLGVDNEEAVKSKIKSIASSL

SYSFNKENILNDGLNTHDDILEFTLLDNADIAKVENLLKEIKGINIQSENMHYKISFTSEEVKNIENFAL

LQAVETIRNRLDQFGLAEPTVAKQGDDKILVELAGIKTKEDELRAKERITKAAHLQLMEVDDSKMGQAST

MSDAEVASYGLILVPDSRNSNLKYTLKSVPILDGSMLTDARVGISDKSNYPVINFTLNAEGSKKFADYTG

ANVGKRLAIVLDNKVYSAPSINERIGGGSGQISGAFTQEEARDVAVALRSGALLAPVKLLEQRSIGPSLG

ADSIKMSMIALIGASVFIVIFMMMYYGVAGIFANIAMLVNVLVVVAVMAMFGATLTLPGMAGLVLTVGMA

VDANVIINERIRELLRDGVNIRASIEQGYKNAMSAIIDSNITSLVTSVALYAYGTGAVKGFAVTLGIGIV

VSMITAILGTHGMFDYFMQRIEKSNNTRFWFGYRRR

>ABS43694.1 alanyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MDIRKAYLDFFASKRHEITPSSPLVPDDATLLFTNAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYITVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGQEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSANGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYVYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDSIKEQIRFEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTVSGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFIKAGEELKVGTIAHARIDAEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALSKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEGLSK

AKDELKNNDILSGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRVDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKIDEALKQSLETIEK

AL

>ABS43693.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEKLLQELNANIKFSNQLSYQILMSNIISNLDIDKKDKEILLLLLQARDRNYIRINNNEQCYQNIINYLN

LIRPLELPLCDLLRIGGNGDGGYVMYNGGGGIMSDINAKAFSLGVSDSSPWDLEMAQRGFKVIEYDASIE

KCPYNHENIVFHKKFIGNVNNENTITLAQALKDNNLDESRPNILQCDIENCEWDMLENVDISILNKYFSQ

VIFEFHGCNPEEQDGVEKRISLLKKLNEYFVPIHTHFHNHGKIFYSQGLFFSTTLEVSYLRKNLINLDIV

KCRDVAGGFKNLDFPWVSNPEIPIRFRGY

>ABS43692.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDKKKEILLSCQNSKNLNSCYNCDEIFNCQTRKNYVDAVYNSMSKGKTEGGFDF

>ABS43691.1 putative transporter [Campylobacter jejuni subsp. doylei 269.97]

MVVVALALVFLNSFFVLSEFSIVKVRRSKLEEMVKEKKASAKKALEVTSRLDTYLSACQLGITLSSLALG

WIGEPAIAKMLEIPLINLGFSTVIIHTIAFIIAFSIITLLHVVLGELVPKSIAIAVADKAVLFIARPLHW

FWILFLPCIKIFDFLAGISLKLFGIKPAKESELTHSEEEIKIIASESQKGGVLDEFETEIIRNAVDFSDT

VAKEIMTPRKDMICLNKQKNYEENMQIICEHKHTRFPYIDGSKDTILGMIHIRDIIQNELSHKSQNLDTF

VKPLILVPENISISKVLVMMNKERSHTALVVDEYGGTAGILTMEDIMEEIIGEIKSEHEEDSYKKLAENI

YEFQGRCDIETVEEMLVINYDEDLEQVTIGGYVFNLLGRLPMVGDRIEDELCYYEVKKMDGNSIERVKVV

KKTNKDEE

>ABS43690.1 tRNA-i(6)A37 thiotransferase enzyme MiaB [Campylobacter jejuni subsp. doylei 269.97]

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGIDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIHKEAQKAVEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEDLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKKW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETMDVLEKVRFEQIFSFKYSKRPLTKAATMSNQIDE

ETASRRLSTLQNRHSEILDEIVKKQENKTFKVLFEELRVGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEII

>ABS43689.1 lipoprotein, nlpa family [Campylobacter jejuni subsp. doylei 269.97]

MTLFTKAFCVATLFTGFAWANEELKVGSSITPHADILRFIKSALQKQGYDLKIYEFNDGVIPNVMVENGE

LDANYFQHEPYLKEFNQRQGTHLVKVASIHIEPMAVYSKKHKKFNPEEGQSISIPNNPTNESRALRIVAS

KGLIEVKDNELITPLDITKNPKKLKFVELKDAQLTRSLDDVDYSLINSNFAILAGLNPVKDGLYTESKYS

EYGNIIAVKEGNENLPKIKALVKALQSDEVKKFIEEKYQGALIPTF

>ABS43688.1 fumarate reductase, flavoprotein subunit [Campylobacter jejuni subsp. doylei 269.97]

MNIQYSDALVIGGGLAGLRAAIEVAKNGQSVTLLSICPVKRSHSAAVQGGMQASLANGAKGEGDNEDLHF

ADTVKGSDWGCDQEVARMFAQTAPKAVRELAAWGVPWTRVTKGPRTVVINAQKTVIEEKEEAHGLINARD

FGGTKKWRTCYIADATGHCMLYGVANEAIKHQVKIIDRTEAVRIIHDGKKCLGVIARDLTNGQLIAYIAR

GTMIATGGYGRIYKQTTNAVICEGTGAAIALETGLCRLSNMEAVQFHPTPIVPSGILLTEGCRGDGGILR

DVDGYRFMPDYEPEKKELASRDVVSRRMMEHIRKGKGVKSPYGDHLWLDISILGRAHVEKNLRDVQDICK

TFNGIDPADEGSKGWAPVLPMQHYSMGGIRTKPTGESQWLNGLFACGEAACWDMHGFNRLGGNSCAETVV

AGMIVGDYFADYCKNNGEVIDTNVVKDFLTKEYQYLKSLVDKEGKHNVFEIKNRMKEIMWDKVAIFRTGE

GLKEAVDELEKLYKDSQDVKVHCKELDCANPELEEAYRVPRMLKIALCVAYGALLRTESRGAHYREDYPK

RDDLNWMKRTNTFWVEGETLPRIEYEELDIMKMEIPPAFRGYGAKGNIIENPLSEKRQAEVDAIREKMEA

EGKGRYEIQNALMPYELQAKYKAPNQRIGVDYE

>ABS43687.1 polyprenyl synthetase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQKIDELIKQFLQELGYEPILNMLSNVKSGKKLRSKLLLAIADESEIAFKICAVIELIHLASLLHDDIID

ESELRRGARSVNAEFGTKNALMLGDILYSKAFYELSKMDARFASIISDAVVKLAIGELMDVDLGEKFNIN

KEAYLKMIYNKTAVLIEASARCGAILAGLYEQDFAEYGKNLGLAFQMIDDILDIKSDEKILGKPAMNDFK

EGKTTLPYIYLYENLQEQDRIYLQTLFKKDLNESEKEWLKTKFEEQKALEKAILEAKTYAKKASKAIEKY

DNNKLNDIIKAMIDREF

>ABS43686.1 putative peptidase [Campylobacter jejuni subsp. doylei 269.97]

MQYLESRGVKIPFIFEKNSDFPIVVLKFVFRNCARSYDEIAGLAKMFSRILNEGVDDKFFKDLEFRAINL

EASSGFESLEINLSCLKENFDFALKSLEKLLLKPRMEEKILQKLKINALGELASKNSDFDYLAKNLLNTQ

IFKCKEFQSPNDGDEKSIEILSLKDLQNFYKNFIHLSDLVVILGGDLEEKQAKEDLLKLLSKLQIGKKNT

PKKYELSKNIKDKILVRPESEQAYIYFATPFFVDFKDEDLYLAKIALFVLGQGGFGSRIMEEIRVKRGLV

YSAYAMLDMNMSFSRVFGYLQTKNESAKEAKKIVKELCEDFIKNGITQNELDQAKNFLIGSTPLRYESLS

KRLSMSFNEFYQGLNLGYYKEELKLMEEVKLETINAYIKKHQELLNISFASIQNEN

>ABS43685.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MNFQVKTLETFNPFESLNQEQANTEQILDFKIIDFKLLCSSVKPAKTKTYERKDFDLFYADDFFVKNYNT

IIQKFLIEIYPKTQSFPFTIKLRSNSNLTYLKANINLTENFKYYPNLKFDILQNIYKIMIKQKFLILRLD

KNLFDKIDGFILSIQKNPSIKELELEIAKGVDKIEHKSNEIIYHRDVNEGGSNENISYDEGGYCKPVEKN

ELLFEYIYRILGKEGRNLRGEILHLNPIAFDNPFVIKDESIYTEELEDRIKYFSANYGFLNKDRSGYSVT

NNLKLSQVGLKTTGSIKTNIDENINLEITNFDISDDAIKSGIVNVQASNIKVNGSIGATKLYGKNISIKG

LTHAKSEIFAQDIFITTHKGTLQADTVYIKNLENGTIIAKNVFVENCVGGKIEAENIYICNLLTDNTLYP

RKNLIITNNIKFKNNILVSPLVSIENNSDTECENLKNLSLKIKSKLDDTISQMQNYYDYLIKNQVKIIKL

QKAEKLNTIGMKFSNLYHDIIKKYNHLSILYKKLIKLKYQIDTKLNFLNKMVYNVKIYIKAENIGEDNFL

KFYPKTNTDIELKHHINLKDYEKVLYLEKGQQANYIESSHNYSESDIEEIKIIFEKLEKDNS

>ABS43684.1 dihydroorotate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MAYEMIKPLLFKLNPEHAHTLVEYSLRALSASFPGALSFLAHKYIVDDESLRQNLLGLDFNNPVGLAGGF

DKNATMIRPLSALGFGFLEVGTFTPKPQEGNEKPRLFRLVKQESIQNAMGFNNEGAEKIALRLVKTYPFV

LPLGVNIGKNKITPNDKALEDYFTLFRDFKDLCDYFIVNISSPNTKTLRELQNDDFLNILLEEAKKITSK

PILIKIAPDMKIDDALNLCENAIKKGASGFILANTSVDYSLLDNNRTFGGISGRLITEKSGIFFKEVAKI

LFGKTLLIASGGIDSADIAYERIKNGANLVQVYTALIFKGPSLVKNINQNLIELLRKDGFLHISQAVGVN

LK

>ABS43683.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MNSFKQKYLINFWDNSRSMIALGILSAVYFGIFGGVWAVTGEMTRWGGEFLELLGMNLDGYSYYQKQNLN

GTPLTRTDGIMLIGMFMGCLVAALLANKVKFRLPASNIRIFQAIVGGILSGYGARLAFGCNLANFFTGLP

YFSLHTWLFTVFMILGIYLGVKICNTSFFKPKAKLERVDKENLPLNKQSLRTKLYFNLGILLFIAFLVWV

FYLVFTNGNISTQNKQSLLALALIFGFVFGFVISRGQICFTSCFRDLFLFGRNNAIKGALLGMIIASLIA

FAFILQGHTSKLIELSPAVAVGAFLFGFGIVLAGGCECGWTYRAFEGQSHFMIVGIANIIGTMILALSYD

FLPKALKEGIKINLLTEFGNLNGFFINLVLFILMFAFVVFYKKHFFKNQLKG

>ABS43682.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSRISLENYLQANNRYSCLSSNDIYLNKKYAELYGETFDFSYSKNGFVFKIIAIKEKIANSQFYDLQSPY

GYGGIYCSSQNEDFIKEALKALQIEALKQNIIAFFIRFHLFDENLKIYSKLLPFFTKSRETIIVNTEKDI

NNIRMNYSPRIRSYVKKAREELQINFATKKDCKDFFSLYGKTMQRNQADKFYYFSEDYFQKLFDFNESVI

LKASLNNEILAYASFFLCGDFSYYHLSANILKSNANAALLDFFFEYASNNNSKFCFLGGGVQDNDTLYKF

KEKFSILRASYYLGGMIFDKKNFDLLNKNLINKYFLKYRFNDFILPPPHPTNRLFFNFRNKL

>ABS43681.1 carbamoyl-phosphate synthase, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MKAYIYLENDIFLSAKAFGKSGTFFGELVFNTSLTGYQEIISDPSYAGQFIVFSMPEIGIVGTNENDNES

KEIFASGVLMRELSSSFSNFRAKESLQDYLEKHGKIGIYELDTRYLVKMIRNNGNLRAVISTEISNKEDL

KIALEKSAKIDEVNFVKEVSTKKNYSHKQGVWNSSFQKFNDAKRSEKKVAVIDYGVKTNILNELVEVGFE

VEVYPYNVKADELITLYKKGEIQGVFLSNGPGEPRILKQEIAEIKKLAEAKIPMLGICLGHQLLSNAFGY

ETYKMKFGQHGANHPVINLDTKTVEITAQNHNYNVPEELAQVAHITHRNLFGDNVEGVRYKDYPIISVQH

HPESSSGPHESKYIFKEFMNLM

>ABS43680.1 type I restriction-modification system, M subunit [Campylobacter jejuni subsp. doylei 269.97]

MRGSVDGWDFKSYVLGFLFYYFICENLKSYVLNSFKQDYENLSDEMAENGRDTVINAKGFFIKPSHLFTN

IFKNANLENLNEKLSVVFKEIESSANGSESEKSFRGLFDDLDLYSNKLGADNKERNKKILKIMETISELD

LHYNENEIDAFGDAYEFLMTMYASNAGKSGGEFFTPQEVSKLLVEITLHNNAKPNKVYDPACGSGSLLLQ

YKKSLKSDPKKGYFGQEINITTYNLARMNMFLHDVNYTRFDIAHGDTLISPSENHKELEPFDAIVSNPPY

STKWEGKDNALLINDERFNKAGVLAPTSKADLAFVMHSLSWLSEKGSAAIVCFPGVMYRSGAEKEIRKYI

IEENFVDCVISLAPNLFFGTSIAVCILVLRKNKTDKNTLFINANEEFIKVTNKNMLSKENLENILKLYKD

RKEVPHLTKLVSIEEIAKNDYNLSVSSYVEVKDTREIIDIKVLNKEIEEIVKRQSVLRNKIDSLVRELE

>ABS43679.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEKENIVKEVCKELNITQAELGRQLDVPASTINTWATTKIPKMAELALNLLIENKTLKEKLEIFKKAHKI

ASEL

>ABS43678.1 hypothetical protein JJD26997\_0836 [Campylobacter jejuni subsp. doylei 269.97]

MFDLIENVMSFIYRHQLIRKVVWQIIITFMSIFLFLTFLFWVNLEKMGYSSFNFSLLLNLQAYIFLLWEY

SREIAYFLIIEQAFFILLLWYMNNKLKNPSNDKEIVHIHIKELAKIWLEDDNTPMIDTSRQATEKANIVM

VNKQVRDSIISLANLKQDISQIFLNDIIKPNLEKIHPKHLEMIIKLLQLLEENIACPSVVQLFEGDPNSA

YGKISARRKDGERVDTVTLDGKTRFDIYEKISLLRHSLNVAYKIIELLNESKEYKSFKKTLFGKAIIVAL

GHDIGKINNFTLRESYIKEQRLKGDSKQAFMNLKRMQEHQKISYIIFYELFKNYPDLKELATVVQGHHLG

IDKDDKLLKLLIDADKQTRDYELDAYLQNSEEFEKIRNKELESIITTVPQKNNLVYENTQKTISKTLEKK

IQIIQNKTQNESTENEISILDLKELQDRFTLNFNEFKKQFFLFIAEDNSKEFQELVHTFTFKNTEKEFYK

NKKDLFILVECGVMNGNRTDTMNYFYDLSDEINKKLNKKIKLGFAMFRDCKDINEAIDGCKKALEYAKNN

NQVVYYDYKDLKMSNSDKILISDNAEVKTTENVKIQEKTDTITTDNQVNTLEEIDTLKQKAVDTQTIENM

FEMIENKVQEVEYSLSQEENFDIPLIEVRFIEILKTKINTFKRKGFTKSPQAISFKNYVLFSHECLLESL

AKALNVKNENLNAKLNFLIRYYRNHPDENKRLIWFVNVDKGFYYSTYLLRFDEKQDEVFFCVPFDSKRAF

GMSISELSIHKDNSGLRNCSVKPYVKKEKK

>ABS43677.1 acid phosphatase SurE [Campylobacter jejuni subsp. doylei 269.97]

MKEILITNDDGYESEGLKKLVKMLKKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLAFHALYKTRLPDLVISGINKGANVGEDITYSGTCAGAMEAALQGISAIALSQFYKKSEKELDY

KNALKITKKIIQNIFDKDFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAHSNINPRGVEYYWLAA

ANLDFEDEKNSDIVLLKKGYATITPIMLDLTAYERMKKVKKWLKANNE

>ABS43676.1 hypothetical protein JJD26997\_1340 [Campylobacter jejuni subsp. doylei 269.97]

MSKIEIFLQNLNPREKFLFISFICLCALFLAFKIHDHFLEDIFQKALVEHNYLAFNEAKIENSHLKEIET

KLTKQIKAEEEKLKYYKEKLHLFSYDKDFFNKKINNLSKNLTINEIKFSQENKNFIHYNYVSLSLNGDFK

DLLNFIQNLENLPTALKIDKIKLYNTQGLKLKLYLIFKFVNL

>ABS43675.1 indole-3-glycerol phosphate synthase [Campylobacter jejuni subsp. doylei 269.97]

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKAAAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPKIP

NSKIIIAESGLENKEFLEYLQNLGVDAFLIGEYFMREEDEGKALKALL

>ABS43674.1 AMP-dependent synthetase and ligase [Campylobacter jejuni subsp. doylei 269.97]

MHNLNFSHPFLNKLIAYKDLNCLIYKDKTYSYLELLLEVKKYISQLNNLKGVIGILGDYNLQSIALLLAC

IEKRLIVAPFLKLKNQDFKELEDKIYEGQIDYLYDEGKFIPYQSKQLKHNLINTLQNHSSSGMILFSSGS

TGKPKAMVHNLDVILNVYQDKKPKVMNIVLFLMFDHIGGLNTLFNVLGMGACGIALEDRKNVEALAQNIQ

KYQVSLLPASPSLLNLILMSGVKEKYDLNSLKLITYGTEKMSDSLLNRLKLEFPKVRFHQTFGTSEVGIA

QTKTKDNMIKLEGMAYKIINNELYLKSKTQSLGYLNADNSVFDEEGYFATGDLVELYKENEEEYIKIIGR

SKELINVGGEKVVPQEVEGVILELDYIQDCLVYAKANAITGQSVCVKVILKANVEFTNLELKKQLRMYCK

DKLANYKIPTQVEIVEKLELSQRFKKVRK

>ABS43673.1 translation initiation factor IF-3 [Campylobacter jejuni subsp. doylei 269.97]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVVLLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>ABS43672.1 aspartyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MRSHYNIDLGISHVGQSVKLCGWVNSYRDHGGVIFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVL

IAEGTIRPRGEGLVNPKLKTGEIEVVVSKLTIENESIVPPFAIADESVNEELRLKYRFLDLRNPKLYENF

ALRSKACIAARNSLANMGFLEVETPILTKATPEGARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDR

YFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEKKDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMEN

YGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIAKDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGA

EGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRCKLEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLID

PNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMPKNIDENDLEEISSIAYDVVLNGVELGGGSIRIHKNDI

QQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPHGGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMT

EAPSPASNEAMRELGIKLRENIK

>ABS43671.1 fatty acid/phospholipid synthesis protein PlsX [Campylobacter jejuni subsp. doylei 269.97]

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEANEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVSKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKRSFISKIGALLIKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAVNFSQSHINELIENELGKYNA

>ABS43670.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>ABS43669.1 1-hydroxy-2-methyl-2-(E)-butenyl 4-diphosphate synthase [Campylobacter jejuni subsp. doylei 269.97]

MEYKRFKTRQIKVGNVLIGGDAPISVQSMLFTKTRDIEGSLEQINRLYFAGANIVRLACLDMADARALKE

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVIKACKECNIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRVVKE

>ABS43668.1 thiol:disulfide interchange protein DsbA [Campylobacter jejuni subsp. doylei 269.97]

MKFPVKLARSIVVCAFLAGISASVLSEGKEYVVLKNPIANADNSLIEIFSYRCTYCYDHHKFNTMGKVKE

KLPNLTYKFYPVSSMRDYGKQANEIFAFAAFKDGVNKIDPTDKNSLTHKVAEAYFNAYFKKKQRWENGKN

PEAFYSVGLKAMDVSKADLENFLKTPEAAEFLKSYKIANPISQNYGTPAFIVNGKYQIISSAINSPETLI

EITKELSKQK

>ABS43667.1 ATPase, AAA family protein [Campylobacter jejuni subsp. doylei 269.97]

MEKLKNFLSLKNIEDTQIYKELKCAKNEALILRELCRNYVVSISSINAFTLLSTIFGNDKYLYLDALEDL

KKLIERGFVNQNSSFFKSLESNKTQTLTLALLQSELSLSEYFLEFLEAKPRLNFEKQEAYADYLEYLKDE

FVRIQLYERLSFIQKNAYNSEIRNQIKLYEKHIKERLKKSKFYNVLADIFKEYNLEHKEQIIFLALLKEE

YALSNESSISREMNSLLSLISENDLERHKNKKLLQENAPLLNLIEYDEYLNAFGDISKSFFIIDEILQRI

INFEPKQSKKIKIESVLKDQDIFELIEPSADINDIIMPENTKELLENILKQQDKKVLERLHSWGIKSNKN

IEAKIIFYGPAGTGKTMSALAMAKSMKKSVLSFDCSKILSKWVGESEQNVRKIFDTYKNIVQTCKQSPIL

LLNEADQFLSTRVDGSSGSDKMHNQMQNIFLEQIERFSGVIIATTNFLESLDSAFSRRFDYKIEFKKPDF

RDRLKIWQKFLPKKALFEKDFDINILSNYELSGAQILMVVKNTALKVAVSQDGVFKMQDFIESIQKELNS

SFDKSKIVGF

>ABS43666.1 putative sugar transferase [Campylobacter jejuni subsp. doylei 269.97]

MNRENLPIVVSCPGSSTGDRMLAMINAIYVARFFDLPFKFVWPVPEKNHHFMKIGEGFRGDGKDAIIGLS

INASEKVFSKEFREKYEISGLDGESCFWGGFPCKSIQEYKDEFYNNPPYRYIQMGIGPLEWQIRDLDIKH

YYKTMPLIFKEITFSQRVNEMIAKAEEAATKLGDFVAFHIRGGDAVEGYAQDRCLHEMTIHHGVYFELVL

AYMENHPSEKILLVGDNLSQLRLFAKSLDREVVLSNDLIGENYSNLELWFFDVILMSKAKKIYLGHSAVA

RTACWISGKPIFHYNFGMTLEQQYFFLEKYKKHCEILNPFIKAHACFYRFVLSRNLHYPLEVRIAHLKEA

LSYDKENDKFHINIIHQYLKFNCIVEAEQYLSSVLKEREEKFFKILTSEYWAGPSFKNLFEEFFAKTSFA

FKNLTFMALKIAQYLKDEEKIKLFYIMSKQEYGENLISYSSHIVPLQGAIKLVKSHLAYKLGACMIRNSK

SLLGCIKMPYLLVAIKWAHAEERKNFINITPLQDYIDYEEALKVKKFLSYKLGEALIKAYKNMWKGGLIK

FVFKEAWEIRRNFMEKKANR

>ABS43665.1 NifU family protein [Campylobacter jejuni subsp. doylei 269.97]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>ABS43664.1 molybdenum cofactor biosynthesis protein MoaC [Campylobacter jejuni subsp. doylei 269.97]

MKLSHLDEKNHPKMVDVSDKNITSRMATASGVIYMSQEAFDVIKNNTAKKGPVLQTAIVAAIMGAKKTSE

IIPMCHPLMLSKIETDIVEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRY

>ABS43663.1 homoserine kinase [Campylobacter jejuni subsp. doylei 269.97]

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKKRILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKMQTKFKDFSVQ

YLEFDDNGFEIC

>ABS43662.1 translation elongation factor P [Campylobacter jejuni subsp. doylei 269.97]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>ABS43661.1 competence protein ComEA [Campylobacter jejuni subsp. doylei 269.97]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>ABS43660.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKMTNIILVLLFILFFILMFFNYKYQKAQVELLEQNKKTLELNIKILELNIKKIELLEKRIKEIKWEF

>ABS43659.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MPKLSVIVPTFNRQVLLEKAIKSIQNQDFKDLEIIVSDDNSSDDTKSVVQNLQKDDDRIKYFLNQNYKQG

PNGNKNNGLDQANGEFVTFLDDDDELLSGALSTLMQKANEGYAHVFGNCLIEKEGNLSKEFSGKGLEKDS

EISKKDFLMAKFSGEFFSIFKKSLLENKRFNEEFYGNEATLWVNLYKEKSFYIHKAFRIYRIFRQNSVTL

GASKNAHRVYLGYLELAKILENELRMSKDKDYKKTCAGYYKMAAYYAKLAKNYKALYKCLFKSLSIKINT

PALILLILSIIPNNMIEKLSKIRVALCKN

>ABS43658.1 hypothetical protein JJD26997\_0860 [Campylobacter jejuni subsp. doylei 269.97]

MGIICMFGIFSLVYVLICLFCMLMMMCFGKLKPMSLLRFLRFFGMFRTHF

>ABS43657.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWGISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKN

K

>ABS43656.1 MiaB-like tRNA modifying enzyme YliG, TIGR01125 [Campylobacter jejuni subsp. doylei 269.97]

MILRNYFIKKFKKARKMSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVLIVNTCGFIDSAKKE

SINAILDLHEQRKKDSLLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQS

ENSKRIITGSNSHAFIKIAEGCNQKCSFCAIPSFKGRLKSRQINSIIAELKDLVARGYKDFSFIAQDTSS

YLFDKGEKDGLIRLIDEVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIM

KRGTNSTRLKEMLNLMKSAPNSFLRTGFIVGHPGESEADFEKLCEFVKDFGFDRVSVFAYSKEEDTAAFD

MEQVPFKVINKRLKIIEKIVDEVIEKSFEKEVEQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINE

SECGNLEMGQIYECEILQNLDKKLLAKALRKVDAN

>ABS43655.1 saccharopine dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKNLLIIGAGGVSRVATVKCAMNSDTFSKITLASRTKSKCDEIAAFIKERLGVQIETAQIDAGDSNAVVE

LIKKTGAQILLNVALPYQDLSLMDACIKAGIDYVDTANYEHPDLAKFEYKEQWARNDEFKQAGILGLLGS

GFDPGATNVFCAYAQQNLFDEISYIDILDCNAGDHGYTFATNFNPEINLREVSAKGRYWENGKWIETGPM

EIKMEWDYPEVGVKDSYLLYHEELESLVKNIKGLKRIRFFMTFGQSYLTHMKCLENVGMLGIKPVMHQGK

EIIPIEFLKTLLPDPASLGPRTKGYTNIGCVIRGKKDGKDKQVYIYNVCNHEKCYKETGAQAVSYTTGVP

AMIGTKLIAKGIWQGKGVFNMEEFDAKPFMEELNSQGLPWKIIEMTPNLGE

>ABS43654.1 putative terminase B protein [Campylobacter jejuni subsp. doylei 269.97]

MKLNLNFSYTRAQLKVFDDKNPRFITVAKGRRLGFTRGCVKYVIENLIEGKNVLWVDTIQANLQNYYELY

FTPELKNLPKDFYSWSVQDKKLIINGAVLHMRSAERSENIEGFAYDLVILNEAGIILKDSKGGYLWYNSI

RPMLLDNPKSRAIIGGVPKGKNLFYELCRKELSDKNWKHFQFSSYDNPFLKEEQIKELIEEVGGESSDVV

RQEIYGEFIDSSSAELFSLSGIENAMSKNSFSTQKMQGENIWGLDVARYGDDKSVLAKRKGFVIDELKKY

SQLGTIELANKILAEYKQSEEKPKGIFIDTCGLGVGVYDVLLNYGLPVFEANSANSATSNQYLNKRAQMY

FTFAKNLKHMELVKDEELKNDMRRIEYEYSDKGLLKIVSKEQLKKNYGKSPDLSDAVALTFFEKLYSKNN

THEDWSYDGW

>ABS43653.1 UDP-N-acetylglucosamine 1-carboxyvinyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MTYLEIEGTNHLSGNVAISGAKNAALPLIVSSILVKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNN

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGTDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEHPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKGLGVKITRLEE

>ABS43652.1 pyridoxal phosphate biosynthetic protein PdxJ [Campylobacter jejuni subsp. doylei 269.97]

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKYGDQITLHVREDRRHAQDFDLENIINFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHVKLKQSIEKLQNVNIEVSLFINPSLEDIEKSQI

LKAEFIELHTGHYANLHNALFSNISHTAFALKELDQDKKTLQTQFEKELQNLKLCAKKGTKLGLKVAAGH

GLNYKNVKPIVKIKEICELNIGQSIVARSVFTGLQNAILEMKELIKR

>ABS43651.1 formyltetrahydrofolate deformylase [Campylobacter jejuni subsp. doylei 269.97]

MISVLKICAKDQKGLIYRISDVIFKYHINIVKNDEFVGEGMFFFRALLEGEFDKEAFIGTLEAMFGQEAL

IEFCQKRKKDIIVFATKESHCLGDLLIKHYSNELEANIKAVISNHNSLKDLVEKFEIPYHFISAENLDRK

EQENQILKCLEQYKFDYLVLAKYMRILSPDFVRHFEGKIINIHHSFLPAFIGSNPYKQAFERGVKIIGAT

AHFVNNNLDEGPIITQAVSPVNHEFTWQDMQQAGRNIEKDVLSKALDLAFEDRIFIHNNKTIIF

>ABS43650.1 putative prophage LambdaCh01, recombination protein Bet [Campylobacter jejuni subsp. doylei 269.97]

MNTKITNTQNQAVSTSFTQEKIELIKKHFFPNNATNAEMEYCLNIANKYNLDPFLKQIFFVPRRAQVEVN

GKKEWVDKIDPLVGRDGFLAIAHKTGKFGGIRSYSEIKQFPRLNNGKWEYIQDLVAVCEVHRTDSDKAFV

VEVAYNEYVQKKASGEATSFWTTKPDTMLKKVAESQALRKAFNLSGLYSAEEMGVGMTESSDIIIDVEAC

QNNTHENKKKVDFSQNFSQSNATTFSEDEREVLLSLGLEVKNEDGYYWIVGNTYGLNEKIKQLGYRFHPE

KKTWWKQIGNVA

>ABS43649.1 hypothetical protein JJD26997\_1140 [Campylobacter jejuni subsp. doylei 269.97]

MALPSMAHTPPATENVKLKQSIYETIIKIGATETPILNKIGTSKVSNPLTHSWITDTFEEPKKNANLELS

KFVGETKNTTQKTTNATQIFITEAMVSKALLKANQYGGNEMEYQIGKKTKEHKMDMEYALLGLGRDNDVK

TSVFKDYIQAQEATSGEMAGLFHYIAKGKDSFTDKKRGNVLAFDEAGDWSGTSTELTEDKLNIILQTIWN

SGVAPKDVFLGADLKGAINKFATRILGNETKLVGQVVSLETDFGTVNFHMHRLLSAKYGLGDVLIAGDFE

YMKHGLYIPTMIEEVTTDITAKAKRFYTQSTLEVRNADAFAIGVGLTSTNNTRAKAVRGAARGE

>ABS43648.1 phage integrase [Campylobacter jejuni subsp. doylei 269.97]

MYFKELAILFLDIKKGLYKISTYYKVEGIINNRLSLFFSYKISDIKPSFIKFWLSSIDDVGSKSKKHYLN

ILNQIFKLALDDDLLSKNPCENIKIIYFKPKINPFSSFEVNQILEKSLNYNYKLQIFLKIGFYTGMRTGE

ILALKIKEIDLEKRIIYINSTRSRFGEGTPKTFYSIRKIPIFNILYTDLKNFVLSNKNNTYLFETQYNKP

YRDDFVFCKFYKQILKDLSLSYRRPYTMRHTFATNFLLNSNLSPLELSKILGHSSPEMVYKVYVKYIDDL

KDNFKRDIQIYKI

>ABS43647.1 UDP-3-0-acyl N-acetylglucosamine deacetylase [Campylobacter jejuni subsp. doylei 269.97]

MKQLTLVKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAGVKELDAPKKIMVIKKPIEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYTSYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>ABS43646.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MEKNTINNDNIQKNEILIPKRVLFDEKTLKMIEMMIPTYKDEISNTNKENEKINQMIKLAIEKMFKNDFL

NKINNF

>ABS43645.1 putative thiamine-phosphate pyrophosphorylase [Campylobacter jejuni subsp. doylei 269.97]

MWDKKIIAISDRKCVEIDFLKQIEKLAKAKVDAIVLREKDLSEFEYYDLAKEVLSICAKQKVTCFLHFFD

RECLKLGHRYFHAPLSLLRKEPKLIKYFHILGTSVHSKEELLEAMSYKVNYAFVGHIFESSCKVGLEPKG

LDFLKSLLEFSQIPLYAIGGINAQNIENFKDINIAGVCMREILMKEKDLKTYIQVCKERLFHE

>ABS43644.1 phosphoserine aminotransferase [Campylobacter jejuni subsp. doylei 269.97]

MRKINFSAGPSTLPLEILEQAQKEFCDYQGKGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYVNTGVWTKKAIKEAQILGVNVKIVVSSEESNFDHIPRVEFSDNADY

AYICSNNTIYGTQYQNYPKTKAPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKATMLYKCIDLSDGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQVKILCEFM

KEFQGKYA

>ABS43643.1 flavohemoprotein, truncation [Campylobacter jejuni subsp. doylei 269.97]

MTKEQIQIVKDCVPILQNNGKDLTKEFYRIMFNDYPEIKPMFNMEKQISGEQPEVLAMAILMAAKNIENL

ENMRSFVDKVAITHVNLGVKEEYYPIVGACLLKAIKNLLNPDETTLQAWEVAYGKIAEFYINIEKKLYDK

>ABS43642.1 YGGT family protein [Campylobacter jejuni subsp. doylei 269.97]

MIIDSFIISIFQVLQIVINIYTWIIIITALLSWVNPDPYNPIVQILYKLSYPAYALVRKIPTRIGSIDLA

PLIIVLALQFLGIFLGNILRSIL

>ABS43641.1 transcriptional regulator, IclR family [Campylobacter jejuni subsp. doylei 269.97]

MHQPTLRVLNILELLAKEKLTLSTIAKKLNIPAGTLWPILQTLQEKKYIKCDLKNKSYYLDFKIIELGCN

IKNENNIFEIIKKHMKNIRNLTNQTCQMGILKDGNVLYLEKIDANNTVQLKSFIGTSYPAYATSLGKALL

SNKNKKELEKLYPNNFDKITENTLNNINELYQQIKQIKKEKIAIEIGEMNPQIECMAIGIEHKNKIIAAI

SISYLIYCSNKTFREKNKKILLEEKNKIEKVLKIYFNDLDTLY

>ABS43640.1 D-glycero-D-manno-heptose 7-phosphate kinase [Campylobacter jejuni subsp. doylei 269.97]

MKTIRTQTPLRLGLAGGGTDINLYCDKYTGYVLNATISLYIHCTLIEREDGKIIFDSPDTNSYSEHESKE

FLENDGKLDIFKSIYNRIVKDFTKKPLSFSLHTYSDVPSGSGLGGSSTLVVGVIKAFSEWLNLPLGEYEI

AKLAYEIEREDLGIVGGAQDQYAATFGGFNFMEFYDNKRVIVNPLRIKNWIASELEARTVLYFTNITREA

KDIEEHKKGKLGDEKSLEAMHAIKQDAIKMKEALFKADFDTLVQILGKSWQSKKIISEIVSNDELERIYK

LAIDNGAYSGKTSGAGAGGFMFFFVDPTKKYNLIKALSKEQGWVQDFSFTKEGVKSWKL

>ABS43639.1 cytochrome P450 family protein [Campylobacter jejuni subsp. doylei 269.97]

MSECPFFPKPHKNKASTLLTFLLKRRSWLDGLYERSYKMQTGYVKMPNFDLYVINDTKEVKRMMVDEVRE

FPKSAFLHELLSPLLGESIFTTNGEVWKKQRELLRPSFEMTRINKVFNLMSEAVADMMDRFSKYPNHAII

EVDEAMTFITADVIFRTIMSSKLDEEKGKKILNAFVTFQEQSVHTAMRRMFRFPKWLSYVLGDRKRAKAG

DVIRQVLSNIIKPRYDMADNAEFEDILGSLLLVVDADTNKRFSFEEILDQVAMLFLAGHETTASSLTWTL

YLLSLYPKEQEKAYEEITQILQGGAIEISHLRQFKYLTNIFKESLRLYPPVGFFAREAKKDTQVRDKLIK

KGSGVVIAPWLIHRHEEFWTNPHGFNPSRFEGEYKKDAYLPFGVGERICIGQGFAMQEAILILANILKTY

KLELEEGFVPDVVGRLTVRSANGMRIKFSKREL

>ABS43638.1 UDP-galactopyranose mutase [Campylobacter jejuni subsp. doylei 269.97]

MYDYLIIGAGLFGSIFAYEASKRGKKCLVLERREHIGGNCYTKEMAGINVHYYGAHIFRTNEKRIWDYMQ

QFCEFNHFINSPIANYKGEIYNLPFNMNTFSKLWGISTPSEAREIIEKQKASIKGEPRNLEEQAISLVGV

DVYEKFIKGYTQKQWGKACKDLPKSIIRRIPVRFVYDNNYFNDPYQGIPKGGYTKIFEKLLGQCEILLNI

DFIERREEFAQKAKTIIFTGTIDSYFDYKLGALEYRSLKFEHEILDMQNYQGVAVVNYTDFETPYTRIIE

HKHFEFGTQEKTVISREFPLSWSKDIEPYYPINDAKNTALYESYLALAKAEKNVHFCGRLGEYRYYDMQD

VVKSALKFCESELKD

>ABS43637.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKTKAKISSRWLRFRALLIDIFLIYVPILYLFYFLLGSKEAFLNNHFITTLCTFLFGLIQAIFLTKKAQS

PGLKAYNLYLIDIKTGKKLSFLRILLRYVIFIISFGLLFGLFVSFVRKDRLNLHDILTQSCIATKA

>ABS43636.1 co-chaperone protein GrpE [Campylobacter jejuni subsp. doylei 269.97]

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKDYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKYGVTLIKEEKEFDPNLHEAMF

HVDGENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>ABS43635.1 putative exodeoxyribonuclease VII, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>ABS43634.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTQEELDALMNGAVDLDLETEAEVKTEESNTEEDALMLEDVKIADYKPNPSVVWPPPPPNQEHKVVHQLD

DVTKDSELKATEMMDKLESINNFFADSESLLKEINKAIEKNIDIFSKLNEKFPNVESFSEALELNNQAKK

SSKEIVGNLQSGQDEVMMAMDAMQYQDIHRQKIERVINVMRALSRYMSSLFEGKIDDKKRVSSAVHIEGD

STADVVSNDDIEALIASLGQK

>ABS43633.1 tobe domain protein [Campylobacter jejuni subsp. doylei 269.97]

MIFSVLMLEFKSLENLKISASVELLFKEHELCFSTSKTLLSVKNSFLAKITKIKKGELLYQVFFDFKGNE

LSSIITKEKALELELCENQEWLCFVKANDIVLKSHGA

>ABS43632.1 ornithine carbamoyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKHFLTLRDFSKEEILSLVNHASELKKEPKKLLQDKTLAMIFEKNSTRTRMAFELAITELGGKALFLSSN

DLQLSRGEPVKDTARVIGAMVDFIMMRVNKHENLLEFARYSKAPVINALSELYHPTQVLGDLLTIKEWNK

IQNGIAKVAFIGDSNNMCNSWLIAAAILGFEFSIAIPKNYEINPEIWDFAMKQALISGAKISLSHDKFKA

LKDKDVVITDTWVSMGEENEKERKIKEFEEFMIDEKAMSVANEDAILLHCLPAYRGYEVSEEIFEKHADV

IFEEARNRLYVVKALLCFLDNQRGRK

>ABS43631.1 DNA-binding protein HU [Campylobacter jejuni subsp. doylei 269.97]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>ABS43630.1 cytosol aminopeptidase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKFELNDKKLDAIKADFELIFIQDKNLKNFSKEKDFFKLNNYKGEGVLLDLNNKKLYLELKSLAYEDIRL

SLCTAYKTLEKLNIKSVKLPSIIGDCVVRSFASLVEGVLFGAYKFDKYKSEKKTSTLEKFIISSEDLNSK

KFNKDEAKIGLERGEILANATNFTKNIVNEIPEIYTPLKMAEDAQNLAKENKNITCKIYDEKFLAKEKMN

AFLAVNRASVYPPRLIHLSYKAKNAKKRVVFVGKGLTYDSGGLSLKPADFMLTMKADKSGAAAAMGIIKA

VAELALDLEVHCILGATENMIGGNAYKPDDVLISREGVSIEVRNTDAEGRLVLADCLSFAQDLKPDLLID

MATLTGACVVGLGEFTSAIMGNNEELQNDFYLSSKKSGEYTTILHFNPHLRELIKSNIADVSNTASSRYG

GAITAGLFLDKFIRKEYKDKWLHLDIAGPAYTEKSWGYSSFGAGGAGVRMCVNYLIQILRKAK

>ABS43629.1 glycosyl transferase family 8 [Campylobacter jejuni subsp. doylei 269.97]

MFHIVLNANENYIKYAAVLMTSIIQKTDLNKSMSEFCNFDTDEGYVFHILSDHISESMKVRISNLEKQLN

DIYPCKIVLHILNDDEFKGMLKWRGNYLAYYRIKMASVLPQNLKICLYLDCDMLCFGDLRELLSVDINNY

QAAVCLDGNNHKKNKKVFFSLKGREKYKFSNIEKYFNSGFILVNLDRWRRDNIENKSIDFLKKFKTLYPD

QDALNFALNDTLLLPNRWNFSLGYFVAFLKNSQEILFLNQTKYPHLNYTKTEFENEVKNIKIAHFILDPF

KPWDAFQYSIVNDDLQLIEYPFYKHYWSVAKNTPEFYLDFLVQKESINEHKAENLINELGKAVVKEMRRY

TSRASYRRLRKSIIFLYIINVILIIYVVLNH

>ABS43628.1 phosphoribosyl-ATP pyrophosphatase/phosphoribosyl-AMP cyclohydrolase [Campylobacter jejuni subsp. doylei 269.97]

MQNFKELNEKIAWQKVDHLLPVIVQDAKTCEVLMLGFMNNEALEKSLESGKVVFFSRTKQRLWMKGEESG

NFLNIVDLSLDCDNDTLLILANPVGPTCHTGDVSCFEKISKNADFVFLGRLEKLINARKNADENTSYTAK

LFKSGTKRIAQKVGEEGVETALAATVKDKEELICEAADLMYHLSVLLADANLSFSDVISKLKERHKA

>ABS43627.1 ubiquinol--cytochrome c reductase, cytochrome c1 subunit [Campylobacter jejuni subsp. doylei 269.97]

MREIKIFLVVVVFTALVYWGVEPYAHSVMKPHVVPANFDFAVEDTTFAKGIVEAKELALKDAQASGDAKR

IESANKELEKAKEELSKVETLWADVAKIDFAKGDAKKGKEFFENNCFACHGVKEDGIAANITDSSMGVIP

PDLSAAGAIFDEKFLAALIMHPAFALKVDHKFGDAFIMTAYNKDTSGESEETTNANIANVIAYLKDVSVK

FEANEDATIKKDVEAKYAKMENSAQKTALMEKDIKFAKDKATFIEACGRCHDMKYDSFFTPSNQNDLKTY

LGSVPPDLSMMIRSRGEQYLHDFINNTQKLLPGTAMPRVGLTEAAQAKVVSYIDQVGDSKKEERKTTGIY

VMIFFVILSIFAIGWKRSVWSKLH

>ABS43626.1 ribosomal protein L5 [Campylobacter jejuni subsp. doylei 269.97]

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPIGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>ABS43625.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSFTDLYFDREEKRIYNQTKELIANEFESKENLENIFANLQDFKNSLEISLEDDEDIATSLQAYGDEFIN

DVHDLLKKLRKFEKKYKKLF

>ABS43624.1 general secretory pathway protein F [Campylobacter jejuni subsp. doylei 269.97]

MKFYEVEFLKNNQNYTKTIKAENLNIAQAKALSKNWKIIDIKEIQKSNFQRLKDENFILFFKELALLCEV

GLSVQEAIKELYLMHSCKIMKKILDNLILAQNLNQAFENANFGLNRAELALIKTAEKTGKISEVFSQISK

LREKSLESQKQLKKAFRYPTLVFLSIIGAFLFLMLFVVPNFKDLFENLGASLPFITHVMLEIYNFLDSYG

IFCIFLFVVFIVMLILAYKNFYSFAFSCDFLFLKIPLISRLIIYNQNYYFFMVFSLLLKNGISISKAFDL

AIIGLENKFLIFQYKKLFSFIDSGLELSQAFKKIDIFDSLVFSMLSVAMKSGRLEVLSEEIAKYYQQKSE

NLMDRFLVFLEPMMTLFVAFLVLFLALGIFLPMWELSSGVNF

>ABS43623.1 RNA pseudouridine synthase family protein [Campylobacter jejuni subsp. doylei 269.97]

MRINKFISHNTRYSRRESDELIKQGLVKINNKIALLSDEVKFDDKVFVKGKRVQKRTQFSVLIYHKQKGE

IVSKKDDRGRKTIYDTLPRQFSTWLSVGRLDYASEGLLLLTDSPVIADVLMHSDLEREYYLKVKGTVSKQ

VIEAMQNGLEIKNEKKGAHAKTKITSMSFAPFIDFEIFGSSGGYTKLRVVINEGKNRELRRFFGHFDLEV

MDLKRVAFGALDLGMLKVGKHRYLENGEYEKLRDFLKFNEIRY

>ABS43622.1 hypothetical protein JJD26997\_0844 [Campylobacter jejuni subsp. doylei 269.97]

MNFKRASELLQIANNYNIEVSEVFSALKQALEVVLKCGKLHADFSNEKISFYEIIYNRFGEERKKFVQIK

RNNYKAVQDRFISIVISYSLEKKREQVKSLKSMIFKGKIEKVLKSGFEVSSSIGFGFLPKVEILRKDLTR

MQLGTELYLAIKKFKSTKKAPNGALVSTRKNMNILEHEIMNNMSDCGVYYIEKISARKISIFCTKMPTKD

QIKNTMRVANTFLDIQVRN

>ABS43621.1 LgtF [Campylobacter jejuni subsp. doylei 269.97]

MNLKQISVIIIVKNAEQTLLECLNSLKDFDEIILLNNESSDDTLKIVNEFKKDFANLHIYHSAFIGFGAL

KNLTLSYVKNDWILSIDADEMLENECINELKNLEFKKEDIIALSRKNLYKGEWIKACGWWPDYVLRIFNK

NFTHFNDNLVHESLVLPSNAKKIYLKNGLKHYACNGMESMIYKMNLYTSFSAKEKLKQDEKASIFGAILR

FWLTFIKDYFFRGGIKYGYKGFIIALLNANGAFFRYMKLYELNHEKN

>ABS43620.1 flagellar biosynthetic protein FliR [Campylobacter jejuni subsp. doylei 269.97]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITAQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNIGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>ABS43619.1 putative ribosomal protein L11 methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQKKYYELFFIVEEQYKNLFLGFAFDLGIEAIEEKDNGIYIRSHESLEELSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTHSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFHKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

DK

>ABS43618.1 phosphoserine phosphatase SerB [Campylobacter jejuni subsp. doylei 269.97]

MIKLCVFDFDATLMDGETIDILATAHGKGNQISEITRYAMAGELDFFESLQKRVSFLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGINLGFANYLHHKNDILTGLIGGEIMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLAMFNESGLKIAFCAKEILRSQADICIDIKDLKEIIKVI

>ABS43617.1 mannosyl-glycoprotein endo-beta-N-acetylglucosamidase domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKPIIIFLSLFLIPLFAADDLKNGFGEEYYKLDIDQKRQIFFIKMNEMFDQSFKKIEQERAFIEAFFKDA

YKTGFRTSNQTNLEKLITIKNKYRIENLYDFAEYKKSIQKIPKSMGIAQALVESATGTSRFAREANNLFG

EWTWGEKGLIPDLRHPDKKHKIKIFDSLQDSVDSYVLNLNRHFAYEKFRDARAKFESESKEITGLEAIKT

LDSYSERKGYYINLITKIIKRYNLEKYDTNSNNT

>ABS43616.1 putative periplasmic protein [Campylobacter jejuni subsp. doylei 269.97]

MRYCFILFLILVLNSNLLANNFSQKKVIKIEKSADSFEVIDLNQNVANPNLNQQKALFDSSTLIEKKSQI

SKDKNIDFAIVLTSRKNFGYFLDGFRVSDKEFSTSFAKNLIQSLKLNWVNSAANGIYQSPKTLLYFSPKD

AKLINVSPFLRQEKDKAKMYAKFTDYVVVVNLQDFYVNIINYFITTSKEGVASVNFKIISTSNGKILSAK

NAKLNLKLKSQDAKQNYQDMINQMPKMLADLINNQIFHLKLLK

>ABS43615.1 DNA topoisomerase I [Campylobacter jejuni subsp. doylei 269.97]

MKKNLIIVESPAKAKTIGNFLGKDYEVIASKGHIRDLPKSSFGIKIEDDEFIPEYRITSDHSALVKELKS

KAKDAKEVYLATDEDREGEAIAYHIAKAIGKDENTLPRIVFHEITKSAIESALKNPRKLDMHSVNAQQTR

RLLDRIVGYKLSPLLGQKIQRGLSAGRVQSAALKIIVDREKEIRAFVPLEYFSIDMIFQKDLDAELVEFD

KAKIEKLTITNKDRAKLILEACKNEAYNINDIESKERKIAPPPPFMTSTLQQSASNRLGFNPKKTMMIAQ

KLYEGVNTHEGVMGVITYMRTDSLNLAKEAIENARKFIQANFGKDYLPSKANVYTTKAKGAQEAHEAIRP

TNLSFTPEIATKFLDKDELKLYTLIYNRFLACQINPAISQTQNVFVKNDRAVFKISGRKILFDGYYKVYG

DMDKDKILPNLKIGQNLKVQNLEMNSHFTEPPSRYSEAGLVKKLESLGIGRPSTYAPTISILTSRDYVKI

DKKQLIPSEVAFNVIEVLEKNFSDIVDSKFTSNLENTLDEIAEDKADWQETLKEFYYPFMRKIEEGKTKI

ASQKTVTKLGESCPDCGGELAIRKGRFGEFVACLNFPKCKYSRNLKNESKNESENTAAKTQTNGTGITCP

SCQKGEIVERFSKRGKFYGCSVYPKCNFISKYKPSEEKCEECGETLVIKELKKGTFLECLKCKIKKEMKD

>ABS43614.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MHTITITSDNIDFIKSLECLSKNAGAIFKISKNDLEATLDNYEDNRTLDEVKKEAEETLLHYKQGKLSVT

PLGSEWL

>ABS43613.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNLKIFSIIVGILIAVIVILGGTYYYLFEYSKPKNYTLNTYTEQKSYTNNYDNSYSPSIQTNNSSSDVNI

NNNTIQKQEANPLDENRSLNNDTNISNNINTNENKQILDTDKEKLKQENKQAKIEALKKEISKQQKILER

EKAVKKELQSNKNKYLNTAREYLNIVKNSRLEPELSTENMKVYVLDGKFLSQYRINLLKDMLSVIQDNAK

DYYLSIFVKMLPKGEMKLTIYNKEIIFSDMKKAYKYISLDRLSPYLNNPKELNEHVAREEILERLKLQIK

KDGKGSDFSKHIKSLKTGLNTAQYFFPFCEIIEISSIK

>ABS43612.1 membrane protein, putative [Campylobacter jejuni subsp. doylei 269.97]

MYVYIFLSALYRLSCGALILAINWLMATRNDSFSYLAILVALTFLPAIFVPLFYKKKTMSGSKLTAFALL

ASFFISLFLFFTHNQILILVLNTALWFFFFIMESSWESWFAALAKDYTEQKILKFSSLSMSANQASLMLG

PIIAAFIFKDNPKIVILASSLLFLFVFFITLFSHTKQSEIKEEVSVDKKVKISALELSLVLIWPTLALFN

FMLPVQVAFEKGDMAEVGILDAMMGLGMICSSILLSKKVLHRFFIHYRFSILLLILAIWGFYQDFIFKIL

SVFILGLCFNMSRIIIRSSLAQKYEANIVGRLVSRANSYSFFIIIFTLFFVYDKVSINYMIPFIFAIFIA

FLSSIKK

>ABS43611.1 pantoate--beta-alanine ligase [Campylobacter jejuni subsp. doylei 269.97]

MEVITSIKEAKQIVKNWKSHHLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDMTQMYLKNFSTYVDMNIITDKLCGAKRPGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVREGKKNTSKIIQAMQDILEKEKLIKIDYIELVDFNTMDNIENIADNVLGAVAVFVGETRLIDNFLVQG

LK

>ABS43610.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKITIAHSPDADDIFMYMAVKLGWIGKDFAYENTALDIQTLNEFALKNEFDTTAISFGLYPLIASEYAL

LRTAVSFGEGYGPKLIKKKNTHLKRNFKVALSGANTTNALIFRMKYPEARIVYKNFLDIENAVLSGEVDA

GVLIHESILEFDPSLCVEAELWDIWLELAKENLPLPLGAMALRRSLPLSDAIKIERDLTHAVKIADANRK

ILAPMLMERKLIRVDEEKLDTYLNLYANKNSISMNQTQLLAVDTLFKLGYDYKFYDKIIRVNDYLIPSEY

EEARNS

>ABS43609.1 tRNA pseudouridine synthase D [Campylobacter jejuni subsp. doylei 269.97]

MNLAEENTIFKPLYSLKHSSINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLSTNEALKILSEQ

SGVKMRDFGYAGLKDKQGSTFQYLSIPKKFESFLSNFSHSKLKILETFTHENKLRIGHLKGNSFFIRLKK

VMPSDALKLEQVLMNLDKQGFANYFGYQRFGKFGDNYKEGLEILRGKKMKNIKMKEFLISAFQSDLFNRY

LSKRVELSHFANDFSEKELLQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELERFR

ARDISAMGLLIGTKAYETGEGLALNLENEIFKDALEFKAKMQGSRRFMWRYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLPE

>ABS43608.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MALIDLIEASKKFGDTIVLNEANFSANEGEKIAIIGKNGEGKSTFLKTLLGILPLDSGRVIRQNGKSIAM

LSQTVDFNANLSVKEAIKQELAEIYNALEEYEILHKKLEEDPSNKDYLKKIDTLITLIDSKDAWSIESKI

IRVLKEFSLLEYENRIISTLSGGEIRRVGLCMLLLKNPDILLLDEPTNHLDVYMTSFLEELLKNSKMCVI

FISHDRYFIDAIAHKCVEVEQGKLSIFKGGYANYLEKKTQILQSLAKSHETLLKQLKSEEEWLRKGVKAR

LKRNEGRKERIFKMREEAKKNPGAIKRLKLEISRVALNFNGEKTINRKKMLFELKNISKNINDKNLFKDF

STRILQGERIAIVGRNGCGKSTLLKILLGQIKQDNGEIKRGELKIGYFDQARSLVNSDKSLLEIFCPNGG

DRVEVRGKNMHVYGYLKNFLFPKEFLDKSVTLLSGGEKNRVALALLFTKEYDVLILDEPTNDLDIATINI

LEEYLLSFGGAILLVSHDRYFVDKIATKLYAFEGNGYINILHTLYTEYLENEKEVEELDNFALELQTQEQ

NNNQKEKSSKKLSYKENKILKNHPEKIDFLEQKIAKLNQNLSNPNVYQEVGINKLYQELEAMQKELEILE

NEYFLVLEKSENL

>ABS43607.1 peptide deformylase [Campylobacter jejuni subsp. doylei 269.97]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFDENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>ABS43606.1 ribonuclease P protein component [Campylobacter jejuni subsp. doylei 269.97]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFVAKNEITELSFSRLEKNLKWGLKKLECFK

>ABS43605.1 cytochrome c oxidase, cbb3-type, subunit I [Campylobacter jejuni subsp. doylei 269.97]

MHPGNVLNYDYTVARYFMFATILFGIVGMTIGTLIAFQMAYPNLNYLAGEYATFSRLRPLHTSGVIFGFM

LSGIWATWYYIGQRVLKVSMAESRFLMAVGKLHFWLYMLTMVLAVISLFMGVTTSKEYAELEWPLDILVV

FVWVLWGVSIFGLIGIRREKTLYISLWYYIATFLGIAMLYLFNNMEVPTYFVAGMGKWWHSVSMYAGTND

ALVQWWYGHNAVAFVFTVGIIAQIYYFLPKESGQPIFSYKLSLFAFWGLMFVYLWAGGHHLIYSTVPDWM

QTMGSVFSVVLILPSWGSAINILLTMKGEWSQLRESPLIKFMILASTFYMFSTLEGPILSIKSVNALAHF

TDWIPGHVHDGTLGWVGFMTMAALYHMTPRVFKRELYSKSLMEAQFWIQTTGIVLYFASMWIAGITQGMM

WRATDEYGNLLYSFIDTVVAIVPYYWIRAIGGLLYLIGFFMFTYNIYKTIACGRVLDKEPKSASPMAA

>ABS43604.1 hypothetical protein JJD26997\_1798 [Campylobacter jejuni subsp. doylei 269.97]

MNNKKLSQNDITTLLKIYNPKLYEISELPENEHGMLASYNKGRELRKKYEKMMNIKYDIILTTRFDMLFH

KEMSIDYYLNLYKNGELSHFPLSNRFCFFQLRYLGSVLLIFDTLMKGRCFFSLIPI

>ABS43603.1 homoserine O-acetyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNFNKETLALHGAYNFDTQRSISVPIYQNTAYNFENLDQAAARFNLQELGNIYSRIGNPTSDVLGQRLAN

VEGGAFGIPVSSGMAACFYALVNLASSGDNVAYSNKIYGGTQTLISHTLKNFGIEAREFDIDDLDSLEKV

IDQNTKAIFFESLSNPQIVIADIEKITQIAKKHKIVSICDNTVATPFLLQPFKHGVDVIVHSLSKYVSGQ

GSALGGALIERKDLNDLLKNNDRYKAFNTPDPSYHGLNLNTLDLPIFSIRIIITWLRDLGASLAPQNAWL

LLQGLETLAVRIEKHSQNAEKVANFLNSHPDIKGVNYPTLASNAYHNLFKKYFDKNFASGLLSFEARDYE

HARRICDKTQLFLLAANLGDSKSLIIHPASTTHSQLSEEELQKAGIKKTTVRLSIGLENSDDLIADLKQA

IES

>ABS43602.1 DNA-directed RNA polymerase, omega subunit [Campylobacter jejuni subsp. doylei 269.97]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>ABS43601.1 metal dependent phosphohydrolase [Campylobacter jejuni subsp. doylei 269.97]

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKLDDLFKKEQKLQQEEEKLKEDKEYLCKSQKHIQDLQSDVDKLKNKYQEKLDDVLKI

LEHSTRLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGEIIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCNRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRIIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAIEYAK

>ABS43600.1 protein-glutamate methylesterase CheB [Campylobacter jejuni subsp. doylei 269.97]

MKLILIGSSTGGPNQLKFLLKDIDIKNTCVVIAQHMSASFIPSFVGQFNKEAFSEVCLLNDKEILSNKIY

ICPKNTILSGNLNIVAAWQDVVSSFKPSVDLLFHSAVSLAKTNKTLAIILTGMGDDGAKGLFELYKTGVR

CLCENEADSVVYGMPKRAKDMNPHLKPMSLKEIKKEIVNFIDQD

>ABS43599.1 hypothetical protein JJD26997\_0963 [Campylobacter jejuni subsp. doylei 269.97]

MQNKYSVTFSKRFKKDFKKINNNDKKILKKIVNKLANDEVLEEKYKDHALKGNYAQKTIKSI

>ABS43598.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSNINAFLFGFTNMFNADILKATSLKDRKTLINDFHKKSEELRKHSDEEYNAKFEKITKQK

>ABS43597.1 ribosomal protein S11 [Campylobacter jejuni subsp. doylei 269.97]

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGSLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>ABS43596.1 posttranslational flagellin modification protein B [Campylobacter jejuni subsp. doylei 269.97]

MAEILCTICARAGSKGVKNKNIKKINELEMIAYSIIQAQNSKLFKHIVISTDSDEIASIAQKYGAEVFFK

REAHLANDQAAKLPVMRDALLRSEVHFKTRFETLIDLDASAPLRSSLDIKKAYESFVKNDNSNLITAVPA

RRNPYFNLIEIQNNKVVKSKEGNFTTRQSAPKCYDMNASIYIFKRDYLLKNDSVFGEKTGLFVMDESTAF

DIDSELDFKIVEFLISLKNLSPKDF

>ABS43595.1 ATP synthase F1, epsilon subunit [Campylobacter jejuni subsp. doylei 269.97]

MQDLISLEIVTPLGMIYQGEVKSVTLPGSEGEFGVLRGHASLVASLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAVTFSKLDNARMH

>ABS43594.1 hypothetical protein JJD26997\_0351 [Campylobacter jejuni subsp. doylei 269.97]

MEILTVTGVVSFDFFFSIFIYFIIGVIPILLSLVLLVIKWVK

>ABS43593.1 HAD-superfamily hydrolase, subfamily IIA [Campylobacter jejuni subsp. doylei 269.97]

MFFLDVQGTLISDHDKSLIHGAKELIDFLNAKNLPYIIITNNTKKLDFLEKLQQKGLAIKENAYIDPFSV

LKHLLRPCKVAVFGADEFVKSLENLGFELDFVNPSAVLVASYDDFKFADFASMIELARREVRFIAMHETS

IYKKDDRPYPGVGSIMAMLKNAIDFEYEVVGKPSIAFYKEALNLIRRQNSKIDFEDIKIISDDFRGDLLK

AKELGMKILLVLSGKISDTKGLDTDLLDGIYPSVFEFLKELKCQI

>ABS43592.1 putative ABC transporter, periplasmic substrate-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MENRANYFFVGLFVFGVFFASLGFIFWLGGYSKEESFKYYEIHTQESVAGLGIKAPVRLLGVEVGSVEEI

SIYNQDELGVNIRIKVKNNTPIKEDTFATLQLQGITGLKFVQLQGGSKNSKDLVSIHGKLPVIPFKESFL

ATIDRQSEHIFSLVKTADDKSKELLSEKNLKNLEIFLQNLAELSANLNADSKNLSLNLSNASLKIGKMAD

NISLSAQNFNSSLKDIKESTMILKNFIKKADEKLNTYDDIKASLMQNLELFKQVLIESNILIENLQNSPA

DLIFKETKPKLGPGEK

>ABS43591.1 major facilitator family protein [Campylobacter jejuni subsp. doylei 269.97]

MKNTLKKNFFTLILLSFCGSIIYGLPYFRKYYYDDYMALYHLDNFQMGLLGSAYGLLGLFSYALGGYLAD

RFAPKKLLIFSLVATGCGGLLHLYFASLKALMIIYGLWGITSLLTFWPSLMKIIRTLASEQEQARAYGVF

EGGRGVVSAIHLAIATAIFGYFQTKALASKGIEMIIIFYSLAPIVSAVILFFLLKENKHEKGENLKRSDF

LFLIKNPALWLVVAITFCTYFFNMSFYYFTPYASNVIGTSAVFAAILAVLASYIRPIASIVGGFVADGFG

KARVMLVGFVAMGLGVVLLMFSAYWGGFIQMVALTLACVIVYVAMYSNFSIYYSLLSEGKIPVHLAGMAI

GIVSTFGYLPEVFAPVLAGDLLDKYQGVKGFHIYFSIMIAMAIMGTIFCLLWIKKYNKKGKKYEENN

>ABS43590.1 non-canonical purine NTP pyrophosphatase, RdgB/HAM1 family [Campylobacter jejuni subsp. doylei 269.97]

MKIILATSNKHKVLELKEILKDFEIYAFDEVLTPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFNQSRAHYVAAIAMVGLMGEFSTHGTM

YGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILTKG

>ABS43589.1 ATP-dependent Clp protease, ATP-binding subunit ClpX [Campylobacter jejuni subsp. doylei 269.97]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHKEFKDITPKELKAYLD

RYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAICD

ATSLTEAGYVGEDVENILTRLLQAADGDVERAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLKI

IEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEKI

EPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIAQ

LALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>ABS43588.1 carbon-nitrogen hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MRRKLKAALIQFAPLSYEREQNLNKSLIFTQTALEQGAKLVVLPELFDSGYCVEDKDFSYALSLEKELPS

SLKELAKKYEAYIIACSIEKEDDTLYDTAFIVGKEGLVGKYRKIYLFRDEKKRFARGQDYPVFELVFKDF

SLKLGLQICYEIGFGEGARFLALQGAELICYPSAFGKARAYVWDLASRARALESGAFVLAANRCGSEISK

LSGENLEFAGRSKIINPKGEILSELSEKEGISYAVLDITQVKAQREYLTYLKDLDLDLSQKMYAKFNLS

>ABS43587.1 autotransporter beta-domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKNIAWTQTLRGGGLKESSFNSKKIVLSLATISFLASYANASGTTDGCPTASTQARSSGSSSNYNCTITS

LYNSGTVGITLSNYQTSTLTIESGGTLQAPGYPTGNGGNGGNGVNSITLKGSNSDTRTLEKLINQGTIKG

KIGIENENTSFNGTITVRTFDNKKNGFIDGHIYMGIWQGNGGTISIENFTNEGTITIPNYNNHNDGVIYF

EGTTHIKTFHNKGTIEGSGKNSISLKAQGNQTPTLENFINDGTIKGRMVIENRGQNGQSFQGTITVKTFE

NKNNGIIDGDIYIGMWGGSRGTISIENFKNSGTIKGGSRQGVYFEDIRSAIKTFENTGFISGSGDSSLAG

GLHTGGGVVMTGGTIETFKNSGTIQSTGTNHYPGGVKLNYATVKTFENTGLISGISGGFITIKGTIENFI

NKGTIEATGQGGGEAAIRIHTAELQFSSITNFTNTGTIKSNSNGVLIESGNKIGTLTNQGVIESKLNGID

FIDDGGHSSPDNAELGKIVLESGSSIKAEKKGINIDNQTAKTITTNGIEVKAGASVSGDEAGIYLGKGKE

ITAPITVSGTVSGGNAGIVNEGSITAPITISGTVSGGNAGIVNESEGRMARGITHNGEGELVISNQGLVG

KDDEGNTVTNNKGNVTIKDWVVSTNEETGKLDTVVVGGTKTDSVKVSNITVDQSGLELEELNEIKNLISG

VSTNNIANVKTNGGGEISLSYDPISARLSTDVQLNASIAGANFRSSVATASKRATFIDNVMANAMQSFSL

DSSGKSQKIALSEKGNLYADASDYIKNDYIKSDLTQANYGLNKEHALFILPYFSSQSVELSLNEESKGHT

KGTIIGYSTLKDSGIYGVYAGYEDTKMDSTYFDVNNISYYTGLKYFNTLFTTAKGQEVYIKAQAQAALIK

NDFTKKIGKNEAKAKAHSYTYGINTAWGMNFIADKNIFSPEAGFAYEGSYTEAFSMQDTRGKATVKGGER

TYANHLNLFSTKTSFTWFRDWLPNLKTSVELGAKFNVNPKVKARARFGNMKVNDEFHLPRVRKFASTSLI

VPVNEAFYFSLNYNGMFDEKGNTHTGFAQFNYLW

>ABS43586.1 cvpA family protein [Campylobacter jejuni subsp. doylei 269.97]

MNFYWFDAFILGFTLLLGLKGIINGLIKEIFGLLGIIGGVFIASKYATQVAEFIQSTFYKIENQSLAGFA

GFLVILIIFWIVCLLVGNFLSKLIKLSGLGFLDRIGGFIFGGAKIFLIFAILVFCVARIDFLNDKLDNFA

KNSYTLNLLKETGSFIMNQPLTENSLDHASEKLQDIASDLNNTQKRGVIC

>ABS43585.1 superoxide dismutase, Fe [Campylobacter jejuni subsp. doylei 269.97]

MFELRKLPYDTDAFGDFLSAETFSYHHGKHHNTYVANLNNLIKDTEFSGKDLVSIIKTSNGGVFNNAAQV

YNHDFYFDCIKPSTGCGCGGSCQSMDANLQAALEKEFGSLENFKAQFIKGAIGVFGSGWFWLVYNTKNQK

LEFVGTSNAATPITEDKVPLLVVDVWEHAYYVDHRNARPVYLEKFYAHINWEFVAKAYEWALKEGMGSVS

FYADELHPVK

>ABS43584.1 amino acid ABC transporter, ATP-binding protein PEB1 [Campylobacter jejuni subsp. doylei 269.97]

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>ABS43583.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVLFEIGDFSPVEKSFSFVKEQGCELLNSLKFNQVDWTIVIKKERV

>ABS43582.1 cytochrome c553 [Campylobacter jejuni subsp. doylei 269.97]

MKKLLVVSALACLGVSAFAADGATLFKKCAVCHGANADKVYLNKVPALKTLSSAERLQYMKEYSEGKRNA

YGQGAIMKLNLKGFTEEDFKAIEAHIETLK

>ABS43581.1 conserved hypothetical protein TIGR00250 [Campylobacter jejuni subsp. doylei 269.97]

MRALALDIGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSSEEEMTR

RIKHFVSLLEFDKEICFVDESGTSKKALEYGIANTRKKDGKLDSLAAFIMIKDYFCSLE

>ABS43580.1 bacterial type II and III secretion system protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILLLLVLCFNVVFSKSFENTIFDYAHLASASNNVDILVSSSISPQSYVFYTSKPYPKISLEVFEKAL

KLQNLKLAFTGDFYYVYEPGKDNNMTSFQKSVIDKDKNLRYIKLKNNSYDDIANLLSMYDINSTYLYRSN

AVTFLCDDFIYSHIKSSIDDLDNMDLPQLKFKITILETNLDFLKEKGSKLSSLFQGNPIKDFHLFVNLIT

IPYNSQNNIVSSDKKGFYSTLNFLENQRITRIVSNPFLLARSNTEVFFSSVQNIPFLKNSTSVSDTRVSQ

NTSYDYRDVGLQVTLKPVIIGDKVDFSLHLIVEDLLSNSNLTPVTSKKELKSSYTLKKGELLVLSGINKV

TNTNYTSGIPYLKDIWFLGNLFKIQRKETNNSVLTLSIEVF

>ABS43579.1 putative oxygen-independent coproporphyrinogen III oxidase [Campylobacter jejuni subsp. doylei 269.97]

MHFYIHIPFCESKCNYCAFTSLKKNDYEKAYFKALKKDIIFQLKQFNIQSNQIKTLFIGGGTPSCVDAYN

YEDIFKILYPLLDKNVEISCEANPNSATLNWLKNMKNLGVNRISFGAQSFHPKKLHFLGRIHNQEMIIKA

LENANKAGFKNINLDLIYDTKLDNKKMLEFELLHLKKIKALITHLSAYNLTIESNTAFAKKEHFKKNAPN

LIKFFIKQLLELDFFQYEISNFSKTKSQICKHNLAYWQGKNYLACGLSAVGFYENKRFYTAKNLKNYIEN

PTFRSIEQLSSKDLNLEHLFLGLRSIVGIDETKLNQWQKDKINILLKEKKLFYKNKRYFNPNFLISDELA

LYLSS

>ABS43578.1 NADH-quinone oxidoreductase, N subunit [Campylobacter jejuni subsp. doylei 269.97]

MLNNFLNLELLNISLSYPFLFLIATAIVLLLCSGFWKFHRSFYIGISFLSLIVSAFLILNNANTQGLEAK

AFLATLNNDIVSFYASLVILCFSFLYLLMQKEENQGEFYALFLFMIASLLLMISSSNLVLIFIGLESSSL

ALYTLIAMRGSDNAISSAIKYFSVAAVGAGFFVMAVAFIYLKTGTLDLSANLALKNEFQKDPMLLGVGVM

IFVLCAIKLSLAPFHFWLKDVYYAAHTNLVAFISVVPKVAMLVVVIRLFDFLNNTGFEYIIIVLAIFSML

IGAFVALSQNNIKKMFAYSSVVHSSLVLVACIPLLKEQNFDGILLAIFGYWTLFAFANYAVFMILSNYEN

NSYESLNGLLVKKPLIAFCLSISVLSLAGIPPFGVFWGKFMILNTAILNGYWYLALFVALSSVIMLYAYL

KILIHALFIKNDRVHNIKFSFIQNFILAFCVCVSTFAILLML

>ABS43577.1 sodium/dicarboxylate symporter [Campylobacter jejuni subsp. doylei 269.97]

MNKQFFQDFLMLSQAHTIATLAILCVVFYALKKMRDIKINFSLRMLFALLMGLGFGFALQYLANFPDAKE

VSNILWYGETKHWFAFVSSVFMAFIKMLIVPLVSICIIKAIIEIDKNIKISSLLGISLFWILFSTAIAAT

LGIFLGYSFDLGSNFAIHEGDKQIREIQTFSNIILGLIPSNIITAINKENIIAIVIFSFFIGISAKKISK

KEEYEQAFKSFHNFILTFFNIMMNMTATVIRFMPYAVVCMMANVLLSNGFEAIKTAGLFIMLIYIAMFIM

FGVHFLLLASQGLNPIKYAKKAFPVWLFAFSSRSSLGTLPMTTSTLQNKFGVNSAIANFVASIGTTTGLN

GCAGYFPALAAVFVAFATHTHIDFTFALMIVLVAVIGSLGIAGVPGSATMAASIMLAGIGFGNNFVMLSL

ILAIDPIIDMARTASNVSGAMTSALCTAKNLKALDKEIYNS

>ABS43576.1 hypothetical protein JJD26997\_1144 [Campylobacter jejuni subsp. doylei 269.97]

MDSKMSESIKGAKTQLNSKIEEIKIEQGQKITELENKMSELNARFITDENQILIKVGNNADNGEISSLKE

ALNLALKYSPSIPRSVTREKNRVVIEIQEGWEWVEAIGLYHMDLSHIILTQKNFDVPIMCDFSRQNMHHD

NGLLVKLYLDNSKISIKKLHLKAKAKELTENNCWFNNYIYSRFGSGVFIEHLKLDSSLLTTRNCGSAGDY

TIFTDDGSQLLAHKIEIIKSNATNEGFGLCENSRAYVEHLILSGGNSNYNGVLINNASSAFIGNITINGN

SGHNGVIINAASSACIANITINGNSGYNGVIVSVSSAYVGNITISGRSGHQHLLVDGSRLTNYGFCNFTG

ATSGNNQKLAVIRGGLATVAGAGYSRGAGNDANIAVNTWSVHGSWCFCGNRT

>ABS43575.1 hypothetical protein JJD26997\_0850 [Campylobacter jejuni subsp. doylei 269.97]

MDGYNIAISIGAITLVFGTLVLVAHYLNDKHTNESKS

>ABS43574.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIKAFSLLEFVFIILILGIVFSLGSLYLKKDNLLEGAIQILNDIQYTQSLAMMQEGIRVDELAIAKREWF

KSKWQIYFIKSAATGYDQTYTIFLDKNGDGNANLGKTEINIDREIAVDVINHNKLMNSGQSGVISKDDEK

TTQRFNITKRFGIEKVEFKGSCSRFTRLVFDEMGRVYSPLKNANYAYEKTLAKNNSDCIIRLLSKKHALC

IVIDTLSGYAYIPEFKTLKSQFVNVKNKNYECSKI

>ABS43573.1 oxidoreductase, FAD-binding, iron-sulfur cluster-binding [Campylobacter jejuni subsp. doylei 269.97]

MANFKAFYNEAKYIFKDRIFNDYARCYAYGIDASCYFYIPKIVIIAKNEDEIKQIIQLANTYKTPISFRA

AGTSLSGQSSCDGVLVVIKFTFKKIKINKDASEITLGCGVVGIHANESLAFLKKKIGPDPATINSALIGG

IINNNSSGMCCGTKDNSYKTLRSIRVILANGSILDTSDALSVAQFKNENKKLINELREIKEEINANKELK

DLIIKKFKIKNTTGYSLNAFVDYDDEIDILAHLLVGSEGTLGFVSEVKLAVLDDLEFKACALLFFDNINN

AANTIKEFAKVDFISSAEIMDYASLKAASSYDELRDILADIKEGDTCVLIQSEHSNELKLDENINKIKEI

SKLAYKSYFSKNKAEYDLWWKIRKALLPIAASLRKAGSTVITEDVCFNIEDLADGIKSIQELFYKYGFSD

NGIIFGHALAGNIHFIITPDLNNKLEFDNFSNLVKEMSNIVASYGGSIKAEHGTGRMVAPFVEVEWGKQA

YLINKKIKSIFDKENLFNPDVIISDDKDIYKKNIKQASLIDEKLNTCMECGFCERFCPSNEYTITPRQRI

AILREIKRLESLNDDESKAKLKDIKKYYNHLVDSSCAACGVCSFSCLLGINFADFSLKYRKNNIGFMSKI

LGNLAYKNHEKTLKIAKFSLSIANKFDNLSLDNKLEKASNFLSIIPRTRAYLPKVNDYELKSRKRAYNVV

YFTSCLNKSFKPNEKMYDKRSLQEVFESLCEKVNIGIIYAPNDLCCGKAYENFQDIQDKNIQKINDFLSN

IDSPIVLDHSACSAKLISDHSKYEIYDLSEYLLKFIAPKLRIDKINENVGLYIMCAARKLGLNENIIKLA

KLCTNGKVSIDNDTYCCGFAGYKGFFKPQLNISATKGFKKFYAKTNIKRGFSTSSTCEIGLSDATGISWQ

HIAYLLDECSEAI

>ABS43572.1 major facilitator family protein [Campylobacter jejuni subsp. doylei 269.97]

MSPKKIIKSMTALFAGMAFLFAGNALIVSSIGVILKENGESSLAVGMVSSCFFVGALVGTISAHKIISRI

GHIRSFGLFGAIFGISAMLHTVSENLIFWAVLRFFIGICYYGLLMVIESWLNEKSKNAIRSRILGFYEIV

FYLAFGIGVLIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFI

AGMLINGFFSMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMFI

FIFFKLHLYMQYFLGITLGIGIFCLYALALARANDVLVSKNKGVELGRGVLFCYSLGSLFGPLVLGFLMQ

YFEIKGFLWFYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>ABS43571.1 selenocysteine-specific elongation factor [Campylobacter jejuni subsp. doylei 269.97]

MKSVIIGTAGHIDHGKTSLIKALNGFEGDSLKEEQERRITINLSFSNLKLKDKNISFIDVPGHKDLVKTM

VSGAFGFSVCLFVVDINEGLKEQSLEHLEILKILDIKNIILVLSKCDLCENIEQKSAKILKELKNLDYPI

LKVFHTSIKNNQGIEELKNYLYTIENKENDGELIFHYYIDRVFSLKGIGTVVTGSLNEGSITLNEKIICL

DTQKELIVKNIQNHDTNLEQIKACNRVALSLNCDYKELKKGYLLSKKGYFKAFKECDALVRAKNLQNSKM

IFCVGSRQIECKINILKNLENDEFFVHFSFDKNVFLSFDETFILLQNNRVIGGGKVLNPLSEPLKKEQKN

KFLMFLKNKDFKAAFSFLKYTHKYGFGLLSSYQRFKLSHQKALELAKELNQVFVDEKNLNVYHLQSLEEI

KNFIKFILEKNPYAMLSAHSLALRITWASKNFCELGLKEMSNLLDFQNGIYFKKGIDFEKLQEKNNNQLY

EILKKQGIKPEAPYNLYDFLELDRKSGDNILKKLTQKGLVVRLSHNLFIEKQALEKLMQECLNLLKNQSL

DVQSMKGYFNLSRKYAITYLEYLDKFPQVSKEAEKRFLINI

>ABS43570.1 apolipoprotein N-acyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNTNFIIFKIIKVFFIAILLSNSIYLSFFENIFTQTISPFLAIWGLVLLLKSKNSKQYFWIGFFVGILWF

WWIGLSSIYFNLNYLVPIIPIIVGFIYGLLFRLCYLLKFDFLRLCGIFCISFIHPLGFDWLNWGIFTVYG

FFDPSYRGIICIFLIAYFIYEGCISKYYKIAIVLILFFGGFQYNEKQAQTLDLNYKLINTNISQDQKFLQ

ENLKSNSDILIQDILQAINEKKELVILPETAFAFDLKNTKYELMLKELSYKITIITGAFHVEKEHTYNST

YIFKKGNVYILNKHFLVPFGEEIPFFKDLIKKYFLKNIEEFARGPVQSQYKLNNQIITNAICYEATKEQN

YQNSQIIIALSNNAWFNNSSEYKLQQLLMKFYASKYGVSVYHSVNGKENAVILPKEKLSLKWSEYLNTLF

H

>ABS43569.1 putative type I restriction modification DNA specificity domain [Campylobacter jejuni subsp. doylei 269.97]

MLGEIFEIKNGYTPSKANKEFWEGGTIPWFRMDDIRTNGRILSDSLQHITPKALKGGKLFPKNSIIISTT

ATIGEHALIIVDSLANQRFTFLSKKVNCDIAIDMKFIYYYCFILGQWCKQNTNVSGFASVDMKAFKQFQI

PIPPLEVQEKIVRILDQFHALTTDLTSGIPAEIEARKKQYEYYRNQLLTFKEAI

>ABS43568.1 glyceraldehyde 3-phosphate dehydrogenase A [Campylobacter jejuni subsp. doylei 269.97]

MAVKVAINGFGRIGRCVARIILERNDIELVAINDTTDIELTKYLFKYDTVHGEFKGSVDSEGDDLVVNGK

KIKVFKSRNVKDLDFAKYGAQIVLECTGAHLTMAKCQEFIDMGIQKVIMSAPAKDDTPTYVLGVNSELYK

GESIISNASCTTNCLGPVCRVLQDNFGIEKGLMTTIHAYTNGQSIIDAKAKDKRRSRAAAQNIIPTSTGA

AKAMKLVMPELNGKLHGQSMRVPVIDVSSVDLTAQLSRKVNKEEINEAFRKAATTNLKGVLMVDDDERVS

SDFITCSYGAIVASDLTQVIADDFIKVIAWYDNEWGYSSRLVDMAVYICK

>ABS43567.1 hypothetical protein JJD26997\_0981 [Campylobacter jejuni subsp. doylei 269.97]

MNQEIKNVEIPMNENAYKKWQRVPKEMQEKAIEAALTMLWRDEVFFYTFFNGHIEEGEIRIEAKREEKVE

FPY

>ABS43566.1 co-chaperonin GroEL [Campylobacter jejuni subsp. doylei 269.97]

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKIANLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTVVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPAMPDMSGMGGMGGMGGMM

>ABS43565.1 ferrichrome transport ATP-binding protein FhuC [Campylobacter jejuni subsp. doylei 269.97]

MAFIKSCNVNFKNQNQYIIYPTNLCFENDKIYALMGHNGSGKSTLLKILARQLKPSFGKICFNDQDITDF

SSKELARKIAYLPQHLPNLGYLSVRELVKMGRYSYEKLFFKNQDRELIDEVMRLTNTLSLSNREIQTLSG

GERTRSFLAMLLAQKSEFLFLDEPLAALDIVYQFELMELISRLNKEFKVGIVLILHDINLAALYCDKIIA

LKEGRVIFNASKQEFMKETILKDIFNINANIIEHPKRKSPIALF

>ABS43564.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQISSSYNSYDYYSSKPSFDKTNQSDSTQKDEKNLSENKDEKEKNGEQTQMVNGVELSQKEVAQVRELQS

IDRNVKAHEAAHQATGGGLAGAASFTYTRGPDNQMYATAGEVPISMQKGNTPEETIANARQIAAAAMAPA

DPSPQDYKVAANATKMEFEARSEAMKLKAEEAKEKEEENKEKDDKSSENSLEKTDKDSKNNDKNSNFDKD

FKNFVVRTYQQNSQNNDIKFNIAS

>ABS43563.1 NAD+ synthetase [Campylobacter jejuni subsp. doylei 269.97]

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFAFLMPTQISNKTNLEDAL

RLCVDLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSAMKNSLVIGTSNKSELLLGY

GTIYGDLAYAFNPIGSLYKSEIYALAKYLNLHENFIKKTPSADLWENQTDEADLGFSYAKIDEGLKALET

NDEKLLKILDPSLIAMLKNRMQKNAFKGKMPEILEI

>ABS43562.1 plasmid stabilization system [Campylobacter jejuni subsp. doylei 269.97]

MQIIQTYRFLLDLEKIADFISLDSIKQANLFLDNLEKSIENIPFMPYKNRKSLSFDNENIRDLIFKGYVI

PYLIDKSKNEILILGIYKSNLWD

>ABS43561.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLIIGHKLLKNLDFSFIESVEEVKDNKVYCIVYDEKLISYLSQNDFEFAILVQNKDEIFLANALGAKFLL

CNDKKLAKFASKVAEFYVFDSRVLMIVDKLENFEKFYKLKIDGIILKDNIDNFPKN

>ABS43560.1 capsular polysaccharide ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MIKLVNLTKSYPLFSGGRHYVFKNFSFEFPENCSIGLMGSNGAGKSTLMRLLSGAELPDSGKIITNKKLS

WPLGLNGAFQGSLTARDNAKFVARVYGYKGKELQEKVKFVEDFAELGKFFDEPMKTYSSGMSARIAFGLS

MAFEFDYYLIDEAGAVGDPTFREKSVKIYKERLSKSKVIMVSHSVAEIKEWCDKIIYMKNGQITVYDDVD

EGIAVYQGKA

>ABS43559.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. doylei 269.97]

MKKLLLLFIFVVQSFAALSVEELTWDNGDTLLKFLQRNSIPMSLYYGLDREDQELASDIAYKIKYQVLKD

ENNNIEQVLIPINDDLQIHIYKDKDGQYTLAFTPVSYQKEDRILHLTIKSSAYQDVYEESGSSTLARAMV

RAFRGSINFRNIQKGDEATLYYEQKRRMGKLWGDINIKMAMVEINKSAREVFSYNDIFYDRDGKELESFL

LTKPVNYTRISSPFTTARYHPILKRYHAHLGIDYAAPTGTPVKSAGKGVVTFIGTKGGYGNVIQIKHDSG

YMTLYAHLSRFAKIKNGQKVNQGQVIAYVGSTGMSTGPHLHFGVYLNNKAINPASVIKIAKSELSGKAKE

NFKHIIAGYEQVVKEALASNQPNPPKEEDFENYIEF

>ABS43558.1 putative thiamine-monophosphate kinase [Campylobacter jejuni subsp. doylei 269.97]

MNKEDFIIKAFLNEKNGDDGAIIDDWCFSKDLFFENVHFKRAWLSLEQIATKAMLVNISDAIVMNTVPKY

ALLGLALPKNLSENEIKALQKGFLKTARKFNIKIIGGDTISNDKIDISLTIISKINNKAVFRKGLKKGHL

LAYTGKLGRSLKGLEILQNGGALKPNHVFIKPKLRASFFYEIAPLISCAMDISDGLSKDLSRLLALNKCG

IFWFEKLDDYTLYSGEEYEILFAFDEKERQNIETIAKKHGVKLNIFGKAVKGKYEFSGREHHF

>ABS43557.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MGIWGGNGGTISIENFNNEGFISGKSRNEKGVHFEAQGNAKVYINTFRNSGSIEGGENSSHERHGVYVQG

NVDVTLFENTGFISGKNGQGVYFQGNVDVTLFENTGFISGSGDSSLAGGLHTGGGVVMTGGTIETFKNSG

TIQSTGTNHYPGGVKLNYATVKTFENTGLISGISGGFITIKGTIENFINKGTIEATGQGGGEAAIRIHTA

ELNFSSITNFTNTGTIKSSSNGVLIESGNKIGTIINKGTIETKLNGIDFIDDGGHSSPNNAELGKIILES

GSSIKAEKKGINIDNKSDKTIKVDGIEVKKGASVSGGEAGIVNEKIIGGDDKKGGIIISGEVSGRIAGIL

NKGSITAPITISGTVSGGNAGIVNEGKMARGIVHNGEGELVISNQGLVGEDDKGNTVTNNKGSVTIKDWV

VTTNEEGKLDTVVVGGKKTDDVKVTNITVDQSGLELEELNEIKNIISGVSTNNIANVTTNGGGEISLSYD

PISARLSTDVQLNASIAGANFRSSVATASKRATFIDNVMANAMQSFSLDSSGKSQKIALSEKGNLYADAS

DYIKNDYIKNDYIKSDLTQANYGLNKEHALFILPYLSSQSVELSLNEESKGHTKGTIIGYSTLKDSGIYG

VYAGYEDTKMDSTYFDVNNISYYTGLKYFNTLFTTAKGQEVYIKAQAQAALIKNDFTKKIGKNEAKAKAH

SYTYGIHTAWGMNFIADKNIFSPEAGFAYEGSYTEAFSMQDTRGQATVRGGERTYANHLNLFSTKTSFTW

FRDWLPNLKTSVELGAKFNVNPKVKARARFGDKKVSNEFHLPRVRKFASTSLIVPVNEAFYFSLNYNGMF

DEKGNTHTGFAQFNYLW

>ABS43556.1 putative MloA protein [Campylobacter jejuni subsp. doylei 269.97]

MKEFIPPKLPLNIELNSNIYSLIIKASRKLAELNGLSKSIPNPNILINALILQEAKDSSEIENIITTHDE

LFLSQIDESKLTRAAKEVKDYESALKKGYELLKKERLLRNAHILEIQKRLERNNAGFRKQSGTMLKNPIT

GEIKHIPPQNHNDIQELMRNLEQYINDDTLDELDFLVKMAIIHYQFESIHPFYDGNGRTGRIINILYLVY

KGLLDLPILYLSAYIVKNKGEYYSLLQKVRDEEAILEWIEYILKGVEQTAIKTIETITTIEKMMLNVSEI

LQNKTNFYSKDFVELLFSHPYTKIDFLIEKLNISRQSASKYLKICENLGVLECIKMGRNNYYINIELLKL

FKKGIF

>ABS43555.1 ribosomal protein L6 [Campylobacter jejuni subsp. doylei 269.97]

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPGGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>ABS43554.1 sensor histidine kinase [Campylobacter jejuni subsp. doylei 269.97]

MWLIEYDQQNYTRELNIKYSLIANARLLNFAGVISEKEFEEQTKNYNKMDEITEAKQIRKILFRGDVLAR

VEVNNGLIEIISYNRQVYLNIIYDGKVYLYKDQDYQTYRYFIIKAIAVAVICILVLLYIYIFKKLKPLKR

LKKQIDKFAQGKLNDIEDVSTGVDEISQVGEAFYQAIVQIRKLNQSRQFFLRNIMHELKTPITKGLLTLE

MIEDNKYKERLNGVFTRLEILINEFAAIEQITSGAAFINRKKYNILDVLDEAKEIAMRDDSNIRIFMEES

FFVNVDFKLFTTAIKNMIDNGIKHSEDGFVQIDIIDDYICFKNRGPELNNTLEYYTQAFTQGSKQKSSFG

LGLYIVNTILETHGMKLDYLYEDGVNLFFFRNLKSLIVKE

>ABS43553.1 putative type IV secretory protease [Campylobacter jejuni subsp. doylei 269.97]

MKLSKEQIRTLINKTLFVLIAFIIGNIVVSALSQFYGISVIHTKSIDKDIFIYQKKFQGDLKDSLIYFSL

PVQTRYFDKDSNFGKYVRCEEGQTLSVKGLKYYCDNVFLGIAQKTDKDGNKVEQFIFNGVIPKDKFFVMG

THPRSFDSRYWGFVDRKDIKGVSIWAI

>ABS43552.1 3-deoxy-7-phosphoheptulonate synthase [Campylobacter jejuni subsp. doylei 269.97]

MWTKNSWKNYPIKQQPIYPDQEEMNRVLARLEKLPPLVFAGEVRNLQKSLARVCKKEAFLLQGGDCAESF

ENFGAVNIRDMFKILLQMAIILTFAGGCPVVKIGRIAGQFAKPRSSDFEELNGISLPSYRGDIINGFEFS

EQARIPDPHRMLEAYYQSATTLNLLRGFAKGGLADLHEVHRWNLGFLKKSELHKQYTDISEKISQALAFM

EACGINTNNTPSLREVSVYTSHEALLLPYEEALTRVDSLSGEIYDCSAHMLWIGERTRALDEAHVHFLSG

VKNPLGVKIGSSASADDVIALANVLNPNNEEGRLNIIIRMGADKIINNLPKIFSKLKSEGLNLVYSIDPM

HGNTVKAGNFKTREFDKIMQEVRSFFEIAISEGVYPGGVHLEMTGKDVTECTGGASNVTAQSLEDRYETQ

CDPRLNADQALELAFLIADLVKKAGK

>ABS43551.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQYKTINLEQGSPQWCDFRKGKIGASMVASCVGIKGAFHSKEQARDIILGLKEVHQNDAMKKGMEKEPLI

RSEVEKLHSVSITPIVLQSLENEMFMASLDGIDKNGVIYEFKYSQDEYDFVKKNKKPSDKYYAQVQFALY

ISAKEKCLFVAMDKKEEIVECEVLRDEAYQEGLVENVKEFILDYIIDQKSDYKELEDTKAKNLTIEIIRL

ANTIKPLEEKLESLKKELIALANGEKARCLDITIYPQSRTKVDYKGFLEQKNITVPKEFYKESISMCLKI

KKGDEK

>ABS43550.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKYILLASSMLILAACGGTSSNFVNVSMPNFKPQVPTKVESIDFGVSIALEPINIEQNNNYSDYFENSV

LKIRIEKEIDLLKQNLEKQIKTIAQLKGYKIVTTNPDYTLKSSIIIYTEEKNAQKTSNFMSGDYVKSNLG

INFKGKIDFIDAHNPQNSTNLSSSTKLDSLVALNYPIKNDDGVNMFKTTISTVPTQLNKGLEQPAFEIDK

SFLAFYKNTLNTLYNNLPKATDIGKTIPNTNSSFNSFDGNATFEESLPQTNSNQNNTIENTPTQNIPTNP

SSTNQNNKSKNQDGVEIFE

>ABS43549.1 putative TonB-dependent receptor [Campylobacter jejuni subsp. doylei 269.97]

MTQIKNMKFKKSLLCFLILSGALLQAEETYQLNDVVVSASGFEQDLVDAPASISIITKEELEKKPIKDIG

EAIGDIPGVDVTMDKTGTYDFSIRGFGSSYTLVLIDGKRQSVANGFYTNVFKGSESGYLPPLSMIERIEV

IRGPASTLYGSDAVGGVINIITKKNPDKIEANIEFNTLLQQHSNHYGNAGGFNAYVATPLIEDTLSISAR

LKYYDKAASDLKWPTPVWNNNNQKPDNYQQRPDNYQIAIHSPGAFTSLGFGSRLNWTVDDKNNIYFDIER

YINEISVNSISSRAIKSEKQLFKDNIVLNHDGNYDFGSTNSYLQYGSTKDKELHSQIWVGEGKVVLPWNL

GQYGNLVNTFGARIDYEMLKNDQASAGSQIRGKNLDQTTVALYGENEYFITDDLIFTTGLRYIYSNLFDS

EFTPRIYLVYHLNDNIAFKGGVSKGYKTPSAKQLTNGYYNYANGNAHFGNPDLKPEESINYELGADFRVF

DFAHYSITGFITDFTNQISSEYLTGMQNGINCSNGTVCKRPINLGKTQTKGIEFAFNTKTYNGFSLNSSY

TFMDNRYKDSQKNWFGGDRIENLPRHIAMLKLNYERGKFNSYIKTRARLDTVAKARVGGNGSLPWQKYKP

FYIVDLGINYKINKQSSLSFAVQNLFDKNFFDPQVTKWAGANPAGYANRYQDYTEGRSFWLSYKYDF

>ABS43548.1 hypothetical protein JJD26997\_1663 [Campylobacter jejuni subsp. doylei 269.97]

MSFYKVHGVLNPYFLKISFAFEEPINSLNSKANFLSLAYFVMT

>ABS43547.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLTYTNELVVAKLARALAYKEAKKDKSKVDFLINLFKKQIQNCIKATEHFTDRVSQRFEEVENDTLSVAI

SRAIRNTLPLQRGADYHIATTQKYFDEDSNIVVVLERQGEFGAVLVTTYKRGQENLLSDEELADLKKRGV

L

>ABS43546.1 dihydroorotase, homodimeric type [Campylobacter jejuni subsp. doylei 269.97]

MILKNPLDMHLHLRDNQMLELIAPLSARDFCAAVIMPNLIPPLCNLEDLKAYKMRILKACKDENFTPLMT

LFFKNYDEKFLQSAKDEIFGIKLYPAGITTNSNGGVSSFDIEYLKPTLEAMSDLNIPLLVHGETNDFVMD

RESNFAKIYEKLAKYFPRLKIVMEHITTKTLCELLKDYENLYATITLHHLMITLDDVIGGKMNPHLFCKP

IAKCYEDKEALCELAFSGYEKAMFGSDSAPHPLHTKECCGCAAGVFSAPVILPVLAELFKQNSSEENLQK

FLSDNACKIYDLKFKEDKILTLEEKEWQVPNVYEDKYNQVVPYMDGEILKFQLKH

>ABS43545.1 cation ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MLFFEISNLNYAYDNETILKNINLSYDNKDFLSIIGPNGAGKSTLVKLILGLLKSQNEIHFKALQRKEIG

YVPQHTLANPNFCPRVLEIVLMGLVSKKIFGFYGKKDKEKAMQALKSVGMEKFWNKTIDSLSGGQRQRVF

IARALASECKMLILDEPTANVDNKSAIQIFELLSSLHQKGMGILLICHDINLVLAYSDKIAHLNKELFLH

TNTKEKEKSSFLKHLYENHSHFCDVEMSLNTCFCDEENCDSKKLCEQEFTRRNLKKTEFKKENFCLKFSK

ENNA

>ABS43544.1 histidinol dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MQILVYDNLDEKQKEEALKRPAISAKDEISKIVSSIIKEVQEKGDQALIEQALKFDKAEISNIKITQEEI

TQASNRLDKDLQEAILVAYENIKKFHEAQIPHEIALETTKGVKCEVLTRPIEKVGLYIPGGLAPLFSTVL

MLAIPAKIAGCKKIVLASPAKINDAVLFCAKLCGVDEIYQMGGAGAIAALAYGTQSVLKVDKIFGPGNAF

VTEAKRQVSSDINGAAIDMQAGPSEVLVITDDLANEKFVASDLLSQAEHGTDSQVILVCLSQNFAKKASD

EVQSQLKLLPRKKLASKSIANSRIIIAKDLNQALEISNLYAPEHLIIQTQNPRELLKGVKHAGSVFLGAY

SPESMGDYASGTNHVLPTYGLTKTHSSLGLADFSKRMTVQELSKEGFLALGKSVEILAQNEHLDAHKNAV

TFRLESLK

>ABS43543.1 carbamoyl-phosphate synthase, large subunit [Campylobacter jejuni subsp. doylei 269.97]

MPKRTDIKSILLIGSGPIVIGQACEFDYSGAQAAKTLKELGYRVVLINSNPATIMTDPEFADATYIEPIT

KESILSIIKKEKIDAILPTMGGQVALNVAMEVYESGLLGDVKFLGANPEAIKKGEDRQVFKECMKKIGMD

LPKSMYAYNYDEALKAVDEIGFPLMIRASYTLGGAGSGVVYNMDEFKELANTALALSPIHEILIEESLLG

WKEYEMEVIRDRADNCIIVCSIENIDPMGVHTGDSITIAPALTLTDKEYQAMRNASFAILREIGVDTGGS

NVQFAINPKNGRMIVIEMNPRVSRSSALASKATGYPIAKVATLLAVGFSLDEIKNDITGTPASFEPVIDY

IVTKIPRFTFEKFPGANTTLGTAMKSVGEVMAIGRTFKESIQKALCSLERSLSGFDRVKFEDRNDLVFKI

RNANEKRLLYVAQAFREGFSVEELYELCKIDPWFLTQIKEIVDFEEQIDMDILNNKALLRKAKTMGFSDK

MIALLVNLKDNLELSQNDIYYARMKQKIIAEFSEVDTCAGEFEALTPYLYSSINVSELTQSKNDAKDKKE

KKVMIIGGGPNRIGQGIEFDYACVHASFALKDMGIKTIMYNCNPETVSTDYDTSDILYFEPIDFEHLRAV

IEREKPDGVIVHFGGQTPLKFAKRLSAFEAKIIGTSARVIDMAEDRKKFAEFITKLGINQPKNSTATSIE

EAVFKASDIEYPVLVRPSYVLGGRAMRVVNDEAELRLYMQEAVDVSDKSPVLIDQFLDNATEIDVDAICD

GKDVYVAGIMEHIEEAGIHSGDSACSLPPCNIDEKMQEFIAQKTADIALNLGVVGLLNIQFALHNNELYM

IEVNPRASRTVPFVSKATGIPLAKVATRVMWQGNLKEALKFYDTFKVVNFDTKILRPKTPKYMSVKEAVF

PFAKLSGSDLELGPEMRSTGEVMGISKDFANSYAKSQIASFNHLPEQGVVFISLKDKDKKYTKKIAAEYV

KLGFKLMATGGTCKEILESGFECELVHKISEGRPNVEDKLKNGEIHLVINTSDSHSFKGDTKKIRENIIR

FKIPYFTNLRSALAGAKSIKAIQSKSCLDVKSLQEWLKI

>ABS43542.1 ATP-dependent DNA helicase, UvrD/REP family [Campylobacter jejuni subsp. doylei 269.97]

MSQFEPFLALEASAGSGKTFALSVRFVALILKGARINEILALTFTKKAANEMQKRIIEIFLNLEKENKTS

ECNELCKLLGKDKEELISLRNAKKEEFLRTELKISTFDAFFGKILRVFALNLGLSSDFTMSEEKLDVREI

FLKLLKKDELKDLAYYINLVDEKEIFFNELEKFYENAYFQNRPKIPNPSKAYINKAYSELRSYCLGLDHV

KNYKNLCDNFKSEVLDLSVFMQSSFMTKFESTKYLQDLESTNLHFSAKRMELINALNTYAIELENYKIAN

LMNLLNHYSEAKNIFHKDKNTLNFQDVSKKVYELITSEFKDMIYFRLDGFISHLLIDEFQDTSVIQYQIL

RPLIAELVSGEGVKKNRTFFYVGDKKQSIYRFRKGKKELFDLLKQEFGQIKSDNLNTNYRSKELLVDFVN

ETFKEKIKDYKEQFALESKKGGFVRIVESKEQKVKNQAQEIKEKTLEILFEQINFLRSKNISYDDICILC

WKNSDVDMVLDFLREQKIPAFTQSNVLLENKASVRLVLEYAKYCIFGDEFYLVFLKELLGFDPRKIALDF

SKNAMENVLFLIKELKLDLNDIALIQFIEYAKTKENFLKLLFEPCTLKIVSEQNMGVSIMSVHKSKGLEF

DHVILLDSLSKNNSNNEDIMLEYDVNQGWQLHIKDKIRELTKEPIYTLFKENIIRANYEDDINKLYVAFT

RAKESLIIVKRNEESVNGNYPSYFKGGFLNIHSQERGYLESKEQILSVKKESIQALQKFEKITPQEIQSE

ERLDSKELYFGNAFHFFMQNLKLPKGENFQILTQRCKSKFRHFLDESDFEKLFKRIEILLKNTQFQNLIG

DGKLLKEQALSFNGEIKQLDLLALKDEEAFIIDYKTGLAMQDKHKEQVRTYKIAISEILKKDKVCAFIVY

CLENEIQILEI

>ABS43541.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MLKQLFYILTFIFILCGCSLRHETINKNENIILKDKGIDSNIFFKKTGKILKIRNANAPLYLNSRAIIYI

DNGFSNKYAHYFWGDLPSNLYSSLILSKFEQSNIFTTLLSSTSSLNADYALESRINSFEQILNNNENYAQ

ISISVNFINLENNQIIAHKIFNTKEKIEKKDIRSTYNAFQKALNKIGNEIVFWVNSNLS

>ABS43540.1 3-deoxy-D-manno-octulosonic-acid transferase [Campylobacter jejuni subsp. doylei 269.97]

MIFFYYFLIWMAFLFCAVFILLLSFLKSKYKTSLKSRFFLYKNLHQEKADVHFHACSYGEVRSIKTLVLK

FDSRITTITQTGFECAKEFCKKVNYLAFENFLPFWFKPCKVLVIFEAEYWLMLVFMAHIYKAKIILLNAR

ISDKSYRAYQRFSFFYKKIFYYIDEVFAQSDLDKARLESLGAKNVKIFKNIKANLEIKNNKIYAKPKEKL

IIFASTHKDEEGLLLDHFKLEENEKLIIAPRHPERFKEVENLLLNKGLEFEKFSSLKDENKKFSKKILLL

DALGELVNFYAISDVVVLGGSFIEGIGGHNPIEVAYFDNVLISGKFIHNQKALFEEVENVYFCENLKDLN

DKIHYLNLKAKISKKENLDLIIQTIQKGIDARKSL

>ABS43539.1 ribosomal protein L11 [Campylobacter jejuni subsp. doylei 269.97]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>ABS43538.1 putative TraG [Campylobacter jejuni subsp. doylei 269.97]

MGDLKKRVVISAIACAFLLPSALNANLSSFIQNNLGSSITSENSGYYKSQVSGFISGGSSRIRWGGGETI

RPFSVTAPSFNVGCSGIDMIFGGFSYLNFEYLVKKLKKIASAAPSYAFQMALSTLCKDCQTIMDELEKIA

NAINSMNFDTCQMTTNWTNKFGKMLSSNAESGQNDSWLSSFAKGMEGTAQTVQNFVKEANAFVNGTTPDE

SGETNAAKILKQGSIIQKVIEKGKASFFAEAFGEDQYEDILRGVFGDLVAYTEKSTSVTSKEMSDPEKVM

LIGPTLNTDKFLEALWNKNGENKSITLEFTAYTISKDENGLYQEPVGKKTKVTIDKDIRSLLIEKFKAIV

AKIKAKSALDDADKNLINAAPLPVADILNIEASTELNGDAVHEFVALLMVDAFVNELFNEFVTNINTVQG

LDPKFSSDHKDDLAKFNAAVAKVQETTRTLLSENAQAIIRDNQQVDSIRKIISNFYGVSDIFNYGTGR

>ABS43537.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNKYLEQLVLLSKIDQEIDSYEPKIDSINKTLKDTELKIGKINIDLEKIDEEIKDIENQKVQNNAHISEF

SAKIKELSKKSGAVKTEKEANALKIEEDIAKEQLDAANDEIVRLDKILDNKETYKKELEEEKIKQEQNIN

EIRVSIKSEMEVLEKDRMSVYDKKTKLVGEMNQKVLSFYEKIRKWAKNTAVVPVKKQACYGCFMKIYDKT

YLSVVKGEEIVTCPHCGRILYKEQEEQN

>ABS43536.1 DNA gyrase, B subunit [Campylobacter jejuni subsp. doylei 269.97]

MQENYGASNIKVLKGLEAVRKRPGMYIGDTNIGGLHHMIYEVVDNSIDEAMAGHCDTIDVEITTEGSCIV

SDNGRGIPVDMHPTENMPTLTVVLTVLHAGGKFDKDTYKVSGGLHGVGVSVVNALSKKLVATVERNKEIY

RQEFSEGKVISEFGVIGKSKKTGTTIEFWPDDQIFEVTEFDYEILAKRFRELAYLNPKITINFKDNRVGK

HESFHFEGGISQFVTDLNKKEALTKAIFFSVDEEDVNVEVALLYNDTYSENLLSFVNNIKTPDGGTHEAG

FRMGLTRVISNYIEANASAREKDNKITGEDVREGLIAVVSVKVPEPQFEGQTKGKLGSTYVRPIVSKASF

EYLTKYFEENPVEAKAIMNKALMAARGREAAKKARELTRKKESLSVGTLPGKLADCQSKDPSESEIYLVE

GDSAGGSAKQGRERSFQAILPLRGKILNVEKARLDKILKSEQIQNMITAFGCGIGEDFDLSKLRYHKIII

MTDADVDGSHIQTLLLTFFFRFMNELVANGHIYLAQPPLYLYKKAKKQIYLKDEKALSEYLIETGIEGLN

YEGIGMNDLKDYLKIVAAYRAILKDLEKRFNVISVIRYMIENSNLVKGNNEELFSVIKQFLETQGHNILN

HYINENEIRAFVQTQNGLEELVINEELFTHPLYEEASYIFDKIKDRGLEFDKDILEVLEDVETNAKKGAT

IQRYKGLGEMNPEQLWETTMDPSVRRLLKITIEDAQSANDTFNLFMGDEVEPRRDYIQVHAKDVKHLDV

>ABS43535.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. doylei 269.97]

MYIFIIVLSALLDIVSNLLLKKSDGFKHKIWGLAAIINAILAFFLLSFSLKYVPLSIAYSTWGAIGIIGT

CLGGWILYKEKLNKIGILGIVIVIIAVFLLNY

>ABS43534.1 4-methyl-5(B-hydroxyethyl)-thiazole monophosphate biosynthesis enzyme [Campylobacter jejuni subsp. doylei 269.97]

MSKKVLIPLAQGFEEAEFIGIVDVLKRARELNPDLEVIIASLNSELLVKGANGISIKADCSIESVDIENL

DAIALAGGFEGMMNLKNSNVILNIIKQLHSKNKIVAAICASPIVLNEAGVLEGEFACYPSCEVGLNGNRV

NKAVVVNKNVITSAGPATAILFGLELAKKLCGDEIYQKLYEGMLLPLTK

>ABS43533.1 hypothetical protein JJD26997\_1276 [Campylobacter jejuni subsp. doylei 269.97]

MGLKNGGGGGNLYKKYIRIAYFKYCKKQSDLIKYKFKISIILKHFISKEENEKNI

>ABS43532.1 high affinity branched-chain amino acid ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MDSTLFLQQLVNGLSLGSMYALIAVGYTMVYGVLRLINFAHGDIMMVGAYAALFCMTNLNVPFLGALSLA

MIFAACVGIATDRIAYKPLRQTPRISLLITAIGISFFLQNLFNMLFTSTPRTFAPPSYFEESVNFGGVIT

TYGSLMVPALTFVILITVLWILYKSKYGIAIRALAFDIQTVNLMGIDANRMIAVVFALGSALAAVGGVFW

AANYYSVEPTMGTLIGLKAFAAAVLGGIGSVVGAVLGGLIIGFTEVVVVAFFPDLSGFKDAFAFIFLVFI

LLFRPTGILGINFEKSRF

>ABS43531.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQKIFDAHLHLWDLEKIPISWIKDDEKLEQNYDFFRMKQEYKEFEFIGAMYVEVNSDDLEKEALFALEQK

KLHNLLLCLADLKHKEELNSFREVMHVSKKGAKRLFEVDFEEKIAILKTFNIPFEACMKNEELSFLEKFL

NKNPNLKVVLNHLGSPKINRFNEYKKDLSFLKKFQNLYIKLSIPDGFSQETPKEFTFELFAFLKENFSED

KFIFGSNYPVAKITPAKWAKLIIESKIFDDLDKIFYKNALLIYKGG

>ABS43530.1 aminoglycoside N3'-acetyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKYFLEHNGKKYSDKDLIDAFYQLGIKRGDILCVHTELFNFGVPLLSRNEFLQTILNCFFEVIGKEGTLL

MPTFTYSFCKNEVYDKVHSKGKVGVLNEFFRTSGGGVRRTSDPIFSFAVKGAKADIFLKENSSCFGKDSV

YEILTREGGKFMLLGLNYGHALTHYAEERNTSFCRYFKEFKGFVIDELGQKREKRINYYVRDLEKAYVCS

LDKINEIVRQTRYYKSIKFAGDFLESYDAKEYVKAIGNALKQDKFAIYEKLLL

>ABS43529.1 peptidase, M48 family [Campylobacter jejuni subsp. doylei 269.97]

MTLIAILCLYTALLSWISYAQIRFLEREKDKQAQILSEKDYQNAADIAIENEKFKLFSNFYNLIINIAWI

SFGFLYLKELLISNNTRFENTLFLLSFLIITSILNLPLSIYESFIKDKAHGFSNMTVKLFIKDTVKSLIL

TLIFGFLILYALLFCYDFFGTFWWIVAFIFAFCIIVITNLIYPTLIAPIFNKMEKLNDENLLKKISSLMK

QCGFSANGVYVIDASKRDKRLNAYFGGLFKSKRVVLFDTLLKALNERELLAVLGHELGHFVHKDIIKALF

NGAITMFLLFFVFANLPEFVYLESHLEGVNGGVFALLFILANIFSFLISPILNALSRKNEFVADQHGAKV

TSKEDMKNALIALARENKAFIKASKIYTFFYLSHPSISDRIKALS

>ABS43528.1 capsular polysaccharide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MIIIFPMAGLSSRFVKAGYDKPKYMLDLKGNSVFFHAVNSFKKYFKDFKFIYIYRDIENTSNFIKEECEK

LGIKSYESVRLEQETLGQAHTVRLGLERVNIKDDESILIFNIDTFRPNFSLPTTLDFCKIDGYLEVFEAD

GEQWSFVLTGENDNVIKTAEKERISNLCSSGLYYFKKTKDFKEIFDRMKAENDFSKGELYIAPMYNYLIK

KGLHIKYHKISLDEIIFCGTPDDYERVKINEKG

>ABS43527.1 flagellar L-ring protein FlgH [Campylobacter jejuni subsp. doylei 269.97]

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVIIQESTTQSTQANKATSRTNTSNLDGGTLTGSSGVVASALDKVNAYSNIGFQTNSSNNYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>ABS43526.1 heat shock protein HslVU, ATPase subunit HslU [Campylobacter jejuni subsp. doylei 269.97]

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLTNAALNLVKNEQREKNKDKINEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGDLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRSENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKAFYEILTRPKNSLLKQ

YSQLLKTENLELDFDNEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>ABS43525.1 flagellar protein FliS [Campylobacter jejuni subsp. doylei 269.97]

MQNSLAYNAYSQNQAGIESPQKLIEMLYEGILRFCARAKIAIRNEDIEQRVYFVKRTTAIFIELINTLDY

EKGGDVAHYLSGLYTREIQLLSLANLENNEERINEVINVTKGLLETWREAHSNETVAQ

>ABS43524.1 hypothetical protein JJD26997\_2017 [Campylobacter jejuni subsp. doylei 269.97]

MVSDISMGNPNLMTAVDTSVLKKSMDTNEALMNELIEGMEGVSQASAPQVSSSSGLDIYA

>ABS43523.1 hypothetical protein JJD26997\_1528 [Campylobacter jejuni subsp. doylei 269.97]

MAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLSD

KEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>ABS43522.1 hypothetical protein JJD26997\_1117 [Campylobacter jejuni subsp. doylei 269.97]

MQNIGGFKALSKELITKLLNEFPNKSILFYDDFIKECEIYKIDFVSCIYFLKECKVLKYDKENNGDFSGV

LISPKAYLYFSKNDLKDIDDLIEFCIK

>ABS43521.1 flagellar hook protein [Campylobacter jejuni subsp. doylei 269.97]

MMNSFYNGISGVKSNSFGIDITANNIANVNTTGFKYSDAQFKDIFYNTITTQSTNPAQGGYGSGAASSQV

VFEQGSPIASDGEFDVALQGKGFFGVLEADGNAYYTRNGSFKRDANGYLVDSYGNFVLGTMNPVFTGMNY

SDRVAGLMGDYLNTGTPVNNGFTVNSNNPFSIGTTVSQGAIKVPVNMYLPPQVTQNVKWSGSLNTNTITE

VVKVDLDPSKFNVTKTEDGKYVVSGSVGKEDVFSAKAGDRIILNFTDDNGVKTSFEATLDENLNFKSNEL

DLKGLDENSIKLDTAQISTEQQKANKDILESPIYNADGSKSTLRVTLERVLPQESDNIQYKAIAQIYDSN

RNAVGNPTEGNMVFDKNGALLQNNITSIANPNGGTINIDLGSPYDANKPGSGYSGIYIKEGVEKNVVTQQ

DGVAEGFFEQYNISDDGSIVAQFSNGKNAIVGKLALYNFINEQGLAAMGDNIFAATANSGDASFIMKDGQ

VVNTAKFKGGFLEQSNVDLSTELSNLIVTQKAFDASSKSITTSDQMIQKAINMKR

>ABS43520.1 GlnD family protein [Campylobacter jejuni subsp. doylei 269.97]

MLNKELEIFKKNLSSYTQSCRKFFLKQGAFSLYHSKNMDNFIKKAYDIVLKDYFDDFSPPSDNIPFCVLA

SKAYANNSLCFNESISLIFVYKDIKAFHLKPMIKAFIEILNDAHLQIDSVILEFNGLYNASNELKTSIIQ

TRFICGSRILFKGIKTKFESILKENKNDFAKLLLENFKEFDIPFIKQEFNILKDFGGLNHLRSLESLLVL

FKTSPKNYALNFIDEKNLSELRLAGDFLLSLKSAMNLLSAKDEDEFLLINVHDLSELMYKKAKKHFGANE

LLVQKALQSMHTIGFYTHFLAKQIQDGLNHTLKQEYKFKTLVEVLEYLLKLEDKQVIFDLHLVFSLRRLK

YGKKDIEKALILFEKIFYKRHSFCVLKLLLDSGILKDLCKPFWTVRFLSDEEGNYSFDEQVFLMLSEFEK

YEDELEILQKLKTDEKMILKLVILLSAIESENEISLAGIYRAYCSKFDLKNEILEWGLKIFKNNNALKDL

VEKEDIYNPIVVSSLVSKLENLENLELLYTLTWLKAKALNYNAFYFRVLDKLLENAKQGFEDENLLEESA

RRVKKELTLKRSKIFLEQDEILQDKIIHIKSNLFIIKNTFEDIVMISKLAKENDFKFWFSNETNLSLQIV

APLHFNIAIILSSLTNLNLIFMNFFELFDDKIYLRFEYDNIISDEQKLKLCELLNSNLSGFNLKKIKKPI

IKKDELKLDLNYSKMYAKLGLNTKDQQGLMAYLMNVFNELELVLCAAKIQTIRQRTRNIFIFQKNEKLEH

SEQKLVNLLISE

>ABS43519.1 hypothetical protein JJD26997\_1440 [Campylobacter jejuni subsp. doylei 269.97]

MIKIAFFIIFVISFLAAQSPANFKEDNNITKEQNIFKEQLPKRIKIPTH

>ABS43518.1 flagellin family protein [Campylobacter jejuni subsp. doylei 269.97]

MRITNKLNFTNSVNNSMGGQSALYQISQQLASGLKIQNSYEDASTYIDNTRLEYEIKTLEQVKESTSRAQ

EMTQNSMKALQDMVKLLEDFKVKVTQAASDSNSQTSREAIAKELERIKESIVQLANTSVNGQYLFAGSQV

ANKPFDSNGNYYGDKNNINVVTGARTESPYNIPGWDLFFKADGDYKKQISTNVSFTDNRWDLNKDPDKTK

YLTGDSKWKQLIGQGYVKDNGLDPDKDFEYDDSKLDFPPTTLYVQGTKPDGTSFKSAVLVKPDDTLEDVM

ENIGALYGNTPNNKVVEVSMNDSGQIQITDLKQGNNKLDFHAVAFTPQFDDKAEYQNIKDAMAANPPMSM

DNLTNAVMTAATQQNNGDITKLNNPVTVTINNQQFTIDLKQTDFIKSNMTDSDGKPANGADYDNVYFEKN

GNTVYGNVSQVIKGSNAYATDSTKLSEVMAGDSLNGTTLNLKVNSKGGNSYDVTINLQTSTVSFKDPKNP

NQTISFPITHTDPATGNSGVVTGSNDITYKQLNDIIGMFAADRIPTTTIQANNGQINNADYTQIQQLMKD

SQATVDVSMDYKGRISVTDKLSSGTNIGISLSDSQSGQFPQPPYTTTAQVQNGPNFSFSANNSLVIDEPN

VDIIKDLDSMIDAVLKGNMRADGNSADPRNTGMQGALERLDHLADHVSKLNTTMGAYHNTIDGVNTRVNF

LSVNVQSIKSNVIDVDYGEAMMNLMQVQLAYQASLKASTTISQLSLLNYM

>ABS43517.1 hypothetical protein JJD26997\_1121 [Campylobacter jejuni subsp. doylei 269.97]

MSFTDLYFDREEKRISNYTKELIANEFESKENLESIFANLQDFKNSLETSLEDDEDIATSLQAYGDEFIN

DVHDLLKKLRKFEKKYKKLF

>ABS43516.1 signal peptide peptidase SppA, 36K type [Campylobacter jejuni subsp. doylei 269.97]

MQNLKSFFKALGCGIKFINTYFKTFVLLLIVIWILVPSANSSSKLANLERIDLKGEIFDSSAVLEKIINA

KNDSNIKGVLFVIDSPGGAFAPSMELALAIKDLKIKKSVLVYASGTMASGSYLAGVGANKILANPASFIG

SIGVIMQGADLSGLANKLGIKEQTIQAGEFKSAGTFARAWNENERNFLQGLIDQSYDLFTGFVAKERVLD

LNKKDQWANARVFLAAKAKELGLIDELSNYENAKKELEKLANVSNPIWKEEDKIDKFLNRLKGQASSLIS

KSLIEIAYKTNSGFINAR

>ABS43515.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MKLSLRYVLNQFLSTNLSIFFVLFAIVSMVFFIQLAKLTSSIEISFLDLLKLYGFMLPRILIFTLPISFF

ISLTLALFRLSKENESIVLFTLGFSPMILAKFFLKIASLISAFMLVVALVMTPIVFELQDNFVNYKSTQV

KFNYKTGEFGQKFLDWMIFIEKQDSDKHENIIMYRPKHKAGDKEQLIIAKEAHVQRKDDSFAFSLNQGKM

YNFEQGQSIFSGEFDTLVVNTQFNTDNLQTKKFYEYWNDLNENPQRAREFVIYITIALFPLASTLFALCF

GLVTYRYEKGYVYLGMFGVIAIYFGLLSSFSQPPILACLGIFSLSLFVSAYCFKKMILNRY

>ABS43514.1 hypothetical protein JJD26997\_1104 [Campylobacter jejuni subsp. doylei 269.97]

MEAFERGEKIQANYKLKNFEYWEDTKNPIWDWHFYDYRVKPRVKITEKEFNLIKERLTGWKYNKDLIYEN

QRESFFSNAFGELRKYFRAKNDLEKVNALCNIVVYCFNDFDINCQEILEIHGFETNKITIFDIVRDLSSI

TTEFHRNEIPDYTFIHRLVFDCFNLINNLGFNFYKCMLETIKDIESHAWYYDESLGKFVEKIGAYSEREA

FDLAINDFKLTNIPNKYFLDKEDKDYWYVKIEDNNGD

>ABS43513.1 putative cyclopropane-fatty-acyl-phospholipid synthase [Campylobacter jejuni subsp. doylei 269.97]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVLDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>ABS43512.1 helix-turn-helix domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKTLFVKGNRGKNKRSYDQIMDILLTQLEENLPSKVVASRYDVTLQTVYKWRKIYAKHLENYKKMKEAEI

KNANKEDKDLKEEKIHNAACGKRLRLLRTSLNLSQDRIAKILGITVAVYMRIERGYTVLNSYIITKLYKF

LGINPIYLITGEGDCFLIKDTDLFEKINTEQKKYSNRNNTKEDEEDLL

>ABS43511.1 DNA methylase [Campylobacter jejuni subsp. doylei 269.97]

MQCEIVNSDIIEYITKIADNSIDLIIADPPYFQIKGEFDFGVFKDKHEYLSWCKKWLIESKRILKDTGSM

ILWGSVGNREITFARLAIMIEDENIFLRKNWITQRNTRGIGTKTNYMSVREDFLFLTKSNNYTFNIPYTN

EKSTRKDFGANGKPRKNTHKRVSNVWADIAEASQSSIERCNHPTVKAQKLCDRIIQTHSNEGDTIFVPFV

GSGSEIISAIRNNRKAFGCEINKEYCNLAKDRVNMLLKRA

>ABS43510.1 tRNA(Ile)-lysidine synthetase [Campylobacter jejuni subsp. doylei 269.97]

MQIKDEILSLLKRGKNLLAFSYGSDSSALFYLLMQEKIDFDLVMINYKTRKNSDLEELKAKELALKFHKK

IFIKYAPEFQSNFEKKARDFRYDFFEKICLEQDYDHLILAHHLNDQFEWFLMQLSRGAGLAEILGMQEYE

QRSNYTLLRPLLFISKDEISSFLKEKDIFYFHDESNENEKYFRNYIRKNFSNAFVSEFHQGLKRSFSYLG

KDRKKLYDFENIKEIQGLFICSKNESLIARVVKMKGLLLSTAQRKELLKGDCVLGGKIALVYKNEQAIVF

EYETCQKLPKNFKEECRIAKIPKLLRAYLYNHKIDISSLSF

>ABS43509.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKYCLAPCFVFFLCACGVKNQNFSSQSLMVLIVSPMIKVNDAAFLKKENNALNLEVYKLGQAFFELKIKD

KICINAVCYDKKVFNQKFFKNVYYDDILSDILKANTLWQGRNLEKTDCGFEQNLKAKNYEIFYQVCDNKV

SFFDKISHTKIILTHIQN

>ABS43508.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLKKLTEKYISAFNKKDIKEVASLLNENFVLEDPVVKKIEGKEECLKVIEDILNSCKKLSFSAKNIFQDK

NTTFIEFILILDETRLEGVDIIEWHNEKIVELRAYLDIPKG

>ABS43507.1 acetyl-CoA carboxylase, biotin carboxylase [Campylobacter jejuni subsp. doylei 269.97]

MEIKSILIANRGEIALRALRTIKEMGKKAICVYSEADKDALYLKYADASICIGKARSSESYLNIPAIITA

AEIAEADAIFPGYGFLSENQNFVEICAKHNIKFIGPSVEAMNLMSDKSKAKQVMQRAGVPVIPGSDGALA

GAEAAKKLAKEIGYPVILKAAAGGGGRGMRVVENEKDLEKAYWSAESEAMTAFGDGTMYMEKYIQNPRHI

EVQVIGDSFGNVIHVGERDCSMQRRHQKLIEESPAILLDEKTRTRLHETAIKAAKAIGYEGAGTFEFLVD

KNLDFYFIEMNTRLQVEHCVSEMVSGIDIIEQMIKVAEGYALPAQESIKLNGHSIECRITAEDSKTFLPS

PGKITKYIPPAGRNVRMESHCYQDYSVPPYYDSMIGKLVVWAEDRNKAIAKMKVALDELLISGIKTTKDF

HLSMMENPDFINNNYDTNYLARH

>ABS43506.1 transcription elongation factor GreA [Campylobacter jejuni subsp. doylei 269.97]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIVELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIMDLDTEKESKYTLVGICEGDLDKGYISIASPIARAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>ABS43505.1 ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MELLRAENLSHSFDYPLFEGLNLTLNTKDCIAIQGSSGCGKSTLLHILSSLLIPKKGEVFFKGSSLYQID

ENERLKIRRYDFGIIFQTHYLFKGFSALENIELASVLSDQDLDEKILKRLGIDTLLHQKIGKLSGGQQQR

VSIARVLCKKPKIIFADEATGNLDFDNAKNVIELLISYVKENDAALFFVTHDSKLASFCDETYTINANGI

C

>ABS43504.1 O-sialoglycoprotein endopeptidase [Campylobacter jejuni subsp. doylei 269.97]

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELEHSIYGGVVPELAARLHSEALPKILKQSKKYFK

NLCAIAVTNEPGLSVSLLGGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDRGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNTPLKHSKELAFSFS

GLKNAVRLEILKHENLNEDTKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>ABS43503.1 flagellar switch protein FliN [Campylobacter jejuni subsp. doylei 269.97]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>ABS43502.1 2-isopropylmalate synthase [Campylobacter jejuni subsp. doylei 269.97]

MKNNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHIQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGM

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLQGFYTDIKCENISKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYESEEENEFVLEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPVLKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGLSTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>ABS43501.1 GTP-binding protein LepA [Campylobacter jejuni subsp. doylei 269.97]

MKENILNDIKGFANATLERLKSFDKDIVKDLTPDITSKELSSLFSYEFKSDNGVSFNKRGSGVKRLFLLS

FFLEDAERKHQSNMIYAIEEPETSQHPNYQRIIIESLKKLAQNKGRQILLTTHTPEIARMVNKENIIFIQ

KDDKNKRIVYHGDEIDIEILVDALSIIVPNSKALSKGRELVKAMKEIVPRQLFEVAIQASIGNKIIAREN

VKSMGKNVTAKCYGGDITRKRKLLEKQKEGKKRMKAIGKVHLPQEAFLSVLKIDMLKAKRNMPLKQ

>ABS43500.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MHFTIFHIIAFIILIICFALICILIFLKIKQKEMALISYTIATIFTALLIYSIFLTINQFTTQTDLSKLT

YTRDLRHESIIVSGKVQNLTKFEIRKCYLILSILNQKQVGGEIFNDKNVRNAKMQNTSVSYTIEIIDTLP

GNTYKEFRASVPFPPSFNNPEFYHTLKCI

>ABS43499.1 ribose 5-phosphate isomerase B [Campylobacter jejuni subsp. doylei 269.97]

MLREKIYIASDHAGFELKEKICALLKEKNIIFNDLGTNTCASCDYPDYAHLLAEKIDERSFGILICGSGI

GISIAANRHKNIRCALCHESLSAELARRHNDANVLALGGRLIGIELAIDIIEKFIQTPFEGGRHMQRIQK

IEVKI

>ABS43498.1 4-diphosphocytidyl-2C-methyl-D-erythritol kinase [Campylobacter jejuni subsp. doylei 269.97]

MKAYAKANIFLKLTGFDSRKYHLLESRFILLKDVFDELELVDKESDSKKEFEIISNFKCENNIIQKAYLL

LSRRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFNSANVSGCGEIIEEFEDDIPTLKWTFPQISCQTKAVYDEFDREIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>ABS43497.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIKLFLLASFIYIALIFAFAWHLELGSYTLNISTYTFELPIMIWLVIPLFIYMILAVLHIAFYGFLRYL

KFKHFFKDAAKFETYTQDLLLEKDLKTTFQTKEFRAVAQLFKTIKTHEKIPHSNKINEILDLIDGLNKNE

FFNLSKFKLENNNALYLQNEKNHLKNDANYAYSKLKNLNEIKDELEEIAFNTLIEKASYEQIKNVKIPKK

PSQVLTLIKRFKEGNLELSAAEYEVLLSHNILSEKDYLNAAKLSTKLLNPDAILGIFNKMKNEKSEALRA

YLYLLAEFGLLNELRGQIHNDDKKFNDFKAFLALREKNIKIDLNQLIQ

>ABS43496.1 hypothetical protein JJD26997\_0857 [Campylobacter jejuni subsp. doylei 269.97]

MQRINLTLNNEASLMLDKLAKDLKMSKTQILTDALKQMHENKRIEQRKALWIKSFEAFKNDEEYQKEQLE

LAEAGVGDGII

>ABS43495.1 flagellar M-ring protein FliF [Campylobacter jejuni subsp. doylei 269.97]

MDFKNMLYQIGQLYQNLTRKQRIVIATSIVVVVGFLVFLALFRGSGSNANNGYAVLVENVSPSSSAAIVA

KLEQNNIPYKLESENKILVPQDQIYRQRMFIASEGFIKDSRVGFEAFDTQAFGATNEEQKVKYQRAIEGE

LARTIETLEPIRSAVVHIAFPKDSVFTERQIPPTASVVVNVREGLKLTRKQIDGIKNIVSAAVPKLTKEN

VKISDQSGVPLDEQEAYEDDLVRAQIKFKSDQEKALEDKIIENLAPFAGGMDKVKVSVNIDFDFSKQESQ

SEIYDPNPIVRSEQTLNEERTGRKDPEIQGVPGAVSNIGPVEGLDNKGQIDTYKKNQVTTNNELSKTITN

IKKQFATVLRTSAAVTIDGRYQDVVDENGDVKSEYVPLTKEELASVESIVKNAINFSATRGDSVVVQNLP

FHRESIRVESKVKTFYNRFVEPFIPPVKYFIAAILLFIFYKKVIAPFTQKMLEDVAAQEEMQQGPNAVLD

DAEDALEKFNAVKKKVEEQLGFGDNFNEDSIQYEVLLEKLRGLVSDKGEEIAALLQNLIQNDSEFGEKDM

>ABS43494.1 tRNA 2-selenouridine synthase [Campylobacter jejuni subsp. doylei 269.97]

MLSEVEFAEFQKENFSLLIDARSPREFLHSHLIGALNFYALNDEEYQEIGTIYKKNQALAKARGASYICQ

NTAKHILEITQNFRIGEKVGIYCSRGGLRSKSIAVILSELGFRVVRLKGGFKAYRTFVTHYFENEINFDF

FALCGNTGCGKTELLEQLPQAINLEKMANHLGSSFGDILGKQPTQKAFEAELFHNMRNSENFAFIESESR

KIGDIILPLKFYEKIQRAFKIYCFCSLENRVKRIQKIYQEKMTPLKFQQCVQKISPYISLNLRQDLLQSY

ERKEWQRLIIMLLEYYDKTYKKPDKIDLELNTDDILKAKEELLDHFKAQLLF

>ABS43493.1 hypothetical protein JJD26997\_1989 [Campylobacter jejuni subsp. doylei 269.97]

MKTLFLNHKYQASYITFIVFIPLLFIIFRSNDFFKIEIRRRFFFFGNKTIYPNQSNQ

>ABS43492.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIDTSTSLTHSLTNNVDKKELSVLKKEDQDKIPVQDLSSLNSDGVKVVFENKQGELIALNLSDENYSSL

QKNFGSYTNYVARNDGSIRLNGEANQFVSNWFESVKDNFGFLNLNNKQQSVKLNFNTSTLQQSMQNLGFK

TSDEKISDDANIEEKLNFFIDKDVNKDGKVDDSDVKEPSMREILSDIKEASGGGANAMKTIDPQKINKKD

DKENNIKEKEDEDLLQKAQEKGLSALSADEQAKLKASNPEEFEKLKQKSLQELSQNLNKDFKNKIENQEV

QIIDKRV

>ABS43491.1 hypothetical protein JJD26997\_0350 [Campylobacter jejuni subsp. doylei 269.97]

MMHRFVFILLLSLNAFAFYPVYYSPSDWLKRSFPNDFFPNPSFSGKYSTNGLGLLVSQRGALYFKHTDFR

FDYVDDGYPFSDYFFTKFNFYVPADVLKSTHILSPVGITYTNIFADSAASLNGTSLGILMTFGKPVTLES

IDNSCLVPVSAFYELANNYGNYMYFDGGDTYFNSPLIMNSGDEPCRNSFLGGYFDLSPNINVQTVYLSYY

EKVSEPCPDNHIFRANSDNTITCEPCPSSTYADIFKNICVAKISSITNPFDYAKAQCSSIGSSLKYIEDS

LNIVNGGDNFYCETICNNGTKINNYNCPERINFGDIINYEPNCIKGNCGNGEGSQNTSSNNYPYDKPYQP

PSNSQKVEVSENEKGKICFSDDNCISIGGATVNDDKQICINGNCSNINSGSDNRDNTVCINGDCYHLGNN

GSINHNQICINGNCSSINSSISNGNNGASGNGGSVGSGGSGASGNGGSNDNNNGLGGLCQNGECGNYDNS

SLNSYFSTLDGLSANLGSFKENLEGTYNNFKESVENTKKIFDNGFLNFRNTGSLKSCPLVFDYELGNGGK

QNFNLDLCEFLFPFSNLFYLIFYIFFSAIALLFSYKILKDVFHLILNSRSS

>ABS43490.1 putative riboflavin biosynthesis protein RibF [Campylobacter jejuni subsp. doylei 269.97]

MLNIFTTISKINITSLAMGCFDGMHLGHLKLVKCLDENGALLVINKFKGQFLCSNRQKEEISGKKVIELD

FESIKSLDGKDFLSFLKKEFVNLKFIVVGYDFSFGKNRAYSAKDIESLSGIKTIIVDEFSIGGIGVHASL

IKDFLSKANLQNAKEFLGRNYSIKGKLINGQGLGSKELFATINLDCEGYFLPQNGVYATLLKSQRKIYKS

VSFLGIRSSDENFAIESHILEELGENFTQGEFFELEFISFLRENQKFQDLKKLKNQITKDIEQARELLRK

NDER

>ABS43489.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKIKKILLLVAISCLFVACSNDKEKQQNDVNLSTEASINQSDDMNFKLNLIDGESISVKKENAVLNFNDE

DKATLFVFFTTWCTPCIAEIPHLNKLQEKYNNDFNIVGVLLEDKSNDEIQKFIEQHKISYKVANGENNYL

LVKALGGVNGIPTMFLYNKHSKLINQYLGLIPEEMLEIDIQKAIL

>ABS43488.1 cytochrome c552 [Campylobacter jejuni subsp. doylei 269.97]

MKKNILRLGIVVLVLLIAGVLWLNNDINQKKEDETNKNAIAANADFSLLSDDDPNFEKWGKVFPEQLKMY

LTVEKEEPKATEFGGNLAYSKLIRFPQLTILWAGYPFSLDFNEERGHFWVQVDQMKTARNNKDFLNAHGL

AAFKGQPAACMNCHSGWTPWLIKNVAKGDFTAFNSTNYWTMIKNIPAVDGIVENSPEHAGPHGGKRMGVT

CADCHNPNDMSLRLTRPAAINALVSRGYEKDPVQGVKATREEMRTLVCSQCHVEYYFKPTGEKVKVMGEI

IVDDSSKKWWNGTQKNYDEYEFWRDGNKAKEIETDGIVLTFPWSEWKKGQPFRIEMLDDYYDKVRGVFGA

DFTHKLTGAQIIKIQHPESELYSGGVHAANGVSCVDCHMPYVREGAKKVTQHNITSPLRDINSACKSCHK

QSEDYLKAQVLDIQNSIAHDQRTAEYTIVSLIMDTKKLRDELGNMEKFQSDGKADAKKISEELKEVLELH

RKAQMRADFVNAENSTGFHNPREASRMLLQAVDMARMGQTKLVEIAAANGIKDFKTSNLGFKDIQKFNPG

ELYYKVDVNNHKAGERYYADEKDVNGNPPKELLEHDKELAPYNYQVIDKK

>ABS43487.1 putative acyl carrier protein [Campylobacter jejuni subsp. doylei 269.97]

MTKTEFLEELKEAMHRDENLSEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSDLINLA

KLD

>ABS43486.1 3,4-dihydroxy-2-butanone 4-phosphate synthase [Campylobacter jejuni subsp. doylei 269.97]

MEFVSVEQAIKDLQAGKMLVMVDAEDRENEGDLIFPAQFSTQEKVNFMIKEARGVVCVALDEALAKKFEL

PLMVPKNTSNHETAFTITVDAKDATTGVSAYERNMTIQIFADDNAKASDFVRPGHINPLIAKKGGVLERT

GHTEGAVDLCKLAGLKGACVICEIVKDNGDMARRKDLEIFCQKHDLNMIAVSDLIEYRLKHESLIKLEEK

NQSVLAGFKAQKFIFSDHNQTQHIAFSFKELKKCENVKFHISGSDFELLTSNKFSKLLEQIKFLSENGGI

IVFMQGEKSNTTQFKNYGIGAQILRYFGIEEIKLLSQSCDKDYIGLEGFGLNLKACNFN

>ABS43485.1 D-isomer specific 2-hydroxyacid dehydrogenase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKIVCLDAATLGDYDLSVFEKFGSLQIYTTTNKEQTIERLKDANVAMTNKVVIDKDVIDACKDLKLILET

ATGVNNIDIEYAKEKGIIVKNAAGYSTMSVVQHTFAFIFAFLNQVPYYDKWSKEGKWCESPIFTDYSRIL

NTLSGKKHGIIGLGTIGKEVAKISKAFGAEIYYYSTSGANKNADFIHLELKDLLKTCDIISIHAPLNEKT

KNLLTFEELKLLKDNAILINVGRGGIINENDLAKIIDEKNIRVGLDVLEIEPMMKNHPLLSIKNKENLII

TPHVAWASKEAVNALMDIVYNNLKEWIENGK

>ABS43484.1 cysQ protein [Campylobacter jejuni subsp. doylei 269.97]

MLNLDKFLQIAINASNQASKAILEERKNFKTWEKEDKSPLTSADLASNKILNDILGSTDIKILSEEKLLS

KEECEELKTFWLIDPLDGTSGFLKGSDEFCVMISLVHDNRPVLSLIQNPSKDDIFYAHAKTKVYKNDKLL

QINQQEYEKNKYKALLSVNHLSKDDEDFAKEHQLEAINIGSGLKFCAILEAKAGVYKRFEKLNIWDIVAG

DFLINQNGGFMGDFSKKYILYHPLNYRSSPFICVSSRNFLQDFL

>ABS43483.1 putative protein binding [Campylobacter jejuni subsp. doylei 269.97]

MFICRVSKRLEEKSETHKAYLASIINSFDDKDFSKLNECMKMDLITLFNEKFTEEEAKIIIEDCLVVFKH

IEKTAPIHKMIELGKN

>ABS43482.1 phosphogluconate dehydratase [Campylobacter jejuni subsp. doylei 269.97]

MVQNKLEQITKKIIERSKKTRNAYLERIYTYKGKIQKKDLGCANLAHAYASIPKHIKERIKDSETLNYAI

ISAYNDMLSAHQPFKNYPDIIKKEIFKYNAFAQFAGGTPAMCDGITQGYEGMELSLFSRDVIAMSVAIAL

SHNVFDGAFYLGVCDKIVPGLLIGALSFGHLPSIFIPSGPMTSGISNDEKSKTRQLFAEGKISRDKLLES

EMKSYHDIGTCTFYGTANSNQMMMEFMGLHLPNSAFINPNTTLREALVKEAASHMVKNKIKGIGELLSEK

NIVNAIIGLMATGGSTNHTIHLSAIARAAGIIINWDDFGAISSITPLLARVYPNGKADVNQFEASGGIAF

IIHELLKEGLLHEDADTIMGKGLEAYTKNPFLIDDKIIYKDGVKTSKNENILRNIENPFSKDGGVRILRG

NIGRAVIKISAVKEEHQVIKAPALVFHSQQEFLQSFQNGELEKDFIAVLPYQGPRANGMPELHKLTPPLG

ILQDRGFKVALVTDGRMSGASGKVPAAIHMSPEALLGGNIAKIKNGDLLLLDAKNGTLEILISEKEWQER

TANKFESQEFFGCGRELFAGFRTQSSSAETGAMSFGGYFS

>ABS43481.1 cell shape-determining protein MreB [Campylobacter jejuni subsp. doylei 269.97]

MILDQLIGFFSSDMGIDLGTANTLVLVKDKGIVINEPSVVAVERERYGSKAKILAVGKEAKDMVGKTPGN

IEAIRPMKDGVIADFDMTEKMIRYFIEKTHRRKSFLRPRIIISVPYGLTQVERKAVRESALSAGAREVFL

IEEPMAAAIGASLPIQEPKGNLVVDIGGGTTEIGVISLGGLVISKSIRTAGDKLDMSIVNYVKEKYNLII

GERTGEEIKITIGSAIQLPKELSMVVKGRDQVSGLLSRIELTSEDVREAMREYLKEIADALKMVLEMMPP

DLASDIVENGVVLTGGGALIRGLDKYLSEIVHLPVYIADEPLLAVAKGTGKALEEISLLQQLTNEE

>ABS43480.1 hmcD domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLVFMVLVNCVFASDELNIDSLFKKQIGLRSITSVSLLSTGNANSYSLYPNITIGGDPTIWNDTKQ

VFLTQTFIYTLTPKFDILISGGGSYARAEYTNFFTNEYSSKNRIGFDNLWLGFIYTGDSIADLIPQITFQ

TAVVQREKAINQTKNFYLKSQSLQASLRGYSDPVVYSIYTGFGYNQSRKFKTLKIEYGNSIYVGGDLSII

LSPKITLDLGAEQRFQMKQKINGYQNSEVRSIPTLSLGSTYSINSDTAVSVNASFGGSSASPDSIFGISL

WKKF

>ABS43479.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSDFLSFTLENIRNGGAFMAWLESRRLEWAPLMAARLKYLLEGRTFVLMCDEQRSWYEEYFLKNINSKAT

RPMLPFVSLNSLCKKKIQSSEDIALLNDLLDISFPNGYVYFYIGSASDNKSLIAKSRDDSLLWLFDEQLQ

DSFYLNSKDKDLDIKLISLYQLFDVSLDAILFSKVQLG

>ABS43478.1 adenylosuccinate lyase [Campylobacter jejuni subsp. doylei 269.97]

MVERYSREIMAKKWDMQAKYDAWLKVELAAVKAWNKLGLINDTDCEKILKNAKFDIARIDEIEKTTKHDV

IAFLTSVSESLGEESRFVHYAMTSSDCIDTAVALQIKESLELILEDVSLLLEAIKKRALEHKNTLMVGRS

HGIHGEPITFGLVLAIWYDEISHAKELLEHAKEVISYGKISGAMGNFAHAPLEFEEEVCKNLGLKAAPVS

NQVIQRDRYAQVISAIAILASSCEQIAVAIRHFQRTEVYEAEEYFSVGQKGSSAMPHKRNPVLSENITGL

CRVLRSFVTPALENVALWHERDISHSSVERFILPDAFITADFMLMRLTNLIDKLLVYPENMMKNLNLTGG

LVFSGRVLLELPFKGISREEAYKIVQRNAMKVWADLQNGKAAINEKNESLFLLALLGDEDLRKSLSEEDV

RKCFDYNYYTKNVDAIFKRTFK

>ABS43477.1 radical SAM domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQLVESFLSIQGEGKYNGKLAIFMRFAGCNFNCLGFNVKISKNDKTLIGCDTIRAVFTKDFKESYETLST

NELLKRVIKLKQGFNPIVVITGGEPLIHYENPEFIEFIQMLLKNKFEIHFESNGSIEIDFDRYPFYKECI

FALSVKLQNSGIKKDKRLNFKALKAFKNYAKDSFYKFVLDANTLDNSFLEINEILKEAPNQIFCMPMGEN

EQNLKKNAQKIAEFCIKNGYNYSDRIHIRLWNDKESV

>ABS43476.1 signal peptidase I [Campylobacter jejuni subsp. doylei 269.97]

MEILKKLYKFSQSWTGTVVIVLLVIFFFIQAFVIPSRSMKNTLLVGDFLFVKKFSYGIPTPHIPWLEIPV

LPDFNKDGHLIKAQGPQRGDIVVFRNPRNEKQHFVKRCVGIGGDRIIYANKTLYVRMHEGDDFMKEHYPN

DLVILGGQIYIKEPYKQKGIHYDPKKDIESNILRFLSIGDFAMSPTYIKELGNHIGFSGRNAYVFDVPEN

EYFMMGDNRDHSEDSRFWGSVPYRLIVGKPWFVYFSWDKDKNVRWERIGRFVDTLENDEQYIHDHDDDED

KLS

>ABS43475.1 flagellar hook-basal body complex protein FliE [Campylobacter jejuni subsp. doylei 269.97]

MNNINDLRLNNISNTNKSQNSTGIGNEFAKMLKNEIDDFNKAQESGEAAMTDIATGRVKDLHQAAIAITK

AESSMKFMLEVRNKAISAYKEIIRTQI

>ABS43474.1 hypothetical protein JJD26997\_0249 [Campylobacter jejuni subsp. doylei 269.97]

MKSLILPPNEFLDHYILNAEFHRFAGISKNAYKFWKNVEIGRYQGTRIIFLHRNCILEKHQQALRQCSGL

NGFVLASAFCSFTGLAPSHLVEKNNSSIYKLLDLKEICGIKFVNLKKFYDFLELNYHQHIYIEKCHFFSP

APFEKRIKITESMCVGYY

>ABS43473.1 putative oxidoreductase, molybdopterin binding [Campylobacter jejuni subsp. doylei 269.97]

MIITPENLYKKRRDFLKLGTGALISSSVLASKLSALNFTGDTNSNKLEISDEELATNYVNFYEFSTDKKK

AVSLAQNFNTQNWKIDISGEIEKPLTLSIEDILKFPLEERIYRFRCVETWSMVVPWVGFELRRLIEIAKP

TSEAKFVKFTTLLDKSQFPDQDALFPTIDYPYVEGLRMDEAMHPLTLLAVGMYKKALKPQNGAPIRLVVP

WKYGFKSIKSIVKIEFTKEQPKSTWESYAPSEYGFYANVNPNVSHPRWSQANERALGDFFTKPTLMFNGY

EKEVASLYKNMDLKVNF

>ABS43472.1 ferredoxin, 4Fe-4S [Campylobacter jejuni subsp. doylei 269.97]

MSLLITKDCVCCDACKEECPDEAIYENSPIYVIDPDLCSECVNDFSEPACIVACPYECIIPDPDNVETIE

ELKLKHRDREF

>ABS43471.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MDWNKTYAAIYRARKDYLKPIFEIDPITLKDLVGMEKQKKALYENTLNFIQNKGANHALLWGSKGTGKSS

LIKAIFNEFKDQGLRLVELNKEDLFTLADIIDEIRLENFKFILFCDDFSFEKGDDSYKFLKPLLEGSIEK

APNNVIIYASSNRRHLLSESIADNLDTQIAHTELHLSDAAEERLSLSDRFGLWLSFYQGNLEEYLKMIDF

YFKDYSCDKELLHAKAKEFATLRASRSGRTAKQFYLAFKENFK

>ABS43470.1 ATP-dependent Clp protease, proteolytic subunit ClpP [Campylobacter jejuni subsp. doylei 269.97]

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSAQEAKEYGLIDKVLEKSFK

>ABS43469.1 phosphoribosylformylglycinamidine synthetase I [Campylobacter jejuni subsp. doylei 269.97]

MKVAIIRFPGTNCEFDTAYAFEKLGVKTQIVWHEEKEFDADLVVLPGGFSYGDYLRCAAIAKLAPAMQGV

FNHAKKGGYILGICNGFQILLESGLLKGAMKHNNNLSFISKNQNLRVVSNDNAFLKNFKKDEIINLPIAH

GEGNYYADETTLKELQDKDLITLKYEPNPNGSVFDIAGICDENKKIFGLMPHPERACEKILGNDVGLKML

KGFLF

>ABS43468.1 shikimate kinase [Campylobacter jejuni subsp. doylei 269.97]

MMRVKNIVFIGFMGSGKSTLARALAKDLDLVFLDSDFLIEQKFNQKISEIFTQKGENFFREQEQKMADFF

SSCEQACIATGGGFVNVSNLEKAGFCIYLKASFEYLKKRLDKDGISKRPLFYDEVKAKKLYNERLSKYEQ

KANFILDIENKNIDEFLSEIKKVIK

>ABS43467.1 glucose-6-phosphate isomerase [Campylobacter jejuni subsp. doylei 269.97]

MLNNTLFFKQSEIHTISSYANRINDEVKSGDIGYYHLIDTSLNLIDESLKFIQDKEYVKNIVLVGMGGSS

CGVKALRDMLFNEKSNQRELFILDNTSSHSFNKTLEKIKLEESLFLIISKTGSTIEVISLFKLLIEHFKL

DMQELKKYFVFITDKDSKLHQEGENLGIKCFFIPANVGGRFSILSAVGIVPLCFCGYNAKALLEGAKACF

EDFFTHKKDEILQKAYHYCTHKNANINVLFSYSDAFKGFNEWYIQLIAESLGKKQGYKRIGLTPIALIGA

RDQHSFLQLIMDGPKNKTVTFLKIKDAQKAPIIPDIHFKFLDSLSNKVNLHELLNAQCDATMHALIAENL

SVDAIELEKLDAWHAGYLMYYYELFTSTCGVMLGINTYDQPGVEVGKLILKNILNS

>ABS43466.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQVRKEKS

>ABS43465.1 putative hydrolase [Campylobacter jejuni subsp. doylei 269.97]

MFIFFLKKLYYNVFMKTKALFLDRDGVINIDKKYVYKIEDFEFCDGIFELCRYFLARNYLLFIATNQSGI

ARGYYKESDFFKLCDYMLKEFAKQDIKIDKIYYCPHLEGCECRKPKAGMLLKAKDEFDLDMKNSIFIGDN

LSDMQAGLNADIGTLILVNEEKKGNFFKQFKNLKEILRFLKEKDI

>ABS43464.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MARQSSNLKSFIYKDECYFYSKKCIKTLRLRLNERGEFVLSIPYFCTFKSVYEFLDKSSSWINEIKKRFE

KKALKEDESIFLAKKYQIIFDENAKKTYFDKDKIICQNKAKLDLFLRQNAKKIFTFYLKKWSKQTGLSYT

HLSIKNMKTRWGSCNHNKAYINLNLKLIQKSLKAIEYVILHEISHLKFPNHSKEFYTFIECFMSDFRQRQ

KEFLS

>ABS43463.1 conserved hypothetical protein TIGR00150 [Campylobacter jejuni subsp. doylei 269.97]

MKEFILAKDEIKTMLKIIPKEGVVLLQGDLASGKTSLVQAWVKFLGLDARVDSPTFSTMQKYENHDICIY

HYDIYQEGLEGLLANGLFENFFEKGLHLVEWGGENLKKTLMKFGISAIQIKISIKDDKRKYEIYE

>ABS43462.1 D-glycero-D-manno-heptose 1-phosphate guanosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MQAIILCGGLGTRLKSVIKDIPKPMAPINDKPFLEFIFEYLKKQGIKEVILAVSHKYEVIQEYFKDEFLG

IKITYSIEKEPLGTGGAIKEALKFVKNEVYVLNGDTFFDIDLSKLKLNGSKICLALKQMNDFDRYGTVNV

NEQGFVISFEEKIFKKQGLINGGIYLLTKDIFNKFDLEKKFSFEEFLQENYEKLKARAEIFDDYFIDIGV

PEDLYNFLINNYI

>ABS43461.1 ribose-phosphate pyrophosphokinase [Campylobacter jejuni subsp. doylei 269.97]

MRGYKIFSGSANVEFARQVSKYLSLPLSDAGVKRFSDGEISVQIDESVRGKDVFIIQSTCAPTNDNLMEL

LILTDALRRSSANSITAIIPYFGYARQDRKANPRVPITAKLVANLIQAAGIDRVATIDLHAGQIQGFFDI

PVDNLYGSIVFNDYIKAKHFKNAIIGSPDIGGVARARSVAKHLGLDIVIVDKRREKANESEVMNIIGDVK

DKEVILVDDIIDTAGTIIKAAEALKEKGAKSVMACCTHAVLSGKAYERIASGALDELVVTDTIPLKEQLP

NIKVLSVTPVFAEVIRRVYHNESVNSLFI

>ABS43460.1 putative terminase B protein [Campylobacter jejuni subsp. doylei 269.97]

MKLNLNFSYTRAQLKVFDDKNPRFITVAKGRRLGFTRGCVKYVIENLIEGKNVLWVDTIQANLQNYYELY

FTPELKNLPKDFYSWSVQDKKLIINGAVLHMRSAERSENIEGFAYDLVILNEAGIILKDSKGGYLWYNSI

RPMLLDNPKSRAIIGGVPKGKNLFYELCRKELSDKNWKHFQFSSYDNPFLKEEQIKELIEEVGGESSDVV

RQEIYGEFIDSSSAELFSLSGIENAMSKNSFSTQKMQGENIWGLDVARYGDDKSVLAKRKGFVIDELKKY

SQLGTIELANKILAEYKQSEEKPKGIFIDTCGLGVGVYDVLLNYGLPVFEANSANSATSNQYLNKRAQMY

FTFAKNLKHMELVKDEELKNDMRRIEYEYSDKGLLKIVSKEQLKKNYGKSPDLSDAVALTFFEKLYSKNN

THEDWSYDGW

>ABS43459.1 GDP-fucose synthetase [Campylobacter jejuni subsp. doylei 269.97]

MDKNAKIYLAGHRGLVGSAILRHLQKEGFSNILYKTHAELDLTNQEAVEEFFTKEKPQFVILAAAKAGGI

AANSTYRADFIYENLMIEANVIHAAYKNGVKKLIFIASTTIYPKNASLPTSENEMLKGDLEYTNKPYAIA

KIAGLMLCESYNLQYGTNFIALSPTNLYGSNDKFDLEKAHVMPALLRKMHLAKLLNEGHFEELLKDLNVK

NLNEAKIYLAKFGVSEESVEIWGDGTPTREFIHSEDLAKAVLFILKNVDFKDLYQKDEKEIQNTHINVAP

GENISIKDLANLVKEVVGFKGTLFFNTARPNGAMQKHTSGKKLENLGFKAEISLKEGVRKMYQWYHTRGG

GGVSLPFYPTLSKAWEVSCA

>ABS43458.1 single-strand binding protein [Campylobacter jejuni subsp. doylei 269.97]

MFNKVVLVGNLTRDIEMRYAQSGSAIGASAIAVTRRFTTNGEKREETCFIDISFYGRTAEVANQYLTKGS

KVLIEGRLRFEQWSDQNGQNRSKHSIQVENMEMLGNSNTPQQGGNFGNNSFSNNNYSGNYENQSYDPYMS

ENKNFNKAKANPAPQRNQNLQHEEKLKEIDIDAYDSDDTNLPF

>ABS43457.1 aminoacyl-histidine dipeptidase [Campylobacter jejuni subsp. doylei 269.97]

MQNVIENFKQLCKIPHCSYETEQMKEFLSSYAKDKGFKVSVDKAGNIHTIKGKPKICLQSHYDMVCMGDA

PNLEVYEENGFLRAKNSSLGADNGIGIAIMMSAMAEFENLECLFTNDEEVGLMGVNSLEHTLKSKMLLNL

DHESDDDIMIGCAGGVDIEASLSFNTLRKKGKIYELCAQNFKGGHSGINIIRNEKNSIKEMAKFIQENEG

EIIAFEGGERINSIPKHAKALVYFKNEAKSDDWIKCEFKEEGEFEICDQSKKLLSLINSFTHGVRAYDEN

LGIVQTSINLATLRMQDKQIKFALFARSNVLDGLKQVEFETLEFFKAFDFKVRSFNFYPPWEGKPNALSD

MVFKALKKVSPNVKVSAIHAGLECGIIEKKQELLCASIGPNIHNPHSTDEHCEIASVEKISKVVFEVLKD

NA

>ABS43456.1 diaminopimelate decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MDYKQLKQEFNTPFYIYNFDFIKERFLNLKEAFKARKSQIFYAVKANSNLSLLQMLANLDSGFDCVSIGE

VKRALKAEAKAYKIIFSGVGKTKEELRQALEYDILYINLESEAEMMLLESVAKELNLKARISIRVNPNVD

AKTHPYISTGLNENKFGVEIDIAKKMYLYAKNSSFLEPVGVHFHIGSQLLDISPIYEAAGIVAKLVRELK

ALQIDLKFFDIGGGLGVAYEKDECEPDLYHYAQGILAQLHGLDLTIGMEPGRYLVAKSGEFVCSVLYEKQ

NKTKRFVVVDGAMNDLIRPSLYEAYHEIILPYNQAQESLCDVVGGICESGDFFAKARSLPSTQSGDIMVI

KNTGAYGFSMSSNYNTRNKVCELALEEGQVRLIRQRENFEDQIALEEKFLKA

>ABS43455.1 capsule polysaccharide export protein KpsS [Campylobacter jejuni subsp. doylei 269.97]

MKISKKLQQEFTSKNVLLLQGPVGNFFHHLAVKMRKNQTKVFKLNFNGGDFFFYPSGTRCKCDEKDLENF

YRIFFQSKKIDAILMYNDCRIIHAKAIKVAKELGIEIWIFEEGYLRPYCITLEKDGVNANSSLPRDKNFY

LSQNIFTKESIKEIPGGFKFMAFDAFLYWLFAFILAPFFNNKLHHRTLYPFEFLFWFRSLYRKYLYKITE

KKLNEKIYSIPKKYYVAVLQVYNDTQILYHYKKSIEHFIEETILSFANHARAKSYLVFKHHPMDRGYKNY

SELINDLSQKYHVEGRVLYVHDTHLPVLLRKALGCITINSTVGLSAILEGCPTKVCGNAFYDFEGLSYPK

KLQFFWREAHAYKPNPALVCNFKKYLLQTNQFNGNFYKKRLKSFD

>ABS43454.1 SCO1/SenC family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKNILFIVIVAIILGVIFFLKNHQNSYDFILKSDLKEETTLKDFKGDKLIIYFGYTYCPDVCPATLSLV

GKALKQINNPKAHILFISLDPNRDNNLSNTNEWLRYFYPKADALIAKDEKTLQKITKQYNVQYQKIDLND

SFMGYSIAHSNMLYLIDEKGHFYKEISDLNPQEILRELRIFLNSQ

>ABS43453.1 alginate O-acetyltransferase AlgI [Campylobacter jejuni subsp. doylei 269.97]

MTYFSLEFSILMIAFFPIYWAFKNDYKIQNILILIFSYIIYILINPYFALVLFIYTFFIHYFALLIFVRR

KRYIFATCMAFIILNLCFFKYFPSIKGSVDEILNFFGLEFLNIDLVLPIGISFYTFTSITYLVEVYQKRR

LESFLNLATFLSFFPTLLSGPIMRSSFFFEQAYQKHEFKHANLIIILLVFGIVKKVLIANYLGIYAKSIL

DFPQSYNFIQLLSAIYAYAIQIYCDFSGYIDLVCAFALMLGFTLPPNFNMPYLAKNLKDFWARWHISLST

FIRDYVYIPLGGNRKGMPRAIVNILIAFILSGMWHGNTLAFIVWGLLHGIGIVVIHLLALSKFSLQKIPA

LGRFLTFQFVCFTWIFFYYSKNLENVIEYFKACYYNFFQIPSYNDICMLVAFGVLFMIYPLFINFKEYCI

KILNLIPFLLKPFIIAFILLLVFAFMPDGIPDFIYSSF

>ABS43452.1 signal peptidase II [Campylobacter jejuni subsp. doylei 269.97]

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSKYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

GVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIYGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>ABS43451.1 hydrolase, HAD-superfamily, subfamily IA, variant 3 [Campylobacter jejuni subsp. doylei 269.97]

MTKIKAIIFDMDGVLIEAKDWHYEALNRALKLFGMEITRYEHLATFDGLPTKDKLKMLSLERGLPKSLHS

FINELKQQYTMEIVYSLCKPRFYHEYALSKLKFEGYKMAVCSNSIRNSIEVMMKKSALENYLDFYISNED

VKKGKPDPEMYIKAIERLKLNPKECMIVEDNENGIKAARASGANVMIVSEVNEVNYENIKNHICKFEKEL

KC

>ABS43450.1 putative antibiotic transport protein [Campylobacter jejuni subsp. doylei 269.97]

MFSSFFASKKWALWAYLGLFLLLFFLYIQTSLNVAINSWYSDFYNVLQKPKIELLDSNSTQKIEENLENN

ATLIQEANQRAEQNFQKANFINKGALYYYQNLLEYFFNSRAMIEKPNYSANDFYALILVFLAIAIPYVLI

ATINIYFASVYAFKWREAMTFSYLKFWKNKDDNIEGSSQRIQEDTYNFSKIVESLGLSFIKALMTLVAFI

PILWSLSDVVSKALFANLSENSSFYFLKNIDGLLVYIALLISLGGLVVSWFVGIKLPGLEYNNQKAEAAF

RKELVYAEDNRKEYAKNETMIELFTGLKFNYKRLFLHYGYFNIWLILFEQMIVIVPFLIMAPGLFAGAIG

LGIVMQINNAFDQVRSSFSVFITNWTTITQLRSIYKRLKEFEKNISYKS

>ABS43449.1 glucose inhibited division protein A [Campylobacter jejuni subsp. doylei 269.97]

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGFMGEITD

EAGIQFRILNESKGVAVQGSRVQIDMDKYRIIARNKLLKLPNLEISQEQVSALIVENDKVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDATSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLHSVKGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAVQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYVLGLLSEQDFAYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNFQKIVARASFDIEKLKKLDPMFETMDNYSLREILNEAKYCHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>ABS43448.1 polyphosphate kinase [Campylobacter jejuni subsp. doylei 269.97]

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLEHYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKIFDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKNFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKILEMIRIETSKKNKGVIVAKMNSLVDSDIIQALYEASMEGVKIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKTIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>ABS43447.1 16S rRNA processing protein RimM [Campylobacter jejuni subsp. doylei 269.97]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELTNLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVVDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>ABS43446.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSDDVLYLVFIIVLLIAMLTYMNIKERENNAKIAKLQNVIEDITKELHYFRKELGTKDDNEEDEDYKTSL

LKEEIMIELDKQISSKITPVLSTLKTMEHIIEDFQNEQQNRLLNLEQKAQSMAKLTPNYDTEEQKIENLF

KEGKSIEQIAKDLHIGTGNVELVLKFKKLIK

>ABS43445.1 malate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKITVIGAGNVGSSVAYALILREIANEIVLVDINEDLLYAKELELTQSIAALNLNINLLCTKDYTHTKNS

DIVFFSAGFARKDGQSREELLQLNTSIMLDCAKKIKDFTEDPLFIILTNPVDFLLNTLYESGIFSSKKII

AMAGVLDNARFKYELAKKLNVKMSSVDTRLIGFHNDDMVLVKSYASVKNKNISEFLNEEEFDDLENEVKT

GGAKVIKHLKTSAYLAPASACIRMIESIRSGEFLPMSVILHGEFGVQNKALGVMARLGLEGVIEIMKMDL

SSQEKDKLEKSLIKYQYKGE

>ABS43444.1 ribosomal protein S13/S18 [Campylobacter jejuni subsp. doylei 269.97]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYDKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>ABS43443.1 fibronectin type III domain protein [Campylobacter jejuni subsp. doylei 269.97]

MKRFRLSFYLSFLTLLLSACSVLQMNSLASSKELTVNESLPKVESLKSLSDMSNIAFEWESLYDENIKGF

YLYRSSDENPDFKLVGTIKDKFQTHYVDTKLEPNTKYRYTMKSFNEQGQISEDGKVIEVSTAPRLEAVPF

VQAVTNLPNRIKLIWRPHPDFRVDSYIIEKTKGDKEFKKIAEVKNRLNAEYIDNDLKSNENSSYRIIAVS

FNGIKSEPSQVVSSASKALPPQVEHLSASTDGSNKIILTWDAPTYEDFSYYKVYSTSLSFLPFSVLAKTD

KNSYEDIVEGAGKSKYYKVTMVDKDGLESPMPKDGVEGKTLSNPLAPSIILAQSTSEGINLEWSDGDTRA

VEYEVRRYGGKQNAVFKGIKEKRLKDVKALPGVEYNYEVIAIDSVGLRSKPSSKVKAAQ

>ABS43442.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MEKIKNYKLIIILLSLDLLALLYGISTLSISADEADIYFGEQGKSLIFFHSLLYYISHFGTFIFGQNDFG

LRLPFLFFHFLSCLLLYLLALKYTKTKIDAFFSLLLFVLLPGTVASALLVNAASLVIFLTLAILCAYEYE

KKWLFYILLIIVLFVDKSFNILFLTFFFFGIYKRNAILFTLSLVLFGVSISFYGFDTGGRPRGYFLDTLG

IFAACFSPLVFVYFFYTIYRLTFQKYKNLLWFFMSVTFVFCLLLSLRQKLFLDDFLPFCVICTPLLIKTL

MQSYRVRLPVFRLRYKIFIECSIIFLIFCYFLIVANQLLYYFINNPTRHFANNYHFAKELALELKKQDIL

ELATAPSLQKRLRFYGIKNSNKFYLKALKQADKYDTDKKIVKVKLGKYEKVYQILNYD

>ABS43441.1 major antigenic peptide PEB4 [Campylobacter jejuni subsp. doylei 269.97]

MKKFSLVAAALIAGVALNVNAATVATVNGKSISDTEVSEFFASMLRGQDFKTLPDNQKKALIQQYIMQDL

ILQDAKKQNLEKDPLYTKELDRAKDAILVNVYQEKILNTIKIDAAKVKAFYDQNKDKYVKPARVQAKHIL

VATEKEAKDIINELKGLKGKELDAKFSELAKEKSIDPGSKNQGGELGWFDQSTMVKPFTDAAFALKNGTI

TTTPVKTNFGYHVILKENSQAKGQIKFDEVKQGIENGLKFEEFKKVINQKGQDLLNSAKVEYK

>ABS43440.1 hypothetical protein JJD26997\_1953 [Campylobacter jejuni subsp. doylei 269.97]

METRINFNLKSTTREEIRADLINEFLKELPGNGVRDLSSKYYYIVENADGYNIILKRPAPLNKGFDFIVS

VENFYFKEMTKKSRSNPSHNDIISLLKKYKKANEAIYGEVKNIIISIYNCENIYLRQDIQQFPKFVNFDN

QEYPISILLYCIKWLFIEQDVTYWNYSGRRKFFEALNECELV

>ABS43439.1 hypothetical protein JJD26997\_0296 [Campylobacter jejuni subsp. doylei 269.97]

MEDKKKEFGDIEVVIEASYPDSHDNYLSYNIGICKEENIVAYINDENKGRKIFDNCLLLF

>ABS43438.1 general secretory pathway protein E [Campylobacter jejuni subsp. doylei 269.97]

MESRMDKIFQAYIDNEISLDEICTKFNITSWDFFKKLANFCNLNFVDLDKDGDFIYEGIPFSLLLKFKFL

LIKNNDGFMIIRSKPCSLELLEQVKTFMICEKIDTAIADELKIAKILNQIRIQEEIKRLSIKLRLEWQEN

QKRDDQSCISQIFDFLLHEILSFHASDIHIEARNDDALIRFRVDGILREFAIFEKDIYEALVFHVKFLAC

LNLAESRKTQDGSFELDFENERYDFRVSCLPLIYGESVVIRILKHDKEILDLYKLNLGNKNLEILKKILH

RPNGMILLTGPTGSGKSTTLHACLNELKSIEKKIISAEDPIEYKIPLVQQILLNSKVGVEFNSVLRAILR

QDPDIIMIGEIRDEESLDIALKASLTGHLLLSTLHTNDALSTIDRLLDMQAKSYLIASALSLVIAQRLVR

KLCPWCKQKSKKHYIEFEGEFFEPKGCERCHHSGFFGRELIAECLEINEDLACAIRENQNKTILMELAKK

HGFQTMFEQGLKKAKEGLTSIDELLRVVR

>ABS43437.1 co-chaperone protein DnaJ [Campylobacter jejuni subsp. doylei 269.97]

MNSLYETLGVSKNASADEIKKAYRRLARKYHPDINKEKGAEEKFKEINAAYEILSDEKKRAQYDQYGDSM

FGGQSFHDFSRNAGGVNLDDILKDLFGGGFGGRSREGFNSFSSKGFSSGFGGFEEENLDSNLELHIPFEK

AVKGGEHSFNFQGETIKFKIPHGIKEGEKLRIRSKGKQSRNGTRGDLIIIVKIEESPIYTREDDDLYQKV

DISLKTALFGGKINIKTLKEGKEEATINITPNSKNNQKIRLKGYGVQNRKSDIYGDMYLILNVVLPNLDT

LDKNFIELLKEKLP

>ABS43436.1 acetyl-CoA carboxylase, biotin carboxylase [Campylobacter jejuni subsp. doylei 269.97]

MNQIHKILIANRAEIAVRVIRACRDLHIKSVAVFTEPDRECLHVKIADEAYRIGTDAIRGYLDVVRIVEI

AKACGADAIHPGYGFLSENYEFAKACEDAGIIFIGPKSEVIYKMGNKNIARKLMAENGIPIVPGTEKLNS

YTLKEIKIFAEKIGYPVILKASGGGGGRGIRVVHKEQDLENAFESCKREALTYFNNDEVFMEKYVVNPRH

IEFQILGDNYGNIIHLCERDCSIQRRHQKMIEIAPCPGISDNLRKTMGVTAVAAAKAVGYTNAGTIEFLL

DDYNRFYFMEMNTRIQVEHPITEEITGIDLIVRQIRIAAGEILDLEQSDIKPRGFAIEARITAENVWKNF

IPSPGKIGEYYPALGPSVRVDSHIYKDYTVPPYYDSMLAKLIIKATSYDLAVNKLERALKEFVIDDIRTT

IPFLIAITKTREFRRGYLDTSFIETHMQELLEKTEDRHQENKEEVIAAIAATLKKIRESRE

>ABS43435.1 Cpp32 [Campylobacter jejuni subsp. doylei 269.97]

MNNVIIINNQEVIFENKDEQVFCTSLDVAKVFGKRHDHVLRDIENILNDLREIGTSKDLLNFGETYRNTE

IRGFGKVKGKTRKDRCYNLTRDGFSLLAMGFTGKKALQFKIAFINAFNEMENIIRSNNQNNTTIDSNIYY

KELCDRLLIENKELKSENTNLKRHINGELYLEFLNKLNTFSKIHFKNSKSKALDYIYKTIAIEFMCPTYY

DFDISDLESDPRYLRYAIDLCNDAISNNFLSRKLI

>ABS43434.1 putative phosphate ABC transporter, permease protein PstC [Campylobacter jejuni subsp. doylei 269.97]

MLKEKIIKFALFLCAFVSVIVSFAIMLAILIEALKFFQKESVVAFLFSSQWAADAAFMNADGTSKQGVFG

ALSLFWGTFYISLIAMLTALPLGVMCAIYLGVFAGKKSKNYLKPILEIIAGIPTVVFGFFAAIVVAPFIV

WFFSLFGVQASFQSALGAGFIMGIMIVPIVASLSQDCIEAVSEKRINGAYALGMTKKEVVFAVILPEAIP

GIVAACFLGLSRALGETMIVVMAASLRPNLTLNFLEDMTTVTVKIVEALSGDQAFDSSLALSAFSLGLVL

FIITLIINMFSVYLINRFHKRKNL

>ABS43433.1 GTP-binding protein TypA [Campylobacter jejuni subsp. doylei 269.97]

MKNIKNIAVIAHVDHGKTTMVDELLKQSGTFSEREQISERVMDSNDIEKERGITILSKNTAINYKGTKIN

IIDTPGHADFGGEVERVLKMIDGVLLLVDAQEGVMPQTKFVVKKALSLGLKPIVVINKIDKPAADPERVI

NEIFDLFVALDANDEQLDFAIVYAAAKNGYAKLDLNDESDNMEPLFKTILERVPAPSGTNDNPLQLQVFT

LGYDNFVGKIGIARIFNGVVKKNQSVMLAKADGTKVNGRISKLIGFMGLEKMDIEEAGSGDIVAIAGFEA

LDVGDSIVDPNNPMPLDPLHIEEPTLSIVFSVNDGPLAGTEGKHVTSNKIAERLEAEMKTNIAMKYESTG

EGKFKVSGRGELQITILAENMRREGFEFCMGRPEVIVKIEDGIKTEPFEHLVIDVPEEFSGAVIEKLGKR

KAEMKTMTPTGDGQTRLEFEIPARGLIGFRSQFLTDTKGEGVMNHSFLEFRPFSGAVEKRNNGALISMEN

GVALGYSLFNLQERGVLFIEPQTKVYTGMIIGEHSRPNDLDVNPIKGKNLTNVRASGSDDAIKLVPPRKL

SLERALEWIEEDELVEVTPLNVRVRKRYLDPTQRKRMEKAKS

>ABS43432.1 hypothetical protein JJD26997\_0523 [Campylobacter jejuni subsp. doylei 269.97]

MKKSKKFMSIFLKNLHSLNNPYLAHKLQNLKENRFVKIDNGGGGDKFLGYKK

>ABS43431.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>ABS43430.1 N-acetylneuraminic acid synthetase [Campylobacter jejuni subsp. doylei 269.97]

MQIGNFNTDKKVFIIAELSANHAGSLEMALQSIKAAKKAGANAIKIQTYTPDSLTLNSDKEDFIIKGGLW

DKRKLYELYESAKTPYEWHSQIFETAQNEGILCFSSPFAKEDVEFLKRFDPIAYKIASFEANDENFVRLI

AKEKKPTLVSTGIATEEELFRICEIFKEEKNSDLIFLKCTSAYPAAIEDMNLKSIVSLKEKFNVEVGLSD

HSFGSLAPIIAVSLGARVIEKHFMLDKNIESEDSKFSLDFDEFKAMVDAVRQTESALGDGKLDLDEKALK

NRVFARSLYASKDIKKGEIFSEENVKSVRPSFGLHPKFYQELLGKKASKDIEFGDALKQGDFQ

>ABS43429.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MGLKDNLKAVKNELNTEEQFIENFIKGERFIRKYKFYISAVVIILVAWFAGNFIISKINDYKTKEANEIY

ANLIQDPNNKNLLEKLKNKNTNLYAIFLLKENINDFNNTALQNELKQIYSNAQTNTLLKNIIALSLGDKS

IFLKNYDKLLEAYKLLEQNKIEEANVLLSQIKENSSLNQIAKNLKHYQGITQ

>ABS43428.1 tyrosyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MDIKKILAEVKRGCAELIDEERIEKLIKNYYEKGENFFIKAGFDPTAPDLHLGHSVVLTKMAFLQKHGAI

VQFLIGDFTGQIGDPSGKSATRKKLDKEQVLINAKTYETQVFKVLDKEKTQIKFNSTWLNELGAAGIVEL

ASTFSVARMLERDDFTKRFKEQSPISICEFLYPLLQGYDSVALKSDIEMGGTDQKFNLLMGRQLQRIYSI

GKEQAVIMMPLLEGLDGVNKMSKTLNNYIGVTEKANDMYAKILSISDELMFRYYELLSQKSLEEIAQIKK

DIEQGNLHPKKAKENLALEITERFHSKEEANNAKSEFDRIHSQNALPSDMAEFEIQGKIWLAKALVECGL

ESSTSAARRSISANAVSVNSQKVSDEQMHLEQGEYILQIGKRKFAKLKVKE

>ABS43427.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MVKKIIILILWVNISFAISSLELAKNLVNNPSKNSQLELLFSNNSYIDNNGNCDIAKISQILKTNSLIAL

TLSNPQSLRLNFKAKADEVMFFKILSDVLTDAGYIYFIPTDLILREGNIDYTIQVESQYVLDPGTLYNLL

KENSVYIDNIKRIGAYDYEYDLNFSNAVLKTNTNVNLNTAKSLEKPLKDYVLDLKNATNLIIDANDLDNW

FPKIFFLDKNLNLIKAVKSENKNNHFSELIPNGAIYAIVSDMYSLDNIRRGLKITLKK

>ABS43426.1 bifunctional purine biosynthesis protein PurH [Campylobacter jejuni subsp. doylei 269.97]

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGVKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRNDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDRLDYEKVIETLKKNQNDENFRLSLMIKAYEYTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNSCGFAIKENLV

QSYIHALKSDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEADEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAATFKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>ABS43425.1 conserved hypothetical protein TIGR00701 [Campylobacter jejuni subsp. doylei 269.97]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEVVKIQERKLYYYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>ABS43424.1 peptidase, M23/M37 family [Campylobacter jejuni subsp. doylei 269.97]

MAKRKGKTYLSVLILVLIAISIFFISRLSIFEKNPPQILMPDVVYTDLKKPILVHVKDDKSSIKNVQIIL

YKDDNTSAMVIADEKISNLKDITLQVALPKFGYKENVKSFVLEVIAKDSSFWNFFSGNEARKQIAVLVDN

TAPKINIISNSYQIEQGGAGAVVFKADDVNLDKVYIETNKGKIFKATPYVKEGYYAALIAWDARDEEFRA

FVIATDKAGNISKERIRYYFVNRKYLVSNINLTDKFLDGKIENLANQYAPKDNSLNRYEKFKFINETLRN

SNEELIHEITSKVPEEKIDNFDLNLFLPLKNGMKVADFADHRYYSYNGQFVSDSYHMGIDLASVAQAPII

SNNAGKVVFAAENGIYGLNLIVYHGFGVYSLYGHCSSKNVDLDEMINKQSIIGKTGTSGLALGDHLHFGV

LVQGVETRPEQWQDKKWIENNIYNVLNDGKKIILGKN

>ABS43423.1 polysaccharide biosynthesis protein [Campylobacter jejuni subsp. doylei 269.97]

MFNGKNILITGGTGSFGKTYTKVLLENYKPNKIIIYSRDELKQFEMASIFNAPCMRYFIGDVRDKERLSA

AMRDVDFVIHAAAMKHVPIAEYNPMECIKTNIRGAQNVIDACFENGVKKCIALSTDKACNPVNLYGATKL

ASDKLFVAANNIAGNKQTRFGVTRYGNVVGSRGSVVPFFKKLINEGAKELPITDTRMTRFWISLEDGVKF

VLSNFERMHGGEIFIPKIPSMKITDLAHALAPHLSHKIIGIRAGEKLHEIMISSDDSHLTYEFENYYAIS

PSIKFVDKDNDFSINALGEKGQKVKDGFSYSSDNNPLWASEKELLEIINHTEVF

>ABS43422.1 putative dihydroorotase [Campylobacter jejuni subsp. doylei 269.97]

MIIKNAKIYGDSLQDIEIKEGKITNIGSNLQGEEILDAKGMTLLPSFVDLCVSLKNDKFSLANLELLENE

CLKGGISSIVLRDCMDFDEESFALFLQNLAQRKMQIFSSMRVKDANGKLKNLATLLNKGACALELDSSLD

ANILKVSSQYAFMKDSPIFVRCYDKDFDDNGVMNDCEMSFELGLIGMSKIAETSQIAKMKELAKFYKNKV

VFDLLSLKDSLVLLDEKDLKLVSIHHLIKDDSACEDFNTAAKLMPPLRSKEDVLALREALKEGKISFLTS

LHSAKSISLKDLAFNEAAFGIHSVCEFISLCYTFLIKEGSLNWQELCQFTSKNSSEFLGLNSGVIEVGKE

ANLVLFDENEEIFTPKSSLYSEDKLFGRVKMHIIKGKNILEK

>ABS43421.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNIQILDCTLRDGSHINNGKFGKEKIRQIITGLIEANIDIIEVGLLQNHQCGVDFSIFNSIDFVDQCLST

IEKKNSKFSLMLRTDRVDFNKLAKSPKVDFIRIALYQEHLNDIKRYGEKAKELGYEIIFNPIAITKYSPN

EIQFLIKTLEELKPYGISLVDTFGSFTLNEFEKVLKIFDENLSPNITLGIHLHQNLNLAPSLAAKATKLI

INRDLIIDSSLSGMGRVPGNLQSELFANYLNQNFNHQYNIEKLLSLTALIEEFEILNRWGYNPIYMYSAS

LNIDRTYPEFFEKMGFCIENNLNLQKICKEKGIGSKFNEEEAQKIINSYN

>ABS43420.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIKINRRYTGKTCVIGKFKVFSDDKLLFECFSLEEDKEGVERNKDLRIPEGIYDLEKHTGSSFNISGRK

TVAGVKVLKDDDFVINVYNKEVPLDRRILIHWGNTDKDTKGCILLGLTKDNNNESIGQSRRACKEFYDLI

YKQDLSKIKLEIVNELV

>ABS43419.1 putative phage anti-repressor protein [Campylobacter jejuni subsp. doylei 269.97]

MQLQLTFPHTELQGAFPANVENLFCYLEVNSKFADWIKNRINQYDFIENQDYIIKEVFTGRRPRKEYYVT

LDMAKELCMVENNEKGRQARRYFIDCEKRLKNLEAEQMQKLAFRQSLGYKSQLAQQKEHYENKIKALQYD

LEHKNELSFKRKLSQKEFLELRKILAKDYGMLCIKEWEFEFLAEKIALESSKMTTWDAVVKKLKQSLDYW

QNYDEYEEKWKKILRR

>ABS43418.1 putative sodium transporter [Campylobacter jejuni subsp. doylei 269.97]

MRAYFSKIGFVLVVAGGAVGLGNAWKFPTLSAENGGFVFVLLYLFFTLTIGFSIFLAEVTMGRLSKSDLA

NAYSNLAIKYGNRWRYGGVFMLGGIFVLSFYLVIMGWVLKYTVVSLYYLPKTLDEAASNFQNLITTNLTS

SVFFFTLSFFLTLLVVSKGLIKGIEKLNVVIMPSLFLMLVFMLFYCMGFKQGFANAFSYLFYPDFSHFKF

SSIAEALGLAFFTLCLGIGCIVTYSSALDKKTNFIKSSVYIVLINLLISFIMGLIVFTFIFEFGADPHTQ

GVGIVFVSLMSLFNQLGALGYIFAFCFFLALFFAGITSAVSMIEPLTFYMINNYQISRAKALFFIGLFVF

VFGICCILSLNLNFFSMFSFFGKDFFTLLDKLTSNFLLPLGAIVCSIFVGFFMNKKQIYKIFSKFISRKI

FLIWLFFIRFISPIAIILVMCYQIFV

>ABS43417.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNFIKTISPIQKINFNGFEFYIKRDDLLGEINGNKARKLAFYIHQRYPKNQSFISYGGSQSNALAALSIF

AKQRSYKLVFACEKISTFLKSNPCGNYALALENGVDFVENIHSLSLKQFALSLCKKDDIFIEQGIANLEA

QYGYMELAQEIQMQSQSLKLDFDIFLPSGMGTSAAFLAKYSQFKVFTCACVGDIKYLKKQILTLDPSYDF

SNLEILTSDKKYHFAKPYKEFYELYMELKLKCNIEFDLLYDILGLSIALRQEWKKPLLYIHQGGILGNST

MLERYKFKKLV

>ABS43416.1 seryl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MLDLKNLQNNFDEVTKKLKSKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSTKVNVLENELEEIAHAIPNIPDECVPVGEDENENVELKKVLNPPSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPITNLYSGEILTSETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDALKKYF

>ABS43415.1 formate dehydrogenase accessory protein FdhD [Campylobacter jejuni subsp. doylei 269.97]

MDPLFITQILKYKDDKSFTCDDTLVREIKLEIFINDEKVGALMATPVDEQALAIGYLMSENIIAKVSDIE

SIEIKDDGMSVHIKAKIDKENLAKLNAEAVVISGCGRAHTANIDLEAIEASKISSDAKFSKDEILKQMST

FYTQCELYEKTGCVHTAKLFVDEKTFFIGEDIAQHNTIDKALGKARLAGVDLSQCFLMVSGRLSSEMVAK

AVMHKIPVLVSRTAPTCLGVMIARKFDLTLCGFARENKINIYSGEFRIHE

>ABS43414.1 acetyl-CoA carboxylase, carboxyl transferase, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MNFADIFSKIRRQQPSVKETPNHWVKCQSCHTLMYYKEIESCFNVCPKCNYHMRISADERIKLLSDESSF

IEYDANLEAIDPLKFVDSKSYKKRLSEGESKTGRKSSVISGECEINGLKTQLVVFDFSFMGGSLGSVEGE

KIVRAIQRAITSKTPLVIVSASGGARMQESTYSLMQMSKTSTALKLLSKEKLPYISILTDPTMGGVSASF

AWLGDLIIAEPEALVGFAGARVIKQTIGADLPEGFQKAEFLLEHGLIDAIVERGEQKQYLSDVLKFFSGK

>ABS43413.1 ATP-sulfurylase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKSARKNKNIIIDQNEFGILSLIKEGLLGTCTHLMNEKEVNEIIKSGKFKGESFPYPLSFAPKNAEEALN

DIKSGDRIDLILDKKVVGHIDFKSQFKNNKNFSDIFSPNTCSLEDMGTTCISGKIEIYNSQIKKIKENFQ

QIKNNLNAQKITAIVSNFDPLHRAHERMFRWTIDKADLVVIFLVESFDANGFEFELKEAYLKKFIQNYLP

PDRIFIFPLKNINIFHAHLNPGLESIIAKSLGCTKLVVGQNHTGLGMFYDDNQPKTILDDFSKDYGIEVI

VLPEFVFCDQCRMIVSTRSCPHGCHHHLHYNSQSLKDLLRAGIIPPAIFMRKEVSSVILTSLFPNRLKNM

QKIYNELFPTDGILEYKNDEEFYQKLLEIHQMSYMV

>ABS43412.1 putative phage repressor protein [Campylobacter jejuni subsp. doylei 269.97]

MGRNGDIFDFHFNTEKFKFYLKNRDKKVTYQDLMEILYKNGIESSEATIKKWLMSKEDNKTKPKPQYIKI

LCNALDIPFNEVILQDVFRNDNQVDFRYFPDIYASAGFGTSSQSEEVKIVSVDENFLKEILDIPIKKSYD

IIKINGDSMEPILSNGDFIIVDRSKNSLGAISNADIVIFRKNDDLFCKKIKKEPFEDYIFLVSENKKYED

RKVDNVEFEQCEILGAVVSKMKIETFKNFIEVVG

>ABS43411.1 multicopper oxidase family protein [Campylobacter jejuni subsp. doylei 269.97]

MGLAGAFVIKAKKDALSHLKEKDLMISDLRLDENAQIPNNNLNDWLNGREGEFVLINGQFKPQIKLATNE

RIRIYNATAARYLNLRIQGAKFILVGTDGGLIEKAIYKEELFLSPASRVEVLIDAPKDGEFKLESAYYDR

DKMMVKEEPNTLFLANINLKKENVKLPKKLKIFKPSEEPKEFKEIIMSEDHMQMHGMMGKSESELKIALA

SMFLINGKSYDLKRIDLSSKLGVVEDWIVINKSHMDHPFHIHGTQFELILSKLNGKVQKAEFRALRDTIN

VRPNEELRLRMKQDFKGLRMYHCHILEHEDLGMMGNLEVKE

>ABS43410.1 UDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFAELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

VLITQSPHLSFAFLSKLFAKPLINTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAMKFKKD

>ABS43409.1 uroporphyrinogen-III synthase [Campylobacter jejuni subsp. doylei 269.97]

MKIYLLNEAPFEGVENLILNEIVFYDFSVDLSLYDALICTSKNALKALQHAKITLNFKLNLYAVGQSTAQ

YAKNLDFKKIKFPSKAYGKDLFLEFKEELKTQKCLYLRAKNIVSTLNLDLKNAGVDLDEIIVYENVFKKG

DKELIHPAIFIFISPLSVENFLKFYSLKEEDKVVVIGQSTAKKLLNFKNLYICENQSLLECVKLAKTLV

>ABS43408.1 hydrogenase expression/formation protein HypE [Campylobacter jejuni subsp. doylei 269.97]

MKNISLAHGGGGEEMNELVTKLFKIFDNEILNANNDAAILGNLALSTDSFVLSPIFLDEEVNIGKLCVCG

SINDVLMVGAKPKYLSLGLILEEGFELAKLERILKSIKEECEKCGVMLVCGDTKVVPKGKADEIYINTTA

LGEMISKKESKNIKAGFSLLLSGDIGRHGASVLIKRNELEADIKSDCKALDKEVLELLEKDIKVVAMRDA

TRGGLSAVLNEWAKQSGNDLLIFEEKIIVQDEVLGLCELFGYEAYELANEGTFILCVEKEDELKALEILK

KYNVNASIIGEVLEEKKARVILQNAYGAKRFLESPKGELLPRIC

>ABS43407.1 putative TonB system transport protein ExbD [Campylobacter jejuni subsp. doylei 269.97]

MPFDDEKPELNITPLVDIMLVLLAILMITAPSITYEEKINLPQGSQKNTSAPTVKSLIISINAKKEIFLN

QEKYDFISFADNLAQRKAQFNTEDPVFIRADKSLKYDDVISVLRSVKNLGFNKVALQTE

>ABS43406.1 tricarboxylic transport [Campylobacter jejuni subsp. doylei 269.97]

MDILMYLAHGFEVALLPNNLIIALIGCLIGTIVGMLPGLGPINGIAILLPLAFAMNLPAESALILLATVY

MGCEYGGRISSILLGIPGDAAAIMTTLDGHPLAKKGQAGKALCISAISSFIGSFIAVCGIILFAPFLAKW

ALSFGPTEYFSLIIFALATLGSMMAQKPIRSFLAALIGLFLTTIGVDANTGIYRFSFDNPHLYDGISFVV

LVIGLFSISELFLILENTHTNKTMIKKTNKLLISFKEFAYTFWTILRSAVVGFFAGVLPGAGATIASAIA

YMSERKLAGKKGQFGQGDLKGVAAPEAANNASACGSFIPMLTLGLPGSGTTAVMMGALTLYNINPGPAMF

SEQAGLVWGLIAALLIANVLLLILNIPLIGIFVKVLSVPLWILAPIIAVVSVIGIYSINSTAWDLFMIFL

IGVVGFVLRKLEFPMAPLILGFVLGEHLEVNLRRALSISSGDLSILWQGSIAPILFIAAFLVIFVPPLLK

KLTKSFVK

>ABS43405.1 hypothetical protein JJD26997\_1142 [Campylobacter jejuni subsp. doylei 269.97]

MMKEQGCNFTNKFNRALSYKDYIQSINSADFIAYLEDKKWLLAMDDLLFFCEKRIKDSDYYEG

>ABS43404.1 hypothetical protein JJD26997\_1516 [Campylobacter jejuni subsp. doylei 269.97]

MDKLSLFKSLKKEKNLKSFALKSGYHCIDKLDKIEFFELFDPIILYTENSEFFYMDCNSCECFDESEMKF

AFKKEIIVINSKFCLIAKKNSNAKIQVFHKGQLNKIDSKQFFKKIKDFISRSNSYYLGYEKRYEKVYGNG

VTTWESSLANESLVTIYKHFSDYFL

>ABS43403.1 protein of unknown function [Campylobacter jejuni subsp. doylei 269.97]

MAEMKTERKSVLDYLSKNKFLIPMYQRPYAWTLEECEQLWNDIVTFFNDEDRKPEDEYFLGSIVMYKQNN

HQNIIDGQQRTISLSLLLKALYVKAFKDRSEETKNLVAMLESCLWDIDDISGKADYNASHLESDVITKED

EDILKQILTNEYRLENNDIETKIKKVKSNYEKNYLFFLLKSDEFAKENPTKWEKFCVVLLKSCILLPIEC

EGYDEDSRLENALRIFNTLNNRGIPLSDSDIFKSIIFKSKKTLERRKEFANKWKELEDKKDMDFIFRNYM

HVIRARNKIKTSEIGLRVFFTKEYKNILQDDNIISEIEQLSKFWNDEFSDLYNNRSYQFYEVLNELPNEY

WKYLDSAYYMYCQDKKINYYKNHENFLAKIIANFLVKLINKPTIAEVKPIVFNAYTSLYSKGELNFQTDS

KQILENEILFKEQFFKANKLIPALLTLNLYIKYPNQKTDIKAEIEHIFPKTTQWRPSYTGWDKEEAKSYI

ESIGNKMWLEKRLNIKAGNNYFDEKKEKYKESNFLEAQELSKYTKNDWLKEDIEKRNEEIYNRLVDFFKQ

NID

>ABS43402.1 modification methylase, HemK family [Campylobacter jejuni subsp. doylei 269.97]

MTIKNALIETKSNLKGYENEAVFILCEYLKKDKAWLFLNQDIEIDHEPYFELVRRFKSGEPFEYIFEKVD

FWGLEFKIKKGVLIPRYDSEILLFQILNLCKKNTFNGILEIGFGSGILSIILAKELGLKITACDINPKAL

ELALENAKLHKVDHLIDFKLCNFKQIEENYDFIFSNPPYIKNSYPIDIWVQKEPKEALFGGEKGYEILEE

IIHFSLDKKVKFLACEFGYDQKEILEKILYQNNFIVDFFKDEQDYNRAFIAKFANMRYDKK

>ABS43401.1 arginine-tRNA-protein transferase-related protein [Campylobacter jejuni subsp. doylei 269.97]

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCPKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYHFSRSERRVINKNINTKVILRMPNLSNEHLFLYDKYHRFMEEKKDWKRYDLSFKQYCNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPSEILKGTKELFENEILWEK

>ABS43400.1 ISHa1675 transposase B [Campylobacter jejuni subsp. doylei 269.97]

MLSAVKYRIYPTKAQKELIHKHFGCARVVYNHFLDYRQKQFAKGIKETYFTMQKELTLLKKQDEYKYLNE

CASQSLQMALRQLVTALDNFFAKRAKYPNFKSKKNARQSYAIPQNIKLDNKKVYASKFTEGIKTKIHRKL

DKDCIIKQAFISKIADEYYIAISYENNKSLPKPKVIENAVGLDMGLENLIIRSDCVIYKNHKFLQDKENK

LIKLQKQLSKKQKGSNNYAKTKLKVAKAHQKITRARDDYLHKISDEITNLYDFIAVENLNIKGLIKNKHL

SKSIANASWGKFINLLTYKAENKGKTLMQIDKFFPSSQICSNCGSNTGKKPLHIRSFTCPNCNTKHHRDL

NASINIRNYALGIIDDRYKIKLDKSRVGITQSYACKDSSSGVSKYGYILDTSYLSLKQEAHLL

>ABS43399.1 ankyrin repeat protein [Campylobacter jejuni subsp. doylei 269.97]

MTTLSLEEEKRFEELCKMAFNFARNNECENLKIMIEAGLNVNLKTHKGDSLLMLAAYNNSYESAKMLLEK

GAKVDEKNDRGQTPLAGVCFKGYLPMCELLVKYGANIDENNSLGMTPYTFAIMFGRKDVAEFLLKKSKNN

FLKKMSLKILKFIKKF

>ABS43398.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILQDGFFLAIFFFVLLPSRVFALDAVLFNENILSQKVSNEINLIGKELYQKSNIFIGVMVGDKTEIE

TLLNKQKELPQSYILLLLSKNSHKVDIVGSKGVLALIDKEAVLSPYPGTGSILPILATNKGDIYNAAILN

GYADIVDRVAKSLGLQLEHSIGNANRDTINILRILIYGFICFALLYYAQRRIKRKKNVRN

>ABS43397.1 protein of unknown function [Campylobacter jejuni subsp. doylei 269.97]

MNLSVEQKNAILRFKKFVSFRNKISLNLSLIVLICYYIFVLGIGLMPEILGYKLGPSSITLGIMVGIGLI

LLCIISTGIYTFIANYFLDKEQEEIIKSLENEGLIDVLKDGKINYKELV

>ABS43396.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKSCLYFTFIVLFLTACSTKNLTSLHHENLEQKNENQHYAKLEYEQNVSILPQFTYDINFDAKRYKKYFF

NPWHDSFKNYKGQNIFWSFPLYLNSKNTYYFFNKQIIPLSWFKNAIDNANIQKFGKINQKALIIQNTIIK

NLPTQRAILKNPFFKNEGIPFDYASDGILNAGTPVLISHFSKDKRYAFVLGEAGFGFVESNNLEFFSNDR

AKIYENLNFITPLKEKFAIYSEDGKFFFESRIGAIYPYYKEDKNYFYGKIGSKKYKISKKDASKFPLQFN

DKNLKNQLSQVLNLPYGWGGYNFERDCSLLTRDIFSAFGLYLPRNSAAQKNYFNHFDISTLSNSQKKDFL

NRFGKAYLSLLYLPGHIMLYAGQIADNNIAIHNIWGLRKDTTQRLLISSSVITSLEIGKNEILEDNLLLS

KLKEISFINLNKQEKEQIKSYLGK

>ABS43395.1 translation initiation factor IF-2 [Campylobacter jejuni subsp. doylei 269.97]

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPDIAVAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENAKDQEKLNESEKKEPKKEESKEQEKQEIIDTHKPQSLASATLAKRRGLVIVKKKKDEEEIQVKKE

EIKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFLDEHDFGDISLDDEDEVV

LPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPPKKIEKKEVEEVSSVSISKEIRV

YEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEADEFDYVKDYEEETDEKD

LVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRKITFIDTPGHEAFTAMRA

RGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDMVKTQLAEMEIMPVEWGG

SYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRGAVATIIVQNGTLAVGST

VVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKEAREYANKRHEYNRQKEL

SKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVNIIYSGVGGITQSDIELA

SASENSIVLGFNIRPTGEVKERAKDKGVEIKTYNVIYNLLDDVKALLGGMMSPIISEEQLGQAEIRQVIN

VPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKGYECGVGIEGCDDMRVGD

YIESYKEVEEQASL

>ABS43394.1 glutamyl-tRNA reductase [Campylobacter jejuni subsp. doylei 269.97]

MYYCISFTYKNTDIALREKLSFSNETKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNSFCGVHLSRAV

HSAFKCATKVRNETQISKKPISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLIEELPYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHMPTVNLKHLQGKMQSDTVINAMRYVFDLKNNLEGLNQYK

CEFDMENNDEIY

>ABS43393.1 hypothetical protein JJD26997\_0692 [Campylobacter jejuni subsp. doylei 269.97]

MGLRAYAVTHYEKEYGDCLGFNYDFDGFIEFVEKLNIEFYIDEDKTLIELNTKELLALNSNNLDLEQEEL

KLLLILQRNAKGANYAKESYFRVEWL

>ABS43392.1 putative tolB protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILAIFLVFLGSLWAEDPVIDVVNSGVVLPKIIVKDNSNLSDENLKKSFYNIIVNDLKVSSNFEVVAN

ATETSNYTFEYALNKNGNTLSLNVKIKAGGSDKSEQTYTLNGLEQYPFLAHKSVKASVNALGLAPVDWMD

HKILIARNSSSKKSQIIMADYTLTYQKVIVDGGLNLFPKWGNKEQTLFYYTAYDHDRPTLYRYDLNTNKA

SKILSSGGMVVASDVSVDGSKLLVTMAPKDQPDVYLYDLNTKNLTQLTNYSGIDVNGNFIGSDDSKVVFV

SDRLGYPNIFMQDLNSNSAEQVVFHGRNNSAVSTYKDFLVYSSREPNQAGVFNIYLMSINSDYIRQLTAN

GKNLFPRFSSDGGSIVFIKYLGAQSALGVIRVNANKTFYFPLRVGKIQSIDW

>ABS43391.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKAYHTKEKVIIKLSKEEYRKEMKLNKSLKDENKSLKTEIFNLENEKIELLKELKDQIEANMNNIKEIKS

LQNKIYELLYAKERSKLCS

>ABS43390.1 molybdopterin converting factor, subunit 2 [Campylobacter jejuni subsp. doylei 269.97]

MEHFTLYQGSLNIPQIYSQWYEFAKDKNCGALLTFCGIVREEGGIEALSFDIYEPLLKKWFDEWQKRVDF

DGITLLFAHSIDDVAVHESSYFAGILSKQRKLGLKLLNEFVEDFKASAPIWKYDVINKERIYVKERSTKL

CGAGLLKG

>ABS43389.1 aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase, A subunit [Campylobacter jejuni subsp. doylei 269.97]

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFAPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTAPNLNANEKLKIAVIENYVNDADTEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTMAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>ABS43388.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSRFFLYFLIILILALIAFALREKLGKKTKPFFGILLVIFIALAVFFEFENTQKSHLRTDIIVAFNQNKN

ILCKDINVSKAYFNYEFGTGSFISKDNNQSFNSLIIDIKDCRLNDE

>ABS43387.1 flagellar motor switch protein FliM [Campylobacter jejuni subsp. doylei 269.97]

MAEILSQEEIDALLEVVDDNTDTPIASNSKDEKDERNIVVYDFKRPNRVSKEQLRTIKGIHDKLARNLAS

QISSMMRSIVETKLHSVDQMTYGEFLMSLPSPTSFNVFSIKPLDGNCVLEINPSIAFPMIDRLLGGQGDS

YEASRELTDIELNLLDSILRIIMQRLKESWATVTEIYPSIEAKESSPNVVQIVSQNEIVIMVVMEIIIGN

SSGMVNICYPVVHLESILSRLANRDIMMGETSAKKSRNKELKTLIGRAEVVYEAILGKTLINVHEFLELK

QGDILRLDREADDKAIVSIDKKDVFLAQIGLHRFRKSIKILELIRTDKDEIKEILEKYEEERKAKASIYD

ESEEEDEEI

>ABS43386.1 3-dehydroquinate synthase [Campylobacter jejuni subsp. doylei 269.97]

MQVEVKLKENAYKVYIDELEELEFDTKVFILSNPKISGLHLKTLLSKIKAKEISIATVKDGEEYKNLSTM

EEILSQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSSRELAAGMAEFIKMAAIFDDSMLDFIEKIDEKSFLNATCENEIFTQI

IAKSIELKARVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQRIKDILLKFGLPISYKINSVDEFYEAFFMDKKSSNKKINFVLASPLGKGLIKGDISKEDIITTLREF

Q

>ABS43385.1 ribosomal protein L23 [Campylobacter jejuni subsp. doylei 269.97]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENAEA

>ABS43384.1 putative site-specific DNA methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNDEFISVKDFFNHNEKRKKILQKQEINSPKEKIKKVKETKLYTNIESGKYKGKKLLLPSFTTTRSTKSI

VKSCVFNVTREDLRDKIFIEAFGGSALMAAEALSNYALKAYAIELDAKAYKIALENAKNIDPNLEVIHAN

TFEILPKLIENSKNEIILYLDPPFDIREGFSDIYEKIYHFLENLDLKTLNLIIFEHHSTIKTPEKIQNFQ

KVKEKKFGSTSLSFYSLN

>ABS43383.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIFSKIILSSLALASLLHAQTLIEQQEESLVKGVIPSTKIAKVERSQIDGFYKAYLDNGNILYVNPFKR

IIFIGELYTNTGASLTANDRDAWQSEVSTKQAKDLSLKEVTQYAKKVDFGKGSKKYEFVLFTDPECPFCA

RVEELFIKKDVSVYVNFFPLSIHSHAEQWSKEILSAPDFKEALIKLRETQKDLEVKITPQAEQTLKKMRE

LGEKLNIMGTPKLLVVDKKERKIIDVIDGANMQKINSYLDKDKQ

>ABS43382.1 flagellar biosynthesis protein FlhA [Campylobacter jejuni subsp. doylei 269.97]

MGPLIAPVLKAKSLTIVGFLVCILAIIIVPLPSPILDFFLALSIALSVLIILISIYIPKPTDLTTFPTLI

LIITLFRLSLNIATTRMILSEGQNGPEAVSEIIAAFGEFVVGGNMVIGVIVFCILVLINFMVVTKGSTRV

SEVQARFTLDAMPGKQMAIDADLNAGLIDEQTARARRQEVIAEANFYGAMDGSSKFIKGDAVAGIIITII

NIIGGFLIGSFQHDMALSDAASTYTILTIGDGLVSQIPGLITSTATAIIITRASKDEENFAEGTLTQLLS

EYRTLLIVGFVLFIFALVPGLPTLSLGFMALVFLSLGYLTKQVKEGKIDITTVKKSKPSAVAVSQSGAGG

TTAAPAKKSEEEILKEEEHKINDILKVEILELELGYGLIKLAENELTERIRSMRRSIAESLGFLMPKIRI

RDNLRLKPNEYSFKLKGVSIANAEIYPDKYLAMDSGFITEEIEGIATKEPAFNSDALWIDANLKDEATLN

GYIVIDPASVISTHMSELIKAHASELLTRQEVQNLLDKVKNDYPIIIEDALGVAPVSLIQKILKDLLKHH

IPIKDMLTILESVSDIAEVSKSFDMIIEHVRASLARMITNMYLDDKGNLDIFILDSASSAVLMENVQFRD

GSYHLPLSVAQTGTLVDTLRAEVTAVANGRIKPFILCVEPQLRKFIADICYNFSINIVVLSFAEIAENTN

FNTEGIIRIEL

>ABS43381.1 putative acyl carrier protein [Campylobacter jejuni subsp. doylei 269.97]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFENIKKMLE

TAMKD

>ABS43380.1 ribosomal protein L10 [Campylobacter jejuni subsp. doylei 269.97]

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKIKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>ABS43379.1 putative flagellin modification protein FlmE [Campylobacter jejuni subsp. doylei 269.97]

MHIKELKGLKFPDNAIIKFFFKNQLHTLQKQRVLEFACSNGNNLSLFANYDYECLGVDLDDENIANANYN

FTHIIKAKKFNFFKNNILEFPLLYPNIKADVFLIPNVVNYLTREEFLNLLKLCEENKIYKKDAFFFIRTR

SIKDYRYGLSEKIAHNCFKITNDDTTGELGCINTLYQEYELVEYLKQYLNLYNFKVLNYENTNIMGKDER

LVNDSDIVIYGKIK

>ABS43378.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEVYPSNYLEIAKIIPFSERRTSFCEFARKNEIKIEKINRKNHISQKELKKAYKIYKSKGSGRNLFGEKK

LIVKAFEDVEKFLRSE

>ABS43377.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKVYLDTNILLDYFNAERAYHNEARQLVYYLLTNNIQIVFSEDMISTLAYILKKTNIDMMQFYNYLSKI

TLDPKILICSFSGSVIRSACQICQSCNDDFEDYLQYFCAEKESCCAIYTMDKNFPNLKIPIKRYGEIDM

>ABS43376.1 putative thioredoxin [Campylobacter jejuni subsp. doylei 269.97]

MIKKIKILFLVIFLAFSPMALEAKIYDDVYVAQKQALKEAKLMIFFVVSNTCEYCHKLMNDVSNNKDLME

YLNKNFIVAISDLNANGLIPKDLLLNGVTPTTYILTPTGKVIGTPIEGAVDSDILFGLLKGLEDYKKGQL

GF

>ABS43375.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIIQWNRAEFSPKEVKINVLIENEKGKEIQILLAKDSVMKEHKAPFAIHVQVLSGKIWFEVEKEKFELN

ALDMISLEANIAHSLGGIENSIIRLSLNKSDSVQRVDAVLKKP

>ABS43374.1 hypothetical protein JJD26997\_0478 [Campylobacter jejuni subsp. doylei 269.97]

MILAFLFLIFFCACGYKGNPQYTSYEQNGSVKTIKKYEQLHRW

>ABS43373.1 alanine racemase [Campylobacter jejuni subsp. doylei 269.97]

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAREIEEF

FENILILSHRPHGNENSRFIYALNDISQVKNYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSNLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKMVKKYFSNLLFHSHNSAALFRGKIPEDEYCRIGLVQFGYGD

SNLKRILSLYAHRLSQRILQKGQSIGYGGIFTAVKDMEVATYDLGYADGLFRYNGKGELVLGNGKAMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>ABS43372.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MPKSGSMVELRSNLSMVQVGREALARAKEKVELSKKEMNHYQFLYQKAHLDYEKMKALETEEIRQKQKEL

AKAEEKFLDEIAISRFFKGEKDD

>ABS43371.1 orotate phosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNLEQIYKDRGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCDELAKIIASYKIEFDSICSPALGG

ILAGYELARACNKRFIFTERVNKEMTLRRGFEVKKGKKFIICEDIITTGGSALESAKTIESLGGIVVGFA

ALANRGFCGVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>ABS43370.1 hydrogenase assembly chaperone HypC/HupF [Campylobacter jejuni subsp. doylei 269.97]

MCLSIPSEILEIDELNNALVQTLGVKRKVNLDLIDEPLKQGDYVLIHVGVAMEKIDKEAALESIKTYQEI

VEKMNSGEIKSDEGDWGLNEFHR

>ABS43369.1 Mur ligase family protein [Campylobacter jejuni subsp. doylei 269.97]

MLINTLYFINSLFFNFCIAFYLMSALQWYSYKFKRVFFHYHKPLWHLYFLFIPYFLFLAFPLYSLAYFAL

IHAPILYFWNKGIDKKLVFTSKVKWFFVFVFVYNAIFAIFALRFSFLFNLFSLPFALFSLKIYEFFTNLH

YKKQAKAKLKANENLKIILITASFGKTSIKNFLYELLKDDFKSYKTPRSVNTLLGIVADINTNLSQDAQI

YIAEAGARLKGDIDEITRFLQPHISIVGEIGNAHLEYFKSVENIRSTKLEALNSKRLEKAFLHSSTQKKE

DKLISLYDDKLNLIHSSLEGLEFRVNMESKSYDFKSQILGDFNAQNLCVCILCAHYFDIKLEKIQKQVLN

INSVEHRLQVLSREPKFIIDDGFNGNFKGMSTSYELCKNYKGRKVLVSPGIVEVSEEENIKLAKIINECF

DLAIISAQINAEIFKRELKIPTIILKEKSELIQTLAKETKNGDLILFSNDAPSFM

>ABS43368.1 RNB-like protein [Campylobacter jejuni subsp. doylei 269.97]

MKEFLNSLSYGISSHEVSNEFKQILRELLANHIIKEHKNKYYLNNGFAFGILDISSKGTGFLQCFDKSFK

KDLLIENKNLKGANYKDIVAVKLLPLKKKRPSAKVILVLKKANETSLVITKRYGEAVLGMNIKTGLSTAL

KASQKSLKALPLGTILKIENENNNIIEVLGHIDDESVDEKISLALFNKNNEFSDACIKEALANGDSVDAS

MYENRMDLRALPFCTIDPIHAKDFDDAIYFDTQKREIYVAIADVSEYVYAYSAIDKEARNRGFSIYFPHI

AIPMLPRPLSENICSLKPHLDRLVYCFKITLDHDNKVIKEELFEGIINSKRRFNYDEVDEILVQKPDLKE

LSWIYELFEITKNLRKMRLKNAFEFRTEELKMNLDENLSLKSTVFEKDTPSHNLIEDCMLLANKAAAKLI

DIGIFRNHLSADARKIDKLLNELRELGIDMNFKANLPELIRDIQALADELNLRAEVDKLIIKAQKKAEYS

SINAGHFGLGFDKYSHFTSPIRRYSDLILHRLLKAKQKNDEKLFNYLLLNIESTCESLSTLEREADKVAF

DFMDRKFARWAAKNTGKKFKALVVQNDGVCIAKLDDEIKGADIILYDTRVNLLESVEVQIMEADIIMAKI

HAKITQKLTKEENV

>ABS43367.1 DNA transfer in the process of conjugation and F pilus assembly protein [Campylobacter jejuni subsp. doylei 269.97]

MILKKSEEEKTFIGIGFDLEDKKQEKLLEIYQMDDNSKNHTFVFGSTGVGKTRLIEGLIEQDIPKGKNVV

IIDPKGDIGLFSKMVEIAKKSNREKELMFLSPIYPEYSIKINPLANYYMEEEIIAHIVSGVPAKDEFFYN

VANETTTAVVKALLIIRRYEKLEKPLNFEEIAEKVYYEGLKELQSELKEIQSNGFEDDEIARLLALYDRV

LSSPQDYFAKVSSTLRTTLTQMTMGNVGKIIGTAQENTFIKRLQENQGVLLYIMTGSMLTRQVSSIISKV

TISMIQSCVGRVYASGKKFDKTLKIYIDEAASSVYRGIETLYAQARGAGVAIMGLTQSAADLAAEIGQDG

ANRLLELTNTKIIMRLNDTKSSKMISDLGGKKRAYSYFLTVEGGITSREVEELNIEVDDVTNLQKREFFY

FGFEGRFKGKTLKVNDGKLVVDMPNVTQKNEDFNV

>ABS43366.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEKNVLENMFKKLMHKGISVFTLDGKEIRIEQDEFYNPFDNCRNPSFFNLLKRYDIGEKEIDGLDCTDFE

NIQEIEDYLNSKGYIWIRVGAYIHSGIALHSEGNKPRNYSYGWDCGCAGYAYYTKEQVREIFDVKRISAK

FKDKLYKNIEIFIKELEAYLEGNIYTLYVDDIPEDTFIGYDKKQMLQTLERFAA

>ABS43365.1 highly acidic protein [Campylobacter jejuni subsp. doylei 269.97]

MKILLLNENPVVSRLVGLSAKKMSYDFEELNAYSENLGNYDVIVVDSDTPAPLKILKEKCDRLIFLAPRN

QNVDIDAQILQKPFLPTDFLNLLNNKDANKHTSIDLPMLSNDENPYADISLDLDNLNLDDLPDENSLDIN

SEGMEDLSFDDAQDDNANKTLETQNLEDENLEQETTKEQTQEDIQTDLDLTLEDSESEKEDLSQEHTALD

TEPSLDELDDKNDEDLEDNKELQVNISDFDDLLVVEEQEKEMDFDDLPEDAEFLGQAKDNEESEEILEEF

APVVEDIQDEMDDFTSNLSTQDQIKEELDQLDELDYGIDSDNSSKVLEDFKDEPILDDKELGTNEEEVVV

PNLNISDFDALKESDIQEALREEILEKNEESIVSDATKDDSSEEIVNELSQSIAGAITSSIKDDTLKAAL

KGMNINININISFKED

>ABS43364.1 NADH-quinone oxidoreductase, C subunit [Campylobacter jejuni subsp. doylei 269.97]

MRKYSDKKNAQTQNYYKDRFYHAPRTVKSDVNESVFKDDFEVLKTQVEILNSFVELDFWVIEIKKEDNVK

TLQMLKTLGYLSFTEASAIDFIADKNGFEVFYQLLNLEKKLRVRVKTFVGVKERLQSVAHIFKGANWSER

EIYDMFGIFIINHPNLKRILMPDDWFGHPLLKTYPLKGDEFARWYEIDKIFGKEYREVVGEEQRDSGFAD

DKDTLNFARLYHEVPKGGKKKEISFKQEYQEDEGVAFVKKVKRDEAKILEKRR

>ABS43363.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MENQKNEFDDIILEKSNKSEKVKKILLRVIALVILFLAIMIVMKLIKGSGDENTQNQSVLPSEPIATQDN

NNDTSFESMPITDNTSAEDQFEALRKQFQDEQNTTQNTTTSSSNNNDSTNFAMPDQEVPAEPTATTSENT

TSQTSAPKQEVKQTAKPKEEAKKQTAVKKEKESAKQTPKKEQNANDLFKNVDARPVHPSGLASGIYVQIF

SVSNLDQKSKEFAFVKQKGYDYKLYKTTVGGKEITKVLIGPFEKADIAAELAKIRKDIAKDAFSFTLK

>ABS43362.1 phospho-N-acetylmuramoyl-pentapeptide-transferase [Campylobacter jejuni subsp. doylei 269.97]

MYYLSDLSHYAFFTYISVRAGFAFFIALCLSLFSMPKFITWAKAKNASQPIYEYAPETHKTKCHTPTMGG

LIFISSAVIASLFCIKFDNIFAISALLYLILFCLIGLIDDLGKVLKKDNHSGLSPRMKLLAQIIAGLICI

LPLYFSSELSTEFFIPFYKHPLFDMEIFAIAFWILVLISSSNAVNLTDGLDGLATVPSIFSLSTLGIFLY

LSGNLNYSEYLLLPKIQGLGEVVIICAALIGALMGFLWYNCYPAQVFMGDSGSLALGGFIGFLAIISKNE

ILLLLIGFVFVLETVSVILQVGSFKIFNKRVFKMAPIHHHFEKVGWVENKIIVRFWMIALLSNLLALASI

KLR

>ABS43361.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKVDNFLNTYSMNSALLDRAVKARSLESSIKINDNDIVTKSKEDEVLKEQTNAFEAFFLKQVLDVSLKSQ

NSLFGKDASDEIYSSMYNDTMSKALSGGMGFSKLLYDFIKERG

>ABS43360.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKVLIIGFGSIGKKHFLALKNLNYEVSLLSLSAKEEEFKNTPIYHSLKECDLNEFDLFIIANITTEHFNT

LKALNELVKDKIILVEKPLFEKAQNFTSSKNYIYVAYLLRFHPVIVALKKLLKGEKIYFASLVCNSYLPH

WRALDYRQNYSAKKELGGGVLLDLSHEIDLAFFLFGNLELEYSQNAKISELDITSDDFAFLVLKNSQEAK

IHIKLDYFSKFNKREITIHTLEKSFKADLINNKIEIYHKNKNTECLNFENDTIKTLQNLHQAVFEKDKEL

CDLKQALKVLELCDEVRRKNG

>ABS43359.1 lipopolysaccharide heptosyltransferase I [Campylobacter jejuni subsp. doylei 269.97]

MKIAIVRLSALGDIIQSAVVLQFIKNFKKDIEIHWFVDEKFEGILKNHPLIDKLYALPLKDKKILKSLKI

LLKARKNNYNAVIDLQGLIKSAIASRILSRNNFGFDKNSLKESFAHNFYNQKLELDYNENVFVRYLSLTS

FVLNTDFNAKNLAFKQDIFSVNENLKQLLSNKLKLDKNEQNILIHVGSSVENKIYPKTKLAILCKLLINE

FQQAKIWLAWGNVKEYEFAKEVLNLSGIDETHIELAPKFSLEELMAFIKMMNLIIGNDSGPTHLAFALNK

ASITIFGATPSYRNAFQTHINKIIDAGKKIQNAKHIDKSDFCITRIEEEDIFKLAKGLLNEK

>ABS43358.1 phosphatase, YrbI family [Campylobacter jejuni subsp. doylei 269.97]

MTELIFLDVDGCLTDGKIIYTSNGEFIKEFDVKDGAAIEAWLKLGKKIAIITGRNCPCVEKRAKDLKIEI

LYQGIKDKLACAKEILQKLSLDFSQCAAIGDYFNDKALLESVGLSFKPKDGHKDLNVDIVLSKKGGKAAV

AQMIEILVEKNHLEEEWNKLWL

>ABS43357.1 ribosomal protein L16 [Campylobacter jejuni subsp. doylei 269.97]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>ABS43356.1 amino acid ABC tansporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. doylei 269.97]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FNLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>ABS43355.1 chromosomal replication initiator protein DnaA [Campylobacter jejuni subsp. doylei 269.97]

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSTKQSNKSTKIDIAHIQAQSTILNPSFTFESFVVGDSNKYAYGACKAIAHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARTLTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

TSLKAKIEELKNKILIKSQS

>ABS43354.1 major outer membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MKLVKLSLVAALAAGAFSAANATPLEEAIKDVDVSGILRYRFDSASFDKNFPSKESLNTSKQMHKYRAQL

NFNSAIADNFKTFIQFDYNAQDGGYGAKQVRNDFKPLNVRQVYLTYTNEDVATSIIAGKQQLNVLWTDNG

IDGLVVTGVKVVNNSIDGLTLAAFAVDSLMASEQEGDLIGTKDGIKTDDTSVYNDPFSPYVLGNQHKLSA

SGNLYGAAVIGSYDFMGGQFNPQLWLAYWGKMAFFYGLDLAYSTTVFDGINWTIEGAYLGNSVDNRLEKE

GKIGNGNFFALRGSIEANGWDASLGGLYYGEKDKVTTTVIEDQGNLDSLLAGQEIFNTTGSRLNGDTGRN

IFGYVTGGYAFNETVRVGAEFIYGGTKSGSATYLGTSGSKKLEAVARVNYKYSPKLNFSAFYSYLNLDQG

KNTNKSADHSTVRLQALYKF

>ABS43353.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKIYHLSHTDLDGYACQFVVNFYFKNVKFYNSNYGKEINENFNSIIGDIEKDENFGKAIILITDLNLNLN

QCEEFEKICKEKNIKIFLLDHHQSGEECAQKYSWYLLDSKRCATKIVYDFFSKICTPVLKLSKFVDVVNA

VDIWLSEDENFELGKVFLGLIANAKEINRVMFKKSQIDYMFFLLDKAWKFIGKENANILLDNATHFIKKD

YFARKNDDTLSNLISYFVVEKLSELKENFRVEYEGHKGILTSNIGNTSVIGNDFLVKNPDYDFFIDVSSR

KTLSFRANGKIDVSLMAKNLVGGGGHKNASGGLFATFKDGANYNHIKAQIIDLIKSKELKKENNESKQ

>ABS43352.1 phosphoglycerate kinase [Campylobacter jejuni subsp. doylei 269.97]

MSDIISIKDIDLAKKKIFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVSKRLARLLDKEIIMAKDIIGEDAKTKAMNLKAGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDA

PMKFVPVQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>ABS43351.1 low molecular weight phosphotyrosine protein phosphatase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILFICLGNICRSPMAEFIMKDLVKKANLEKEFFISSAGTSGEHDGEGMHYGTKNKLAQLNIEHKNFT

SKKLTQKLCDESDFLITMDNANFKNVLKSFTNTQNKVLKITDFSPSLNYDEVPDPWYSGNFDETYKILSL

ACKNLLVFLSK

>ABS43350.1 putative nucleotide phosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MIFYSYEEFKEDVKILAKEIKKDFNPDALLAIARGGMSLGHSLAVALKTRQLFALNSIHYDTKKLDTIEI

FNIPDLSKHKKILLIDDIVDSGESLAEIKKVVLEKFPHIELKIATIFYKKTALLEPDFKVKEATEWVDFY

WDINLD

>ABS43349.1 ribosomal protein L15 [Campylobacter jejuni subsp. doylei 269.97]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>ABS43348.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MLQRRNLMVRTDKIYIYAASGHGFVCEDVAKNMGYKECIFLDDFKGMKFESTLPKYDIFIAIGNNEIRKK

IYQKISENGFKIVNLIHKSALISPSASVEENAGILIMPYVVINARAKIEKGVILNTSSVIEHECVIGEFS

HVSVGAKCAGNVKIGKNCFLGINSCVLPNLSLADDSILGGGATLVQSQDEKGVFVGVPAKRKI

>ABS43347.1 glycerol-3-phosphate transporter [Campylobacter jejuni subsp. doylei 269.97]

MEQRLIGWAVDYYGSWNAGLIMLLSACILCILCSTLCHFSAQKKYQ

>ABS43346.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFYFVVFKGRIIMHLKHLYFSISQIFNFYKEGFKNLTLGKTLWKIIFIKLFVMFVILKLFVFDVNFNSIF

KSDKEKSTFVLKNLTLEGK

>ABS43345.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MFGARKNNTEIIEQLEKKCNGLGDILRSIGNTMAVIEFTTDGVILEANQNFLTTMKYSLSEVKGKHHSMF

CLPEVVNSSAYSDFWKDLRDGKARSGLFRRIAKGGIDVYLEANYLPISDNNGHVYKIIKFANDITQRHYE

MLDLRNTIAAANRSMAIIEFKPDGTIITANENFLRTMDFNIDEIKGKHHSMFCDSNYRHSKDYVQFWEDL

REGKFQSGKYIRYGRNNKKVYLEASYNPVKNDDGKIYKVIKFATDISEQVKKDQEKLRLISELAEKNDNL

TQDGDRVIENTVSNVQNIADMMSQSSNLVSSLNQQSDEIKSIIQTISDIADQTNLLALNAAIEAARAGEH

GRGFAVVADEVRNLAERTGHSVNEITTTINSIRNVTSQVVESIKSGLEDVNQSVELAKEARECMEKIRES

STEVAKAMS

>ABS43344.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIFFIFIGQLFALDLNFNTFSSNFIQIVKSKNSTLSYSGHFILSKDQAYWSYDTPSKKEIYINKNQVTIV

EHDLEQVIFSHLDNIPNLNEIFKKASLIDKNKLVAKYDNINYTIKLNQEQIQSISYKDEFENDVIINLNN

QIKNPKINSDVFKAKIPQNYDIVR

>ABS43343.1 antioxidant, AhpC/Tsa family [Campylobacter jejuni subsp. doylei 269.97]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>ABS43342.1 GDP-fucose synthetase [Campylobacter jejuni subsp. doylei 269.97]

MLKDSLIYVAGHRGTAGSAILEGLLKQGFSNIITKTHAELDLTNQKAVAEFFASQKIEFVFLAAAKLAHL

GQFEPASVLYENLMIQNNILNASFKNGVKKLLFFGSAWMYPKNATNPIKEDALLSDKLDSVATPYALAKI

TGVKLCEAYNDEFKTGFLSLALANLYGQTKDFNFKTAKVLPAMLRKFHLAKLLSQNDEKGVLEDILLRDS

LKLSTMSEAKEYLAKFGVSEESVEIWGSGKVRREFIHSEDLADAAVYIMQNINFKQIKSENSHLNVGSGE

VLSIKELAFLIRDIVGFEGEVVFNTSKPDSTMDRLLDNSKINALGWKAKINLEKGVQMMYQWYHTRGGGG

>ABS43341.1 DNA/RNA non-specific endonuclease [Campylobacter jejuni subsp. doylei 269.97]

MKIFIFLLAISLNIFALESYKPSADFSSYFNNINCSQILDKFFYLNCYDYKLKGTKAVAYKVEALNLKDK

QIKKRPRFEDDTNIPKKYRTTWSDYKNSSYTRGHTAPNASFSFSKAAQNSVFLMSNITPQNAQINNTIWN

EIEQRERSLALKFQSIEVLNLVLYDKEPQYIKNRIAIPSFYIKIIKTPKFKECYQVPNHEVNDENIKQYQ

INCNKF

>ABS43340.1 gamma-glutamyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MRYLAIFAISITLSFGAANPPIQDRTGTGLVLSSHELANKIGKEVLDKGGNAIDAAVAVGYALAVVHPAA

GNIGGGGFAVIHLANGENTTLDFREMAPLKASRDMYLDSKGEVIKDASTIGYLAAGVPGTVKGMSAMLDR

YGTMKLKDLMAPAIKLAEKGYLINDRQEQTMLEAKDMFKEFPSSSKYFLKKDGSTYKSGDLFVQKDLAKT

LKLIAKEGPDAFYKGKIADLIATDMAKNKGIITKEDLAQYQAIWRKPVEGTYRGYDIISMSPPSSGGAHI

IEILNIMENANIENLGFASSKTLHIMAEAMRQAYADRSEYMGDPDFVKIPLDKLTSKEYAKEIYAKIPKD

KALPSSKVKPGLGKIHEGHNTTHYSVLDSKGNAVSITYTINASYGSGAAVEGAGFLLNNEMDDFSIKPGV

PNLYGLVGGEANAIEPKKRPLSSMSPTIILKDGKVFMVVGSPGGSRIITTVLQVISNVIDHKMDISTAVE

SPRFHMQWLPDEIRTEPFGIIKDVQNNLEKMGYKITKEPYMGDVNAIMVDPKTGKIIGSMDTRKEF

>ABS43339.1 peptide ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MLKVCNLSKFYELKKHWYLKKERHIIFDNVNFSLNENDNLMILGKSGVGKSTLARILCFLEDPSEGEVWY

ENLNLHKLDKNKQRLLRKQIQYCFQDQKMALNPYKKIKNLIQDGLENFNLQKNDDLILEFFDFFSLKKQI

LEQKPYELSGGEATRVGLIRALVLNPKLLILDEITSALDIKTSKEILTFLYDYQQKNNISYIFITHQSDL

FYKFNHKKLKL

>ABS43338.1 enolase [Campylobacter jejuni subsp. doylei 269.97]

MLAIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDKDERFGGKGVLKAVANV

NESIAGEILGLDAFNQTQLDDTLRELDGTKNYSNLGANATLGVSMAAARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMITPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEDKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>ABS43337.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MQYKTINLEQGSPQWCDFRKGKIGASMVASCVGIKGAFHSKEQARDIILGLKEVHQNDAMKKGMEKEPLI

RSEVEKLHSVSITPIVLQSLENEMFMASLDGIDKNGVIYEFKYSQDEYDFVKKNKKPSDKYYAQVQFALY

ISAKEKCLFVAMDKKEEIVECEVLRDEAYQEGLVENVKEFILDYIIDQKSDYKELEDTKAKNLTIEIIRL

ANTIKPLEEKLESLKKELIALANGEKARCLDITIYPQSRTKVDYKGFLEQKNITVPKEFYKESISMCLKI

KKGDEK

>ABS43336.1 high affinity branched-chain amino acid ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MILELKQISKSFGSVKAINETSFKINEGEIFALIGPNGAGKTTLFNIITGNYKPSSGSVEFLGERIDHLK

PHKIVHLGIARTFQNIRLFSSMNVLENVLIGFNKQMKYNIFEAFLHLGRFGKIEQVFKEKAYVILEELGI

AEFAHEKATSLSYGQQRKVEIARAMATQPRLLLLDEPAAGMNSSESDELAELIFKLRKDYKISVLLIEHD

MKFVNKLCDRVLVLDYGKTIFEGKLCDAVNHKEVIAAYLGDFDANS

>ABS43335.1 ribonuclease HII [Campylobacter jejuni subsp. doylei 269.97]

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKKLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDTLGLSTCLKTGLKLIKKHFKAENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDKVMNFLAKDFPCYEFEKNKAYGTKAHKEVIAKFGICKLHRKSFKLL

>ABS43334.1 ATP synthase F0, C subunit [Campylobacter jejuni subsp. doylei 269.97]

MKKFLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>ABS43333.1 hypothetical protein JJD26997\_0935 [Campylobacter jejuni subsp. doylei 269.97]

MCIKASLQKISLVSLVLVFSLINLNAKETQASEYDNNLLLKKAVLKLYRENQELEKRVAVLEEKLGILKS

EQNTSVVNPKPLDQNASVFLSRVKDEFKKGRKIVLGQAIKDTKYYSKPSISSRVVGNSR

>ABS43332.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLIDEKRLMRNHTLKPAYPSNIGELDTIKVYEKWFSYAMIGVNKYVELLHKQLIRKGRSQIQNIKHPLFK

NSYIVKKYNIKSSSTAPYDKENYNDLGLNQFFVGQDPYKSYQGDPSSKNGIYHDICEIRTNYDLANMQYY

YGFPNNLALLFEKEKALKYNGKGFFYIDEKINFKDILSKALENINYQMLINDMEVVIFCQTLQKNNEWVY

PSTHDIKIPEIKVENIEFKSSFGKPYKKLCVDVEKFYKAFKELNKKIFRIEKVEISYNVYEKAQKTLESD

GDKIYYTLTSKKISFFEVFNSIKENYKFKYGTPLCFYNGFNLVCYEEPYVAYSNPSNQSFGKKDTSVTPS

VYPLYRKSSNLPYGRRDRWFALWDNFYYLYVYEKSNKGILRFLLPIVTIVLAVATWWMGGQGAWLGTLIG

VSENVATSITLGISLGLAVGSLSGNKTFSILNAVWGLVNFLGDWSYNNWNLAADFTKNTARVAQEMTSFE

STLNVVGNLLSGASRIFDGVQSITANTPDMIKEQSDDFDNERGNASEAEELAKDAINPTIWYDFETADIL

NEKIEKKEKPIFTFFTSFNCLKIIYYDLL

>ABS43331.1 hypothetical protein JJD26997\_0103 [Campylobacter jejuni subsp. doylei 269.97]

MCEIKSFNYNLFDFKREFNKLYHSNKVPPIYLFLSKKVSTTC

>ABS43330.1 dTDP-glucose pyrophosphorylase [Campylobacter jejuni subsp. doylei 269.97]

MNIVIPMAGLGSRFAKAGFDKPKPFIDVLDKPMIVRVLENLKYKDARYILIARKEHLTKEKKLVDEIKNN

FNVEFIPIDKLTEGTACTVLYARKYINNDTPLMIANSDQIVDINIADFINDSFKRGLDGSILTFIDKEKN

PKWSFAKLNNDLVVEVKEKEAISEFATVGIYFFNKGKIFVESAIDMIIENDRVNNEFYTCPVYNYAIKNG

AKIGMYNIDFSKMHGIGTPGDLEIFKAINKL

>ABS43329.1 hypothetical protein JJD26997\_0056 [Campylobacter jejuni subsp. doylei 269.97]

MSNLAPQNDVLNLTPSKTSTTSNSFSKTSKNKEYESSDSKNSTQDDTESFLNSLLNSIDETNEFLPDHMK

IGQKEVVNEVMNRLQKGAFDESDKISIFESASFMQILSLLDKLKTDTADVKLANLSTQLSSLIKTEANFN

ALKGASNLSELLDIAKDLGLNVKNIKVDRLLDLKATFPNLDKADFFKGAVNNVFKEIINSKISNVSKNLN

HNLQNTTHTTSTHSTQKTNSKDSGSLLSQTLKNLDSILSSKESKHEKKDKVKSKIEEDAADAKNTLKNIK

NDEFAKNLTEELNIKDKKNQDNLNKENKDLNKDFNKELNKNQGDMQEQNKNLKNNNQNLIFDKNSNKETV

KDTPNLASNLTQKDFSLNKEVKNNNKENKDIKQNFFDQKLNFENLNKTQVVQNKENNANFNNNTNKETFT

QEQTKTHSENVDKNSLDELNSLVKDLNKVTQNNARNITPKETLQHFSQDLKEAVDQYKAPITKLSITLNP

NNLGEVEVTLIQRGNNLHINFNSNTNAMNLFIQNQAEFKNSLVNMGFTGLEMNFSDQGKREQNQNQGKNR

SGYGFKDALEGKNESEKVNLELVLAKYF

>ABS43328.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTKLELIEALFGLSKTQANIAEKRYFNNFNEAKINDFYDFFVETCNNENIVGDNFFKLTSVFKIAELEFK

KRFEDKESFLLWLTNKYKNRAFFRVFAGEFEYQYFAYDSFGKRYEMTNKSIDMLVCLNQFKELTYQNGDL

IENGVFKEALVDFIFKNQHRIGKDIHLAITPAKIERVLTLDEMRELEKAEEKRLLNENKSRFEKILKSKM

AFRNIS

>ABS43327.1 threonine synthase [Campylobacter jejuni subsp. doylei 269.97]

MKLVESRNVNNVTSFKEALINPNASEGGLYSPLNLPVFEGEKYANLSYKDFALKLIESFGFGEEELFKKA

LKSYESFDDKNTPISLQKIAEKTYINELWHGPTRAFKDMALQPFGVLLSEFSKDKNILIICATSGDTGPA

TLKSFENAKNVKVACMYPKGGTSGVQELQMRALDKDNLKVFAIDEDFDAAQRILKELLFSKDFQNEIKAL

NYELCAANSVNFGRILFQIIYHYYASLKLFNEFLEEVQIIIPSGNFGNALGAFYAKKMGAKISKIKITSN

ANNILSEFFNQGVYDLREKSLKKTISPAMDILVSSNIERLLFAKFKDKRTKELMNLLKNERYFKLEKEEL

QSLQEDFEADFCTDEECMQFIKQSKILIDPHTATCFKMLDLLKPSIITSTAEWTKFTPSMIKALYGRDSK

NEKEDLKFIAKEFNVQVKDEILALFDLKNSDKNVFESKNIKKEILNWMQK

>ABS43326.1 conserved ATP/GTP binding protein [Campylobacter jejuni subsp. doylei 269.97]

MAKIAIHIITGFLGSGKTTFLQEFLEQKGGKNIALIVNELGEVALDNELIQTQFVKETLVLNAGCMCCNK

REDLSQKCKEVLDGYEKSGKKLERILIETTGLANPAPIVFTLLSDAFLANHFYLANIITCVDALDGLKHL

EQNAEARSQIISADYVVITKTDLHKDTQKLREKIFCIHQGVGIVAKEDFNFNKLFSLKRMEEFSGQKFPQ

NSTPTNLHQAHQNSVNSLCLCFDKPLDWSVFGIWLSMLLYAYGDKILRVKGLLDVDEDYLVNINGVGHII

YPPTHTKISSRRDLDIRQDLRIKQSPALSDGKDESGLTDQNKTYLARQSRLVFIAKNLDLKNVEYSLRAF

LKLKI

>ABS43325.1 ribosomal protein S1 [Campylobacter jejuni subsp. doylei 269.97]

MSEVNKKVQGSVDDYLEEEDFGQLLEAFDKSREEATTEGVIVEIKNDEVYVDIGKKSEGILALSEIQDDN

SKLLFNVGNSIKVAVVGSRSGRSLLSHKKALRKEKVVEFIKNYQENQDDIFNVKVVGKNKGGLIVVDDND

VEFFLPKSQYGFKEINNITGKTFKVKIIKINKDEQSIIVSRKKTLDDERKKRKELISNIVQQENLIEGIV

KKITTYGMFVDVGSVDGLVHYSEISYKGPVNPGTLYKEGDKVPVKVIKYDKERKHLSLSVKAALPDPWSE

IKDTLDVGDTIKVIVSNIEPYGAFVDLGNDIEGFLHISEISWDKNIKNPKDYINKGQEIDVEVIEINPSE

RRLRVSLRNLLSRPFDEFMKSYKIADVVEGEITSVTSFGAFVKLGGIEGLLHNEDASWDRNDKCKDKFSQ

GDKIKVKIIKIDEENQKISLSTKELSSSPVQEYAKIHKVGDIVKGTIRDIKDFGVFVELSKNVDALIHKE

DISTSMLENLKIGDYIEAAIVFIDEKKNRIRLSVKNLVRMKEREVFNEINNDDKVTLGDIIKDQLA

>ABS43324.1 lipoprotein, NLPA family [Campylobacter jejuni subsp. doylei 269.97]

MNIKKIFLSVLFTISLSFGADKTITIGATPTPYAEILNFSKPLFQEKGWKLIVKEFNDYNIPNIALNEKD

LDANLYQHKPFLDDFNTHKGTNLSSLGAIVLVPMAIYSNSIKDIKDIPNGAKIAIPNDATNESRALDLLA

KANLIEFKSQSTLKTPIDISKNPKNLKFIELKAAQLPRALNDTDLAVITTNYALGAGLNPLKDGIFIEDK

DSLYAIVLATRKGEETSQKSLVIKEILTSDKIKNFIIEKYEGSVIPTF

>ABS43323.1 GTP cyclohydrolase I [Campylobacter jejuni subsp. doylei 269.97]

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKAYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENADAKGVGVII

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKIREEFFSLINSAKQVRF

>ABS43322.1 NAD-dependent deacetylase [Campylobacter jejuni subsp. doylei 269.97]

MKQAMLLSGAGLSAPSGFKTFKDNDGLLEEYDVMEVCSATGFRKNPKKVLDFYDTRRAQLQNVKPNHAHE

KITDKQCLKCKSKDLRHNIVMFEEQAPAYATLYSLLNQTSLFISIGTSGAVLPVGRYASMCEKSILNIYE

KDANLEWYFDKIYIEDIISAIDKIVLDIENFMKDGNV

>ABS43321.1 aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase, B subunit [Campylobacter jejuni subsp. doylei 269.97]

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVNGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIDFEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLQIKIPELPDEKKMRFVSELGIKESDAEVIISSLEMSRFFESLISQNLSPKLCVNWLNTELMGF

LKGELTIENSPVDAQKLGDLIKRIEDGTISAKAAKDVLAFVFENTNVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANADKVAEYKSGKDKLFGFFVGQTMKEGKRAFNPAKVNEILKAKLG

>ABS43320.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>ABS43319.1 tRNA pseudouridine synthase A [Campylobacter jejuni subsp. doylei 269.97]

MMKIKIIFSYDGSAFLGSATQPHKKGVQDVLSEALSHLGIFSPLLMASRTDKGVHASYAVASVECGDHFV

NLEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVYFYPKFDLGKANE

LLGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMS

EKELKEQIEAKKQCNHFLAPPNGLYLSRICY

>ABS43318.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKYEFLCKNPDSKKLIVVFGGFASHSSHFSHLKSDKNVILFYDYENFDLNFDFKAFDELFLIAFSMGVCV

ANKLLKELNFKQKIAINGTHFGIDKLKGIHPTIFRKTLQNFKLENFKEALFKERKNLTKDFIFKDEKALK

IELEKLFNFALVKQEENLLWDKVYSSKKDEIFPPNALKNAFSKLIFLNEPHFAFFHFKTWDEI

>ABS43317.1 repeat motif-containing gene [Campylobacter jejuni subsp. doylei 269.97]

MQGNTVRNYYVSEGVKALFSIYFKDQTEENFIKALNEFNKENQINSQEIKDEALREIKEELSKLATTDLL

NARIDTVDAKIDRTEASLNAKIDKVEASLNARIDKVEASLNARIDKVENKLDSFKTEVKTYVIILAVLMF

ILQPTIFDLIKSIFK

>ABS43316.1 GTP-binding protein Era [Campylobacter jejuni subsp. doylei 269.97]

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVIHEKNQIIFIDTPGLHESGATFNQ

LLVQSAIKSMEDCDVILFVASVFDSTKDYENFLSLNPQVSHIIALNKVDLTDNATLLKKLSEYAKFSEHF

KAILPYSSKKKSYKKGLLDEIVKCLNEHEYFYDPEFLSVNSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMFIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>ABS43315.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>ABS43314.1 site-specific recombinase, phage integrase family [Campylobacter jejuni subsp. doylei 269.97]

MKYPLDCEENFEKSFLFWLAKYIKFKLNSLSNKELKNPQALAEVNFALTKGVKNIEELDALAKKARNAGL

SGVNTYFNPLKKVFEYLNFYKLYSLKQIDEELIVEVLASITGALSDASKKNYRIAVINFFVFLDKQNEED

EKAHIFDINLKNWAGIAGSKGVKLPEFMSEEELKKFLDAIENADFKNNTIRNKLIIKIIIFTGIRVSEAI

NIKIGDISEENDLYIIRIRAKGNKYRVVMIKKELIYDLLKNVSINYMSKDALLFVNKKGTPLTQSYVSRI

VEQLLFRAGIRKQKNGAHMLRHTFATLLYKKQKDLVLVQEALGHASLNTSRIYTHFDNDKLKLAAQVAKE

LSDS

>ABS43313.1 hypothetical protein JJD26997\_1106 [Campylobacter jejuni subsp. doylei 269.97]

MADAIEMKILDLFKVKVYYFCSYKADKGDKIISGSCLVNYSRYFWKKTDFEVVYSLISNQIKKDLKAVSV

YFTQFHKL

>ABS43312.1 NAD dependent epimerase/dehydratase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQKVILITGTRKGIGKQLSEYYLSLGYIVCGCSRGASSINHINYRHFELDVSDEEKVVSMVRAVRKEFSR

IDILLNNAGIASMNHILTTPYKSINNIFNTNVFGTFLFTREVAKVMGNIYKKNYKNTKTMPFRIVNFTTV

ATPLRLEGEAIYAASKAALVNLTQVCAKELSEFGITVNAVGPTPVPTDLIKNVPQNKLDILLNQQAIKRF

GEFEDVLNVIEFFLDEKSGFITSQVVYLGGINA

>ABS43311.1 para-aminobenzoate synthase glutamine amidotransferase, component I [Campylobacter jejuni subsp. doylei 269.97]

MTLENYAVFGKYFYHDLKHTLKAFNHKESKKCFKFIEKYKNDFYILMLADYELYRYFQDKNFTSKKAYLS

VFAFKKRKKFQKEDIDEEKFIPEFINFLDQDNYKENFIKVKEAISKGRVYQINLTQNFNFHSKMDSFELF

KLLLSRQDTEFKAFIKDETREILSFSPELFFKTKKRKIFTKPMKGTIKRDKDPIKDEENKIFLQNDTKNL

SENVMICDLLRNDLSKIITKKSLKIKLFEIQSHPTLHQMTSSVQGKLKKNTSLYQIFKALFPCGSITGAP

KLESIKFIEELEQRDRGIYCGTIGLIHKNKNKFSVAIRTLEKQDEIYTYSTGSGLVWDSKFKDEFEELKL

KSAILNPCDFHLFETMYFKNSQILFLKEHLLRLINSALKFNFNTHNIFKDFYNILNQKSSYKEYQNFTLF

KFDEKIFHKKHSLFYNFPLPFKNPHKEGILKLILYKDGKYEFQQSALKQNSNDILLLSDDKINSKSDNLY

HKSSLRTLYNQHSYKWQQNLCYDIAFFNEKDELCEGSRTNLILEKNAQFYTPQIQSGMLNGVYRNFLINL

GLIKEKALFKQDLFEAENIYCINSVRGLKKVKLQ

>ABS43310.1 conserved hypothetical protein TIGR00103 [Campylobacter jejuni subsp. doylei 269.97]

MFENMDFSKMGELLNQVQEKAKNIELELANREFSAKSGAGLVKVSANGKGEIIDVSIDDSLLEDKESLQI

LLISAINDVLAMIAQNRSSMANDVLGGFGGMKL

>ABS43309.1 transaldolase [Campylobacter jejuni subsp. doylei 269.97]

MKNFSLWCDFIENSFLDNEFLNLLSHEINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAIGKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKTKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDNLPKDYYIKELLFENSVNTAPLDAIEAFKGKMDFKKP

LMNFEIYTALNQIISQSEREKACNDLLSDGIEQFCIAFEDILKAL

>ABS43308.1 tryptophan synthase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MVDFRKFYKENANVAYTVLGYPNLQISEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGV

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLVKECEKYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKYFKQENLDIIMKDIEEIFKK

>ABS43307.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MFKTIVCFLALNLSLFAVGFDLKPIKSELVKVDDIYGYIKDSDDIKLYSSGVVVQHFSNSQSIIARASVI

DKKNGLAKLEFSVFSALKQDALPLPNVLPKVGDEVVLNFLYDRGLVIAPDEQTYNELVREFPQIYFTHID

IFGAQLIRTATLSPKRSDFRQFCDDNAVGILVVALENQAEVVDCQDFNKLYEVPISKPTSVQVPFYSRIG

GYKSNFFDFNSQEIGNYYRYYDALINLPKVQ

>ABS43306.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLINQTFEIDSCDDVELNIKRTSKLEYRISYDDEKEIKAIVFIIPGFGGDADGNYRKHLVEYVAKEFQIM

VVSVNYHCIKNRLQFGASLFMDNIDKFILQENCTAFNIAIPIHLNKITDILSYLDENMEKLKNEEKIKEN

AKMSLSITLEPGKNEYQNFGVMQAQDLINALLHLKKEKYNLLENIPVIMIGSSHGGYLAHLAAKIAPWLV

DGVIDNSSYAKTPLQYLGFGKEIDYMRHYEACDISNSFKNLNLLFYSKTFWTSNKFLKNYFSKDKSLVRD

ILNYKHLNIMSNYDICFISYHSIQDDYIAPIGDKILLYDYLNKLNIDAELNIIRHKEQIDGRFIKNLEHG

MGMSIKFLINNNLPKLFAKIQLKKRIVRQKTVSYPCQDLIYTFYEENNKINLKIEENICS

>ABS43305.1 1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino]imidazole-4-carboxamide isomerase [Campylobacter jejuni subsp. doylei 269.97]

MTQIIPALDLIDGEVVRLVKGDYKQKKVYKYNPLKKFKEYEKAGAKELHLVDLTGAKDPSKRQLVLIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKDATLCLEILKKFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPKICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSVEEGIRCLQNA

>ABS43304.1 6-phosphogluconolactonase [Campylobacter jejuni subsp. doylei 269.97]

MAFKLYYFEDVRECNFALAKAIVSLIEKYLLIKDKVNLAFSGGKSPINFLEMLSQENCAWERCNVSLVDE

RIVNLNDENSNAKLIRTYFLKNLAKKSNFQPYFENVNISLDELIDKANSYYKQPDIAILGMGLDGHTASL

FPEAKEFNEALVTEQNIILINPKNAPYRRMSMSLFALEKCKELFLSIATEEKLKVFRQALKEINPKFPIS

YILHSRKVMCNVYFSK

>ABS43303.1 hypothetical protein JJD26997\_0298 [Campylobacter jejuni subsp. doylei 269.97]

MLSQIQNNTSIQVASFYEVTKNSIAKHFLRNSDELIENIHYFYDYEQTKGGFK

>ABS43302.1 DedA family protein [Campylobacter jejuni subsp. doylei 269.97]

MQDMIDTLIKYGYIVLFFYSLGGGMVGILAAGFLSSQGKMDLSFCIALAFIANTIGSTLLFILGKYYKKD

IMPYFKKHRRKLALAMMKTKQHGIILLVTQKFIYGLKTFIPIAAGMAKYNFLKFFIINTLASLAWAIVLG

LTAYTFGYVIEAIFDKLSLYPYAAPLFLLILAGIIWLYLSKFSKK

>ABS43301.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRFCFYALKNYYKPYNILKKIYEILKKHFPLSHFVFGSDWPHTNFEANVNFSSVLTAFNEIVVSKKEQEQ

ILGDNACALFGF

>ABS43300.1 acetyl-coenzyme A synthetase [Campylobacter jejuni subsp. doylei 269.97]

MLNQNNQELFKPSKEFSHNARIKNLCEYYDLCDEAKEDFEGFWKRQALEKIEWFSPFLRVLNEDKAPFYK

WFEGGTLNVSYQCLDRHMKTRRNKAALIFEGEMGDYEVYTYRRLLHETCKTANLLKKFGVKKGDRVVIYM

PMIPETAIMMLACARIGAIHSVVFGGFSPEALRDRIVDAGAKLVVTADGAFRRGKSYMLKPAVDKALSEG

CESVEKVLIVIRNNEPIEYVKGRDYVYNELVKNESYKCEPEIMDSEDLLFLLYTSGSTGKPKGVMHASAG

YILWAQMTMEWVFDIKDYDNYWCSADVGWITGHTYVVYGPLACGATTIMHEGTPTYPNSGRWWRMIEEYQ

VSKFYTSPTAIRMLHADAPDEPRKYDLSTLEVLGTVGEPINPSAWKWFYDEIGRTKSPIVDTWWQTETGG

HMITPLPGATPLKPGCATLPLPGIFAEVIDEEGNKKDEGEDGLLCITKPWPSMIRGIWGNDERYIESYFS

QAKKGGKAVYFSGDGAFYDKNGYITITGRTDDVVNVAGHRIGTAEIEGAIAKHPSVAESAVVSILDAIKG

ESLFAFVVLSPASSCDLGGAIETLKELNDILRVEIGSMAKIEKILYTPGLPKTRSGKIMRRILRTIAKGE

EIKQDISTLEDSGVVETIVKLAKAEFE

>ABS43299.1 3-isopropylmalate dehydratase, small subunit [Campylobacter jejuni subsp. doylei 269.97]

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYVDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELTKDEVLEIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>ABS43298.1 thymidylate kinase [Campylobacter jejuni subsp. doylei 269.97]

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPISKRAELLLFLADRAQHF

EEILKTNQNKLIISDRSFISGMAYAKDFENDLLFTLNSFALEDFFPQKIIFLKGDENLIQERLSQKELDS

IEKRGIEYFLSVQDKLKKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>ABS43297.1 chemotaxis protein CheA [Campylobacter jejuni subsp. doylei 269.97]

MEDMQEILEDFLVEAFELVEQIDHDLVELESNPEDLELLNRIFRVAHTVKGSSSFLNFDVLTKLTHHMED

VLNKARHGELKITPDIMDVVLESIDRMKTLLNSIRDNGDDTAIGMDIEPICARLTAISEGESPVTATDSN

EKSTPQAEPEEPKQEIATPEPEVDVNQLSDSEVEAEIERLLKVRKAEDQARRAQKKQTTNAAPKPTNNTA

NKPAESGEKKVPASGSNASSMDQTIRVEVKRLDHLMNLIGELVLGKNRLLKIYDDVEERYEGEKFLEELN

QVVSQLSIITTDVQLAVMKTRMQPIAKVFNKFPRVVRDLSRELGKQIELEITGEETELDKSIVEEIGDPI

MHMIRNSCDHGIEDPATRAANGKPEKGTVQLKAYNEGNHIVVEIIDDGKGLDPNGLKAKAIEKNLITERE

ADQMTDKEAFALIFKPGFSTAAKVTNVSGRGVGMDVVKTNIEKLNGVIEIDSELGKGSSFKLKIPLTLAI

IQSLLVGTQEEFYAIPLASVLETVRVPIDDIYTIEGKNVLRLRDEVLSLVRLSDVFGVKQVLESGDQTYV

VVIGVAESKLGIIVDTLVGQEEIVIKSMGDYLQNIQGIAGATIRGDGRVTLIIDVGAMMDMAKEIKVDIK

AQLESSAKKPKEQPSDYKVLIVDDSKMDRTLMQKALEPLGVSLIEATNGVEALNIIKSGEHDIDAMLIDI

EMPRMDGYTLAGEIRKYSKYRNLPLIAVTSRTSKTDRLRGVEVGMTEYITKPYSPEYLENVVRKNLKLG

>ABS43296.1 hypothetical protein JJD26997\_0081 [Campylobacter jejuni subsp. doylei 269.97]

MDKFDYSYPILTKDTKCSFCENFFPIEYSSNLKTIEKECPFCNNKMDIKLKD

>ABS43295.1 glycyl-tRNA synthetase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MTFSQMILNLQNYWQEQGCVIMQPYDMPAGAGTFHPATFLRSLGKKPWAVAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNETE

>ABS43294.1 putative 4-hydroxybenzoate octaprenyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNAFWIKFKDILELVVFKHSIFALPFLFSSMIVASKLANDTAWFGFKALILGIICAVSARNFAMATNRLM

DEDIDKNNPRCANRPNVSGKIDRKSVWIFIIINALIFISCSYFINTLAFYLSFPVLFVLAIYSAFKRFSS

LAHLVLGFCLGLAPIAGSVIIMGEIHIYSVILCLGVTFWTAGFDLLYSLQDMEYDKKVGLHSIPAKFGSK

ATLFISAFCHILAVLFWLLFVWEVWGVALGKIALIGVIISGIILALEHKIVYKNFAHIDRVFFTLNGYLS

IIFFIFIWIDLLWN

>ABS43293.1 oxidoreductase, short chain dehydrogenase/reductase family [Campylobacter jejuni subsp. doylei 269.97]

MDLKIKNKVCIITGGAKGIGYGIAKLWASEGGIPVIFSRSMPKEHDKELKNLCSRYEFYEIDLKNYEQIE

ELVKKVAIKHSGIYALVNNAGANDNLHIENTSTQDLIKSYENNLFHYYTMTKECLPYIKKEQGSILNIVS

KTGITGQGRTSAYASAKAAQMGFTREWACAFAKDNVRVNAIAPAEVMTPLYEKWLQNFPNPKDQYEKIAK

AIPLGHRFTTIEEIANTAVFTLSPLASHTTGQILMPDGGYVHLDRALNWDEN

>ABS43292.1 glutamyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFKDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPQFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNTHYIKTLPFEEIKRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDPKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIENFLKVRGK

>ABS43291.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MMNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTREEFFKECLDKKYNSGGLNKC

>ABS43290.1 ribosomal protein S20 [Campylobacter jejuni subsp. doylei 269.97]

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSHGFIKKQ

TASRRVSRLALLVNKIA

>ABS43289.1 riboflavin synthase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MFNGLIREIAKVQSYQNNTLSLKAKYRPNLGDSIAVNGACLSVTKLYEGGFEVELSRESRTHIAIENLKD

KVHIEPALRYGDRIDGHLMQGHIDFIGTLEKIQKDENGVDFHISLPKEAMKFMAEKGSIAVDGVSLTINE

ILKNGIRLTIIPITFKETLFKDYQVGRKINIESDLLVRYIYAQLQGKNKGLSWEEVERISYLY

>ABS43288.1 PZ12b [Campylobacter jejuni subsp. doylei 269.97]

MKYEIRVLKEYKKNYKKLTLKEKDLADKIVYRLSNKVLERKYKDHKFKGEFKELRECHVKPNLLLIYQKQ

DDKLILTCINIGSHSELF

>ABS43287.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MCEEKHTHTHSQKHLKAVCNRLSRTIGHLNAIKRMVENDKDCSEILIQLAAVKAEVNNTAKVVLKEHLAH

CMVHAVEENDTQSIEELNKAIDMFMK

>ABS43286.1 putative conjugative transfer protein TraE [Campylobacter jejuni subsp. doylei 269.97]

MLFDKYKNQMDKYIFENITFRIVTLLLSFVILVLIWVILARTDSQKVVFMPPKIVNQEFWIAGNQVSKGY

LHEMGQFISFNLLNITKENARNNIDNLLTLVDPKFYQEVKTKLLEQMNYIIDNAISRTFFVSAIDADAKG

QIKVFGVVKDIISDKVVRSSQSVLKINYIIEQGRFILNDLSIEEEKNNKEKN

>ABS43285.1 fumarylacetoacetate hydrolase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKFVNFIQGQKPGLGVLNSSGKIVSFADLGIETNDMNEFIIYFDKFKHKLTDLDSKIAYEVPKENYLAPI

IEPRQDIICLGINFLDHAKESAKFKGEKFEEREYPVYFGKRCNQATPPFGDIPLHADVTSQLDYECELAF

ILSKDAYKIKAKDAKDYIFGYTIINEISARELQKRHKQFYRAKSLEGSTIMGPYITSVDEISYPPKLQLQ

SYVNDELRQNSNTQLFIFDIACVLEELSAGMLLKTGSIISMGTPSGVGMGLNPPTFLKSGDKVRCVIENL

GELCNKVK

>ABS43284.1 leucyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEIFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVVQKKMPGYYVKITAYAEKLLKDLEGLRDK

WPNQVLTMQENWIGKSEGLAFSLNLDEKSKQKAKESSLEVFTTRADTIYGVSYVALAPEHKIVQNLLLQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFVLSDYGSGAVMAVPAHDER

DFEFAKKYNLAIKQVIQTQENLPYTQKLGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIAPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFMLFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNIKKGELVELKQENLNKEEKYARLKVYEALKKSEEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFKISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>ABS43283.1 phosphohistidine phosphatase SixA [Campylobacter jejuni subsp. doylei 269.97]

MKKIYIIRHAKASKSGDIDDFERKLTKSGKKDLKKLFKHLALHEIHPDLVLSSPAVRTAKTAKKIAKFYN

FDKNKICFDERLYLCNVENLLKILQDIDDEFNEVFLVGHNPGLMELGELLSSLCLASFPTSSILCLEFDI

KEFKNLKKHSGKLVFFEHVRELKEEKDLGF

>ABS43282.1 aminotransferase, DegT family [Campylobacter jejuni subsp. doylei 269.97]

MFEKEISFIKSLFNKENIALHEPCFIGNEKKYLLECIDSGFVSSVGEFVTRFEEALKEKTKARFVIATNT

GTAALHIALLANGIDENCEVITQSISFVATANAIAYTGAKPIFLDIDENTLSLNPKALEHFLENQTYQKN

GFSYNKTTHKLIKACIIMHTFGLSAHIKALKELCEKYRILLIEDAAEALGSTYENKALGTFGKCGILSFN

GNKIITGGCGGAILSNDENLAKLAKHLSTTAKIPHPYEYDHDRIAYNYRLCNVNAAILLAGLENLELFLK

NKRELAKIYKDFFKNHDKCKFIDEKNNEKSNFWLNTLLFKDENLRDIFLKECLENKIFSRPIWKSLPSLK

AFQNCQSDELINTKNLEKRLVNLPSSVRRK

>ABS43281.1 CjaA protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILLSVLTAFVAVVLAACGGNSDSKTLNSLDKIKQNGVVRIGVFGDKPPFGYVDEKGNNQGYDIVLAK

RIAKELFGDENKVQFVLVEAANRVEFLKSNKVDIILANFTETPQRAEQVDFCLPYMKVALGVAVPKDSNI

TSVEDLKDKTLLLNKGTTADAYFTQNYPDIKTLKYDQNTETFAALMDKRGDALSHDNTLLFAWVKDHPDF

KMGIKELGNKDVIAPAVKKGDKELKEFIDNLIIKLGQEQFFHKAYDETLKAHFGDDVKADDVVIEGGKI

>ABS43280.1 sodium/hydrogen exchanger family protein [Campylobacter jejuni subsp. doylei 269.97]

MHQSVIDPQGLIDLKILIVIALCLLFSPHIAKILRLPLSATEIILGAVIAYFDFIGKSENFALLANVGFY

YLMFIAGMEVNLRAFFNMDKEVAKKSFFYIFLLYVLSSFIVWIFGLSLVFVIIIPVMSVGLLSLLFKDFG

KECYWLNIAMIVATLAEVISIVLLTIAGAFLREGTGIIDVAQSILYLNIFLGLCLLGFKMLGVLFWWYPQ

LKVVLMPWEDKNEKDIRFCMAIFILIIVAMVITKLEIVLGSFIAGSFIATFFDHKKDLEHKLSTFGHGFL

IPIFFIHIGSTFDLKMILDYKIVLQAFLLMFVMVGLRILCASVFLKKMGFKNMILFGFSHSMPLTLLIAT

ATLGYSGKVIDEKLYSALILTALFEAIIVMSMIKFLSNSKK

>ABS43279.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKGIFLLVFLSIFFNACSTKNDEGLYNLSASEWYKQIIKDLQDKDLEKADDHYNGMASEHVADPLLETT

LIILAQAHMDEEEYKLAEFYLDEYNKKFGNSRNTDYIRYLKIKAKFDAFAVPNRNQALMLESQKEIDTFL

KDYPYTEYEPLVQTMLTKFNLAVFYLNSTIENLYQRIGHDESAQIYKQRLQESEFYQQSIIKPELPWYRS

IFERF

>ABS43278.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MLSIEIKSDISKTKGGKKLIDFIKAKYSECFYIAKNNEEKELRLKALDTMAFLDLIIHKIKDEEDGK

>ABS43277.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEEFYPYTLTIHLLCAILFIGYLFVDVFVLGLVKKKNPNFDKSLFSATGVKIMPFVVLLLFLSGGALAGF

HFKPLNLLFAVKIILAFGILSLVVFSLFCHFILKKKNPLGAFIHPFVFVLCIAIVILAKLMNYFFIPC

>ABS43276.1 peptide methionine sulfoxide reductase [Campylobacter jejuni subsp. doylei 269.97]

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQIPLLEILTL

FFKIHDPTSIDKQGADIGIQYRSIIFYENEEDKILAQNFIEKQQKIFSKKIVTQISRLQTYYKAENYHQH

YFMNHPDQGYCQAVIAPKLQKIQSD

>ABS43275.1 hypothetical protein JJD26997\_1898 [Campylobacter jejuni subsp. doylei 269.97]

MHFDLFIFIKCKIIKKGYTMKEVVIVDAKRSFRSVMGNFGGSLKN

>ABS43274.1 hypothetical protein JJD26997\_1119 [Campylobacter jejuni subsp. doylei 269.97]

MKAYHTKEKVIIKLSKEEYRKEMKLNKSLKDENKSLKTEIFNLENEKIELLKELKDQIEANMNNIKEIKS

LQNKIYELLYAKERSKLCS

>ABS43273.1 putative hemin ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MLKIHDLSFAYHQKDLLKNIHLELKNQAFIGILGPNGSGKSTLLKLILKNLNPNKGEISLFNTNIKDFSL

KEFAKICGFVPQKSELNTPLKVIDVLLMSKYANLKHAFSSYSKEDILEIKKFAKDLRLENFLERSILSLS

GGEFQRMLLARALLKKPKILFLDEPTSALDLNYAIELLSLCEKRVKEKNIAVVAILHDLNLASMFCDKIL

FLKEGEIKYFGTSKELFTQEILKEIYDLNCEIIYQNSKPYILALKEKK

>ABS43272.1 hypothetical protein JJD26997\_1038 [Campylobacter jejuni subsp. doylei 269.97]

MSEFFGEIQQNFNVNFMQNQQNFIQNRITNNMNNISGN

>ABS43271.1 hypothetical protein JJD26997\_0983 [Campylobacter jejuni subsp. doylei 269.97]

MKLKDFDFRIWDNKYKEYIFTNRTISKYYEDASKVCSLAGRIRKEKYSGNLVFDDLGCDCEEREIELFTW

FRDKNGINRSMFIEQAILEYSSKKPKVEFFFHGITKTRRINKVKQQDKNSEENNLQSKISKESNAQANVN

ESKNDNKAQKKSGGMMFNFGSKE

>ABS43270.1 RNase H [Campylobacter jejuni subsp. doylei 269.97]

MKHIEIYTDGSCLNNPGFGGWSYILRYKEYQKEGFGAEANTTNNRMELMAIIESLKVLKEPCEISLFTDS

NLMVQSINEWLEGWIKKDFKGKKNIDLWKEYIKVAKSHKIKAFWVKAHNGHLENERCDTLAREAALKIAR

ENNEKH

>ABS43269.1 flagellar protein FlaG [Campylobacter jejuni subsp. doylei 269.97]

MEISKANGQMDTALASISQRTSETQVSSNIQTDRSQSQGGDDGQQQGVSEKLADITKKLNEQMDSLDTNV

RFGYSDKIGSMYISVTEKSTGREIRQIPSEEAMRLAEYFRDVIGMIFDKES

>ABS43268.1 hypothetical protein JJD26997\_1147 [Campylobacter jejuni subsp. doylei 269.97]

MGNLENNANSVLVAGSFVLAIFYQVLSYLGVSTAQVFTLFFIFMFSGLVGFLKTFALNESLKAYMISDLL

AKTLILFVPFIVAMIAKSISDLYIFVDYVFSFLILGELLAILVNIQSIKTRKAIQEIDFYNIFIDKIKHL

SLKFLKIEKHNFHDDNKNDDNKKE

>ABS43267.1 ribosomal protein L19 [Campylobacter jejuni subsp. doylei 269.97]

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESIAVLRRGRVRRARLFYLRDRRGKAARIKELKK

>ABS43266.1 flagellar basal-body rod protein FlgC [Campylobacter jejuni subsp. doylei 269.97]

MAYLSDFDISGYGLSAQRFRMSVISSNIANVNTTRTAEGGPYRRREVIFKATDFDKLLNEQINKNNNFLK

YENPLNDPSSPEEAKPAIQSVVVDKVVRDDKDFRMKYDPSHPDANAEGYVAYPNVNPVIEMADLIEATRA

YQANVSAFTSAKTIAQSAIDLLRG

>ABS43265.1 putative glutamine amidophosphoribosyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MFAIFFQKFGVAKMLLKPLPQFLECIILDKNLLHSKLKLYLERYLTKNYAIVAEESFAEYFKILKFNNII

LKQTEFNKYQKILQNQKTHIFVLNKGAKFKIKKDSNITHITIPKMSAFDNTNNKLYKGKILADNLAENIV

LSIKNKEKMKNPQENSLIPLKQKYCSLRLLYKNDVNDIILGQNVGEFRIKLGKILASYIDKRLIKNLDYI

VGVPSSGIFYAVGLSQALNIPFLPALKKQEVSERSFEIVNTDIRKNYLYSNIQINSHLIKDKKILLVDEA

IFTGATLKIVCDILRDNKVKEKIHLAIPSPKCYKQCDYLMLPKRTLLLEKIKENLMAQYLNADSLTFLPQ

KAYKNALIQINKNLCLECFENKGEVNV

>ABS43264.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNTLVKAKNVKFNKDYLIVLLEDERIIQTPLKWYKELENANLEDLEKWHFICGNTGIEWEELDCHLSIEA

MLKSNANKVA

>ABS43263.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MALDEKIIAYTENPARELLSVVSRTNLSLNELDFSLLAFSTQYRFGDLEWEKISEKELTLFDKDEIFLKN

DLQIKQEYKIEIFHGINQSKASQAVKLVANKNLTKIVAQIDFTNLDFHEKLALELLQNIYKKMLKLKFLI

GIRIFDFKKNLMSFCNQHKNTPLNKTIQITVAQGIDPIESQDESLILTYKEKTKNYTIDEKRSGIIVVDE

NEVVLKHAKFKQGKEGKDLNLHTLKVLAANENKVKFSCSSAFKQVEQDGYTEYIALKKGYVVQDGEKFDI

ANELDFNGVDFKNIGIIRAGLDKNVKINIKFLSEVEDAVNSGVGIECEELNVVGSVGSNTQLNATKMKIE

GTTHSKAKIQAKQAYIKTHRGFAEAEILNIDLLEGGTIKAKEVRIKKSLGGNIQADKIYIENLESNNSCV

FFENTTIERINGDNNKFHAKIKTLDKNYDEKFAILGEQISKLNHKINKIRQYILSSKNGILSVEKKITEL

KNQGQNVPVQYEKALKDFSLQNLELNKLQNEEKELLERKKSLQLELINLQKMLFEATFINKSGKWTDMNE

IKFSLLEPKEDIFYSSFVNESAKFIGIKKVIQNNQESIEIHKKLDYKEKDIAWLSASKE

>ABS43262.1 exodeoxyribonuclease III [Campylobacter jejuni subsp. doylei 269.97]

MKILRKIMKLLSWNVNGLRSICDKNALDWIKKEKIDFIGFQEIKAHEDKFPKKIYEYPFKHMYFNSAKRA

GYSGVMSLCNFDSEVKKCEFFDDEEGRVLEHRFKNIALFNIYFPNGQKDEERLNFKMKFYTDFLVYLNKL

LKDGFEIIICGDVNTAHKEIDLTHPKANANTSGFLPIERAWIDDLLKLGFVDTFREINGEIKEKYSWWSY

RMKARERNVGWRIDYFFISKGLKDKLKNAFIRDDIFGSDHAPVGIEIDI

>ABS43261.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MAIFNKGGISPASSSRSETTVISSGARIEGKFYFASMLHVDGELSGIIHSESIVVIGKNGNLKGELQADK

IVVNGYFEGQLEANSLEILAGGVVNGDISTQKISIENGGCFNGTSKIKEDTIKLIENNNEE

>ABS43260.1 1-deoxy-D-xylulose 5-phosphate reductoisomerase [Campylobacter jejuni subsp. doylei 269.97]

MILFGSTGSIGVNALKLAALKNIPISALACGDNIALLNEQIARFKPQFVAIKDSKNKHLVKHDRVFIGQE

GLEQILTECQDRLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPIDSEHVALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSVKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KESDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAVDFSKMPALKFHKISTKK

YPIFKLKNAFLKEPNLGVIINAANEVGVYNFLENKSGFLDIAQCIFKALDHFGAPKISSIEEVFEYDFKT

REYLRS

>ABS43259.1 di-/tripeptide transporter [Campylobacter jejuni subsp. doylei 269.97]

MSKNIKNLDTSFFGHPKPLLSLSFTELWERFSFYGIRPLLVLFISAAIVYGGLGIERENASAIVGIFGGC

LYLASLPGGWLADNYLGQKRAILLGALTIALGHLCIALSIFHSFMFFLGLALIVIGTGLFKTCASVMVGM

LYKKDDTRRDSGFTLFYMGINIGAFIAPLICGFLQKEYGWHFGFGAGGIGMLLAVIIFYLKTMPDLKEFD

EKIGLEYDWKRATKKTQNIKWIFFGLIFCLVLLTFIGYTLSSLGLLDLSPVSLSKKMIFIILICTGIYFL

YLFFFSSLNSIEKKNLIVFIILFFAAAFFWSTFEQKPTSFNLFAQDFTNKIIFGWEIPTPWFQSFNPLFV

IIFAPIMATIWIFLAKHKLELSSISKFALGVLSAGIGFMIMMFAAKNVLASNGAPVSMIYIISSIWFLTL

GELCLSPVGLSIMTKIAPKLIKNQVMGLWFVASALGNVIAGLIGGHVDAKNIASLPDLFGQCMWVLFIMS

AVLFLIKKPVYNMLNKE

>ABS43258.1 methyl-accepting chemotaxis protein [Campylobacter jejuni subsp. doylei 269.97]

MQSINSGKSIGISAKLTLWVGISVVLILAITSAVSYFDSRNNTYGLLKDNQLKTMQDVGAFFESYGMSKR

NGIQILANELNKRPDMSDEELINLIKAFKKVNGYDLVYVGFDNTGKNYESDDQILDLSKGFDTKNRPWYK

AAKEAKKLIVTKPYKSANSGKVGLTYAAPFYDRNGNFRGVVGGDYDLAKFSTDVLAVGESHNTYTVVLDP

EGTILFTGDITKILTKTELSINIANAIKANPALIDPKTDTLFTAKDHQGIDYAIMCNSTFNPLFRICTVT

ENKVYTEAVNSILMKQVIVGIIAIIIALILIRFLISRSLSPLAAIQTGLTSFFDFINHKTKNITAINIKS

KDEFGQMANAINENILATKKGLEQDNQAVKESVQTVSVVEGGNLTARITANPRNPQLIELKNVLNKLLDV

LQARVGSDMNVIHKIFEEYKSLDFRNKIANASGNVELTTNALGQEIIKMLKQSSDFANALANESGKLQTA

VQSLTTSSNSQAQSLEETAAALEEITSSMQNVSVKTSDVITQSEEIKNVTGIIGDIADQINLLALNAAIE

AARAGEHGRGFAVVADEVRKLAERTQKSLSEIEANTNLLVQSINDMAESIKEQTAGITQINDSVAQIDQT

TKDNVEIANESAIISSTVSDIANNILEDVKKKRF

>ABS43257.1 polyA polymerase family protein [Campylobacter jejuni subsp. doylei 269.97]

MQISKISLKNNPDLQFIAEFLKPYTKRAYLVGGSVRDLFLGLKICDYDIELYDIKPKDFEKIMQKLGARG

FGKSFFVYKFKNYDLALARTENKISHGHKGFEVQICNDEKLGAKRRDFTINSMMINLFNDEFLDFYGGLK

DLGAGFLRYIDQQSFQEDSLRVLRAVVFASRFNLKITSESLKLMQSMDITDLSKDRINAELYKFFKSPRL

DVGYRYLQELGLEKQIFGFENIFKSLEFQNSLRQSREFVKSDALFLYLYLNFFNLEKDIFFKRTKLKKEY

LKYANQAFYLNDISDFELAKIAFEMPLKEWLGLWSKKRIEQAKRLRLYENKFESKILAKDFIDAGFCGKI

LGLKLQEARENELKEYIKGLAK

>ABS43256.1 dephospho-CoA kinase [Campylobacter jejuni subsp. doylei 269.97]

MKNAFFVTASIACGKSTFIEIANSLGFKSISADKIAHEILDENALELEKIFSPFSLKNLLTKEKKIDRKI

LGEIVFNNKEAKKTLENFTHPKIRAKILEQMQILDKKNKAFFVEIPLFFESDAYENLGKIIVIYASKELS

LKRIMQRDKLSLEAAKARLDSQIDIEEKLKKADFIIKNTNSYADFRQECVKVIQEISKGKM

>ABS43255.1 acetyltransferase, GNAT family [Campylobacter jejuni subsp. doylei 269.97]

MQNTIIQKAVHKDLNSILEITKDALNAMKAMNFHQWDENYPDEIVFQEDIQAQELYVFKENDEILGFICI

NEKFEPEFYKQVIFNKNYDDKAFYLHRLAVKQNAKGKGIAQKLLNFCENFALENHKASLRADTHSKNFPM

NSLFKKLDFNFCGNFNIPNYQDPFLAYEKILNQKAF

>ABS43254.1 sodium/dicarboxylate symporter [Campylobacter jejuni subsp. doylei 269.97]

MFSKIIQSYAKGNLIIQICAGIALGILIGINSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGVKIKNIIILYIVGTFLASACAILANFFFPVKLVLDGIQATTNPSPAHMGEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGAALKHCSNEAKQVFIDINEGVLKIVKFVVKLAPFGIFGLVANSVAQTGAQGL

LSYTKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAASGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>ABS43253.1 cyclic peptide ABC transporter, ATP-binding protein/permease [Campylobacter jejuni subsp. doylei 269.97]

MPFIMELLKQNKLKLISFLLFSFITSAVGVLTLVFINDYLLKNAQNIPIFYFIVLLLIFFISSTIVELGL

SIFGQNFIFKMQRRVVKQILDTPLLRVAKVGKARILASLGSDVRNISFGLLRLPDFLQSSILILCTSVYL

CYLSPQIFALCVVWIMVIFITNNFLMMKVYQYFRKARENDDALQNNYQNILDGHKELLINRDRAKLYYED

EFENNARLKKKNSTLGNLFNNLSNNWTNVILLALVGVEFYLALKFEWASVADATTIALSILFLRTPLVSM

IGSFPTLLLAKIALDKIAKLELDDYIEGFKKTHYISEWKKISFRNTQFAYEENFHLNPVNIELKKGELVF

LIGKNGSGKSTFCMLLTGLFKPSKGGIYVDDMLVDDKNLDEYRSLISAVFSDFHLFTKTLNKENFASEEK

IAFWLEFLELKDKTSVKDNELTLTKLSTGQKKRLAMLIALLEERDILVLDEWAADQDPVFRRFFYKKLLP

LLKEQGKTIFAITHDDAYFDSADRIFLAQNGEISELKGENIKELAKNLVEKFD

>ABS43252.1 NADH-quinone oxidoreductase, L subunit [Campylobacter jejuni subsp. doylei 269.97]

MQNLALISLFSPFIAFLFASCFALSEKKQLVGIICSLLVTLSAFCSLYLLFCNEAFNVSLFEWFAGVNFG

FDIDAISLTMMSVVGIVATCVHFYSIFYMAHDEGFNKFFAYLGLFVFSMFFLVMSDNFLGLFVGWEGVGL

CSWLLIGFWYKNDTYSFAANEAFIMNRIADLGMLLGIFWLYLQAGTLKYDEVFSMAQSLDHNALILIATC

LFIGAMGKSAQFPFHTWLADAMAGPTPVSALIHAATMVTAGVYLVIRASTLYDLVPEVSYIIALLGAFVA

IFAVSMALVARDLKRIIAYSTLSQLGYMFVAAGLGAYSIALFHLATHAFFKSLLFLGAGNVMHAMNDKLD

IKKMGGLFKPLKFTAILMCLGSLALAGIYPFAGFFSKDLILGYSFISFHHGIFLVLLIAAFLTAFYSFRL

LMLVFFTPARHDEHPHEASKIALLAMSPLMVLAIVAGFFEHSFFEYLSTKLVFIDAQNQIVMICASVAAI

LGVILAIFAYKNSWFKESIEENKIHKLLSNDYFIPKFYHQFIVSKYESLCAILKHCDLYIFDRIIEKIAL

YSQNISQKMIMPNSLNLMLRFLVAAFAILLILVWMV

>ABS43251.1 thiamine biosynthesis protein ThiS [Campylobacter jejuni subsp. doylei 269.97]

MIINGEKLEFKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>ABS43250.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MVFMNFSGFFYARNDLRLFKIEKKNELKSFFHKDYTLSSYKDDLNLNNEIFFYQSLKEGLFKENDEILVS

NLGKKIILFRNFTQNCDNFNEAKLKQILLLFFLLLASVFFASSAMINEFGAVDLVFLMICLLLLVMGVIN

LGLLFKQIHILKSFSKKEIKEFLSQRMKKYTKV

>ABS43249.1 threonine efflux protein [Campylobacter jejuni subsp. doylei 269.97]

MMTFLFIFGIHLSALLTPGPDFFLVSAYALKFSFKEALKAAFGVSLAILLWIIFSLTGLKILFDTFPFIQ

LVLSTLGAMYLFYLAYLLLKNISNEIHFTNSIKISQPFLGGFLTNITNAKAIFYFGSIFSSLNFTGDNFE

IFLLVIILGLESLIYFIFIAFLFSNLKIKMLYLSHYKKIDLFCAFIFISFACFTLTTIYF

>ABS43248.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

SLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>ABS43247.1 hypothetical protein JJD26997\_1878 [Campylobacter jejuni subsp. doylei 269.97]

MADMVGQSDNVVGLFLNYQIYSVITYVVVNCHLDSFLFCLD

>ABS43246.1 putative cytochrome oxidase maturation protein, cbb3-type [Campylobacter jejuni subsp. doylei 269.97]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALNKKRLS

>ABS43245.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MSKIDEISSKSKANILEHLKKAYKETTFTRIESIDPVEHIQTTQDMLAEMKQKMSDNKYIVENATKDTLE

EKINEIVLKYGFKSMIYGADLNLNLEQIKAENKICFDKEIENLRSEVFHSDFSIIHARAGVSSHGVALIP

SSKTQPRMLSLAPKLCIVLLKKENVVKSLSEALNLVKKENEILPTNILFIAGPSRTADIELITVFGVHGP

QIAHIIIY

>ABS43244.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MEVYPSNYLEIAKIIPFSERRTSFCEFARKNEIKIEKINRKNHISQKELKKAYKIYKSKGSGRNLFGEKK

LIVKAFEDVEKFLSEN

>ABS43243.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MQAKYFKFLAYFSFIISLIYGFYHITKAFDFVKEAYIYTGIFTLIFLNLSLLFSLLKFKKTKNYPKILGI

FAAFWAILHFLNYFIFDRNAQILRLFDDISHRLLEASGFIAFLIIFLMLLSSFKIFKKLSKIRKLGYLCL

VLASYHYFLTPKVPMFWEWSVLIIALFYFIVRYTKTLKKLKSNNLTFIKT

>ABS43242.1 DNA-directed RNA polymerase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MRNITISAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTVGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKSDSNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELE

FTLIVEKGIGYIPSEEIKEFLNDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMENIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>ABS43241.1 preprotein translocase, SecG subunit [Campylobacter jejuni subsp. doylei 269.97]

MITLLIILQFIIVVVICIAVLLQKSSSIGLGAYSGSNESLFGAKGPAGFLAKFTFVMGILLIANTIGLSY

LYNKASKDSLAEKIKVENNTTIPSAPIIPTTPNTNSVAPSAPQLPSDINSSK

>ABS43240.1 putative lipoprotein [Campylobacter jejuni subsp. doylei 269.97]

MKKIKKIIQIGMIGGLAAVAGGALAGCGSNNDNADTLNQAANVQGAFVIIEETAPGKYKIKDQYPSDETR

VVLKDLNGTERILSKEEMDALIKEEVAKIDNGTSNLTKDNGQISSGGLSLGETLLASAAGAILGSWIGSK

LFNNQNFANQQRGAFSNQSAYQRSVNSFNKAGTTSSASNAKKSGFFGGGSKATSSSSSFGS

>ABS43239.1 thioredoxin [Campylobacter jejuni subsp. doylei 269.97]

MGKYIELTSDNFDQAKEGIALVDFWAPWCGPCRMLAPVIDELANDFDGKAKICKVNTDEQGDLAAEFGVR

SIPTLIFFKNGEVVDQLVGAQSKQAISDKLNSLL

>ABS43238.1 thioesterase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKMRIYYEDTDAGGVVYHSNYLKFCERARSEIFFNKKVDIFDASKGHFLLAKANCNFLKPAKLGDMIEIK

TKILKVKNASVEILQEIYKDEILLFKMELTLAFIKNEKPARMDMQLKKLFEELF

>ABS43237.1 cytochrome c biogenesis protein, CcmF/CycK/CcsA family [Campylobacter jejuni subsp. doylei 269.97]

MKNIIKSIGDLRVSVVLFLLFAFFCALATFIESAYGTPTAWAMVYDTFWFEYIQLLLGINLLCGMFRYKM

FGLKKLSLMVFHISFLFILVGSAMTRYAGFEGILAIREHTQNSLIESSKTSLRISAIKDGERYSAVNDRY

IGNLPFANSFKLKLNLGDDQVVLKYKDLILNAHYTYKENNNSDPLLVLMLSQKGSQGVDVKFEKGEVKNI

EGVNFAFMNDNVKAPFVKIDENLTLSSSENLHFLSMLNGQNLDLKIGEKANAKERRLYEINDISFVVKAA

SLHAQEALEGSNRPQDESFWLWFKSAWLEVGRTMLISTFGEPQNWKNSLLLHFKDFALSNENKNLELTGS

SALKLELSYKNESKEFYIFEYNKPIMIELSGQKFFISWALSYEQLPFDIYLRDFVLDRYPGSMSPASYAS

EITVKNNNENFDYRIFMNNVLDYDGYRFYQSSYDQDEKGTVLSVNKDPGKIPTYIGYFLLCLGMFMNFLN

PHSRFRTLARLINKDTLKHTSVIIFILLLSFSSEKTFAQDLNSTLPVVNTNHAKALATLIVQKSADGRMV

PFDTLSREILEKIHQSNSYKGQNSNAVMLSMLVDVDKWQMEPFILMPQNQAVRDAIANILEIPSAKYIAY

KDFFDENNRYKLQKYVENANRKNPNARGVFDKEIIKLDERVNVVNLVFSGELFKFIPVQNNPNNVWLAPF

SAVTTLKGDEGYIVLALIQNYFSAVENAFKDGNWTRTDEGLKFIKEYQEKIGYKVMPSKTKVEMEIFSNK

AEIFVKLAPVYLIAGFLLLILVFFKMVVPNLKIYFIFKVVYVLNVLAFVIHTVGLGLRAYLSGHAPWSNG

YESMVYIAWALSLSGIFFSRKSPIALSLTSILSGVVLMVAHLSEMNPQITNLVPVLNSYWLSIHVSVITA

SYGFLGLCALLGIFTLFLMCFLNKDGKYNLNILRNITEATRINEMAMIFGLCLLTVGNFLGAIWANESWG

RYWSWDSKETWALVSILVYAAILHLRMIPKYCNQFVFALWSMFAYWVIIMTYFGVNYFLTGLHSYAAGEA

AQIPNYVYWGFALMVVLAFFARRKRNFVGKL

>ABS43236.1 N-acetylmuramoyl-L-alanine amidase [Campylobacter jejuni subsp. doylei 269.97]

MAKIFVFLVFVFTTLFGAYENELANFDKNFIGSKSEVQVKFHHQLKSLYIQSIINEDEKTKMEILKRLII

SSNTLNLDDKSYANELKESGISEASINALRKAVIKDIKVQNISQDTEKSTFEPIKTVQKNEKKSSNEQVK

NTEKTNSKTSQAPKSSIASKAKSDDKIYVLKSSKTNQGVEFELNADLDKDQLKSFALDEKGNYRFISDFD

GVLEGGKKEFKFDDYRLVISQFNPKTIRIVVYAKEKIPIDISFKEEKLIFSKETVNQKKTEQDSKISEKK

QDQKTEIKTKVLETKKQDKKTNNEKENQEPLYVLDVDKISNAVVLNLSDDLDEKEIAVFDTKDQKFRYVV

SFKGVLEGNRKSFTFGQNVITVTQYNPKTVRVVLSAPKEFKLLKELDNKNLTLGFYTQTTNQNVNKKATQ

SSSKTLNTNYKSGKLVVIDAGHGGKDSGALSDKKGSLKEKDIVLSTALKLGNELKKRGYKVLYTRSSDKF

INLRDRTKYANDKRADLFISIHTNAAPNATKAKSSEGVETFFLSPARSERSKKAAEKENQGDFEEINYFS

KQSILNFLNREKIVASNKLAIDVQKNILTQTRKKYKIVDGGVREAPFWVLVGAQMPAILIEIGYITHPNE

GKRISNKAFQDLLVKGIADGVESYFYNNR

>ABS43235.1 cell division protein FtsA [Campylobacter jejuni subsp. doylei 269.97]

MNILGIDLGSTQTCAIIAQKDEDGLKIIGFSKSKTNGVKKGAITNIELASKSIEEAVRSAEMMSGVHYDK

VVVSISGAYTKSVDSIGVVNIPNHEISIKEIHRAVSTAKHTANLPSGYEIIHVLPYNFKVNDLEHVDDPL

GMSGNRLEVSTHIVISQESHIKNLKKAVELADLRVDNIVLSGYASAIACLDDSEKELGAVLIDMGGAICD

MVVHTGNSIRYNDCLQIGSINITQDLSMALHTPLKEAEKIKLNYAALSQQPNTLIQIPSMGDERKVNEVS

LDIISNVIYARAEETLMILAKILSDNRYANATGGGVVLTGGMTKLAGIDELAPATFDNRSVRLATARKDL

ITGFSEIFNDPENTCAIGLCLYGAGYFTPYELDSNEKLRYKGEIENFNRQIKQDIVLQKDTESEIKSDFF

DENLQENDTIAIQEQLDFKEPKEKKPSVFSNIWHKIMNQF

>ABS43234.1 succinyl-CoA synthase, alpha subunit [Campylobacter jejuni subsp. doylei 269.97]

MSILVNKNTKVIVQGFTGKEATFHAEQCMAYGTNIVGGITPHKGGQTHLGKPVFDTVADAVKATKADVSL

IFVPAFAVGDSVIEAADAGIKLAVVITEHTPVKDMMFAKQYANKKGMKIIGPNCPGIITSEECKLGIMPG

FIFKKGCVGLISKSGTLTYEAANQVVQGGYGISTAVGIGGDPIIGLAYKELLSEFQKDDETKAIVMIGEI

GGSLEVEAAKFIQENISKPVVAFIAGATAPKGKRMGHAGAIVGSADESATAKKEALKSYGIHVVDSPALI

GEEIQKILG

>ABS43233.1 excinuclease ABC, A subunit [Campylobacter jejuni subsp. doylei 269.97]

MNDTIKIIGARENNLKNIHLEIPKNKLIVFTGLSGSGKSTLAFGTLYAEGQRRYIESLSAYARQFLDKVG

KPDVDKIEGLTPAIAIDQKTTSKNPRSTVGTITEIYDYLRLLYARVGIQHCHQCGQKISSMSASDIVNEI

LKFPKGAKIIIYAPLIREKKGTYADLLENLRNKGYVRAQIDGVLVRLDEEIELAKTKKHTIKLVIDRLEI

QEDLLSRLASDIEKGLQESFGEIEIEVLNHEEINLNKHYHFSEHSACFDCKISFVPLEPLSFSFNSPKGA

CEACDGLGIRYTLDMKKIIDESLSLENGAVKIMYGFNKSYYYKFLIAFCEQNEIPIKIPFAQLSEEQKRL

VLYGNAKIIEFLWKRNRLKRTFEGVVKMAYEMLKDEKDLAEYMSEKICKDCGGHRLKPESLAIKVAKKGL

GEILDMSIEDSTAFFADEKNFSYLSEQQKLISKPILKEINERLFFLYDVGLGYLSLGRDARTISGGEAQR

IRIASQIGSGLSGVMYVLDEPSIGLHERDTAKLIKTLRNLQQKGNTLIVVEHDKMTIEEADFIVDIGPKA

GKFGGEVVFSGTYKELLKSKSETALYMNGKKQISQLQNRAQKEWLELKNVNINNIQDLSVKFPLQNLVAI

TGVSGSGKSSLILQTLLPFAQEELNRAKKVKKLGGVQIEGLEKLDKVIYLDQSPIGRTPRSNPATYTGTM

DEIRNLFAATKEAKMRGYKAGRFSFNVKGGRCEKCSGDGEIKIEMHFLPDVMVVCDTCGGKRYNDATLEI

KYKGKNISEILNMSVLEASEFFTAVPKIKQKLDTLVKVGLDYLTLGQNATTLSGGEAQRIKLAKELSRSD

TGKTLYILDEPTTGLHFEDVNKLILVLQHLVDLKNSVFVIEHNLDVIKNADYIIDMGPEGGVKGGKVIST

GSVEKVSKEHKKTRSYTGYYLDLELKNTQKS

>ABS43232.1 hypothetical protein JJD26997\_1773 [Campylobacter jejuni subsp. doylei 269.97]

MIPKFFNYVSFKDEREFYDKWEQILTNCSFLERCKRDNLQIIFSLESKKQFDYFKKLKLDVDVVYGNQYE

LLYSTAIFITDCHNFAYDASKLFNCKVLHYGAPNEIVFKNSSIYGELCLDVDCLVSKIFTNVQNKTDFFI

DKNINASYFKDIYEVLNK

>ABS43231.1 conserved hypothetical protein TIGR00046 [Campylobacter jejuni subsp. doylei 269.97]

MQFLYNKQAGEEFIQLQGENFNHLKARRVRENSELNLRNLQDNFLYSYTITDLTRNSCTLKFLNKKLQNI

EQSKLNLALAIIDIKILEKTLPFLNELGVKKLHLVFTNFSQRNFKIDLERFEKIIISSCEQCGRNTKMDL

IIHQSTQEFVQKFPDAIMVDFQGEQQSHFDEKELYFIGPEGGFNNDEKLLFNRKISLKNSNILKSQTAII

AIASKILL

>ABS43230.1 peptidase, M16 family [Campylobacter jejuni subsp. doylei 269.97]

MIAYEKIQLKNKLEVYALPVNKNSDVISVDIFYKVGSRNEIMGKSGIAHMLEHLNFKSTKNLKAGEFDEI

VKGFGGVDNASTGFDYTHYYIKCAKKNLDKALELFAELIANLNLKDEEFQPERAVVLEERRWRTDNNPLG

YLYFRLFNHAFMYHPYHWTPIGFFKDIENWGIKDIKEFHSIYYQPKNAILLVSGDIESKEVFELSKKHFE

KIKNTKAIPKIHTKESKQDGAKRIYLHKNSDTELLALAYKIPNFKHKDIPALNALSELLGSGKSSLMSEI

LIDKSNLINDYYAYVNDCIDENLFIFICNCNPNVDAEKVEKELLKIIDKLKMGKISQKDLQRVKNNVKSD

FIFSLNNASAVANIYGSYLARGDINPLLNYEKDIQNLELKDLISCAKKYFIQENSTTVILRKDLNG

>ABS43229.1 PhnA domain protein [Campylobacter jejuni subsp. doylei 269.97]

MAKDANGTELNAGDSVSVIKDLKVKGASTTLKRGTTIKNIKLTFKEGEIEARVDKFGVIVLKTEFLKKI

>ABS43228.1 site-specific recombinase, phage integrase family [Campylobacter jejuni subsp. doylei 269.97]

MLTQKDIDNLEIKDKRYMISVGEPKELYVRVNPTGKKVFYLRASKFKQFITIGECQKGILNVTNAREKAK

ELLKSMYDGSFVSKSEKGVTLNKANELYIEIKAKKLSRATIKKEQLVYGKYFNSTLGDKAINDLKKDDFL

PIFDLMYKKGIFETISRSISFLCRVLEFCRQRGDLKTDIILQLKDLKKFYNEANHNKVKHFKAIVEEQEI

KNMLECMKEYKNHPRTNTTIINAIYFTLLTAQRSKNIRFAKWSDIDFKNNLWVIKADEMKVSSNGDNIIP

LNKYALKVLEIQRILNGNKEYIFTNNNGIISESFGVKFFKTYNLEHTIHGFRSTFRSICTEKSDELIKLG

IGKDIAEMILHHINGNEVTRAYDRAKAIDLRVKLMQWYGNYLNSLCGFDF

>ABS43227.1 putative chemotaxis signal transduction protein [Campylobacter jejuni subsp. doylei 269.97]

MKILYFAYAKLLKNKDGTNFDPRDRLRFKQTIQTKTTNMIKPYVDLVSNTLVISFSQPVFNRDNEIVGIL

SGDLPLEIFTKNIPEFKFSPSARVLIFEDLFYVTPDRFMLDKKGKPFINALKEGM

>ABS43226.1 excinuclease ABC, C subunit [Campylobacter jejuni subsp. doylei 269.97]

MTKEKLENELKTLPNSAGVYEYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPGNSLRIQKMIQETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVDFKEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYREILDEAMHALLNPSVLLKNLE

KQMLVLAQNENYEEAAKIRDQIATIKDLEVKVEIDIAKLEDFEVFALAFKNSMLSTLRFVVQNGKIISVN

SKITPIKNDIQWDKNEIYKQLILENFSMDIPLLASVIYVYEEFEDRMLLEKILSQRFDKKISIKIPKIGE

KRKICDLAFQNALLNIEKEQKNHDFTIQKELKSYFELENLPNDIEIFDNSHLQGVANVGAMVTYSVNSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKEIILSTGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSVNDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

LGVIQKLLAYYGNFESIYKADFKDLAMLVGKKAAQKIKEN

>ABS43225.1 ATP synthase F1, beta subunit [Campylobacter jejuni subsp. doylei 269.97]

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEIPFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YINLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKAETLREISRGDTCLDNCKVEQKKAN

>ABS43224.1 methionine-R-sulfoxide reductase [Campylobacter jejuni subsp. doylei 269.97]

MKELNEEEKKVILNKGTEAPFSGKYNDFYEKGIYQCKQCGASLYKSEDKFKSGCGWPSFDDEIKGAIKRI

PDKDGIRTEIICANCNGHLGHVFEGEGFSAKNVRHCVNSISLEFVKTKD

>ABS43223.1 DNA-binding response regulator [Campylobacter jejuni subsp. doylei 269.97]

MSQECKELIILVVEDAIKTRESLINVLSERFSKVIGAQNGDEGLKKFKKFKPDLVITDIAMPIMDGLDMA

REIKEISDDVPIVVLSTYSEKERLLRSIDIGIDKYLIKPVDIEELFKVLDCLVGEKIEANMLVKISEEYQ

FNKTKRTLIHNGQEIVLTKKELAFISLLLKQPGVLVLHEDIKKNVWIGEHVSDTAVRTFIKRVRDKVGED

FIKNVPSLGYKININK

>ABS43222.1 NADH-quinone oxidoreductase, I subunit [Campylobacter jejuni subsp. doylei 269.97]

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVGNYSINLGRCIYCGFCAEVCPELAIVHG

IEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMQERVLENQNTKEQG

ENK

>ABS43221.1 PP-loop family protein [Campylobacter jejuni subsp. doylei 269.97]

MINLSKKLIRQVAQANAKFGLIKDGDRVLLGLSGGKDSLALAHLLNRMQAHVPFKFELEAVTLSYGMGED

YSGLHAHCEEHDIKHSVLDSNIYEMSGDTIRENSSFCSYFSRMRRGTLYTYALEKGFNKLAIAHHLDDAA

ESFFMNFIHNGALRTLAPIYQSKRGVTVIRPLIFVRERQLRNNATQNELSVIGNEFCPGMKLSEKNVKFP

HAREEAKQLLANLEKDHPKLFTSLKTAFANLHTESFWLERTKV

>ABS43220.1 ISHa1675 transposase B [Campylobacter jejuni subsp. doylei 269.97]

MLSAVKYRIYPTKAQKELIHKHFGCARVVYNHFLDYRQKQFAKGIKETYFTMQKELTLLKKQDEYKYLNE

CASQSLQMALRQLVTALDNFFAKRAKYPNFKSKKNARQSYAIPQNIKLDNKKVYASKFTEGIKTKIHRKL

DKDCIIKQAFISKIADEYYIAISYENNKSLPKPKVIENAVGLDMGLENLIIRSDCVIYKNHKFLQDKENK

LIKLQKQLSKKQKGSNNYAKTKLKVAKAHQKITRARDDYLHKISDEITNLYDFIAVENLNIKGLIKNKHL

SKSIANASWGKFINLLTYKAENKGKTLMQIDKFFPSSQICSNCGSNTGKKPLHIRSFTCPNCNTKHHRDL

NASINIRNYALGIIDDRYKIKLDKSRVGITQSYACKDSSSGVSKYGYILDTSYLSLKQEAHLL

>ABS43219.1 amino acid ABC transporter, permease protein, His/Glu/Gln/Arg/opine family [Campylobacter jejuni subsp. doylei 269.97]

MLELLNTDTLLRLWQGLFVTLEISFISIIITSIGGLFLGILMSFKNTYIYAFCRLGLEFVRVMPLLVWLF

VAYFGFPRWFGWDLSSVSAAIIVFSIWGCFEMMDLVRVSLQSIPKHQYESASSLGLNTVQSFIYIIIPQA

MRRLTPMSMNLLTRMIKSTTFAYLIGAVELVKVGQQIIEFHNRNDFAPFIIYGLIFFIFFILCYPITLYS

RKLEKKWS

>ABS43218.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTNPKENLIKTTCKEQKLTYKELSKLIGYSEDTINKNASTNQISKPVQRVIELYLENLALKESLKEHHTL

KNSLKELIS

>ABS43217.1 putative maf protein [Campylobacter jejuni subsp. doylei 269.97]

MLILASSSISRANLLKTAKIDFKQVGFDYDENLDKNISPFLYVQKIVLEKEKQFLSALSKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALNDYVE

NNLYKSKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>ABS43216.1 oligopeptide transporter, OPT family [Campylobacter jejuni subsp. doylei 269.97]

MYKKQNLPELTLRGLILGSILTIIFTASNVYLGLKVGLTFSSSIPAVIISMAVLSLFKTSNILENNMVQT

QASAAGTLSSVIFVIPGLFMCGYWSEFPLWQTFMICLCGGGLGVLFTIPLRRAMVVESKLAYPEGRAAAE

ILKVANKDQSNKKGKQGIKEIALGSFIAAIFSLLSNGFKLAASESNFAFIWNKMAFGFSMGYSLALLGAG

YLVGLAGAIALFVGMFLAWGIFTPYLSNFEFDSTKNAVDLASSVWSSKVRLIGTGAIAIAALWTLIELLK

PVIEGIKEIVKNVKITNQEKNERTNIDLSLKSIFILFVLMVVGLFITFYSFVEDANLSIYYQMLFSFVGT

LVSVLIGFFVAAACGYMAGLVGSSSSPISGIGLIGVIISSIVFLVLGVELFQDPMLSKFAVALAIFTTGV

ILATAAISNDNLQDLKTGHLVGATPWKQQVVLLVGCVFGALAIVPVLNLLYQAYGFVGAMPREGMDASSA

LAAPQANLMSTIAQGIFHHNIEWGYMAFGVFVGILMIIIDKILRRTQKMSLPPLAVGIGIYLPPAVNIPL

VIGGILKYIVMQYLTKKYAKNSHKEEKLASCEQRGTLFASGLIVGESIFGVIIAGITVFSVSMGGSENPL

ALNLTNFHDSELFALIFFVGVVLYFIKRIVKKDA

>ABS43215.1 putative cell division protein FtsX [Campylobacter jejuni subsp. doylei 269.97]

MLFMMFAFEFILITNATLKHYEELVNKDYNIIVVSKTELDQNVVKTKIPFFSGLESLDPKDLIDRLKNDV

SEKNLKVLKDSLPKFYTLKLNSLPDQNELNSIKNQLLNIVGVSKVETFSKTHDKIYSLLILMKFVFWLFL

FIIILLAFVLFLKQMRIWLYEHTDRIEIMCLFGAPFWFRSFMLYKVVVVDCFIAFVILLAFFTQIFDLSI

IQENLKAVDIIFPPINFILHLTLIFLATLFICLLCVNTVMFKVKR

>ABS43214.1 cytochrome c family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKHILLLGLCLSLSLSAKSVSDYKAGEELSDKEGVEYFKELSKRPVQEWPNKNLSINDVPKGKQGDLIR

YGIELLSKTESTLGPYSKLKKTSNEVNCISCHMDNDGNGLPGTKKYVIPFLNVLNNYPRLDIETMKIISV

EDRIRGMGGTDSHRFPNDSKEMKAILAYFKWLKEAYGIKDGVKLEGDFFAKMNFPNRPADPVRGKKLFEE

NCVACHGERGLGVKNDNYEQGSGHLYPSLLIYPDGGHMAMIPFLARFLKSAMPFGASADNPILSDEDALD

IAAYVNTGFVRMPITTTENRAGLDTAYSKSPSLKPEYFASPQQNLDPKEYIKVKYGPWKNPNHFPGE

>ABS43213.1 multidrug resistance protein, SMR family [Campylobacter jejuni subsp. doylei 269.97]

MEWFYLFLATACEIFGVVIMKKLVSTKNKLYLLALIVCFGFSFTFLSLSMQNIAMSVAYAIWTGAGTAGG

VMIGVLFYKESKSFLKLFLIAVIIACTVSLKFLS

>ABS43212.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKTRILAIFFIFISLLYADENPFKTDQNMTLIAPPEFQKEEVKFNSSARILKSVTFNYINLDGSEDKIDL

DVNKSIDWHDTYTISRFKSPDPSKVLDVSVTIPEKNSSKQESNSTANVEIPLQVAKIYDFISYAVHKNKI

KLNTSDEMITDFSVGNPSKIVIDFRSNLISPTKNIRLSNSIFKRIDFGSHQGYYRLVIYLDGVYNYNIQK

DATGYMVNLL

>ABS43211.1 nitroreductase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKELEIFSTRYSCRNFKNEKLKKEDLNSILEIARLSPSSLGLEPWKFIVVQDEKRKEELSKICNQQKHV

KDCAALIIIISRLDFLDYFEEKLRKRDMSETEIQKRLDTYMPFLKSLNQEQKISYAREQAHIALASILYS

ANALNIASCTIGGFDKEKLDSYLSLDIQKERSSLVVALGYCNDEKNPQKNRFNFDEVVKFI

>ABS43210.1 hypothetical protein JJD26997\_0303 [Campylobacter jejuni subsp. doylei 269.97]

MLPPFKASFEVANYAPSLEYLNEGGLYSGVFRKAFLYEKIASDGGNNTFICFEFLTAKEQKLAIFNLFVA

KNNNFTYMDKNGKKENYLGFRQLNAIMKFFEIDELDFSQKGNENVFGVQTEVIYLNSLVNKLLVLGFGLE

EYLSKNGELANKIFLDRIFNEKMQSMDEFENNKEPLSIKSFKARYKSLNNNKSFIPKENQSYNPYGNEVK

NNNNEKYIEIGEDDGSLPF

>ABS43209.1 hypothetical protein JJD26997\_1521 [Campylobacter jejuni subsp. doylei 269.97]

MFFLIIIVKSHKQVLIKTILQDLLKDKTLFIFSLVKNL

>ABS43208.1 RNA methyltransferase, TrmH family [Campylobacter jejuni subsp. doylei 269.97]

MIVYGKQIFFYILEYHKDCINELYLAKECDKATFSKIAKSGFKIKKLDFKTAQAYAKGGNHQGFLLDIKE

SSFANLNEIKKNDFIVMLYGISDVGNIGAITRTAYALGVGALIFIGEKLAMEGVIRASSGAALDLPIVIS

NDALSVINELKQVGFYFYASDGSGKEIHSVKINNGKKVLVLGSEGFGLSSKIVKKCDECVGIAMKNNFDS

LNVSAAFAILCDRMLNV

>ABS43207.1 twin-arginine translocation protein, TatA/E family [Campylobacter jejuni subsp. doylei 269.97]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>ABS43206.1 ATPase, AAA family protein [Campylobacter jejuni subsp. doylei 269.97]

MSLALTFRPENFDDILGQYELIEIFKKFTALQKLPHSIFFGTAGSGKTTFARVVAKEFGLDFYEFDGGNF

KLEELRKILDNYKNSLYKPLIFIDEIHRLSKTQQEMLLIPMENYRLILIGASTENPYFVLSSGIRSRSML

FEFKSLGAKELETLLLRVQEKMKFSIDKEAKDFLLKSADVRAMLNLLEFVLVLDEKHISLENLKKLRNTI

NSEGVSSKDTHYILASAMIKSLRGSDVDAAIYYLARLIDAGESADFIARRLVIFSSEDVGNADPNALNLA

VSTLEAVKNIGYPEARIILAQCVVYLASTIKSNASYKAINEALNYVKNNEALEIPNYLNNNHQEKQNYLY

PHDFGGWVEQKYLSKNLKFYHSKGLGKEAKLLDNLYKLKNHKA

>ABS43205.1 imidazole glycerol phosphate synthase, glutamine amidotransferase subunit [Campylobacter jejuni subsp. doylei 269.97]

MKLVIIDTACANLASLKFCLDRLGFNATISRDLKELESADKLFLPGVGTAKEAMKNLEQFNLIDFIQNTK

KPLLGICLGMQILGNFSEELNQETLKLIDFTTQKFKAKEGFTFPHTGWNQVHSSHALFKGLEGAYFYFVH

SYCVGLGEYTIADCEYSQKFSASVMKDNFYGVQFHPERSSEAGEILISNFIKDIG

>ABS43204.1 ribosomal protein L34 [Campylobacter jejuni subsp. doylei 269.97]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>ABS43203.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTEENMSEQTYELRFEYFNEENATLFFQKITDFLLSIDKLNNSLVSVFGIEIDINIQIKSIEKGSIRIWI

AEKLSKISDDDIKHYVNNPRELLADLLIKSKKMILEKIQDKKCQDIPKEYKNIIEKSNLKDFGYNNNETN

LLTCVSELTHKAKEFKHKPMIIFEEKVYGISETFDYNPKTADGVKEQISKMQGAFIIKKPDLTGESKWEI

IHDKIIKVKINDENFKNKLKNRTIKLSYGDMIEGSLICKTYISKDLEVLENEYFLEDIKGIIEPSYTQEK

NLFK

>ABS43202.1 protein-L-isoaspartate O-methyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALNFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKATQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDGGILVAPILHNGKQFITRLRKNGTNLQKETLEECLFVPIVDGKE

>ABS43201.1 putative flagellar protein [Campylobacter jejuni subsp. doylei 269.97]

MKVLFRSDSSSQIGFGHIKRDLILAKQYDDISFACLHLKGSLIDEIPYPVYELSSESIYELINLIKEEKF

ELLIIDHYGISVDDEKLIKLETGVKILSFDDEIKPHHCDILLNVNAYAKASDYEGLVPFKCEVRCGFSYA

LIREEFYQEAKENREKKYDFFICMGGTDIKNLSLQIASELPKTKIISIATSSSNANLKKLQKFAKLHSNI

RLFIDHENIAKLMNESNKLIISASSLVNEALLLKANFKAICYVKNQEPTATWLAKKGYEVEYRY

>ABS43200.1 ABC transporter, permease/ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MLKKLFFILSKEDKNFLFFLLVFSIFVSFIETFAISLVMPFITLASDFSYFDRNKYLISLKEYLNIPVFE

IIVYFGVGLIVFYVFRALLNAYYFHLLARFSKGRYHVIAYKVFSKFLNINYEKFTQKNQSEILKSITGEV

YNLSTMISSFLLLMSEIFVVLLLYALMLLINYKITLFLSIFMVLNAFILVKILSPIIKKAGLRREEAMKN

FFEILNTNLNNFKFIKLKTKEDGVLSLFKEQSEAFSKANITNESVAAVPRIYLEGIGFCVLVFIAVFLVL

KNESDISGILSTISIFVLALYRLMPSANRIITSYHDLLYYHSSLDIIYQNLRQEEENLGEKKLSFNQELK

ICNLSFGYEGKKHLFKNLNLSIKKGEKIAFIGESGCGKSTLVDLIIGLLKPKEGQILIDKQELNANNTKN

YRQKIGYIPQNIYLFNDSIAKNITFGDAVDEEKLNRVIKQANLEHFIKNLPQGVQTKVGDGGSNLSGGQK

QRIAIARALYLEPEILVLDEATSALDTQSEAKIMDEIYKISKDKTMIIIAHRLSTITQCDKVYRLEHGKL

KEEK

>ABS43199.1 UDP-N-acetylmuramate--alanine ligase [Campylobacter jejuni subsp. doylei 269.97]

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLIFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYAEFLDTAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKIFGMGYHLALDASLAILAALNFLDIETI

GARLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYAKLGGYKKITAIFEPHRYTRLAVN

LKEFAKAFEGVDELVILPVYAAGEEPIEIDLKAVFPKALFVENIQREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>ABS43198.1 hypothetical protein JJD26997\_0348 [Campylobacter jejuni subsp. doylei 269.97]

MAITYIVGNPGSGKTYFAVNQIYEYFVLPTLPNKRILGFEIKRKLKIFDYLYCYTNINGLKFDISDKLIS

FDFDIFYLNLTHLYNLYNQGLNDDELNIKANELNLFKVMFVIDEAHNFLKNKDDKILIWWLTYHRHLHQE

IIFITQDLSLISNEYKRIAEFFYKALDSGKRIYKNSLRYVQFSSYKLYQKDIVTRFSLSLNKEVFSLYKS

GDNKPNKSFFLKIFTFLLFSILTLIFCFYIFISFFKSDEIKENNISKESNINLNLNISPNTIKDKSENNL

FSNLELIDGSLKDLPLKNVDINNSSVYKILCIDTTCHIDDKNQNFMHFPLEYFHFILNEFPPIYHYKNKV

NKGYQHFIIFNFEVFNNLKKGVLKNEKDTSFTRSLF

>ABS43197.1 aspartate-semialdehyde dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MSKKQKIAIVGATGAVGEELLNVLDELDFPVESILPLASAKSVGSEVEFKGKAYKVKELTENVFKENPID

IAFFSAGGSVSEKYAKFAVESGAVVIDNTSHFRMEKDVPLVVPECNPEDIKDWKKTGIIANPNCSTIQMV

QVLKPLNDVFNLKRVDVSTYQAASGAGKEGMQELVKAMQSFFAFKLDEFEPQTFPYTLALNLIPQIDVFM

DNDYTKEELKMVNETQKILHKNLEVSATCVRVPVLRSHSEAITMHFEKEINVKKAKEILEKAPNVVVIDD

PKNKKYPMPLMTSDTNETYVGRIRADVYDKKILHLWCVADQIRVGAATNAVRIAQKWLELKNK

>ABS43196.1 pyridine nucleotide-disulphide oxidoreductase family protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIDLIVVGAGPTGIGCTVEAKLKNKEVLILEKSNNICQTLMQFYKEGKRVDKAYKGCEGTNHGHVPFE

DGTKESTIETFQNALKEHNIEVEFDSEVESVKNENGVFLVSTAKGVYECKNIIVAIGRMGKPNKPDYKLP

MTLTKIINFNANSALGNEKILVVGGGNSAAEYAVDLANSNRVSLCYRKKEFTRLNDINLKDIHEAGNSGK

VELKLGIDITEVEDDNGKAKVNFTDGTSDIYDRIIYAIGGSTPLDFLQKCGINVDDKGVPLMDENKQSNV

KGIFVAGDIATKNGASIVTGLNDAVKILSVL

>ABS43195.1 antioxidant, AhpC/Tsa family [Campylobacter jejuni subsp. doylei 269.97]

MSLNIGDKAPQFELLNQDGVKIALKDFIGKKVILYFYPKDNTPGCTTEACDFSLNYDKFGNKNAVIIGIS

PDSATSHEKFISKFDLKHILLSDSEKEVAKAYGAWGLKKNYGKEYEGIIRSTFVIDETGKIARIYSNVRV

KDHALKVLESL

>ABS43194.1 flagellar biosynthetic protein FliQ [Campylobacter jejuni subsp. doylei 269.97]

MDENTLVALGVQTFKITLLLSLPMLLAGLIAGLVISIFQATTQINEMTLSFVPKIILVVVILIFLMPWMT

TTMMDFTENILNQIPTFIQ

>ABS43193.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRKSIAIIGGSIAGLSAALFFASAKNDELDFDITVFDEGKADLKAAAIYNVPFFPKGAKADEIYTHIKAQ

IASMLEVKYIDSKVVSISGEKGDFTVNDEQGLGIKADYIIVATGANKSEIKGLEDFVIPHELMPKPNKFC

FKHHGRQIIKEGIYAAGLASGVTTMVACAMGSANEAACAILSDIKGAVSVYHDTPTTRV

>ABS43192.1 putative endoribonuclease L-PSP [Campylobacter jejuni subsp. doylei 269.97]

MSNYPKAIGPYSAYREANGLLFISGQLPINPASGEIESSDIKEQTKQSLKNIGAILEENGISYDKVIKTT

CFLADINDFVTFNEIYAEFFKAPYPARSAFAVKDLPKKAKVEIEIIAQKG

>ABS43191.1 putative ATP-dependent DNA helicase [Campylobacter jejuni subsp. doylei 269.97]

MPLSKLNNEQYLAATADFGHNLVIASAGTGKTSTIVARISYLLSKGVTPQKIMLLTFTNKASKEMIGRLG

KFFDKNITSKILAGTFHSTAYTLLRNADKNIILKQASELKTLLKSVYEKRTFRHLSDMKPYQPSYLYDLY

SLFQNKAHNQDFYTWFCQNYEDQSIYAEIYEDILKEYDNEKKRFNYLDFNDLLINLKDLLKEEKYEFDEI

LVDEYQDTNTLQSSLIEAFHSKSLFCVGDYDQSIYAFNGADINIIGGFKDRFKDAKIFSLNKNYRSSRSI

LALANKVILNNERLYPKELIVTRNDEFKAPSLLAFEELFDQYQNIAKMILTSGVSLEEIAVIFRNNSSAD

GVEVALREQGIASVRKGSGSFFESLEVKAFSAMLALIVNPKDIMAFIHLVQYTKGVGGVLAKEIFDALLK

LGHGNLIKGFLDPDKSVNLQNHQKRNYQLGLFADLEELARETRFKFESEFDAHPILRLSKINDLCAKNLE

KIYLYLKKAMEIKHSLALVNLICENSFYREICEELAIKRATNKAGQVDLLRKSENLEKIEIKFNVLKELT

KNYSDIYKYYNFLTLGASEMSSGKGVNLLSVHASKGLEFDLVFVIDLAQGRFPNQKLMGMGGSLEEERRL

FYVAVTRAKNILYLSYAKYDKNKKTSFAPSRFLIEAGLCKGDLTID

>ABS43190.1 transcription termination factor NusA [Campylobacter jejuni subsp. doylei 269.97]

MEKIADIIESIANEKNLNLENVREKVATALINTAKRIYGQEYEFFVDPKNLNLYQKITIVADNDERLQNK

SESFIALSKAKVEAPDVEIGDELTYECSLENLGRTAVNTLHKELEYHIQKLLEQTIFEKYKNKVGQMVFG

TVVRVDNEENTFIEIDELRAFLPRKNRIKGEKFKIGDVVKAVIRRVYTDKGIKIELSRTSPKFLECLLEA

EVPEIKDGYVNIIGCARIPGERAKIILQANGANIDPVGATVGVKGVRINAVSKELHNENIDCIEFTNESE

ILISRALAPAIVNSVKIEDKKAIVNLNSEQKSKAIGKNGINIRLASMLSGYEIELNELSSSHLNNAISNE

EAMKNLQDLFKI

>ABS43189.1 outer membrane protein, OMP85 family [Campylobacter jejuni subsp. doylei 269.97]

MKKHLISICALVAMANAATIKDIKFIGLNHLSNTSAINITGLKIGEEINPAKINTAILNLYKQNYFENIA

VENNNGILEIIVTEKPTIAKVSITGIASNDRKQVESILGIKRGTLLDEGSIKEAIERIKAYYEAKSYFDT

IVEYKKKTLENTDGLELEFTVNRGENIIIDNVHLSGAKKFSYSDIEPAVVNKEKEFMGWIWGRNDGKLKV

FELSNDSSRIADEYMKKGYLDVQVSSPYLKTYTDTYQANLTYFIKEGKPYKIKSISIENPLFDDKQNTQT

IKDLRSSADKTINIEDIRKDVKTIETQSADLGYAFVEVYPDIQKNDQTQEATVVFKVISHDTVYIRNVII

SGNSRTVDRVIRRELYTTEGNLYNRTDLSESKNALKRTSYFDDVNIKEEKVDDTHIDLIVDVKEASTGAI

SGGIGYGSSDGILLNASLSDTNIFGSGIKSSVSVDKSDDTLSGRISLINPRILDSQYSLGGTLYSNDYEW

DNYSEKNYGFDITVGRQFARYYNASLTYNLEQSDIYHLSPTLLRTGYELGKSIKSSITPAIIFNNTDDYY

LPRSGIIASTSLEYAGLGGDQEFISSSSKFNFYQGLQDYIGYDLIYRYKASFYKVWDEGYLPINQRIYLG

GIRSIRGFESRTVSPKNQWGDEVGGTIAFANSVELSFPLIDRIKLRGSVFFDYGMIGLKNLDEIKRMSTG

IGIEWITPIGPLQLVFAKPLNDKKGDNTNSFEFNLGTRF

>ABS43188.1 copper-translocating P-type ATPase [Campylobacter jejuni subsp. doylei 269.97]

MEELRIKIGKMTCVNCSNAIERACKKIDGVKDASVSYVNSSGVFLLEDQEKRKDIIAKIKNLGFEILEDE

QSLNAYKAKKHLELRKNLLLSIVLSVIIMYFEMFVKSSFSQNIQMALSFFGIFYCGRDFFSHAFLGLKSK

NLDMNTLVALGTLSAFVYSFLVYLQIFKEEDLYFSGAMMIISFVLLGKYLESKAKFKAQDYQRILENIDT

KKTKILLEDESIKEISSSFVKSGDVLLVKEGESIVADGVVLLGSAELDMSFLNGEFLPVLKKEGDEVQAG

GVVLNGALRIKANKKAIDSTLEQIKNLVFEAGNIKSPLANLADQISKYFVGGIIFFAFLVFIFWVVKADL

NTAFLHACAALLISCPCALGLATPVALVVASANAAKNFILIKNPAALEKLALVKYAFFDKTGTLTKENLS

IFKHNLSKDDFDKLCQIESLSSHPIAKALHKDQIFDLKGEGRVIVGSGIKYKEDSDIYLAGSAQFLHENE

IDTKESDIFFDTFKEYIRVYFAKNKKCLGGVLLSNALKDGAKELVLNLKKQNLKTFILSGDHVKNVEKIV

KELQIDEFYAQLKSEEKLHIIQKFEKTLFVGDGINDAAALSAASVSMSFSKANELAKKTGDFILIKDDLS

AIFKCFKLAKKTRSIIKLNLFWAFIYNVLCIPVAAGFIPFITLSPHIAAFAMCFSSITVVLNSLLIFKF

>ABS43187.1 phosphoheptose isomerase [Campylobacter jejuni subsp. doylei 269.97]

MINLVEKEWQEHQKIAQASEILKGQIAKVGELLCECLKKGGKILICGNGGSAADAQHFAAELSGRYKKER

KALAGIALTTDTSALSAIGNDYGFEFVFSRQVEALGNENDVLIGISTSGKSPNVLEAFKKAKELNMLCLG

LSGKGGGMMNKLCDHNLVVPSDDTARIQEMHILIIHTLCQIVDESF

>ABS43186.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKVLLSSLIAVSLLSTGLFAKEYTLDKAHTDVGFKIKHLQISNVKGNFKDYSVAIDFDPVSAEFKKIDA

TIKIASVNTENQTRDNHLQQDDFFKAKKYPDMTFTMKKYEKIDNEKGKMTGTLTIAGVSKDIVLDTEIGG

VAKGKDGKEKIGFSLNGKIKRSDFKFAASTSTITLSDDINLNIEVEANEK

>ABS43185.1 hypothetical protein JJD26997\_0476 [Campylobacter jejuni subsp. doylei 269.97]

MHGKIAIYMDSTGRGTVTNSANTFFDFNRQIWNDKKSMPSVGMLVEFRTLSSEKKAEDGKPVQTSKTITG

IKPSKFQEFKEGDFITEHDFWKTDNDNELEDLQNSRRSAYITELYRTTDFDTIEKIPLSFTIPQAIQKYF

AHEILSVETLQANLQDEKEIPCILDYLILKRFLFKAYDTLIFMDNSIDQTQFSALKSIMMHLENSYKQMI

ADQKPNITKIFNETFLSLQCHYQALVATIDTRKNRLASLEAQMKTLQSEINLKSNATNADPEKLKARQER

LAKLQKEAEYYGTTLKRLDAIREDFYKKNYNIFENAFKLSREKLFKKIITGLNLCATIMDVKIWHLSLKS

SGVKNSYFTMSNIENSFCSLSFAEHYLSRLNKSALNPFDQKLLVYIQKITKEQRKKFLVVTSDLDLLCKL

KIENFSQNPYYLVKYAPKKVNYQSLMRDNTFDIVYIDEKHVWENVADIILQGKHFDKSGKTKFKLI

>ABS43184.1 threonyl-tRNA synthetase [Campylobacter jejuni subsp. doylei 269.97]

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFCVESKIGEEDLVKIEKKMKELAEAKIEISKYKITKNEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHVPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLAIIEEAKKRDHR

KLGIELKLFTFNDEIGGGLPIWLGNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKVYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEVATKALKEALDEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTIQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVAKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVYF

>ABS43183.1 cytochrome c oxidase, cbb3-type, subunit III [Campylobacter jejuni subsp. doylei 269.97]

MQWLNLEDNVNLLSLIGAILIILITLVIVGRMFKQMKEKKGESELSEHSWDGIGEYKNAVPTGWAVVFFL

TIVWTIWYFLWGYPLNSFSSIGQYNEEVATHNTKFEEKFKNLSPEDKIAMGQNIFLVQCSACHGITGDGI

NGKAQNLNIWGSEEGIINVIKHGSKGMNFPGGEMLGAADLGVAEEDIPAIAAYVAKDLSAIKKTTNENLV

AKGKEAYAICAACHGEDGKGQDGMFPDLTKYGSAAFVVDVLHSGKAGFIGTMPSFPTLNDIQKEAVGEYV

ISLSRGE

>ABS43182.1 hypothetical protein JJD26997\_0840 [Campylobacter jejuni subsp. doylei 269.97]

MENGSGNIGNKGDINSYSSGRFAHPNLDFGELKERQGGNGRHIFHALSEIQRYHVIEDRSEEIPKEYFTI

EQILDYLKIGFKSGMFESFIFTGLLCFLQVIYPSYKYYFLDSPLSKNEELFFDLLSYAPILVSTLFMAYI

SKYYKGLLTRRAIFALMNGRSFSFLLKGFAIFWLFSWLKEISINNPRAVYSWADWTLWLIQYFKPNVSTE

QLYVFYYKYAIPALHDASYELLYSMCIFAILPYLTIFYKGYKERVKRFENKDAYENY

>ABS43181.1 sodium/hydrogen exchanger family protein [Campylobacter jejuni subsp. doylei 269.97]

MDNFLEIFLTTVTIAIVLNVIFKKFEIPTIIGYIATGKIISEIYHLSGKGEITHIAEFGIVFLMFTIGLE

FSFKHLMAMKQEVFLNGSLQMLTCGFVFMLLAIGILGLGDKSATIAGFALALSSTAVVLKILNDNGDINE

QYGRKALGILLFQDIAVIPLLLLVDIFSSNNQNIEKLLFTTLISALILITLLFFIGKYLVDRIFRLIIHT

SSQEIFISTVLFMVIGASFLANYFGFSYSLGAFIAGALIAETKYKHKIEADLIPFRDLLLGLFFITVGMQ

IQLDAVAQNWFLIIVLTLLVMALKFGIVFGFLFLYTKKRVALKTAFAIAQIGEFALAIFSLLQAKNMLDI

KTSQILIVVSILTMIITPFILNNIRKITNVVEDIALNTNAVQNIDSNIKLKNHLVVFGYGRLGQEVVQKL

KNTGVPYLVLESDLNLVELGVSRGENVVFANAAQEETLKIANIEECAVAIITVTNEAKLEILCQVLAHYP

KPIDTIIHVNGTLKKMLFSSIDENIRIIRSEKVIARNLVQEALECRIHKNT

>ABS43180.1 exsB protein [Campylobacter jejuni subsp. doylei 269.97]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDIPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>ABS43179.1 lipoprotein, NLPA family [Campylobacter jejuni subsp. doylei 269.97]

MKIKSLFIASILTLSLNANALETITVAATPIPHAEILEQVKPDLEKQGYKLEIKEFTDYVLPNLAVDNGE

ADANFFQHTPYLEEFNKNKGTKLIKVAAIHIEPMAVYSKKYKSLDDIKEGAKIAIPNDPTNESRALDIIA

KKGLVKFKDKALKTPLDLIDNPKKIKFVELKPAQLPRALDDVDFAVINSNYALSANLNPAKDSVFIEDKE

SPYANILVVRVGHENDSKIKALIQALQSDKIKQFIIEKYNGSVLPAF

>ABS43178.1 primosomal protein N' [Campylobacter jejuni subsp. doylei 269.97]

MQRSDIRYYELAICGLYLDNLTFHSFDEIKPLTQVLVDLRTKKNLKAIVLKECQKPDFKTIEIKEITEYF

LTPLQFELANFIVYYYTSKLGFILGFFETSPKYECQKIFFKDTPKLSNQQQNALSFLQKENNSLLFADTG

SGKTEIYISLIKECLKQGKQALLLMPEIALTPQMQKRLEVYFKDNFFLWHSKISKKKKQEYLERFCKGEV

LLVAGARSALFLPFRNLGLIVVDEEHDNSYKASNQPFINARDLALFLGQKNNIKVVLGSATPSLTSFYKQ

KSFRLKGTFFESKKHFLYDENELGITPMLLSELEKSLKHQKQAIVFLPTRANFRQIICKDCGETIKCPFC

SIAMSMHKKKNVLKCHYCNYTSLIEQNCPSCKGEMLEARKMGTAELLELLQNALPLAKIVKFDSDEITSV

KKLNTILKDFNENKIDILIGTSMLAKGHDYHSVDLSVILGLDEYLLRPSFRASEETLALAMQVAGRAGRK

GEARVLLQTKNRAFFERYIEDYDAFLKDELENRKDLYPPFKRLLRVLIEDKDQQSSQKLCEKLAYQFKNI

KQVELVGYGICGVEMLHGKYRFYLLLRSENHKALVAIENYILQFKNASADIDPIDFI

>ABS43177.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MRELERVLDTYPSRIIEHATLSSILENLAYKRINDKIVQLKNKSILTPLKSGLYVYNPLCNNTLLSKEII

ANILLGPSYVSLDFALWFHGLIPESVYKITSISTKRSKSFDTPYGVFSYIQIKKELFNIGLEIKTFKSCN

FIIASKEKALCDKVYFTKDIDLRSQKAMREFLEDDLRVDMDELENCDIKIFEEYVKVSKSKRIEVLAKVI

KGLSR

>ABS43176.1 putative soluble lytic murein transglycosylase [Campylobacter jejuni subsp. doylei 269.97]

MIKKILVFLFIFSSLNATQYNIEKLKKEENSLAKDYYIYRLLEKNKISKKDAQDLNSHIFRYIGKIKSEL

EKIIPLKPYINPKYAKCYTYTANTILDANLTCQSVRLNSLVFIASLNSKDRITLTQTFKNQRPDLTNLLL

AFNTSDPMSYIVQKEDINAFFKLYNHSKKYDLDLNTSLVNKLPNHIDFKDFAQNIIIKKENPKFRHSMLE

INPENASEDSAFYLGVNALTYDKTELAYDFFRKAAQSFKSQSNKDNAIFWMWLIKNNEEDLKILSQSSSL

NIYSLYAKELTNTPFPKIESLNPSKKKNNFNIQDPFAWQKINKQIRDANTSQLDVLAKEFYTQETLPIYA

YILERKNNFKKHYFIMPYYDNIKDYSKTRQALILAIARQESRFIPTAISVSYALGMMQFMPFLANHIGEK

ELKIPNFDQDFMFKPEIAYYFGNHHLNYLESRLKSPLFVAYAYNGGIGFTNRMLARNDMFKTGKFEPFLS

MELVPYQESRIYGKKVLANYIVYRHLLNDSIKISDIFENLIQNKANDLNKS

>ABS43175.1 putative phage anti-repressor protein [Campylobacter jejuni subsp. doylei 269.97]

MQNITSNLIFTNEQVAINYGLTTGSTIAKHLRTHNDEFIENTHYFLVENSFKNKTIKWTLEGVYMLGFFI

KSPKAKEYRKKVAKLLREQTQARFKSLSDENQRLNSLNHHQKIGYKSQLKQQKEHYENKIKALQYDLEHK

NELSFKRKLSQKEFLELRKILAKDYGMLCIKEWEFEFLAEKIALESSKMTTWDAVVKKLKQSLDYWQNYD

EYEEKWKKILRR

>ABS43174.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MQVNTFSNIASMTQTQVSNKKADDAKENTKDKNVQSTNSSKNVDKNTLEKLNALGGKGITQIYLVQFQQQ

TMNTVIGSSNAQTGLDSLLNGANLDTAKSILTNIDFASLGYSDKNPLDMNTDELQQLVSEDGFFGVENTA

SRIADFVIKGSGDDVDKLKKGLEGMKKGFEQAEKMWGGELPQISQDTIDAALKKVSDRIDELGGKTLDLQ

A

>ABS43173.1 putative efflux pump component MtrF [Campylobacter jejuni subsp. doylei 269.97]

MNIFLKNIEKMGNKIPDVSILFLFALIIILLASFFLSLFDFNYFLIKADGSGSEQVVIKNFLSLGNFLNL

LSSMTSNFINFPPLGVVLVVALAIGIAETSGFLRVSLIKLSLFIPKRLIVPVVLVISVASHIIGDGAYVF

LMPIVAMLFISAKKHPVAGIATAFAGYAGGLSASFTPSLIDPIMQGFTEKAAHIIDTSIDINVLCNYFVS

LAGTISVVLFCWFVCDKIVEPYLKNNLPIDGDYEEFSSNSISKDENRGFIFALLSILAMIVILVVLAYPS

DSLLRGSHGSLSEKDAILMKGLVAFLFLFFAIPGLIFGIFSKKFTSLIQAVNAMSDALKPLIGFMVFCFI

CGQFLYVFNESNISKLLAVSGAELLKSLALPSGITIFGIIVFTGFLNLFVTSATSKWAVLAPIFVPMLML

VGIAPELTQAAFRVSDSAINVMTPLCPFYPLIIAYCQKYSSKTGVGTLCSIMIPYSIALMIALTLTLYLF

WIFNIPLGFESSYIYTLKG

>ABS43172.1 single-strand binding protein family [Campylobacter jejuni subsp. doylei 269.97]

MFNQITVIGNICQDIKLSYTQSGVAFLNNAIASSYKYTTNDGTIKEEVCYLNFSVFGRLAENMNQYLHKG

SKIFLQGRMVQENYVDREGKNRTNYKIAVETMKFLDSKPADNNQSGNSYKNVQETSTPEASQPVQQGENF

PF

>ABS43171.1 ferric receptor CfrA [Campylobacter jejuni subsp. doylei 269.97]

MNKLCLSLFTSVFLISDAISQNVELDSSIVSASGFSQDIKEAPATINVISKKELQSKPYRDVAEAIADIP

GVDLYASKGKTGSYNITMRGITGYTLVLIDGRRQGIGGEVGPNGFNEISNSFLPPISSIERIEVIKGPMS

TLYGSEALGGVVNIITKKVSDKWETSVSLDALLNENKDWGNTYGTSIYSSGPLMNDKLGLTLRFREFYRQ

QSNVEFTHGSGQRVPGDQAQSPTKANNFNIGTRVSYLANDYNTFIFDIDFSRNHYDNKQAQLGTITKPAD

KNKGSLTGGYTDIMEVDKLVTYLSHEGIYENFSITSTLQYNRVSNNGREVVGQAKQPFLGENRDIVAEDI

ILDTKSVIPLGQNHILSAGGEYRLEKMQDKIANPTNFDQYLLAIFAEDEYSIKDDLRLTFGARYNHHEIF

GNNISPRAYLVYNPTDELTFKGGISTGFRTPYANRLINGTYNYSGQGKFPIYGNPDLKEETSLNYEIAAI

YNNDLFYVSATGFLTNFKDKISTQKYDKNSMIPGISKCEANACYRAINHGKVEYKGVELGAGISPLDNLN

VNLAYTYLDTEVKEAQDRSVIGKPERNSLKHNIMLKTEYSFYNKFTPWIKGEWQIDRYMGDTNINREYYK

DIFLASMGVRYDINKQWSINAAIYNLFDKSFTNSWESYKITNKTKTIETAWVNTYNRIEEGRRMYISING

SF

>ABS43170.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKILLLSALFAVNLWAVNDIEIKNAFVKQTPPHAQNSAIFLTIFNNTDKDIALISAKSDISEVSELHTH

IHKDGKMMMQKIPEIIIKAHSSIELKSGGYHIMLLKLKKPIIKDTKVNLDLKFNNHKTMELKNIDSKEF

>ABS43169.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MKKIFTVALLGATLLYAESSAFGAGDITSNSSYGLTSNEKLFKEKLDSLNNENIQTNARINEINERIEGL

QSTLEGINSQYAKSNSRLSQVEENNQNIENNFTSEIQKLKAYVEESRKIQEANNKQIKKVLAELSSLVDA

INANYVSKNELNDANLSIKTITPSVVVSTADSNSTIENNNTQNTQDDKAKQIDESWKKKKNNEILELAIK

DVDKNAFEDSKAKLNFLITKQYKPARANFWLGEIEYEQKNYNNAIVYYKKSSSLSTKGDYFPKLLYHTAI

SLDKTGDTKTANGFYKALKINYPNSPEAKASPNRK

>ABS43168.1 peptide ABC transporter, ATP-binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKVRNLNISSKNNLLLKDINLDVKTGKTLMILGQSGVGKSLLGKALVRLLDSNFTISFDELSFHNSCIFN

FNKEELRDFRSKVALVLQDAELSLYPYLDIGNLCHLVLKTHTKLKQKERKDYAFSYFQKLGFENLDRLWH

SCANELSLGMARRVSLALALLNQPQILICDEITASLDKENASKIISILEKLKNTTALVCITHDLNLVNSL

ADEILVLEKNSSNLYSLDEFLRYYNA

>ABS43167.1 phosphatidylserine decarboxylase [Campylobacter jejuni subsp. doylei 269.97]

MSFSKESSRLFGFVVGVKFPKFIQKVINENYVKYFNIDMSEFKAPCEYESLNALFTRTLQIPRKLEEGFI

SPSDGKILECGSTFLANEEHFAFSIKGHTYSVEELLKDSFEEDELKNGLDYVNIYLSPKDYHRYHSPCDM

QILSVTYTSGALYSVNEKHLERISNLYVKNERVSLKCQNKKGIFWLVFVGAQNVGKMRFNFDTSIQTNAK

ISHNFVRKYENLNLKKGEELGNFELGSTIVLISQKGLLNFNLKAGQGVKFGEKIAD

>ABS43166.1 general glycosylation pathway protein [Campylobacter jejuni subsp. doylei 269.97]

MRIGFLSHAGVSIYHFRMPIIKALKDRKDEVFVIVPQDKYTQKLRDLGLKVIVYELSRASLNPFVVLKNF

FYLAKVLKNLNLDFIQSAAHKSNTFGILAAKWVKIPYCFALVEGLGSFYIDQGFKPNFVRFVINNLYKLS

FKFAHQFIFVNESNAEFMRNLGLKENKICVIKSVGINLKKFFPIYVESEKKELFWKNLNIDKKPIVLMIA

RALWHKGVKEFYESAAILKDKANFVLVGGRDENPSCASLEFLNSGVVHYLGTRSDIVELLQNCDIFVLPS

YKEGFPVSVLEAKACGKAIVVSDCEGCVEAISNAYDGLWAKTKNAKDLSEKILLLLEDEKLRLNLGKNAA

QDALQYDENIIAQRYLKLYDRVMKNV

>ABS43165.1 peptidyl-prolyl cis-trans isomerase B [Campylobacter jejuni subsp. doylei 269.97]

MIKTIDTSKVNEYKFALIKTEKGIMKLKLFGDEAPQTVCNFATLANEGFYKDLNFHRVIPNFVIQGGCPH

GNGIGGPGYEIICECDDQEHKHERGALSMAHAGRDTGGSQFFICHSPQAHLDGVHTVFGQIDPKDEESLE

VLDSIRQGDKILDIKICDKI

>ABS43164.1 disulfide bond formation protein, DsbB family [Campylobacter jejuni subsp. doylei 269.97]

MNEINKTKNFYALMCLAGFLIILLPVGIANFVFGYMLGDSPCTLCWGQREAMIFIGVMALFIVRYGMKGK

YLAALLIMTAVGLYQSFAHYGNHAHRDLDQGFGLAVFGIHTYFWAEVVFWAVVLLLGVIFAFAPKFNAFE

TELNGEKFRKYTKFSFTAVLISAIIVASNVFQAFVSTGIPPYVGQGDPVRFSLNPKYIIWSTDGWKGLWQ

NISFLGKRDVKTPDYAFAPASEKLGIKFDNDINNAPFAKINDELKITNEQTINFDKAINTLDYINNEFVA

SSKWDVAFLDNNFSVKEGFELDPYFSASIDPIIGIIPYMNDKFILMGSNKSFLRFAKNPNASEEDIAKQY

ADFVKGNDKFKGQGEGLGRGRLDTVRAKFNHVASMSTDGNYLYLATVPNNKDAKTFVISKVSLKDRVLSG

EFTPKANLKEGKTLGDLYVTSMTFKDGKIYALSKNHNVIAVIDPVKEEVVKTIAFPSSITNARSIFFKDG

KINILSYQDGSNKLYALN

>ABS43163.1 thermonuclease family protein [Campylobacter jejuni subsp. doylei 269.97]

MRINYKKLFNLRKLLSDPKKLFSVLIFTLVVVFIQNYIAQNSSFEGKVVRVIDGDTIEVNHENKLARIRF

FGIDAPELKQSFGKQSKEALSRILSGKQVEIIYKNKDTYGRIVAIVKLNDVDINRFLVSKGYAWADTYYS

NAYIKEQENAKKNHLGLWKESNPIEPYKWRKHNKF

>ABS43162.1 aconitate hydratase 2 [Campylobacter jejuni subsp. doylei 269.97]

MSFMQEYPKLVEERAALGIPPLPLNANQTQELCKLLENENNEELANLLENRVNPGVDDAALVKCEFLDSI

LKDKISTPNIDKKRALRMLGTMLGGYNVKVLIDALKDENIAKDAAEVLKNIIFVHDNFHTIAELSKNNPH

AKEVLQSWANADWFNKKEKLPQVIQCIVFKVAGETNTDDLSPAGDAFTRSDIPLHANAMLKVRQTGSLEK

IKELKKSAREVVYVGDVVGTGSSRKSAINSIQWHLGKEIEGVPNKHSGGIVMGSTIAPIFFNTAQDSGAL

PIICDVTNLEMGDEFEIHPYEGKIIKNGSTIAEFTLSPNTLLDEVRAGGRIPLIIGRGLCAKAREFLGME

SENIFTKPEQPKSSSGGYTLAQKMLGRACGVEGVCPGMYIEPMTLTVGSQDTTGPMTRDEIKELASLGFN

ADFVMQSFCHTAAYPKVSDSNLHKTLPNFMTSRGGVSLKPGDGVIHSWLNRFVLPDSVGTGGDSHTRFPI

GISFPAGSGLVAFAGVTGSMPLNVPESVLVRFSGELQAGVTLRDLVNAIPYYAIKQGQLTVEKKNKKNIF

AGKILEIEGLPNLKVEQAFELSDASAERSAAACSVDLSIESVSEYIKSNISLIEAMIEAGYENKATLARR

AEKMREWLKNPTLLRADKDAKYAYIININLNDIKEPILACPNDPDDVATLSEILADDKRPKNIDEVFVGS

CMTNIGHYRALGEILKDKGILKTRLWVVPPTKMDKAQLTDEGYYSIFGAAGARIEVPGCSLCMGNQARVN

DGAVVFSTSTRNFDNRMGMGAKVYLGSAELAAVCAILGKIPSKEEYLQIVSEKLSDEHKANIYRYLNFNE

IENFKLEN

>ABS43161.1 disulfide bond formation protein B [Campylobacter jejuni subsp. doylei 269.97]

MKDNCRNFSLSKWQDTRKPWLILIIVTIGLTCIAHFLFQEYLFMKPCEQCVYIRFDMLVMAIGGMIALIN

PANNIIKIFSYSLAFYGIWLGLEHCLTLNHIHEVVHSENPFAGVDGCREIPIYPFNLPLHEWAPSWFLPT

GECGMDTPVVPENAYNHLNAFQKFFIGTPPDFENGLYSNGWYLIPSLKFMNMAICCLIAFLCCFVVLFAM

FIAYVLDKNKPNAKIFALVIVALVLVLKFIGEPKNPNQNIASLNQVVLRYS

>ABS43160.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTAQEIKEFCKNIGITQKELAEKVGMSQEGLNSILSTGKISKTLEASINLLMENEKLKQELKNYENLKNS

LKQALS

>ABS43159.1 cytochrome d ubiquinol oxidase, subunit II [Campylobacter jejuni subsp. doylei 269.97]

MFFGLELEGLQIYWWLILSLLGGLLVFMFFVQGGQTLIDELSKDELEKTMLVNSLGRKWELGFTTLVLFG

GAAFAAFPLFYSTSFGGAYWAWLCILFCFILQAVAYEYRKKENNVYGSKTYEIFLKINGYLGVFLIGVAV

SSFFSGSEFILNEHNFVSWQNPLHGLELLLNPFNYLLGLALVFLARLLGAAYFMNNINDENIKIRAMKKL

MVNSILFLPFFLGFLVWIFLKDGFSVDANGVVSMSANLYLYNFLNQMIFAILLVVGVILVLLGMVQGAKG

CSKAIFTLGLGTVLTVFVLLSSIGLGQSVFYPSLSDLQSSLTLKNASSSYYTLSVMAYVSLLVPFVLAYI

IYVWNAMDKVKITREEIANDDHAY

>ABS43158.1 putative fibronectin/fibrinogen binding protein [Campylobacter jejuni subsp. doylei 269.97]

MKYTELLQLQTFFSQFKKIDFIKRINDNILELSFDRERFIFDLTRAMSAIYTAKFNAKNYNAPFDFMLKK

YFSNAFIKEVKVLEGNRILCFSVKANKAYKSYEGKIYFEFTGKNTNVILTDENDLIIEALRHIDKSYRIV

KPNVILEPLKPYKMDENFEEIKDFADYFSRKFTSIYESKIKQIKNLKLTQVDKKIQNLQELFSSLDEKNS

LLLKALEYRKRADVLFANLSVLKDYEREFKLDDFEGKELEFKLEFNPKQSANLYYKNAKKLEQKAKNLNI

QRQNLKEKLDFTLSLKELLFQAKSEVELEILLPKKNSKKNQDHKQEDLVANFYYNEFKICVGKNEKGNEF

LLKNAKKDDLWLHARDIPSAHTLIVSNKQKISLDVIEFAARLCVSFSKLKKGSYWVDYTLKNFVKIQQKA

FVNYTNFKSIHITKD

>ABS43157.1 protease DO [Campylobacter jejuni subsp. doylei 269.97]

MKKIFLSLSLASTLFAASINFNESTTTANRVNPAAGNAVLSYHDSIKDAKKSVVNISTSKTITRANRPSP

LDDFFNDPYFKQFFDFDFPQRKGKNDKEVVSSLGSGVIISKDGYIVTNNHVVDDADTITVNLPGSDTEYK

AKLIGKDPKTDLAVIKIEANNLSAITFTNSDDLMEGDVVFALGNPFGVGFSVTSGIISALNKDNIGLNQY

ENFIQTDASINPGNSGGALVDSRGYLVGINSAILSRGGGNNGIGFAIPSNMVKDIAKKLIEKGKVDRGFL

GVTISALQGDTKKAYKNQEGALITDVQKGSSADEAGIKRGDLVTKVNDKVIKSPIDLKNYIGTLEIGQKI

SLSYERDGENKQTSFTLKGEKENPKGVQSDLIDGLSLRNLDPRLKDRLQIPKDVNGVLVDSVKEKSKGKN

SGFQEGDIIIGIGQSEIKNLKDLEQALKQVNKKEFTKIWVYRNGFATLLVLK

>ABS43156.1 oxidoreductase, short chain dehydrogenase/reductase family [Campylobacter jejuni subsp. doylei 269.97]

MKTAFITGASSGFGRACVEAFIQEGYKVIALARRKERLEELKNTHKDKIYTLCIDVRNQKEIFEAIENLP

KEFQEIDVLFNNAGLALGVDEFDKLNLEDINTMVDTNIKGFLYVAKAIIPILRKQKNAYIFNLGSVAGRN

PYFGGNVYCGTKAFVGQFSLALRNDLRGSNIKVTNIAPGLCKTEFSEVRFKGDIQKSDAVYENTQFISAN

DIAKVVMSIINLPSHINVNEIELMPVTQTWNGFYIERDE

>ABS43155.1 formate dehydrogenase, iron-sulfur subunit [Campylobacter jejuni subsp. doylei 269.97]

MSKVNFANLEKERLKFFCDNERCIDCNGCAVACDEAHELPIHIRRRRVITLNEGIQGKEVSTSISCMHCD

DAPCSIVCPVDCFYIRADGIVLHDKEICIGCGYCLYACPFGAPQFPKDSVFGNKGIMDKCTMCAGGPEAT

NSKKERELYGQNRIAEGKVPVCAAMCSTKALLVGESSKIEEIYHNRLMNRNYGIPNPSESLEWKIAYTGK

ERL

>ABS43154.1 ATP-dependent DNA helicase RecG [Campylobacter jejuni subsp. doylei 269.97]

MKIKESDFEFFKKLKIRSAIDLALLLPKKIENLNPSKNPKENEICTQKVTIKSVSSRKNQLFGLGFCEEW

QENISFVFFHPRAWHFGICKVGKELIFNAKLLRFNHTWQFNNPKILTSFEGFSPKYQILGLKDTKIAAFI

HKYLNYENLKESGIEDKYIHFLLNLHAYDEKSFFMFENLQNFNKDLKYIEIYNFLKRLKAKKTYFKAHQI

NVFNIANWLKDLPFALTKDQLNALKDIEKDLHSKEAKRRVIMGDVGCGKTLVLLGAALMVYPKQAILMAP

TSILAYQLYDEAKKFLPDFMNILFIKGGKKEKDLEQNIQKANLIIGTHALIHLGSYNAVLVMIDEQHRFG

SAQREKIHSLNKQEFAPHFIQFSATPIPRTLSMMQSELLNFSFIKQMPFKKDITTYCIQNEGFSKLSEKI

KEEIAKNHQIIIIYPLVSASDKIPYLSLEQAKEYWQSHYEKVFVTHGKDKQKDEILERFRDEGNILLSTT

VVEVGISLPRLSMIVIVGAERLGLATLHQLRGRVGRVGLKSACYLYTKLKEIPSRLKEFASTLDGFKIAE

LDLKNRLNGDLLDGFMQHGNEFKFFDFSKDEKILEEVKKDLTKKLPN

>ABS43153.1 periplasmic binding protein [Campylobacter jejuni subsp. doylei 269.97]

MQKIFKVALFLMLISSFSFSKEVILKDVLDREVKLNLPVKRIALGFYYTDFLAVGGVKALGKVVGFSKTV

WTDWTPASWELYSKTLPQLNFLADFGEVEVGTFSVEKVLSLKPDLLILAAWQYQVLEFDLEPIVEANIPI

IVLDYNKEKVELHAKSTELLGVITGEEKRAKELIDFYKNTANEVASRIEKAQLPKPKIYIEFGNKGPNET

GFTYGKDMWGALIDLAGGENIAAPFVKQWAPINPEQVLISKPDVIMIAGRETELKKNQEAMVMGFNIDEK

EALKRLEAYKNRPGWSALPAIKDNRLYGLYMGASRTLADAAMIQYIAKALYPSLFEDIDPIQTYIDYHKT

YLPVVPQGTFGIQAK

>ABS43152.1 conserved domain protein [Campylobacter jejuni subsp. doylei 269.97]

MLVNKFKIILLFFIIFTSSYAQNLNTNDTIDSILNQSKNHSALTSYVSKKDLKNLEKKLEKNQNIGIRIY

GDSHMAADFFPRVIRGYLIRSNSIGFAYPLQPKYQQNLNLVYSYKNFEILNSRNPANAGHNFPLGGIIAK

AKTKGAKINLDTTLDKKNFKIGFLFKAKQNTNAFSIKDAKNQSYELRTTQINKWSYKELELDLPLQISAL

QKDAELGGYFITNKNNNVFLDTIAINGAKSDLWLSWNQAVVKKELELLHNDLIILAYGSNDALFKGFEKQ

KFKNNLKKWISILKTYNKNAVIMLISPPTIVQKQGKNYKLAPDFFAIRKALYEVAKEEKTLIFDMHQFMQ

DSGGKNKWIEQKLSLNDVHLTIKGYELMAKKLLEDLKNIIDY

>ABS43151.1 RND efflux system, inner membrane transporter CmeB [Campylobacter jejuni subsp. doylei 269.97]

MFSKFFIERPVFASVVAIIISLAGVIGLTNLPIEQYPSLTPPTVKVSATYTGADAQTIASTVASPIEDAI

NGADNMIYMDSTSSSSGTMSLTVYFDIGTDPDQATIDVNNRISAATAKMPDAVKKLGVTVRKTSSATLAA

ISMYSSDGSMSAVDVYNYIALNVLDELKRVPGVGDANAIGNRNYSLRIWLKPDLLNKFKITATDVISAVN

DQNAQYATGKIGEEPVTQKSPYVYSITMQGRLQNPSEFENIILRTNDDGSFLRLKDIADVEIGSQQYSSQ

GRLNGNDAVPIIINLQSGANALHTAELVQAKMQELSKNFPKGLTYKIPYDTTKFVIESIKEVIKTFIEAL

ILVIIVMYMFLKNFRATLIPMIAVPVSLLGTFAGLYVLGFSINLLTLFALILAIGIVVDDAIIVVENIDR

ILHENEQISVKDAAIQAMQEVSSPVISIVLVLCAVFIPVSFISGFVGEIQRQFALTLAISVTISGFVALT

LTPSLCALFLRRNEGEPFKFVRKFNDFFDWSTSVFSAGVAYILKRTIRFVLIFCIMLGTIFYLNKAVPNS

LVPEEDQGLMIGIINLPSASALHRTISEVDHISQEVLKTNGIKDAMAMIGFDLFTSSLKENAAAMFIGLQ

DWKDRNVSADKIAMELNKKFAFDRNASSIFIGLPPIPGLSITGGFEMYVQNKSGKSYDQIQKDVNKLVAA

ANQRKELSRVRTTLDTTFPQYKLIIDRDKLKHYNLNMQDVFNTMNATIGTYYVNDFSMLGKNFQVNIRAK

GDFRNTQDALKNIFVRSNDGKMIPLDSFLTLQRSSGPDDVKRFNLFPAAQVQGQPAPGYTSGQAIEAIAQ

VAKETLGDDYSIAWSGSAYQEVSSKGTASYAFALGMIFVFLILAAQYERWLIPLAVVTAVPFAVFGSFLL

VYLRGFSNDIYFQTGLLLLIGLSAKNAILIVEFAMEERFKKGKGVFEAAVAAAKLRFRPIIMTSLAFTFG

VLPMIFATGAGSASRHSLGTGLIGGMIAASTLAIFFVPLFFYLLENFNEWLDKKRGKIHE

>ABS43150.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MTINSANPYQNLTLSNPLQNSSALNLIKDSKALDQEGNENSLEQLSYIFNNTTYASEFGFRINEEGFFDK

DLNKIANIPESYDINIKSVRSIAKELAKQDENLNYNKIDLPYLLNSYHSSLKSINSEFLQDDNAYLNRDL

ISKLSSGFSTDNGEFLGQISRIYNNQEEIDLALSNITNLNTLMLDNKITNFHFDKAIENTSSNEILKPYL

TKNAEVSKSGLLMNFIYHDIKTQNEKEFNFFMKPATLELSSHQNLQKILKGETDIEDYIKKENEKKMSFD

LYLYVNGVDKKTSTQDKLSVFFQQYINYQKDMDLREFANSSSIFQIYIDQNRNDFDALKKQYQNQSQDTQ

RLEEANQLHSSSLKNFLDRRQKQANINKILNSYMSVMV

>ABS43149.1 hypothetical protein JJD26997\_0328 [Campylobacter jejuni subsp. doylei 269.97]

MENDVLKDLMNVITDDDKAQEANHEGDAIAENEATNEPTQVADNEGDYKAMFEAYKSENDNKLNALMSEL

EALKNPKPREQNEQREQYLKELGLDGLDEKLKRLEELDKKQKDKEEQDALIAKYAQVESELRKAYPDADL

KAMAELATKLKGLGEGNIDSWKTLLHLVGKSNNVKKAEDLSSTNNNVRLSDFNDKLKKGAVSEIDLGKEL

LSLI

>ABS43148.1 prephenate dehydrogenase [Campylobacter jejuni subsp. doylei 269.97]

MKIAIIGLGLMGGSLGFCLKENKLISCVYGMDLSKENEKDALQLGLIHELIEFKDLALCDMIFVATPVNA

IIEILQKLVDLPSNITIIEFGSTKRKIIESLPKNLIKQTLFAHPMTGTENSGPKAAFKELYKDAVCVLCD

SEIADDLHQKRAVEIFSHLGMKIVFMDSKAHDHHAAIISHLPHVISFSLANFVMKEEDKRNIVHLAGGSF

KGMSRIAKSSPQMWESIFLQNKDNLLSSIDFFQQELERCKQMIQLDKNDELREWMKQANTLREIL

>ABS43147.1 ribulose-phosphate 3-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MYVAPSLLSANFLKLEEEVKAIEAAGADLLHIDVMDGHFVPNLTFGPCVIEKISTISKVPLDVHLMVKDV

SKFVDLFIPLKPKFISFHMESEAHPIRLCDYIRSQEIHPAIVLNPHTPIDSIKHMLEFVDMVLLMSVNPG

FGGQKFLPLVHEKIKELRQMIDKKNAKVFIEVDGGVNGLNASDLEESGADILVAGSYIFSSNDYKTAISS

LKLEF

>ABS43146.1 type I restriction enzyme EcoR124II R protein [Campylobacter jejuni subsp. doylei 269.97]

MNDLMTQNDNTTIITEYKFTPKEPKAYQSEEDLERFLIKELTLQGYERLNLNDIDELEINLKLQLQRLNN

ITFSPTEWESFYRQNITNPKLTFEDKTKMLQSDGFTLTLDKDDGSKKNIILIDRVNPINNHLQVISQLKN

ENGEFKNRYDVSILVNGLPLVHIELKRRGVNLKEAFNQIRRYQKESFLEGNALYEFVQIFIISNGTLTKY

YSNTNQHKSRKSQNDNYAFCMSFSDAKNNIIEDLEDFAKTFLAKRNLLNILTKYCVFNTDNELLIMRPYQ

IAASERIIDKIKIAHNHKHYGKVEAGGYIWHSTGSGKTLTSFKTAILATKLNFIKKVLFVVDRKDLDYQT

QKEYDKFEKGVANATKNTNELKRRIESTKEDEKIIITTIQKLSKFVQKYENSRIFDSEIVFIFDECHRSQ

FGLMHEQIIKKFKKYYIFGFTGTPIFEENAGKNYFVNNDKNLELKTTQSTFGVCLHPYTILNAIKDKNVL

PFKVSYHSTMKQIESNSDKKILTIDRESSLLNDERIQKITSYILENFNRHTKRQNAYTLKNQRVQGFNAI

FATASVDFAKKYYEEFSRQLKQNKQDLKVGIIYSYEPNEDLDEFASDSQIAKEFLSNAIKDYNSYFKSDF

SLEKFDNYYKDISQKLKNKELDLLIVVNMFLTGFDSKTINTLYVDKNLKYHGLLQAFSRTNRILNEQKSC

GNVVCFRDLENATNESLKMFGDERASSIVLLENFAFYFEKYSVLVDELKQKFELLNFPLKSEKEQKEFIK

IFNEILKLENILNLFDEFKNPLNIRDKQDYQSHYLELYTAIKNEKRVEKENINDDLIFEIELIKQNEINV

DFILFLLEEYHKTNQEKTKESILKTIISNPSLRDKKELIEEFLNEIDHNKNSDYKSLFESFMQRKKEQEL

NKLIKDENLNENLTKEYLDEAFELNFFQDKGERIGRLMPLINPFAPKSEGNDEKRQQIIDKLKSFFDKFI

VFLKKEENE

>ABS43145.1 phosphoribosylglycinamide formyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MLVKLAVLFSGNGSNLENILEKLHKQTIGKNTYEIVLCLCNKKDAFGIQRAKKFGLDTVIVDHKAYSTRE

EFDTILVQKIKESGANLTVLAGFMRILSPVFTKNIKAINLHPSLLPLFKGAHAIKESYESNMKVAGVSVH

WVNEELDGGMIIAQKAFEKRNLSFEEFEEKIHSLEHEILPLSVIEIFS

>ABS43144.1 integral membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MTRTKYLYILLVLAMFLWGSSWPTSKILSAYADTSVITFWRFFFVLLGSLMVLGFLRIPLRLEKSILKWV

LIAGILNGLYTFVFFIAIKHGLAGKGGVLVTTMIPIFSYLIFMIAILFQKDKKSTHKITKSEILGLFLGL

LSGFCLLNLGSLEDLFGKFNILFLTCSFIWALIAVFNHKAKGAHPLAINFYINLISVLMFSWVLFDVKSY

EIFHFEFKFWINMFVVAFLSTIVGTSIYYYGIHILGSVKANSFVLITPASALICSYFILDEVPNALTLLG

CVLAIGAIYFINIYGKKA

>ABS43143.1 methionyl-tRNA formyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIMRQIKDLNPDFIVVAAYGKILPKAILDLAPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILSTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNAKMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>ABS43142.1 cobaltochelatase, CobN subunit [Campylobacter jejuni subsp. doylei 269.97]

MDKKEIAKRINVSLGTLYNWEKTKPELIKLISYGLKYERNEIETNEISKYFEQLEKIEQEFYLSEIKANV

LRKKLRK

>ABS43141.1 serine hydroxymethyltransferase [Campylobacter jejuni subsp. doylei 269.97]

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIERCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLTHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEVGAYLFADIAHIAGLVVAGEHPS

PFPHAHVVSSTTHKTLRGPRGGIIMTNDEQLAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKVY

AKQVRTNAQVLTNVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGETRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>ABS43140.1 conserved hypothetical protein TIGR01033 [Campylobacter jejuni subsp. doylei 269.97]

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGIDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGFEELEQNEEELVISGDYTAFGELSSAIEAKGLVLKKAGLEYIPNNPVSFSKEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>ABS43139.1 UDP-N-acetylglucosamine 2-epimerase [Campylobacter jejuni subsp. doylei 269.97]

MLNTLKASCSLRKGVKKIMLISATRAEWYLLRNLCHEIQNDKDLSLQIIATGAHLSPEFGLTYKEIEKEF

KIAKKIPILLASDDKISLCKSMSLAFSAFSQAFEDLKPDMVVILGDRYEMLSVASVCLLMHIPLVHLCGG

ELTLGAIDDSIRHSISKMSHLHFVSHEIYKKRLLQLGEEEKRVFNIGSLASVIIKNMNFLSKKDLEKALE

MKLDKELYLITYHPLTLNVKNTQKEIKTLLKKLDTLKNASLIFTKANADENGLLINEILQNYCQKNSHKA

KLFDNLGSQKYLSLMKIAKAMVGNTSSGISESPFFKTPCINIGDRQKGRLRTQNIIDCEINDLDQAFEKL

ESKEFKQNLKNFKNPYDNDKNPNKIIKTYLKNVNLDTILHKNFIDL

>ABS43138.1 iron ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MYKTLKYYKLGAILLALFLALPIFSIFAELFYILFQNFNTSNLTQFSSIKENLSHFFDYLFLKFIKDTFI

ISVGVLCLSLILGVSSAYLIANYDFYFCKILEKLLILPLAIPAYILAFVYVGIMDFQGFFHENFGFRIDF

FNHYGVIFVLAISLYPYIYLFAKTAFKSEAKEAYEVAKIMKYSEFRIFTRVALLSARPAIFSGALLVLME

TLSDYGASAYLGVDTFSAGIFKLWYDLNDSYSSSVLSGILMLFVFLIMYVDYYYKNKHHYSFNQNLTLFI

KKRKLNPIKQILSCIYCFMIAFIGFILPFIWLVYWGLKDHKLFESQFYIISFQTIILALITALITTFLAY

FLMFSSRIVKNHFFNLFILKISSLGYSIPAAALGISIIVLFVFLDKIFHMSLLGNSLLVLVFAYIIRFLA

SAIYSLEGGYNKIHLNIDEASLNLRASYFILFFKIHTPLMKHFLFLAFIIVFIDTIKELPLSRILAPFGF

ETLSVKAFWFASDERIYDAALPSLFIVFLSLMVVVWMDKITRKDDVRN

>ABS43137.1 AcrB/AcrD/AcrF family protein [Campylobacter jejuni subsp. doylei 269.97]

MFKLAINRPITVLMFFLALMIFGLISAFSMSVNLFPNVSIPLIKITSKVNGDLNFVESKVTKEIENALSE

IDGVKTITSAAYDNFSVSVVEFKLGKNLEVAANDVRDKIGTLSLPSKPEIEKISSDSGSAISLFLYSKDK

LQLMREINDKIKPFLQRVEGVGKIEAKGFLEPQIRIELKPNELRKYNLNALDVANIIKSQNFKQALGELN

NKQDNYIIKGYFEATNLEELSNLRIKTGVFLSDIANISSLYEDEKQSALYEGKEGVLLELGKITNYNTLE

MIKNIKNALPILEKQIPKDISINVLYDKSLNIHKHLSQVIFDMVLGIFLTLVIVFLFLRNLSATLIACIA

IPTSIISTFFIIDLLGYDLNRLTFIALTLSIGIFIDDAIVVIENIAKKLKTYPPLQAAFLGINEIGFSVL

SISIVLLCVFIPISYMNSIPGLFFNALGISVASGIVISFLVSVFLIPSVGARFLNSKESKFYEKTEAFFE

KIEQKYENLLYKILQNKAKFILATLVFVGLSFALATRIGLDFLPMEDDSEIQVLLESKKNLSLEAMKEKS

LNLLEKIKNDSNVKYAFLLVGYDDAKDATKAKIYVKLKNLDERNLRQSAIVSLYRQKFQDESLKIKILEL

PKIEGAGIDDPVQFLILGDDLNTLKEAASRAKEILDTNARIVDISDNANTTKDEVALHINKEKAKLLDVN

PEYIAGVLGYSFSQLSVGSMDRGNSKDDIILSFAPEFKKDIEALKRISIKNNQDVNLELSSVVDFIYSKD

LKTINRYNKNRSVKITAGVNDLSLGAVQKLLLDNMDKILNNNPSLSYAFSGFINLLGETVQGFAMAVALA

FVLIYLVLAALYESFILPLIIMITMPLAFGGASIGLFITGHNFSLFVLIAIILLFGMVGKNAILLVDVAN

KKCHEGLDSDKALLIAGKSRLRAILMTTFAMIFAMLPLALSRGAGYEANSPMAIAIIFGLISSTLLTLLV

VPALFKFCFKLDSKLRKIYEREKLN

>ABS43136.1 [NiFe] hydrogenase maturation protein HypF [Campylobacter jejuni subsp. doylei 269.97]

MCHLGYKIKISGLVQGVGFRPLVYELALKSKLFGEVRNDGFGVEIILACTQKECENFIENLKNHLPPLAR

IDQLIITQIPIPNYENFSITPSLKNAKSTPMLSDFALCKECKKEFFDEKNPRFLYPFITCTHCGPRFSII

KSLPYDRAHTSMQELLMCEFCKSEYEDPKNRRFHAQPISCPKCKINVFLKNPKGEILAKDQEAFMQSAKF

LKEGKILAIKGMGGFHLMCDAFDEKALKTLRLRKNRPKKPFALMCKDLQSAKELAFIDEKEEALLGGVLA

PIVILKAKKAFSLIAPDVDKIGIMLAYTPLHLLLFEYFKGSLVATSANLSGESIIKDEFNLRQKLDKVFD

FYLDYDREIINASDDSIAQVVNGKTMFLRTSRGLNPFYLERNFNKKGTFLALGAELKNEFVIFYENKLLI

SPYIGDLKSLEVHERFFKLLEFFKQNYDLKFDAILCDKHPHFSYAKEFKERFKIAHHYAHFCAAYFEYEE

NFAKDEKALAFICDGTGYGEEGKIWGGELFIGNLKEYERIAHFENFTLINSDIKNIQNLALSLIFHYDLE

DKAKEFLAKIPKIKLENLKKIYSHSNLQTSSLGRIIDAFGSIVLNLEKSSYEAQVGLMCEAFYDKNLDFS

YKLFVEKGQVNFKNLILGALQDEKTKAITGMFNALANFIIDFSKDYDLKVLLSGGVFQNKTLLEILKAKN

FDFFVPLKYPCNDSSIALGQMVHFLNLEK

>ABS43135.1 thiol peroxidase [Campylobacter jejuni subsp. doylei 269.97]

MSTVNFKGSPVKLKGNSVEVGVNAPKVSLKAKDLSVIEIGAAGKTQIILSVPSLDTPVCATEAREFNKKV

ASYNGAEVIVVSMDLPFAMGRFCSTEGIENLSVASDFVAKEFGEKYGVLINEGALEGLLARAVFVIKEGK

VAYKELVNEITEMPDIAKLDAFFGGSSCCGGCGCH

>ABS43134.1 putative membrane-bound lytic murein transglycosylase D [Campylobacter jejuni subsp. doylei 269.97]

MKKILLCFLICFNFLFAQINTPEFYKRQMNVLRNLDINPSFISDLIFVQTQQDIKSKHAQTLIDSIQNFS

KVTPMIRKILVQQEVPDEILYLAMIESGLKTHSVSNAKAVGVWQFMQPTARNLGLRIDAYVDERRDPVKS

TYAATNYLKELKEEFGKWYLALLAYNCGNGKLRQAIKQAGSDDLSVLLNPDKKYLSLETRNFIRKILTLA

FLANDRDFLLDKDASLMNYALSNEFAKVDVPSSVSLKEIAKNLNMDLATFKKYNPQFKHNFTPPGKGYYM

YIPLNKVAFFDKNFKAEKLAKVDTTIPMTRTYTVKSGDSLYKIAKNYNISVDEIRELNKIAKNHLSINQK

LIIPIKENKNANKNNYTKVVSR

>ABS43133.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MNNKEKLIKELENNPKNASFANIEKLLSWYGYKLVSTRGSHHKFKKDNKSIIVPLHKPIKEVYVKQILKL

LKDEK

>ABS43132.1 ABC transporter, permease protein [Campylobacter jejuni subsp. doylei 269.97]

MLAKMIFNSIFKNKIQKFLAFLTCFLATLLLSTMLNITLSIGDEVTKQLKSYGSNILVLPKGSSLGIEIG

NELYEPLKNKNYLEEKNLYMIKDIYWRNNITALAPFLEGKITIENSQQKALIYGTYFQKAIKIKDDDDFI

TGIKSLYPYLAVQGEWAKDDSNEIMLGEDFAKNNKLKLGDTIKLIGENNQSKEAKIVGILLHANPKMSNK

IIAPLNLAQDLLNKQGLYSSAEVRAFTIPESALSEKVRRLGEEKLDQLEYDKWYCSAYVGSIASQISDGL

PGADAKALNAISDAQSLVVKKIQSLMGITCIICLIVASIAISSLMSSEIHRRKKEIGLLKVLGANTFQIY

LIFASENLIVALFAALFGFIFGTALSQIISLSIFGYFIDIAFIALPLSFIFAGLIALLGCLLPIKNITQL

SAAGVLYGR

>ABS43131.1 putative membrane protein [Campylobacter jejuni subsp. doylei 269.97]

MRPEIYVAFFTVCGFFIGLAFSIISIDEAFDILIFTCFITFMFYIFVHIAIMNFIDVKKISGRIFNKHDY

EKTSNNIINDLVIREKKMDIILEKLNEEREELKKNEPKERRRNAKRAA

>ABS43130.1 ribosomal protein L25 [Campylobacter jejuni subsp. doylei 269.97]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDPVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>ABS43129.1 motility accessory factor [Campylobacter jejuni subsp. doylei 269.97]

MRKKEINFEKNIKALSGSEYDNLRKKLGDLKELKHFSFTQGKDNLDINIIKKRNLKKMYQDPVKALEKDL

EYFKDFTRYPVLFFYGIGNGILYKILLQNKNLKRIIIFEKELELIFLAFNFVDFSKDLSLARLIIVHQDD

VTLPKIEKIFRLVGDLFYRSYNLHLANDFYEEYKEDILKLNKLNILTIKNHNLMHGNDPKDAMQGIEQFV

YNLPKLISHPSYKELLKKRKNAKETAIVVATGPSLTKQLPLLKKYASKATIFCADSAYPILAKHGIRPDY

VCMLERDEIVAECFNNDFGEFDKDIIFLVASLVHKKTITYLEKNKRNYMLILKGQPFARYLELDDYGYIN

AGMSVSHMAYEFAENLGHKNIVLIGQDLAYAKDGQTHSKGFIHASWHNGDYERDFGKFTTTAYGGEGKVE

SSEIWTLFRQIFENFISFSQSKAYNCTEGGARIESAIEKPFKEVCKDFLENEKDKKFKKLKALNAKEQVK

LGLKIYQKIKKNMSLALHFQKECKKIKKQIHNLTHGKNKLSLDEINQNIDKIKEKLSSQKYSFSQEILGP

TLHHEQSLLAPLYLKDIKNEADKQNKLFAWVYAHEALIENIIELLEAQDKRLKIAILALQDFLEKKKAL

>ABS43128.1 conserved hypothetical protein [Campylobacter jejuni subsp. doylei 269.97]

MIFGKIDYINLLPLHVYLKKYPLPNGYKANMEYKKGVPSKLNKDLFYRRIDAAIISSIESARKKYKNLDL

GICANKRVLSVLVEKNSSNAKDPSSATSNALAKVLKQDGKVIIGDKALKLYLKDPSKYIDLCAKWHEKTG

LPFVFARFSCVQKKALYKQILKKFPKTKIKIPYYILQNYARTRDLDIKDVRYYLDEVIYHKISTKEKTAL

KRFVKACKALNLA

>ABS43127.1 TctB protein [Campylobacter jejuni subsp. doylei 269.97]

MLSTRIFAVFLLLISAFLLYNGWQITTEYNYEPLGARPFPVASLILIMLCCVLILFFAENTKVQWGDFSF

WKKLIILILSLSIFALVFEYLGFMLSVGFLVFIMSVLYGAKPYLAMLFALFCGIAFYYFFENLLQITLPF

GLIFE

>ABS43126.1 ribosomal protein L35 [Campylobacter jejuni subsp. doylei 269.97]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRNLRTAKYVHSTNVKAVEKMLGI

>sp|A7H1P3.1|MIAA\_CAMJD 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

MFFEIALIGTTASGKTYIADTLAREFDAVVLSLDSLCVYKEINIASAKPSQDDLASIKYFGVNLLSVNEH

FNVELFIREYQKAKEFALARNLPLIIVGGTGFYLKTMIDGLSEKTLESKSSLNNDEIYTLLLNIDPNYKI

EKNDTYRLKKWLGIYEQTREIPSEFLKRTQKTGVLKDIEIYELAWDKEILKKRIQTRTKEMLDNGLLDEA

KILFYKFDHKLKALNSIGLKECKEYLDGEISFKDLENLITIHTTQLAKRQRTFNKKFQSKALEFDKALAT

LRMKFSIEK

>sp|A7H295.1|SYE1\_CAMJD RecName: Full=Glutamate--tRNA ligase 1; AltName: Full=Glutamyl-tRNA synthetase 1; Short=GluRS 1

MHEKLTTRFAPSPTGYLHIGGLRTALYNYLYARKNGGNFLLRIEDTDLKRNSKEATKAIIEAFKWCGLEH

DGEVTYQSERFDLYKEYVKKLLDEGKAYYCYMSKEELEELRAKQEAAKERPRYDGRYREFTGTPPQGIEP

VVRIKAPQSGEIVFKDGVKGEVRFKAEDIMDDFIIARSDGTPTYNFTVVIDDALMGVSDVIRGDDHLSNT

PKQIVLYEALGFKIPQFFHVAMIHGEDGKKLSKRHGATDVMEYKEMGILPQALLNFLVRLGWSHGDDEVF

SLEDLKKLFDPYHINKSASCYNAKKLEWLNTHYIKTLPFEEIKRQLKDLGFDLSVYEKAGFLLDLLRERA

KTLHDIINGAKSIVNAPQNYDENAVQKFVNENNLELLQAFANTLKDPKTGKDFEDFTNDFLEKKEAKLKD

LAQPIRIALTGSAVSPSIFEVLEFLGVDECKKRIENFLKVRGK

>sp|A7H3M3.1|SYE2\_CAMJD RecName: Full=Glutamate--tRNA ligase 2; AltName: Full=Glutamyl-tRNA synthetase 2; Short=GluRS 2

MYRFAPSPTGDMHIGNLRAAIFNYICARQKNMDFILRIEDTDKSRNIKGKEEEIKEILNLFGISWQHYYI

QSENLKFHRQMALKLVSEKKAFACFCTEEELEAKKELAKKQGKAYRYDGTCEKLADIDVLECEKSFVIRL

KKPTHTMKFTDFIKGELSFEPENIDSFVIMRTDKTPTYNFACAVDDMLENVTCIIRGEDHVSNTPKQEHI

RASLGYDKAMTYAHLPIILNEEGVKMSKREAHSSVKWLLESGILPSAITNYLIMLGNKTPYEIFTLEEAI

KWFDISKVSKAPARFDLKKLLQINREHIKMIKDDELNKILDLNKDLAQLAKFYTQEASTIKELKEKMRAI

FNTKDFGEFETECKILKELLKDIELFENYEDFKNKLLNKSSLKGKKFFMPLRIILTGNIHGPELSDLYPY

IKNFIHELARI

>sp|A7H2Z6.1|THIG\_CAMJD RecName: Full=Thiazole synthase

MQENLKNDKLKIGKYEFDSRFILGSGKYSLELIKSSIEEAKAQIITLALRRANTGEIANILDYIPKNITL

LPNTSGARNADEALRIARLSRELGCGELIKIEVISDSRYLLPDNYETIKACELLAKEGFTPLPYMHADLY

AARAMRDVGAAAIMPLAAPIGSNKGLCAKEFIQILLNEIDLPIIVDAGIGTPAQACEAMQMGVSAVMVNT

AIAEAKDIALMARAFSLAVNAGRAAFLAGLASVSEAKASSPLTGFLRD

>sp|A7H4N3.1|SYA\_CAMJD RecName: Full=Alanine--tRNA ligase; AltName: Full=Alanyl-tRNA synthetase; Short=AlaRS

MDIRKAYLDFFASKRHEITPSSPLVPDDATLLFTNAGMVPFKSIFTGEIPRPNPPRKTSCQTCIRAGGKH

NDLDNVGYTARHHTFFEMLGNFSFGDYFKEQAIAYAWEFVTEVLKLPKDRLYITVHENDDEAFNLWQKHI

QKERIYKFGDKDNFWQMGDTGPCGPCSEIFYDQGQEHFNSSEDYMGGDGDRFLEIWNLVFMQYERSANGV

LSPLPKPSIDTGMGLERVTAIKEGKFSNFDSSLFMPIINEISKLCNKTYVYESGASFRVIADHIRSSVFL

LAQGVSFDKEGRGYVLRRILRRALRHGYLLGFKQAFMYKLVDIVCDLMGGHYTYLNEKKDSIKEQIRFEE

ERFLSTIENGIEIFNEELKNTKEIFSGEVAFKLYDTYGFPLDLTADMLREKNLKVDEEKFELLMNEQKAR

AKASWKGSGDKTVSGDFKNLLEKFGENHFVGYEKAECESKILALLDEDFKEVSTLKDAGWVMLENTPFYA

TSGGQSADSGFIAKREVLDTQKFFNLNLSFIKAGEELKVGTIAHARIDAEKREQIARHHSATHLLHHALR

EILGSHVSQAGSLVESNKLRFDFTHHKALSKEELESIEKRVNEMIINSSEAILENMPLEEAKKSGAIALF

NEKYQGNVRVLTLGESKELCGGTHVKNTAQIGSFYIVKESGVSAGVRRIEAVVSKAALEFVKNQLEGLSK

AKDELKNNDILSGVKKLKNEILSLKNELKNSSKTELDSKNIQGVEICVKRVDNGDIKAMIDDFKNKFAKA

VILLIQVKDEKITLAAGVKDAPLKAGALVKEAAQILGGNGGGRDDFATAGGKDLSKIDEALKQSLETIEK

AL

>sp|A7H2B7.1|RECR\_CAMJD RecName: Full=Recombination protein RecR

MAKGLEKFNELVESFANLPTIGKKTAIRLAYHLCINNQIDGMKLAHNIENAIRFIKPCEQCGALSENELC

EICSDEERSKNILCIVESPKDILTLEESQSYNGLYFVLDELNEEKLEKLKQILLKLNISELIFALTHSIN

SDATIFFIEDKFKDLNLTFSKIAQGIPSGVNLENVDLISLNKAMNFRTKI

>sp|A7H4U3.1|GPMI\_CAMJD RecName: Full=2,3-bisphosphoglycerate-independent phosphoglycerate mutase; Short=BPG-independent PGAM; Short=Phosphoglyceromutase; Short=iPGM

MKQKCVLIITDGIGYNKNSKFNAFEAAKKPSYEKLFKEVPNSLLKTSGLAVGLPEGQMGNSEVGHMCIGS

GRIIYQNLVRINKAIKNKELEKNENLQKLLAKCKRVHIIGLYSDGGVHSMDTHFKAMLEICAKNGNEVFA

HAITDGRDVSPKSGLNFIKDLKGFCENLGVHFATLCGRFYSMDRDKRWDRVKEYYECLLGKAYKVPNLLE

YLQKSYDENITDEFIKATQNENYKGMREEDGIIFINFRNDRMKQLVEVLNSKDFKEFEREKVFENLLTMS

VYDDKFKLPVLFEKEKIENTLAQVISKAGLSQLHTAETEKYAHVTFFFNGGKEELLENETRVLISSPKVK

TYDEKPQMSAFEVCDAVKKGIEKGEDFIVVNFANGDMVGHTGDFNAAIKAVEAVDTCLGEIVECAKKHDY

AFIITSDHGNCEAMQDEKGNLLTNHTTFDVFVFVQASGVSKIKANMGLSNIAASVLKILDLEIPKEMNEA

LF

>sp|A7H2S9.1|FLIW\_CAMJD RecName: Full=Flagellar assembly factor FliW

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMAQVILDTVNYPDFFQADQIANYIKK

>sp|A7H1G8.1|RL21\_CAMJD RecName: Full=50S ribosomal protein L21

MYAIIKHSGKQYKVSVGDDLKLDHFEAESKASIEVSEVLAINDKELKVGAPFVAGAKVVLEVINHGKDKK

VVIYKKRRRKDSKLKRGFRRQFTRVVVKDIKA

>sp|A7H1P4.1|MNTP\_CAMJD RecName: Full=Putative manganese efflux pump MntP

MDFYSLIFLSCALGMDAFAVSLCKSFSVKKLHLKHYLIVGIYFGGFQALMPTIGYFIGITFASFIASIDH

WIAFILLSLIGLKMIKESLENENCNSNAKQFGFKTMLALAIATSIDALAVGVSFAFLNVNLLLAIFLIGI

ITFILCIIALKIGNKFGIYLKNKAELLGGLVLIILGVKILIEHLFFD

>sp|A7H4J9.1|SYP\_CAMJD RecName: Full=Proline--tRNA ligase; AltName: Full=Prolyl-tRNA synthetase; Short=ProRS

MMRFTKFYAPSLKEAPKDASLPSHIFLTRAGFVEQIGSGLYNFLPLGKRVLDKIKNIVKEEMDKAGAQEV

NLSFITPASLWQESGRYNVFGKELLRFKDRKENEFVLGPTHEEAMLSLVKNKITSYKQLPLHLYQIGLKF

RDEARPRFGLLRCREFLMKDGYSFHANEEDLGREFELMYKTYSQILQRMGLDFRAVEADSGAIGGSGSKE

FMVLAKNGEDDILICENCDYAANIEAAKRAKKTCQDERPEANYASKFHTPNIKTIDSLAQFFKTNAFYTI

KAVVKKAIYENESKLVVFFIRGSDDLQEVKAQNACSALELVDASEEELEKAGLVAGFIGFVGLKDIDFYI

DFELENEKQMIMGANEKDYHLIGIDVVNLNKDRFKDLIEVKEGDCCVKCGAKLKQSKGIEVGHIFKLGQK

YSKAMNANFLDENGKSQPFYMGCYGIGVSRLLAVAIEASHDEKGCIWNKTLAPFVLEIIVSNIKDEKTLE

FANKLYEDLTELGLEVLLDDRNERFGVKMNDFELMGFPYALVIGKGLENNEIEFIQREGLVKELIKTDEL

TEILKKKVL

>sp|A7H4N2.1|Y1428\_CAMJD RecName: Full=Maf-like protein JJD26997\_1428

MLILASSSISRANLLKTAKIDFKQVGFDYDENLDKNISPFLYVQKIVLEKEKQFLSALSKDFQNQNLLFA

DSIVCIDEKILTKAKDKKEAYEMLALQNGKYASILSAFLLVKPEKRVFSLSKTTLYFKNFDENALNDYVE

NNLYKSKAGCIMCEGFHQNFITQQVGNLSTALGLDIQTLKAYL

>sp|A7H2R0.1|SSTT\_CAMJD RecName: Full=Serine/threonine transporter SstT; AltName: Full=Na(+)/serine-threonine symporter

MFSKIIQSYAKGNLIIQICAGIALGILIGINSKEISEIANLLGILFTSALKAIAPMLVFILILTSICTKD

FSQSGVKIKNIIILYIVGTFLASACAILANFFFPVKLVLDGIQATTNPSPAHMGEIFKDLLFKIVDNPIN

ALSSGNYLGILTWAIAGGAALKHCSNEAKQVFIDINEGVLKIVKFVVKLAPFGIFGLVANSVAQTGAQGL

LSYTKLLILLVATMLFVTFVINALIVFFYTRKNPFPLIFICLRHSAFFAFFTRSSAANIPVNMALCAKLG

IDKEFYGISIPLGATINMAGAAVTIAILSLTAANTVGIEISLLQAFLLSIIATFAASGASGVAGGSLLLI

PLACSLFNIDYDIAMKVVAIGFIIGVIQDSVETALNSSTDVLFTAICSKNELNYNIK

>sp|A7H2H9.1|LUXS\_CAMJD RecName: Full=S-ribosylhomocysteine lyase; AltName: Full=AI-2 synthesis protein; AltName: Full=Autoinducer-2 production protein LuxS

MPLLDSFKVDHTKMPAPAVRLAKVMKTPKGDDISVFDLRFCVPNKDIMSEKGTHTLEHLFAGFMREHLNS

NAVEIIDISPMGCRTGFYMSLIGTPDEKSVVKAWENSMQDVLKVKSQEDIPELNIYQCGSCKLHSLDEAK

QIAQKVLNSGIGVMNNAELKLENL

>sp|A7H2J9.1|SYR\_CAMJD RecName: Full=Arginine--tRNA ligase; AltName: Full=Arginyl-tRNA synthetase; Short=ArgRS

MKSIIFNEIKKILECDFALENPKDKNLAHFATPLAFSLAKELKKSPMFIASDLASKFQNHDCFESVEAVN

GYLNFRISKTFLNELANQALTNPNDFTKGEKKQESFLLEYVSANPTGPLHIGHARGAVFGNTLTRLARHL

GYKFDTEYYVNDAGNQIYLLGLSILLSVKENILHENVEYPEQYYKGEYIADLAKEAFEKFGKEFFSEENI

PSLADWAKDKMLVLIKQNLEQAKIKIDSYVSERSYYDALNATLESLKEHKGIYEQEGKIWLASSQKGDEK

DRVIIREDGRGTYLAADIVYHKDKMSRGYGKCINIWGADHHGYIPRMKAAMEFLGFDSNNLEIILAQMVS

LLKDGEPYKMSKRAGNFILMSAVVDEIGSDALRYIFLSKKCDTHLEFDISDLQKEDSSNPVYYINYAHAR

IYQVFAKAGKKIDDVMGADLQSLNQDGINLLFEALNLKAILNDAFEARALQKIPDYLKNLAANFHKFYNE

NKVVGSANENDLLKLFSLVALSIKTAFSLMGIEAKNKMEH

>sp|A7H2R6.1|SYL\_CAMJD RecName: Full=Leucine--tRNA ligase; AltName: Full=Leucyl-tRNA synthetase; Short=LeuRS

MAYEASLIEKKWQKIWDENEYFEPKDDLNLPKKYILSMFPYPSGRIHMGHVRNYTIGDALARYYRKIGFN

VLHPIGFDSFGMPAENAAIKHKIHPKSWTYENIAYMKKELFSLGFSFSKKRMLATSDPLYTKFEQEIFIK

MFEKGLIYTKEANVNWCEQDQTVLANEQVEDGKCWRCGHEVVQKKMPGYYVKITAYAEKLLKDLEGLRDK

WPNQVLTMQENWIGKSEGLAFSLNLDEKSKQKAKESSLEVFTTRADTIYGVSYVALAPEHKIVQNLLLQN

LLNQDVLNKIKAIQNQSPRERQSSEKEGYFLGIYAIHPLSGEKIPLWVANFVLSDYGSGAVMAVPAHDER

DFEFAKKYNLAIKQVIQTQENLPYTQKLGKLIHSQEFDNLDCNEARLKIISQFEAKNIGKRVVNFKIRDW

GVSRQRYWGAPIPMIKCQSCGIAPQKLENLPITLPEDVQITGEGNPLDKHPTWKNCICPKCGKEAQKESD

TLDTFFESSWYFARFASDEKTWQEKALDEKSVKYWMSVDQYIGGIEHAILHLLYARFFQKALRDLGYLTQ

NEPFDRLLTQGMVLKDGAKMSKSKGNVVDPDEIIEKYGADTARLFMLFAAPPAKELEWNDDAVEGAYRFI

CKLYDRAQNIKKGELVELKQENLNKEEKYARLKVYEALKKSEEVYHQSFAFNTLIAACMEALNALALCKN

EALEQEAFYIILNILEPIIPHVCFELSEELFKCKNFKKLELKEEVFVKDTLNLAVSINGKKRAEFKISSS

ASKEEILAFAKENTAKWLEGKSIVKEIYVEGKLVNLVIK

>sp|A7H1U1.1|RL35\_CAMJD RecName: Full=50S ribosomal protein L35

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRNLRTAKYVHSTNVKAVEKMLGI

>sp|A7H4X7.1|SYK\_CAMJD RecName: Full=Lysine--tRNA ligase; AltName: Full=Lysyl-tRNA synthetase; Short=LysRS

MFDNILEQQRIEKAKELKNLGINPYPHFLEKEMSLKTFKDKFSYILEQVEKRDESVNAVVAGRLKLLRIA

GKSIFANIEDEDTNLQIYFSKDSVGEELYTILKKNLEAGDIVLVKGFPFVTKTGEFSLHASEVKLATKAI

VPLPEKYHGLTDIEQRYRKRYVDMIMNAEVRKDFLVRSKVVSLIRHFFENKGFLEVETPMMHPIAGGANA

KPFVTFHNSLGVERFLRIAPELYLKRLVVGGFEAVFEINRCFRNEGMDLTHNPEFTTIEFYWAYHNYKDL

MDLTEELFALLLDKLNLGKTIEFDGKMIDFSKPFERITYKDALCKYGGLDRDLIEDKEKILAKLKTDGFE

ANEKLELGHLQAELFDNYVEEKLINPTFVSDFPISISPLSRRSDENSQIAERFELFICGRELANGFNELN

DPLDQYERFLKQIEAKNAGDEEACEMDEDFVNALGYGMPPTAGQGIGIDRLVMLLTNKKSIRDVILFPAM

RPLKSELKEKE

>sp|A7H4Y8.1|SYS\_CAMJD RecName: Full=Serine--tRNA ligase; AltName: Full=Seryl-tRNA synthetase; Short=SerRS; AltName: Full=Seryl-tRNA(Ser/Sec) synthetase

MLDLKNLQNNFDEVTKKLKSKKVDENILKKLAELFASLKKEKTALEEFQAFQNKFSKELATAEDKESLKA

KLSENKSKINEQSTKVNVLENELEEIAHAIPNIPDECVPVGEDENENVELKKVLNPPSFDFTPKEHFELG

ESLNWLDFVRGVKISQSRFCVLKNEGALLSRALVNYMIDFNRSRGFEFVNVPFLVNGATMFGTGQLPKFK

EDMYKVDDEDLYLISTSEIPITNLYSGEILTSETLPIKMTCYSACFRKEAGSAGRDTRGIIRQHQFEKVE

LVSITKPEQSDSVFNEMLECASDLLSSLGLAHRHLMLCTGDLGFSAAKTVDLEVWLPGQNKYREISSVSN

CRDFQARRAKIRYKNEQGKNELVHTLNGSSLAVGRTLVAIMENYQDKEGKIHIPDALKKYF

>sp|A7H4T0.1|THIC\_CAMJD 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

MKTQMNYAKEGVFTKEMQIVAQKENLSKDFLLENIACGKIIIPANINHKSLDPNGIGFGLRTKVNVNLGV

SNDCVDYSEEMKKVELAHKFGIEAIMDLSNYGKTSRFRDELVNVSKAMIGTVPVYDAVGFLEKDLKQIGA

KDFLDVVYHHAKSGVDFMTIHAGINSRATHIFKQSKRLTNIVSRGGSVLYAWMMMKDAENPFFEYYDDLL

DICLKYDVTLSLGDALRPGSTHDASDGAQISELIELSLLTQRAWDVGVQVMIEGPGHMAINEIEANMQLE

KRLCKGAPFYVLGPLVTDIGAGYDHISGAIGGAVAAASGADMLCYVTPAEHLRLPNLEDVREGIVATKIA

AHAGDIAKLPKERARDDEMSKARQEIDWEKMFKLAIDGEKAKKMFNERRPDDLNSCSMCGKMCAMNTMNQ

ILKGEDVSLV

>sp|A7H477.1|SYH\_CAMJD RecName: Full=Histidine--tRNA ligase; AltName: Full=Histidyl-tRNA synthetase; Short=HisRS

MINALKGMKDLLDKDAYYYEKVIQTCEEVVKNYGFTFINTPHLELCILFKRSVGESSDIVGKEMYEFIDK

GENHVCMRPEGTAGVVRAYIEKKLDKNTSVKRWFYHGSMFRYERPQKGRLREFHQFGVESFGNASVYEDA

SIILMLVEIFSRLDIKFKLLINSLGCLECMPKYRENLIHFLDSKEGFCEDCLRRKNLNPIRVLDCKNEHC

QSLLNDAPLLNQNLCSSCQKDFEILQSVLKENGVDFEVDSKLVRGLDYYSKTAFEFISDEIGAKAAIAGG

GRYDRLIEYLDGKSGFGIGFAMGIERIIAILEQKEEKVQREGIYLCAMDKIYIQKLLHIATNLRKEHKVL

LSYEARKLAKHLENADKNNAEIFLCMGENEVQNESLFYKNLVKKEEKMIKISDLKKVL

>sp|A7H3F0.1|SYFA\_CAMJD RecName: Full=Phenylalanine--tRNA ligase alpha subunit; AltName: Full=Phenylalanyl-tRNA synthetase alpha subunit; Short=PheRS

MQNFIEQIQKCENLNDLEAIRISVLGKKGILTEGFTKLKGLEDETKKEFAAKLNAQKEIFNKAYLAKFKD

LENLALEERMKQDALNFNYFDESITTGALHPVMSTMDKIIEYFIALNFSIEKGPLIEDDFHNFEALNLPK

SHPARDMQDTFYFDDKRLLRTQTSPVQIRTMLAQKPPIRMIAPGAVFRRDFDITHTPMFHQVEGLVVEEG

QKVSFANLKSALEDFLRYMFGDVKVRFRPSFFPFTEPSAEVDISCVFCKEKGCRVCKHTGWLEVLGCGIV

DPNVYNFVGYENVSGYAFGLGVERFAMLLHQIPDLRSLFEGDLRLLEQFR

>sp|A7H4H2.1|SYDND\_CAMJD RecName: Full=Aspartate--tRNA(Asp/Asn) ligase; AltName: Full=Aspartyl-tRNA synthetase; Short=AspRS; AltName: Full=Non-discriminating aspartyl-tRNA synthetase; Short=ND-AspRS

MRSHYNIDLGISHVGQSVKLCGWVNSYRDHGGVIFIDLRDRSGIIQLVCDPNDSKEAHEIASNARNEFVL

IAEGTIRPRGEGLVNPKLKTGEIEVVVSKLTIENESIVPPFAIADESVNEELRLKYRFLDLRNPKLYENF

ALRSKACIAARNSLANMGFLEVETPILTKATPEGARDYLVPSRVHQGEFYALPQSPQLFKQLLMCSGFDR

YFQIAKCFRDEDLRADRQPEFTQIDVEMSFCEKKDVINVAETFLKDIFKACGKEIQTPFRQMQYKDAMEN

YGSDKPDLRFDLKFIDVIDIFAKSNNEIFANIAKDTKKNRIKAIRVPKGDTIFSKRQMQRFEEFVRKFGA

EGLAFIQVKEDGLKGPLCKFFSEEDLNELSKRCKLEVGDVVFFGAGAKKTVLDYMGRFRIFLANELNLID

PNALEFLWVVDFPMFEQNDDGSYSAMHHPFTMPKNIDENDLEEISSIAYDVVLNGVELGGGSIRIHKNDI

QQKVFKLLNIDEEQQKEKFGFLLDALSFGAPPHGGIAIGLDRLIMLVTGANSIREVIAFPKTQRAQCLMT

EAPSPASNEAMRELGIKLRENIK

>sp|A7H5G4.1|RF2\_CAMJD RecName: Full=Peptide chain release factor 2; Short=RF-2

MDNYEFSELLKTLKNKVGNIASIIKPKNIQTRLKEIEELENSPSFWNDVKQAGIIGKEKTKITNLLKNYE

NAFNALNDASELFDLANSENDIETLQALFNDAPKLEDTITSLEISMLLSGENDGKNAIVSIHPGAGGTES

NDWASILYRMYLRFCEREGFKVETLDFQEGEEAGLKDVSFLVKGENAYGYLKAENGIHRLVRTSPFDSAG

RRHTSFSSVMVSPELDDDIEIEIEEKDIRIDYYRASGAGGQHVNKTESAVRITHFPTGIVVQCQNDRSQH

KNKATAFKMLKSRLYELELMKQQDSANSSEKSEIGWGHQIRSYVLFPYQQVKDNRSGEAFSQVDNILDGD

IKKMIEGVLIALKAE

>sp|A7H1S0.1|SYT\_CAMJD RecName: Full=Threonine--tRNA ligase; AltName: Full=Threonyl-tRNA synthetase; Short=ThrRS

MEKEVIAYLDNETIIDSQSVKNTNLKEIYFDNSKESLEVIRHSCAHLMAQAIKSLYPEAKFFVGPVIEDG

FYYDFCVESKIGEEDLVKIEKKMKELAEAKIEISKYKITKNEALAKFQNDDLKQEVLLRIPDGAVSIYKQ

GEFEDLCRGPHVPNTKFLRFFKLTRVAGAYLGGDEKREMLTRIYGTAFADKESLKEYLAIIEEAKKRDHR

KLGIELKLFTFNDEIGGGLPIWLGNGARLRSKLEHMLYKIHRLRGYEPVRGPELLKADAWKISGHYANYK

ENMYFTQIDEQEYGIKPMNCVGHIKVYQSDVRSYRDLPLKFFEYGVVHRHEKSGVLHGLFRVREFTQDDA

HIFCMPSQIKEQVLEILAFVDNLMKLFDFSYEMEISTKPEKAIGDDEIWEVATKALKEALDEQGLKYGID

EGGGAFYGPKIDIKITDALKRKWQCGTIQVDFNLPSRFKLEYTDSDNEKKQPVMLHRAILGSFERFIGIL

TEHCAGEFPFFIAPTAVGIVPIGEAHIAYAKEIQKELLELNIDSEVYEKNESLSKKIRIAEKQKLPMILV

LGDDEVAKRSVALRDRRAKEQKNLSLDEFIKLVKEKMSEVYF

>sp|A7H540.1|PLSX\_CAMJD RecName: Full=Phosphate acyltransferase; AltName: Full=Acyl-ACP phosphotransacylase; AltName: Full=Acyl-[acyl-carrier-protein]--phosphate acyltransferase; AltName: Full=Phosphate-acyl-ACP acyltransferase

MINIAIDAMGGDFGEKPIIEGVLKALEAKPFNAILVGNSKILKPLIPKKLEQYIQYEEANEIFSMNENAT

DALKNKETTIYKAINLLKEKKVDAVVSAGHSGASMSLATLRLGRLKGISRPAIATLMPNIVSKTLLLDVG

ANTDCKAENLFQFAIMGEVYAREIMQIQKPRLALLSNGEEECKGNELTKESHQLMKKIPNFIGNAEGRDI

FNGEIDVLVCDGFDGNVILKACEGVATAIFQLLKNEVKRSFISKIGALLIKPSFKKLKKHTDWQEYGGAP

LLGVNGCVIISHGKSDSRAIKNAIFQAVNFSQSHINELIENELGKYNA

>sp|A7H4J1.1|EFP\_CAMJD RecName: Full=Elongation factor P; Short=EF-P

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>sp|A7H2E1.1|PDXJ\_CAMJD RecName: Full=Pyridoxine 5'-phosphate synthase; Short=PNP synthase

MLLGVNIDHIAVLRQARMVNDPDLLEAAFIAAKYGDQITLHVREDRRHAQDFDLENIINFCKSPINLECA

LNDEILNLALKLKPHRVTLVPEKREELTTEGGLCLNHVKLKQSIEKLQNVNIEVSLFINPSLEDIEKSQI

LKAEFIELHTGHYANLHNALFSNISHTAFALKELDQDKKTLQTQFEKELQNLKLCAKKGTKLGLKVAAGH

GLNYKNVKPIVKIKEICELNIGQSIVARSVFTGLQNAILEMKELIKR

>sp|A7H1S5.1|ARGB\_CAMJD RecName: Full=Acetylglutamate kinase; AltName: Full=N-acetyl-L-glutamate 5-phosphotransferase; AltName: Full=NAG kinase; Short=NAGK

MQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDISA

MCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENLAF

VGTIQKVNSKILEELLEKDFLPIIAPIGMDEDFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYEDFN

DKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLVG

>sp|A7H4C1.1|SYGA\_CAMJD RecName: Full=Glycine--tRNA ligase alpha subunit; AltName: Full=Glycyl-tRNA synthetase alpha subunit; Short=GlyRS

MTFSQMILNLQNYWQEQGCVIMQPYDMPAGAGTFHPATFLRSLGKKPWAVAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNETE

>sp|A7H447.1|SYC\_CAMJD RecName: Full=Cysteine--tRNA ligase; AltName: Full=Cysteinyl-tRNA synthetase; Short=CysRS

MRLLDSATKEKIKLDKKDISIYLCGPTVYDDAHLGHARSSVCFDLLRRVLLANGNRVKFARNYTDIDDKI

LKKMAQSCQTLEEITEFYIKSYEEDMRTLNVLDPDFKPRATHYIIAMLDLIKKLAKDGFVYTLEDGIYFD

TSKDEKYLSLSSRNLEENISRLSNEVQKRNESDFVLWKFDENFYESEFGKGRPGWHTECVAMIDSIFENT

LDIHAGGIDLLFPHHENEAAQCRCGCKRKLANIWLHNGFVKIDGEKMSKSLNNSFFIKDALKEFMGEALR

FYLLSSHYRSHFNYSLSDLENAKKRLDKIYRLKKRLDLGEISDFDVLNDIEIKSEIAKQILEILNDDLNI

SKALALLDDFISNANLELDKESKNKILKQNIKEALSELAKIFGFGFMDATLYFQWGVSKEEREEIEKLIL

ERTEAKKNKDFNTADAIREQLSSKKITLLDTPNGTIWEKMNA

>sp|A7H1H8.1|ATPD\_CAMJD 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

MENIIARRYAKAIASRADINDFYQNLCILNSAFVLPKFKNIIESNEIKKERKMEFLDSFFHIKNSSFQNF

LRLLIENSRLECIPQIVKELERQKAFKENIFVGIVHSKEKLSQENLKDLEVKLNKKFNANIKLNNKISQD

DSVKIELEELGYELSFSMKALQNKLNEYVLKII

>sp|A7H632.1|BIOB\_CAMJD RecName: Full=Biotin synthase

MQIMLCAISNIASGNCSEDCKYCTQSAHVRTDIQKYRRKELSQIVLEAKMAKKNEALGFCLVTAGLGLDD

EKLEYVCEAAKAVQKEVPNLLLIACNGMASVEQLKELKKAGIFSYNHNLETSKEFFPQICTTHTWESRFQ

TNLNAKEAGLMLCCGGIYGMGESEENRLSFRKSLQELQPFSTPINFFIANENLKLQTPRLSADEALKIVR

DTKEALPQSVVMVAGGREVVLQERQYEIFQAGAGAIVIGDYLTTKGEEPSQDIIKLKEMGFTFASECH

>sp|A7H502.1|Y1583\_CAMJD RecName: Full=UPF0234 protein JJD26997\_1583

MASEHSFDISAALDKQELKNAFEQAKKELDSRYDLKGIKCEIDLSEKENIFKLSSSSEGKLDVLKDIVIS

KLIKRGINPNAIKELSRESGAMFRLNLKANDTIDSENAKKINKTIKDSKLKVNSSIRGEEIRVVAKQIDD

LQAVMKLVKELDLELNISFKNLK

>sp|A7H303.1|ATE\_CAMJD RecName: Full=Putative arginyl-tRNA--protein transferase; Short=Arginyltransferase; Short=R-transferase

MLEIGFCTLEDQCPYLKDKRSRIEYKYIENCPKEINNELIKRGWRRFGRYFSRPICKDCDECLSLRILVN

EYHFSRSERRVINKNINTKVILRMPNLSNEHLFLYDKYHRFMEEKKDWKRYDLSFKQYCNLYVDGFMNFG

YELAFYIEDKLVCVDLIDILEDGISSIYCFYDPDFSYFSLGKFSLLNEIQIAKKMNLDYIYLGYFVKKCQ

SLSYKADYTPSEILKGTKELFENEILWEK

>sp|A7H2G9.1|RNY\_CAMJD RecName: Full=Ribonuclease Y; Short=RNase Y

MIESLIALIAAIVGLGIGYLVAKKINDAKYEIFVEQAKAKAKAIEYEAELILKDAKNSILNAELEVKKKY

EEKTHKIQKDFNQKLDDLFKKEQKLQQEEEKLKEDKEYLCKSQKHIQDLQSDVDKLKNKYQEKLDDVLKI

LEHSTRLTQNEAKEIILKKVEENSREQIAHIVRKYEEEAKNEAKRKANFIIAQATSRFAGEFAAERLINV

INIKNDELKGRIIGKEGRNVKTLEMVLGVDIIIDDTPGAIIVSCFNLYRRAIATKVIELLVEDGRIQPAR

IEEIHEKVCKEFDSAILEEGEIIVMDLGLNKIHPEIVKLIGKLKYRASYGQNALAHSLEVAHLAGIIAAE

CGGDENLARRAGILHDIGKALTHDFEGSHVDLGAELCNRYKEHPVVINAIYAHHGHEEATSIESAAVCAA

DTLSAARPGARREVLEAFLKRVSELEDIAKSKEGIKNAYAINAGREIRIIANAQLVNDDESVLLAKEIAA

EIQEKMQYPGEIKVNVIRELRAIEYAK

>sp|A7H5U1.1|IF1\_CAMJD RecName: Full=Translation initiation factor IF-1

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>sp|A7H451.1|DDL\_CAMJD RecName: Full=D-alanine--D-alanine ligase; AltName: Full=D-Ala-D-Ala ligase; AltName: Full=D-alanylalanine synthetase

MKFAILFGGNSYEHEISIVSAVALKKVINQNLEFIFCDEERRFYHIPSEKMNSKTFSTKAYKKEKELFIQ

QGGFFSKGFLKENKLECECVINLIHGGDGEDGKIAALFEFYSIKFIGPRLEASVLSFNKELTKLYAKSVG

VKTLDYTMLRKGQNSKEKLRFPCIIKPARLGSSIGISIVKDEKDLEYAKDVGFEFDNDLVVEEFKNNIKE

YNLAGCVINDKFVFSIIEEPKKKEFLDFEQKYLSFSGHNELIEANLSEELKEKLKDSFKKIYNPLFKGAL

IRCDFFILDNEVYLNEINPNPGSLANYLFKDFSTTLNTLADQIPLEKMIKINYNFLHSINGQKGKL

>sp|A7H3U9.1|RPPH\_CAMJD RecName: Full=RNA pyrophosphohydrolase; AltName: Full=(Di)nucleoside polyphosphate hydrolase

MENEKNYRPNVAAIVLSSSYPFECKIFIAKRSDMDNIWQFPQGGIDKGESAKNALFRELKEEIGTDEVEI

IAEYPEWLSYDFPGKIVKKMYPYDGQIQKYFLVRLKHGATININTKHPEFDDYQFVSVKQIFEMINHFKK

NIYVKVIKYFEEKGYI

>sp|A7H220.1|PPK1\_CAMJD RecName: Full=Polyphosphate kinase; AltName: Full=ATP-polyphosphate phosphotransferase; AltName: Full=Polyphosphoric acid kinase

MQTSPDMFINRELSWLRFNSRVLDQCSKNLPLLEKLKFIAIYCTNLDEFYMIRVAGLKQLFSAGVNASSS

DEMTPLQQLKAIRKYLHQEKELLEHYFNEITSELEKENLFIKHYENLDENLKQKCDEYFFSNIFPVIVPI

AVDATHPFPHLNNLSFSLAVKIFDKAHPELVKFGMIRIPRVLPRFYEVSANIYVPIESIVHQHAEEIFPG

YKLLASAAFRVTRNADMVIEEEEADDFMMILEQGLKLRRKGAFVRLQIQKDADEQIVEFLNTHMKIFHKD

VYEYSILLNLPSLWQIAGNKNFTHLLSPLYTPKTLPPFDENLSIFDAVEKEDILIIQPFESFDPVYKFIK

EASKDPEVISIRMTLYRVEKNSNIVQALIDAASDGKQVTVMVELKARFDEENNLHWAKALENAGAHVIYG

ITGFKVHAKVSQVIRKQGDKLKFYMHLSTGNYNASSAKIYTDVSYFTSKAEFARDTTSFFHILSGFSKNR

RLQTLSMSPNQIKEKILEMIRIETSKKNKGVIVAKMNSLVDSDIIQALYEASMEGVKIDLIIRGICCLKP

DEEYSKNIRVRSIIGKYLEHARVFYFKHSEPNYFISSADWMPRNLERRLELMTPIYDERSKAKLAQFLRL

QLSDNVLAYELKNNGEYEKIPSSEKTIDSQQTLEEYVSKIYKTLKKDTDQSRATHLASKLFKEN

>sp|A7H4F3.1|ERA\_CAMJD RecName: Full=GTPase Era

MKSGFVSIIGRTNAGKSTLINSLLEEKIALVSHKQNATRRKIKAIVIHEKNQIIFIDTPGLHESGATFNQ

LLVQSAIKSMEDCDVILFVASVFDSTKDYENFLSLNPQVSHIIALNKVDLTDNATLLKKLSEYAKFSEHF

KAILPYSSKKKSYKKGLLDEIVKCLNEHEYFYDPEFLSVNSEKELYRDFILESIYENLSDELPYSSEVLI

NRTKDTPNLLILEANIITDTNSHKGMFIGKEGATLKRIGKDARFKISKLAQKKVLLKLFVTVKKNWQKDE

EFLKKLLNDEN

>sp|A7H5G6.1|TRUD\_CAMJD RecName: Full=tRNA pseudouridine synthase D; AltName: Full=tRNA pseudouridine(13) synthase; AltName: Full=tRNA pseudouridylate synthase D; AltName: Full=tRNA-uridine isomerase D

MNLAEENTIFKPLYSLKHSSINAYFSKNSDDFVVRERPLYEFSGKGEHLILHINKKDLSTNEALKILSEQ

SGVKMRDFGYAGLKDKQGSTFQYLSIPKKFESFLSNFSHSKLKILETFTHENKLRIGHLKGNSFFIRLKK

VMPSDALKLEQVLMNLDKQGFANYFGYQRFGKFGDNYKEGLEILRGKKMKNIKMKEFLISAFQSDLFNRY

LSKRVELSHFANDFSEKELLQIYKISKEEAKELKKQEQFFKLLKGEVLGHYPFGKCFLCEDLSAELERFR

ARDISAMGLLIGTKAYETGEGLALNLENEIFKDALEFKAKMQGSRRFMWRYLEELKWRYDEEKAHFCIEF

FLQKGSYATVVLEEILHKNLPE

>sp|A7H2Q5.1|TRUB\_CAMJD 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

MNKIFAAFKPRGLSSNSFLSTLKKKYKNKKAGYSGTLDPFAKGVLIVAFGQYAKLFRFLKKTPKTYKATL

WLGVYSLSLDDQNIKKIQNIKEFDLAILKQIIDQMQGIISYTPPQFSAKRINGTRAYELAKKGIEANLKP

CQMEVFDCKILSYNHPFLNIEITVSEGAYIRSYCELFARKLGINATLSSLERIKEGKFVYNNEKSLNVLK

YINLKPNFIKDLNKLENGAKIFVEELEFHDEGDYYIETEKYFSIINIKENTVKYLLNKVEKC

>sp|A7H5Z9.1|NHAA1\_CAMJD RecName: Full=Na(+)/H(+) antiporter NhaA 1; AltName: Full=Sodium/proton antiporter NhaA 1

MNNIVHKLKTLVLNEAFGGVLLIVCTLLALLVQNGSFSEHYREFLNLKVGFSVGEFELNKPFLLWINDGL

ISIFFFAIGLELKKEFLHGDFKNPKNIVLPFMAALGGILIPAMLFALVNIGDAYTLKGWAIPTATDTAFA

LAILMMCGKHIPSSLKIFLLSLAIFDDVGAILIIAIFYTTKLSIVAFVVAGIAILAMLILNLLGITRKSF

YFICSVILWISVLKSGVHATLAGIITAFFIPMQTKNGEAFLEEIYESLKFWLAFVILPLFAFANAGVNLS

NIDIGAVFSGVSIGIFLGLFVGKQVGVFLFSYLVIRFKFAALPQGSNLKQLYGVCILTGIGFTMSLFIDG

LAYEVSDIFNYADNLAILIASFCSGIWGFIYLKFFAARS

>sp|A7H600.1|NHAA2\_CAMJD RecName: Full=Na(+)/H(+) antiporter NhaA 2; AltName: Full=Sodium/proton antiporter NhaA 2

MQMIKKMALSETFPGILLIFFTFLALLCKNSSLSVIYTDFFHANFTVGFVHFQISKSLDLWINDGLIAIF

FLCIGLELKYEILRGQLKNIRAVSLPIFGALGGMITPALIFAAINYSYDFAMKGWAIPTATDIAFAVGIL

MLLGNKIPTSLKLFLLSLAIFDDLGAIVIIALFYTDQLSALAIIICLFCIFALLLLNYYHITHLSLYVLV

GVVLWIAMLKSGVHATLAGVIISLFIPLDTKNKKPYLHEVLKDLNPWVVYFILPLFAFANAGIDIRDMHL

GSVFSPVSLGIILGLFLGKQLGVFIFCFIAIKLKLAKLPENIKYGKFYGICILTGIGFTMSLFIDGLAYK

NSDIFEHADKLAILIASFLSAIVGFIYLKIVK

>sp|A7H2C7.1|PNP\_CAMJD RecName: Full=Polyribonucleotide nucleotidyltransferase; AltName: Full=Polynucleotide phosphorylase; Short=PNPase

MQYSIEINKNTEIFDIDKVAKQATGVLMRQGKSVVLATVAREEKQVEEDFLPLTVQYIEKAYAAGKIPGG

YVKRETKPSDAETLTARIIDRSLRPLFPKGYAYPTQIVVMVLSADPKVDLQVMSLNAASVALYLSDIPMK

APVCGVRIGKIDGNFILNPNNEELQNSTLDLYVAGVKDELLMIEMRALPDQKENEIFIEAPYADVLTQTT

SQNMNELSEDEILEALNLAQKAILNGSNAYEEAFSKHKKNSQIELKNEIEHPEILAFIENNFQKQIKKAI

NQMAKSERASELNKIAKEILNLEIAKDWSEESILNTLAKVKRKLIREQILNEGKRADGRSLNEVRPISIE

TNILPNAHGSCLFTRGQTQALVVATLGGENDAQMIDLLTEKNPISERFMVNYNFPGFSVGEASPIKAPGR

RELGHGNLAKRALYPSVDENYPYVIRLVSEILESNGSSSMATVCGGSLALKAAGVPSLKLVAGVAMGLIF

EDNKYAVLTDIMGLEDHDGDMDFKVAGSKDGITALQMDIKLGGIDQETLKQALYQAKEGRIHILNIMEEA

TKEIIVNEEVLPKLELFSVDPSKIVDIIGQAGKTIKEIIEKFGVSIDLDREKGEVKIAGSQNEQIKAAKD

YIINITSSQKGTKKGSKDKDISDFELGQEFQGIVKKIAPFGAFVELKNGVDGLLHSSKIKHLDLSENQSL

KVKISEIKNGKISVDLCE

>sp|A7H650.1|RS3\_CAMJD RecName: Full=30S ribosomal protein S3

MGQKVNPIGLRLGINRNWESRWFPTKANLVENIGEDYKIRAFLKRKLYYAGISQILVERTAKKLRVTVVA

ARPGIIIGKKGSDVDNLRKELQDLISKDVNINIKEERKAGASAQLAAESVATQLEKRIAFRRAMKKVIQG

AQKAGAKGIKVSVSGRLGGAEMARTEWYLEGRVPLHTLRAKIDYGFAEARTTYGNIGVKVWIFKGEVLHK

GMQPEKTEESAPAKKSRRTRRGK

>sp|A7H4T6.1|ACCA\_CAMJD RecName: Full=Acetyl-coenzyme A carboxylase carboxyl transferase subunit alpha; Short=ACCase subunit alpha; Short=Acetyl-CoA carboxylase carboxyltransferase subunit alpha

MASYLDFEKNIQQIDEDIINAQIKGDTEAVSILKKNLEKEISKTYKNLSDFQRLQLARHPDRPYTLDYIE

LILNDAHEIHGDRAFRDDPAIVCFMGYLGEKKIIVIGEQKGRGTKDKIARNFGMPHPEGYRKALRVARLA

EKFQIPILFLIDTPGAYPGIGAEERGQSEAIARNLYELSDLKIPTIAIVIGEGGSGGALAIGVADRLAMM

KNSVFSVISPEGCAAILWNDPAKSEAATKAMKVTADDLKSQGLIDDVIDEPTNGAHRNKEAAAVAIADYV

KKSLNELENIDVRELSANRMQKILKLGAYQEA

>sp|A7H484.1|DNAK\_CAMJD RecName: Full=Chaperone protein DnaK; AltName: Full=HSP70; AltName: Full=Heat shock 70 kDa protein; AltName: Full=Heat shock protein 70

MSKVIGIDLGTTNSCVAVYERGESKVIPNKEGKNTTPSVVAFTDKGEVLVGDSAKRQAVTNPEKTIYSIK

RIMGLMINEDAAKEAKTRLPYHITERNGACAIEIAGKIYTPQEISAKVLMKLKEDAEAFLGESVVDAVIT

VPAYFNDAQRKATKEAGTIAGLNVLRIINEPTSAALAYGLDKKDSEKIVVYDLGGGTFDVTVLETGDNVV

EVLATGGNAFLGGDDFDNKLIDFLANEFKDETGIDLKNDVMALQRLKEAAENAKKELSSANETEINLPFI

TADASGPKHLVKKLTRAKFEGMIDSLVAETITKINEVVSDAGLKKDEIKEVVMVGGSTRVPLVQEEVKKT

FNKDLNKSVNPDEVVAIGAAIQGAVIKGDVKDVLLLDVTPLSLGIETLGGVMTKIIEKGTTIPTKKEQVF

STAEDNQSAVTINVLQGEREFSRDNKSLGNFNLEGIPPAPRGMPQIEVTFDIDANGILTVSAKDKATGKA

QEIKITGSSGLSEEEINNMVKDAELHKEEDKKRKEAVDVRNAADSLAHQVEKSLSELGEKVATADKENIQ

KALDDLRETLKNQNASKEEIESKMKALSEVSHKLAENMYKKDEPNTANDKKKKDDDVIDAEVE

>sp|A7H664.1|LEUD\_CAMJD RecName: Full=3-isopropylmalate dehydratase small subunit; AltName: Full=Alpha-IPM isomerase; Short=IPMI; AltName: Full=Isopropylmalate isomerase

MQKFIIHKGIACPLEYANIDTDQIIPKQFLLAVSKQGFGKHLFHDLRYVDDKESVLNMDFNLNKKEYQNS

SILVSFENFGSGSSREHAPWALVDYGIRAIIAPSFADIFKNNALGNGLLTIELTKDEVLEIVDELKKSQD

KNIEISLLEKRVFFKDKIFSFDLDDFHRICLLEGLDNIALTLKHEAQIKAYEKNSKSFLV

>sp|A7H654.1|RL23\_CAMJD RecName: Full=50S ribosomal protein L23

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENAEA

>sp|A7H655.1|RL4\_CAMJD RecName: Full=50S ribosomal protein L4

MSKVVVLNDKLEKAGELDLPSKYAEVNPHNLYLYVKSYLASLRANTAHTKGRSDVSGGGKKPWRQKGRGG

ARAGSTRTNVWVGGAVAFGPTNERNYFQKVNKKQKRLAFERALADKAAKGALFTADSLAIESGKTKDANA

VIKKLGVKDVLIVKDLLDEKTLLAYRNLANCYVVDVAEVNAYLVSVFNAVIMEKSALESITKEG

>sp|A7H4B5.1|RS16\_CAMJD RecName: Full=30S ribosomal protein S16

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>sp|A7H2F9.1|CH10\_CAMJD RecName: Full=10 kDa chaperonin; AltName: Full=GroES protein; AltName: Full=Protein Cpn10

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIMFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>sp|A7H1A6.1|ILVD\_CAMJD RecName: Full=Dihydroxy-acid dehydratase; Short=DAD

MRSDAIKKGHLKAPNRSLLRACGLKDEDFDKPFIGVANSYIDIIPGHYFLNDYAKIIKDEIRKNGCVPFE

FNTIGIDDGIAMGHEGMLYSLPSREIIANSIETVMNAHQLDALICIPNCDKITPGMLMGALRVNVPTIFV

SGGPMASGVTKKGEKISLSSVFEAVGAYEAKKISEEEFKDIECSACPSGGSCSGMFTANSMNTLCEAMGI

ALEGNGTILALSKEREELLRKAARRICEIALDERFKIRNIITQKAVRNAMIVDMAMGGSSNTVLHMLAIS

REAGVALDIKDLNFISSKVAHIAKIAPSLNSVYMDDIHKAGGVSAVMAEISSRQGHILELDALTITGESL

EERLKNAKIKDENIIRKVDNAYSKVGGLAILFGNLAEQGCVIKTAGIIGERKFKGKAVCFNSQDEAIKGI

IKGKVQKGNVCVIRYEGPKGGPGMQEMLSPTSLLMGMGLGADVALITDGRFSGATRGLSIGHISPEAAEG

GLIGLLKDGDEIEIDVDAYTIHANLSEKEITQRKKEFVLPQKEVPSRWLRMYQKLVSNASKGAVLDME

>sp|A7H4H9.1|ILVC\_CAMJD 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

MAITVYYDKDCDLNLIQSKKVAIIGFGSQGHAHAMNLRDNGVNVIIGLREGSVSAVKAKNAGFEVMSASE

ASKMADVIMILAPDEIQADIFNVEIKPNLSEGKAIAFAHGFNIHYGQIVVPKGVDVIMIAPKAPGHTVRN

EFTLGGGTPCLIAIHQDESKNAKNLALSYASAIGGGRTGIIETTFKAETETDLFGEQAVLCGGLSALIQA

GFETLVEAGYEPEMAYFECLHEMKLIVDLIYQGGIADMRYSISNTAEYGDYITGSKIITEETKKAMKGVL

KDIQNGVFAKDFILERRAGFARMHAERKNMNDSLIEKTGRNLRAMMPWISAKKLVDKDKN

>sp|A7H598.1|FABZ\_CAMJD 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

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVRGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>sp|A7H622.1|ENO\_CAMJD RecName: Full=Enolase; AltName: Full=2-phospho-D-glycerate hydro-lyase; AltName: Full=2-phosphoglycerate dehydratase

MLAIEDVRAYEVLDSRGNPTVKAEVTLSDGSVGAAIVPSGASTGSKEALELRDKDERFGGKGVLKAVANV

NESIAGEILGLDAFNQTQLDDTLRELDGTKNYSNLGANATLGVSMAAARAAAAALGMPLYRYLGGANASI

LPVPMCNIINGGAHANNNVDFQEFMITPFGFTSFKEALRSVCEIYAILKKELANSGHSTALGDEGGFAPN

LANNTEPIDLLMTCIKKAGYENRVKIALDVASTEFFKDGKYHMEDKAFSSEDLIERYVELCAKYPICSIE

DGLAENDFEGWIKLTEKLGNKIQLVGDDLFVTNEDILREGIIKKMANAVLIKPNQIGTITQTMRTVRLAQ

RNNYKCVMSHRSGESEDAFIADFAVALNTGQIKTGALARGERTAKYNRLLEIELESDEYLGEKL

>sp|A7H597.1|LPXA\_CAMJD RecName: Full=Acyl-[acyl-carrier-protein]--UDP-N-acetylglucosamine O-acyltransferase; Short=UDP-N-acetylglucosamine acyltransferase

MKKIHPSAVIEEGAQLGDDVVIEAYAYVGKDTKIGNDVIIKQGARILSDTTIGDHSRVFSYAIVGDIPQD

ISYKEEQKSGVVIGKNATIREFATINSGTAKGDGFTRIGDNAFIMAYCHIAHDCLLGNSIILANNATLAG

HVELGDFTVVGGLTPIHQFVKIGEGCMIAGASALSQDIVPFCLAEGNRASIRSLNLVGIRRRFDKDEVDR

LSRAFKTLFRQGDLKENAKNLLENQESENIKKMCHFILETKRGIPVYRGKNNA

>sp|A7H375.1|PUR9\_CAMJD 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

MRALLSVSDKEGIVEFGKELENLGFEILSTGGTFKLLKENGVKVIEVSDFTKSPELFEGRVKTLHPKIHG

GILHKRNDENHIKQAKENEILGIDLVCVNLYPFKKTTIMSDDFDEIIENIDIGGPAMIRSAAKNYKDVMV

LCDRLDYEKVIETLKKNQNDENFRLSLMIKAYEYTANYDAYIANYMNERFNGGFGASKFIVGQKVFDTKY

GENPHQKGALYEFDAFFSANFKALKGEASFNNLTDINAALNLASSFDKAPAIAIVKHGNSCGFAIKENLV

QSYIHALKSDSVSAYGGVVAINGTLDEALANKINEIYVEVIIAANVDEKALAVFEGKKRIKIFTQESPFL

IRSFDKYDFKHIDGGFVYQNSDEADEDELKNAKLMSQREASKEELKDLEIAMKIAAFTKSNNVVYVKNGA

MVAIGMGMTSRIDAAKAATFKAKEMGLDLQGCVLASEAFFPFRDSIDEASKVGVKAIVEPGGSIRDDEVV

KAADEYGMALYFTGVRHFLH

>sp|A7H653.1|RL2\_CAMJD RecName: Full=50S ribosomal protein L2

MAIKTYKPYTPSRRYITGLSSEDITAKPSVRSLLVKLPAHAGRNSYGRITSRHKEAGAKKLYRIIDFKRR

KFGIEGKVEAIEYDPYRNCRIALIAYKDGEKRYILQPRGLSVGDIVAAAESGLDIKPGNAMKLKNIPVGT

IVHNVELKPGKGGQMIRSAGAYAQLMGKEEKYVILRLASGEMRQVLAECMASIGEVGNEEWANITIGKAG

RNRHRGIRPQTRGSAMNPVDHPHGGGEGKKNSGRHPVTPWGKPTKGAKTRCKKASDKLIISRRKGK

>sp|A7H426.1|TRUA\_CAMJD 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

MMKIKIIFSYDGSAFLGSATQPHKKGVQDVLSEALSHLGIFSPLLMASRTDKGVHASYAVASVECGDHFV

NLEYLQKQLNKFSHPFIHIKKIEKVKDDFEVRFDVKSREYRYIFSHSSYSPFMASYVYFYPKFDLGKANE

LLGFFVGKKDLKFFCKSGGDNKTTLREIFIARAYAYKDFSIFHFKANGFLRGQIRLSVASVLKVLEGKMS

EKELKEQIEAKKQCNHFLAPPNGLYLSRICY

>sp|A7H5Q5.1|Y1899\_CAMJD RecName: Full=UPF0271 protein JJD26997\_1899

MFKVDLNSDLGESFGAYKMGMDEEILKFVSSVNVACGFHAGDPCVMDKTLNLAKQNGVCIGAHPSYPDLL

GFGRRNMQISFEEAKNYALYQLGALFGFAKAKDMKIQHFKAHGALYNMAAIDENLALALCEAVASFDENI

IFLGLSNSAMNEAAKKKGLKYANEVFADRAYNDDGTLVSRKLEGALIHDENLAIKRVIKMIKESKVTSIN

GKEIDLKADSICVHGDNVKALEFVKKIKENLEKEQIQICALENFI

>sp|A7H2K2.1|Y557\_CAMJD RecName: Full=Probable transcriptional regulatory protein JJD26997\_0557

MGRAFEYRRASKEARWDKMSKLFPKLAKAIQVAAKEGGIDPDMNPKLRSAIATAKANNMPKDNIDAAIKR

ASGKDSADIKNIHYEGKAAHGALVIVECMSDNPTRTVANVKAIFSKNGGEVLQNGSLGFMFTRKAVFHLE

KFAGDLEELELDLIDAGFEELEQNEEELVISGDYTAFGELSSAIEAKGLVLKKAGLEYIPNNPVSFSKEQ

LSDIEKLLDKLEDDDDVQAVYTNID

>sp|A7H4B3.1|RIMM\_CAMJD RecName: Full=Ribosome maturation factor RimM

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELTNLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVVDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>sp|A7H1L5.1|IF2\_CAMJD RecName: Full=Translation initiation factor IF-2

MAKIRIHEIAKELGYDSKEIIEKANELGLGIKTASNAVEPDIAVAIYEYIQTREIPEAFKKNIKTPTAKK

PKKENAKDQEKLNESEKKEPKKEESKEQEKQEIIDTHKPQSLASATLAKRRGLVIVKKKKDEEEIQVKKE

EIKNSNDISINNEERLSLKTMFSNADESLKKKKKEKKSFVASKKESTEKMNFLDEHDFGDISLDDEDEVV

LPDFSVKEQEKPQNINKKQPNFIRQAVGNSAGFGLEGGIQRRSRKKPPKKIEKKEVEEVSSVSISKEIRV

YEFADKIGKSTSEVISKLFMLGMMTTKNDFLDEDAIEILAAEFGIEINIINEADEFDYVKDYEEETDEKD

LVTRAPVITIMGHVDHGKTSLLDYIRKSRVASGEAGGITQHVGAYMVEKNGRKITFIDTPGHEAFTAMRA

RGASITDIVIIVVAADDGVKPQTKEAINHAKAAGVPIIIAINKMDKEAANPDMVKTQLAEMEIMPVEWGG

SYEFVGVSAKTGMGIEDLLEIVLLQADILELKANPKSFAKASIIESSVQKGRGAVATIIVQNGTLAVGST

VVAGEAYGKVRAMSDDQGKALKEIKPGECGVIVGLSEVADAGEILIAVKTDKEAREYANKRHEYNRQKEL

SKSTKVSIDELGAKIKEGNLKALPVILKADVQGSLEALKASLEKLRNDEIKVNIIYSGVGGITQSDIELA

SASENSIVLGFNIRPTGEVKERAKDKGVEIKTYNVIYNLLDDVKALLGGMMSPIISEEQLGQAEIRQVIN

VPKIGQIAGCMVTEGVINRGAKIRLIRDGVVVYEGNVSSLKRFKDDAKEVAKGYECGVGIEGCDDMRVGD

YIESYKEVEEQASL

>sp|A7H432.1|GLMU\_CAMJD 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

MKTSILILAAGLGTRMKSQKPKVLQELCQKSMILHILKKAFALSDDVSVVLSHQKERVEKEILEHFPKTQ

ILEQDLQNYPGTAGALRGFEPKNERVLILCGDMPLVEQTSLEALLGNNAKLNLAVFKARDSKSYGRVVIK

DDGVEKIVEFKDANAREREINTCNAGVYVIDSRLLKELLPLIDNNNAAKEYYLTDIVKLAKEKDVMIKAV

FVDEDEFMGINDKFELSIAENFMQEKIKKYWMQQGVIFHLPQSTFIGVDVKFVGECEVYENVRIGGKSKI

INSIIKSSSVIENSIVENSDVGPLAHLRPNCELKNTHIGNFVECKNANLNAVKAGHLSYLGDCEIDSGTN

IGCGTITCNYDGVKKYKTIIGKNVFVGSDTQFIAPVKIEDEVIIAAGSTVSVNVEKGALFINRTGHKIIK

NYYYKKFQK

>sp|A7H2J2.1|RS2\_CAMJD RecName: Full=30S ribosomal protein S2

MVSMRDLLECGVHFGHQTRRWNPKMKKFIFGERKGIYVIDLQKTLRYFRYTYNIVRDAAAEGKTILFVGT

KKQAGGALKEYAEKCGMPYVNHRWLGGMMTNFGTIRQSIRKLEVIEKMEEDGSIKLLTKKEALMLTRKKE

KLLAYLGGIRYMKTQPDMIFVIDTVKEKIAVQEANRLRIPVVAPLDTNCDPDLVTYPIPGNDDAIRSVQL

FCQEMAEAINEGKALREQDGEALPNEEKEITDEEKKEVLDESMSEEDFGEEQE

>sp|A7H1A3.1|RNH2\_CAMJD RecName: Full=Ribonuclease HII; Short=RNase HII

MKTLFDTKELLNEFDINLIGIDEAGRGALAGPMMMAACKLNKKLDGLCDSKKLSEKKREELYEIIIKNSN

YLILAFSSEQIDTLGLSTCLKTGLKLIKKHFKAENNFLYDGNTNLGINGIKTQIKADTSILQVSAASILA

KVSKDKVMNFLAKDFPCYEFEKNKAYGTKAHKEVIAKFGICKLHRKSFKLL

>sp|A7H564.1|RL25\_CAMJD RecName: Full=50S ribosomal protein L25; AltName: Full=General stress protein CTC

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDPVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>sp|A7H311.1|LEPA\_CAMJD RecName: Full=Elongation factor 4; Short=EF-4; AltName: Full=Ribosomal back-translocase LepA

MKNIRNFSIIAHIDHGKSTLADRIISECGAISDRQMSSQVMDTMDIEKERGITIKAQSVRLNYKFNNENF

VLNLIDTPGHVDFSYEVSRSLASCEGALLVVDASQGVEAQTIANVYIALENNLEIIPVINKIDLPNADVE

KVKHEIEHIIGIDCKDAICVSAKTGVGIKELIETIITKIPAPKTDDEAPTKALIYDSWFDNYLGALALVR

IYEGSIAKNDEVLVMSTDKKHIIQDLFYPHPLSPIKTQSLQSGEVGVVVLGLKTVGDVQVGDTITSVKNK

AKEAIGGFEKAKAFVFAGLYPIETDKFEDLRDALDKLKLNDSSITYEPETSLALGFGFRVGFLGLLHMEV

IKERLEREFNLDLIATAPTVTYEIYQTDGELVKIQNPSELPPVNKIDHIKEPYVKATIITPSEFLGNLIT

LLNRKRGVQVKMDYITPERVLLEYDVPLNEIVMDFYDKLKSLTKGYASFDYEPIEFRVGDLVKLDIKVAG

ENVDALSIIVPNEKAQSKGRELVSAMKEIVPRQLFEVAIQASIGNKIIARETVKSMGKNVTAKCYGGDIT

RKRKLLEKQKEGKKRMKAIGKVNLPQEAFLSVLKID

>sp|A7H4R3.1|EFTU\_CAMJD RecName: Full=Elongation factor Tu; Short=EF-Tu

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>sp|A7H645.1|RL24\_CAMJD RecName: Full=50S ribosomal protein L24

MAVKLKIKKGDNVKVVTGDDKGKTGKVLAVYPKTLKVVVEGCKIAKKAIKPSEKNPNGGFINKEMPMDIS

NVAKVQE

>sp|A7H4H1.1|NADK\_CAMJD RecName: Full=NAD kinase; AltName: Full=ATP-dependent NAD kinase

MQNKIDHKNIKKIGLVTRPNVSLDKEILKLQSILSIYKVELVLFKESSEILDLPKYGLDDLFKISDFVIS

LGGDGTLISLCRKACEYDKAVLGIHAGHLGFLTDFKVDEAENFFQAFFQGEFRIEKPYLLSVFLEDKQGK

ILEKLAFNDVVISKNNQAPMAHIEVFRKEKKFNEYFGDGLIVATPAGSTAYNLSANGPIVYTLAQAFILT

PVCSHSLTQRSIVLPKGFEIEIMAKDCILCIDGQENYKMNDFKSIKVGLSDKNVALIHPKNRDYFQILKE

KLHWGN

>sp|A7H2J3.1|EFTS\_CAMJD RecName: Full=Elongation factor Ts; Short=EF-Ts

MAEITAAMVKELRESTGAGMMDCKNALSETNGDFDKAVQLLREKGLGKAAKKADRLAAEGLVSVKVSDDF

TSATVSEINSETDFVAKNDQFIALTKDTTAHIQNNSLQSVEELHSSTINGVKFEEYLKSQIATIGENLVV

RRFATLKAGANGVVNGYIHTNGRVGVVIAAACDSAEVASKSRDLLRQICMHIAAMRPSYLSYEDLDMTFV

ENEYKALVAELEKENEERRRLKDPNKPEHKIPQFASRKQLSDAILKEAEEKIKEELKTQGKPEKIWDNII

PGKMNSFIADNSQLDSKFTLMGQFYVMDDKKTVEQVIAEKEKEFGGKIKIVEFICFEVGEGLEKKTEDFA

AEVAAQL

>sp|A7H245.1|TSAD\_CAMJD 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

MKNLILAIESSCDDSSIAIIDKNTLECKFHKKISQELEHSIYGGVVPELAARLHSEALPKILKQSKKYFK

NLCAIAVTNEPGLSVSLLGGISMAKTLASALNLPLIPINHLKGHIYSLFLEEKISLDRGILLVSGGHTMV

LYLKDDANLELLASTNDDSFGESFDKVAKMMNLGYPGGVIIENLAKNAKLKNISFNTPLKHSKELAFSFS

GLKNAVRLEILKHENLNEDTKAEIAYAFENTACDHIMDKLEKIFNLYKFKNFGVVGGASANLNLRSRLQN

LCQKYNANLKLAPLKFCSDNALMIARAAVDAYEKKEFVSIEEDILSPKNKNFSRI

>sp|A7H1U2.1|RL20\_CAMJD RecName: Full=50S ribosomal protein L20

MARVKTGVVRRRKHKKVLKLARGFYSGRRKHFRKAKEQLERSLVYAYRDRRRKKTDFRRLWIVRINAACR

LNDLSYSRFINGLKKAGIELDRKILADLAMNDVAAFAKIAEAAKKAL

>sp|A7H2I0.1|GATB\_CAMJD RecName: Full=Aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit B; Short=Asp/Glu-ADT subunit B

MFEVVIGLEVHTQLNTKTKIFCSCATSFGEAPNTNVCPTCLALPGALPVLNEEAVKKAIAFGKAVNAAIN

KKSVFNRKNYFYPDLPKAYQISQFDIPIVEKGELFINVNGENKRIGITRAHLEEDAGKNIHENNFSKVDL

NRAGTPLLEIVSEPELRSSDEAVAYLKKLHSIIRFLDISDANMQEGSFRCDANVSIRPKGDTKLYTRVEI

KNLNSFRFIQKAIDFEVKRQSEAWEDGTYEQEVVQETRLFDTTNLVTRSMRGKEEAAEYRYFPDPDLLPV

LLKDEFLQIKIPELPDEKKMRFVSELGIKESDAEVIISSLEMSRFFESLISQNLSPKLCVNWLNTELMGF

LKGELTIENSPVDAQKLGDLIKRIEDGTISAKAAKDVLAFVFENTNVEIDEAIEKLGLKQVSDDSAIEAV

IEQILNANADKVAEYKSGKDKLFGFFVGQTMKEGKRAFNPAKVNEILKAKLG

>sp|A7H4D8.1|ISPG\_CAMJD 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

IKAKSPLPLIVDIHFNHNLAVYCAEFIDGVRINPGNIGSKENIKEVIKACKECNIPIRIGVNHGSIEKQF

SDKFGYGVDAMLESAMYNIKLLEDLDFFDIKISMKTSDAQKTIEAYERLRPLCDYPFHLGVTEAGTKFHS

TVKSSIALGNLLLKGIGDTMRVSMTGELEEEIRVARAILQDSGVQKSGVNIISCPTCGRIQSDLLSAIKI

VEEKTKHIKEPLNISVMGCVVNALGEAKGADVAIAFGKNQGLVIRHGEVVAKLKESELVDRFLAEVEDEV

KSRVVKE

>sp|A7H4Z5.1|NUSB\_CAMJD RecName: Full=Transcription antitermination protein NusB; AltName: Full=Antitermination factor NusB

MATRHQVRQSVISLLYAFELNSQNNVFVDEILDEKKIRNEQKNFTLNLYHGILDNLNNIDETLNSFLNDN

QITALGHVERAILRLGAYELLFTNTPSAIVINEAIELAKELANDNSPKFMNGVLDALIKAKK

>sp|A7H1H2.1|FMT\_CAMJD RecName: Full=Methionyl-tRNA formyltransferase

MKKIIFMGTPSYATCILKALVENENFKLVALFTQPDKAVGRKQILTPSDTKAFLSQNYPSIPIFTPSSLK

DENIMRQIKDLNPDFIVVAAYGKILPKAILDLAPCVNLHASLLPKYRGASPIQSAILNKDEKSGVCTMLM

EEGLDTGAILESLECDIKDKNSSEVFELLANLAAKLILSTLLNFDKITPKKQEESLATLCRKIKKEDGLI

NLQNARELYQKYLAFTPWPGVFLENGLKFLELELVDELKQNAKMGEILELEKESFLLACKQGVLRIKKLQ

ESGKKALDGRTYLNGKRLKSEDSLC

>sp|A7H5I4.1|FLGI\_CAMJD RecName: Full=Flagellar P-ring protein; AltName: Full=Basal body P-ring protein; Flags: Precursor

MRVLTIFLLFMTSIFAVQIKDVANTVGVRDNQLIGYGLVVGLNGSGDGTSSKFTLQSISNLLQGMNIKVD

PNDIKSKNTAAVMVTAKLPAFAKSGDKLDITVSSMGDAKSLQGGTLLLTALRGIDGEIYAIAQGSISTGG

LTPRPGGAGSHSTAATVMGGANVEREIPQNFSQNNDLTLSLKVADFKTANDIERVLNTVFGEEVAKAIDS

RTVKLKKPEDLSNVDFMARVLEQDIAYKPQSKVIIDERTGTVIAGVDVEVEPVLITHKDITIKIDPNNNA

VANQNEIDMKDGGFVDSSSNTLRINNAKSTVANIARMLNKLGATPNDIIAIMENLKRAGAINADLEII

>sp|A7H4D7.1|FLGH\_CAMJD RecName: Full=Flagellar L-ring protein; AltName: Full=Basal body L-ring protein; Flags: Precursor

MKKVLFYVLPFAFFGCSATVDPQISMKPPAYVEELAPKQSNNVESAPGSLFGKGDNPLFSDKKAMNVNDL

VTVIIQESTTQSTQANKATSRTNTSNLDGGTLTGSSGVVASALDKVNAYSNIGFQTNSSNNYTGTGSQSR

NESFNTTISTRVIKILSNGNYFIEGSRELLINGEKQIIQLSGVIRPYDIGQDNTIDSKYIADAKILYKTE

GEVDRSTRKPWGSKVIEAIWPF

>sp|A7H1R0.1|CLPP\_CAMJD RecName: Full=ATP-dependent Clp protease proteolytic subunit; AltName: Full=Endopeptidase Clp

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSAQEAKEYGLIDKVLEKSFK

>sp|A7H1H9.1|ATPA\_CAMJD RecName: Full=ATP synthase subunit alpha; AltName: Full=ATP synthase F1 sector subunit alpha; AltName: Full=F-ATPase subunit alpha

MKFKADEISSIIKERIENFDLNLEIEETGKIISVADGVAKVYGLKNIMAGEMVEFENGDKGMALNLEESS

VGIVILGKGEGLKEGASVKRLKKLLKVPVGEALIGRVVNALGEPIDAKGVVNANEYRFVEEKAKGIMARK

SVHEPLHTGIKAIDALVPIGRGQRELIIGDRQTGKTTVAVDTIISQRGQGVICIYVAIGQKQSTVAQVVK

RLEEHGAMEYTIVVNAGASDPAALQYLAPYAGVTMGEFFRDNAKHALIVYDDLSKHAVAYREMSLILRRP

PGREAYPGDVFYLHSRLLERASKLNDELGAGSLTALPIIETQAGDVSAYIPTNVISITDGQIFLETDLFN

SGIRPAINVGLSVSRVGGAAQIKATKQVSGTLRLDLAQYRELQAFTQFASDLDEASRKQLERGQRMVELL

KQPPYSPLSVEKQVVLIFAGTKGFLDDIAVSRIKEFEDGIYPFIEAKHPDIFEQIRSKKALDSDLEEKLA

KAINEFKANHL

>sp|A7H4P5.1|EFG\_CAMJD RecName: Full=Elongation factor G; Short=EF-G

MSRSTPLKKVRNIGIAAHIDAGKTTTSERILFFTGMSHKIGEVHDGAATMDWMEQEKERGITITSAATTC

FWKDHQINLIDTPGHVDFTIEVERSMRVLDGAVAVFCSVGGVQPQSETVWRQANKYGVPRIVFVNKMDRI

GANFYNVEDQIRNRLKANPVPLQIPIGAEDNFKGVIDLVTMKALVWEDDTKPTDYVEKEIPAELKEKAEE

YRTKMIEAVSETSDELMEKYLGGEELSLEEIKTGIKAGCLSLSIVPMLCGTAFKNKGVQPLLDAVVAYLP

APDEVANIKGEYEDGTEVSVKSTDDGEFAGLAFKIMTDPFVGQLTFVRVYRGCLESGSYAYNSTKDKKER

IGRLLKMHSNKREEIKVLYAGEIGAVVGLKDTLTGDTLASEKDKVILERMDFPDPVISVAVEPKTKADQE

KMSIALNKLAQEDPSFRVSTDEESGQTIISGMGELHLEIIVDRMLREFKVEAEVGQPQVAYRETIRKAVE

QEYKYAKQSGGRGQYGHVFLRLEPLEPGSGYEFVNDIKGGVIPKEYIPAVDKGVQEALQNGVLAGYPVED

VKVTVYDGSYHEVDSSEMAFKLAASMGFKEGARKAGAVILEPMMKVEVETPEDYMGDVIGDLNKRRGQVN

SMDERGGNKIITAFCPLAEMFGYSTDLRSQTQGRATYSMEFNHYDEVPKNVADEIIKKRNG

>sp|A7H2I1.1|GPDA\_CAMJD RecName: Full=Glycerol-3-phosphate dehydrogenase [NAD(P)+]; AltName: Full=NAD(P)H-dependent glycerol-3-phosphate dehydrogenase

MRIAVIGAGKWGSALHLALKENHTCFISSLHQRDLEDFVSIKEALECEYLIFALSSQGMRVWLKENFINK

GQKILIASKGIEDQSCQFLDEIFLDFVPKENFCVLSGPSFAAEVMQKLPTALMISGINQELCKKFASFFP

DFIKTYIDDDVRGAEICGAYKNVLAIASGISDGLKLGNNARAALISRGLIEMHRFGKFFGAKEETFLGLG

GAGDLFLTATSVLSRNYRVGLKLAQNQKLDSILAELNEVAEGVKTAYAIEKLAKMKGIYTPIVNEVVAIF

KGKSVQEATQNLLKQND

>sp|A7H644.1|RL5\_CAMJD RecName: Full=50S ribosomal protein L5

MMRLKEKYNQSIKPALVKEFDIKNPMLIPVIEKVVISVGAGELAKDQKVLQNVADTISLIAGQKAVITKA

KKSVAGFKVREGFPIGVMVTLRKENMYAFLDKLISIALPRVKDFRGLSRDGFDGRGNYNFGLDEQLMFPE

VEYDKILRTHGMNISIVTTAQNDKQAQKLLELIGVPFTKGK

>sp|A7H4B1.1|RL19\_CAMJD RecName: Full=50S ribosomal protein L19

MKNKYIEQFEAKQIEGKNVPDFRAGDTLKLAIRIKEGDKTRIQNFEGICIARRGNGVSETFIVRKMGANN

VGVERIFPIYSESLESIAVLRRGRVRRARLFYLRDRRGKAARIKELKK

>sp|A7H576.1|PAND\_CAMJD 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

MNIALLKSKIHRASVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNINNGARFETYTIATQEEGVVCL

NGATARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGSIF

>sp|A7H3V3.1|LPXD\_CAMJD RecName: Full=UDP-3-O-acylglucosamine N-acyltransferase

MKLSEIAEFLSLEYKGEDIEISALNSLLKANFAELTYCDGEKNTKDIPHTGAAAILVSKEYENLVPKDTK

VLITQSPHLSFAFLSKLFAKPLINTAKEKVQNIAKSARIMPNVYIGDNVNIGENVIIMAGAYIGDNVSIG

DESIIHPNVVIYNDTKIGKKCHLLANCVIGSDGFGYAHNKNGEHYKIYHNGNVILEDFVEVGACTTIDRA

VFDSTIIKAGTKVDNLVQIGHNCNIGQNCIIVAQTGISGSSELGRNVIMGGQSATSGHLKIGDFSTIAAR

GGVSKNLEGGRVYGGFPIMLQKDWLKLQAKIAMKFKKD

>sp|A7H2F8.1|CH60\_CAMJD RecName: Full=60 kDa chaperonin; AltName: Full=GroEL protein; AltName: Full=Protein Cpn60

MAKEIIFSDEARNKLYEGVKKLNDAVKVTMGPRGRNVLIQKSFGAPSITKDGVSVAKEVELKDSLENMGA

SLVREVASKTADQAGDGTTTATVLAHAIFKEGLRNITAGANPIEVKRGMDKACEAIVAELKKLSREVKDK

KEIAQVATISANSDEKIGNLIADAMEKVGKDGVITVEEAKSINDELNVVEGMQFDRGYLSPYFITNAEKM

TVELSSPYILLFDKKIANLKDLLPVLEQIQKTGKPLLIIAEDIEGEALATLVVNKLRGVLNISAVKAPGF

GDRRKAMLEDIAILTGGEVISEELGRTLESATIQDLGQASSVIIDKDNTTVVNGAGEKANIDARVNQIKA

QIAETTSDYDREKLQERLAKLSGGVAVIKVGAATETEMKEKKDRVDDALSATKAAVEEGIVIGGGAALIK

AKAKIKLDLQGDEAIGAAIVERALRAPLRQIAENAGFDAGVVVNSVENAKDENTGFDAAKGEYVNMLESG

IIDPVKVERVALLNAVSVASMLLTTEATISEIKEDKPAMPDMSGMGGMGGMGGMM

>sp|A7H5D0.1|ACPS\_CAMJD RecName: Full=Holo-[acyl-carrier-protein] synthase; Short=Holo-ACP synthase; AltName: Full=4'-phosphopantetheinyl transferase AcpS

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDERNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>sp|A7H590.1|SERB\_CAMJD RecName: Full=Phosphoserine phosphatase; Short=PSP; Short=PSPase; AltName: Full=O-phosphoserine phosphohydrolase

MIKLCVFDFDATLMDGETIDILATAHGKGNQISEITRYAMAGELDFFESLQKRVSFLKGMSYKKVLELGS

TLPLMHGAHELIQYLKSKNIQIVIFSGGFHEGIDPAMQKLGINLGFANYLHHKNDILTGLIGGEIMFSNS

KGLMLQRLKSFLNLKTDEVMCVGDGANDLAMFNESGLKIAFCAKEILRSQADICIDIKDLKEIIKVI

>sp|A7H1H0.1|OBG\_CAMJD RecName: Full=GTPase Obg; AltName: Full=GTP-binding protein Obg

MFIDSVKITLASGDGGKGAVSFRREKHVPLGGPDGGDGGNGGDIIFICDNNTHTLVNFKGKRELRAQNGA

GGMGRNKNGKKGENLELVVPEGTQVIDAQTNEILLDLTKEGQRELFLKGGKGGLGNTHFKHATNQRPDYA

QPGIKGESRLVRLELKLIADVGLVGFPNVGKSTLISVVSNAKPEIANYEFTTLTPKLGLVDVDEYNSFVM

TDIPGIIQGASGGKGLGLAFLKHIERTSFLLFVLDPMREMLLKEQFIVLRKELEKFSDELFGRKFGIMIS

KSDSVNLGEEFAEQIALNINELENYLKEINNPQSFLIKVSSLEKTGLKELKFMLLEEIKALRNNK

>sp|A7H5C5.1|PGK\_CAMJD RecName: Full=Phosphoglycerate kinase

MSDIISIKDIDLAKKKIFIRCDFNVPQDDFLNITDDRRIRSAIPTIRYCLDNGCSVILASHLGRPKEISS

KYSLEPVSKRLARLLDKEIIMAKDIIGEDAKTKAMNLKAGEILLLENLRFEKGETKNDENLAKELASMVQ

VYINDAFGVCHRAHSSVEAITKFFDEKHKGAGFLLQKEIDFASNLIKHPARPFVAVVGGSKVSGKLQALT

NLLPKVDKLIIGGGMAFTFLKALGYDIGNSLLEEELLEEANKILTKGKNLGVKIYLPVDVVAAPACSQDA

PMKFVPVQEIPNGWMGLDIGPASVRLFKEVISDAQTIWWNGPMGVFEIDKFSKGSIKMSHYISEGHATSV

VGGGDTADVVARAGDADEMTFISTGGGASLELIEGKELPGVKALRSKENE

>sp|A7H667.1|LEU1\_CAMJD RecName: Full=2-isopropylmalate synthase; AltName: Full=Alpha-IPM synthase; AltName: Full=Alpha-isopropylmalate synthase

MKNNKIIIFDTTLRDGEQALGSSLGINQKLQIALALENLGVDVIEAGFPVSSQGDFKAVQKIASKVKNST

ICALSRALDKDIDMAYEALKVAKHFRIHTFIATSTLHIQDKLKKDFDEILSMAKRAIIRARSYTDDVEFS

CEDAGRTPIDNLCFMVENAIKAGAKTINIPDTVGYTLPSEFANIIKILFNKVPNIDKAIISVHCHNDLGM

ATGNSLSAILQGARQIECTINGLGERAGNCALEEVVMAIKTRKDYLQGFYTDIKCENISKTSKLVSAITN

ESIPSHKAIVGSNAFSHSSGIHQDGVLKNRQTYEIISPSAIGIHENRMLMTARSGRAMIKTCLENLGYDE

NTYNLDDVYERFLRLADKKGQVYDYDLEALMFLSYESEEENEFVLEKLSVISGNIPTACVCMRIKEELKT

EACTGNGPVEAVFNCIARITNLKPVLKAYSINAKSSGVDAQGQVDVDLEFKGRKFHGKGLSTDVIEASAQ

AFVSAYNAIYRSLKVEERKMA

>sp|A7H5T0.1|NUOB\_CAMJD RecName: Full=NADH-quinone oxidoreductase subunit B; AltName: Full=NADH dehydrogenase I subunit B; AltName: Full=NDH-1 subunit B

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLV

>sp|A7H5G3.2|RIMO\_CAMJD 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

MSKLYLMSLGCNKNLVDSEIMLGRLSAYELCDEPSKADVLIVNTCGFIDSAKKESINAILDLHEQRKKDS

LLVVTGCLMQRYREELMKELPEVDLFTGVGDYERIDEMILKKTNLFSNSTYLQSENSKRIITGSNSHAFI

KIAEGCNQKCSFCAIPSFKGRLKSRQINSIIAELKDLVARGYKDFSFIAQDTSSYLFDKGEKDGLIRLID

EVEKIKGIRAARILYLYPTSASEALIKRIIASEIFVNYFDMPLQHISDNMLKIMKRGTNSTRLKEMLNLM

KSAPNSFLRTGFIVGHPGESEADFEKLCEFVKDFGFDRVSVFAYSKEEDTAAFDMEQVPFKVINKRLKII

EKIVDEVIEKSFEKEVEQKRLVVCTGESSEGEFFIAAKDLRWDREIDGEILINESECGNLEMGQIYECEI

LQNLDKKLLAKALRKVDAN

>sp|A7H2V9.1|DAPE\_CAMJD RecName: Full=Succinyl-diaminopimelate desuccinylase; Short=SDAP desuccinylase; AltName: Full=N-succinyl-LL-2,6-diaminoheptanedioate amidohydrolase

MNAKEFLIELLKFKSVTPNDDGALNFIAMELSDFEAFFIEKEGIKNLLLTKKFKDEGEHLAFGGHVDVVP

AGEGWSSDAFVPMEKESFIYARGAQDMKSGVAAFVDALKNADFKGARLSLILTSDEEGEAIYGTKAVLEW

MQKRDMLPDYAVVAEPTCVKKIGDSIKIGRRGSINGKLLIRGKQGHVAYPEKCINPVHDFAPVLKLLAGF

DLDPGSAEFSPSKIVVTDIRGGIEVCNVTPNDLKLMFNVRNSPDTSLEDVKSYVEKICHGLNYELELKQS

SEAFLTNIDNKIVQKMNESVQKITHEVPELNTKGGTSDARYFAKYGVKVVEFGVCNDRIHAIDERVSIEE

FEKLCLVFKDLIENF

>sp|A7H513.1|LSPA\_CAMJD RecName: Full=Lipoprotein signal peptidase; AltName: Full=Prolipoprotein signal peptidase; AltName: Full=Signal peptidase II; Short=SPase II

MAKTFKFIFYFWGAFVLVFALDQWVKSLTLAGLRWQSKYLDLTYALNTGVAFSMLSFLEHNLKYLHLALI

GVLFIYLFWQKTLLKTHSIAFGMMLGAGVSNLLDRFIYGGVVDMFFWHKWFNFAIFNVADVMINISVALI

LIQEIFKKRKKDDRMD

>sp|A7H1K5.1|RLMH\_CAMJD 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

MQVNIFYIQKSDEFKTWSEKYSKLISKYGTLKEINVFNKKIALAQNLNAIEAKKSYEEAFMPYKKGYCIA

LDERGKDLTSIEFAKLIQDKNELSFFIGGAYGLREEFNQSLDFRLSLSKLTLAHQFVKTLLLEQIYRAFC

INNNHPYHK

>sp|A7H3B5.1|ATPL\_CAMJD 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

MKKFLFLLLACAAVAFAAETNAPVEQEAINVWIKAFSVLAAGLGLGVAALGGAIGMGNTAAATIAGTARN

PGLGPKLMTTMFIALAMIEAQVIYALVIALIALYANPFIVLQ

>sp|A7H2H4.1|ATP6\_CAMJD RecName: Full=ATP synthase subunit a; AltName: Full=ATP synthase F0 sector subunit a; AltName: Full=F-ATPase subunit 6

MKDLFLFSSLLDASHTFSYFFHIGLVALIAVIVAMMATRSMQLVPRGMQNLAEAFLEGVLSMGRDTMGSE

KGVRKYLPLVATLGIIVFFSNIIGILPGFHAPTASLNLTLSLAIIVFVYYHFEGIRAQGFIKYFAHFMGP

IKLLAPLMFPIEIVSHLSRVVSLSFRLFGNIKGDDLFLMVILALVPYIAPLPAYVLLTFMAFLQAFIFMI

LTYVYLAGATVVEKGH

>sp|A7H2B2.1|MNMC\_CAMJD 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

MKKAKLIFKDNTPFSLDFDDFYFNSKDGLNESKFVYTHSFEWKNQENFIITESGFGIGLNFFLTLKRFLE

TTPSKRPKKLFYISVEAFYIEKEQLREIYQKLRFYEEFKELLEHFLKFYPKAKEGIYRFYFEDCFLDLVF

EDITILKELDFKADVWYLDGFSPNKNSQMFDENLIFEVARLSKKNTQICTFSSASFLQKNLKKYGFRVEK

TKGFRKREMIKAYLENELEFKDKEAYFSRTFSSLKNKKVAIIGAGISSAVLAYELSLRGFKIDVFEKHLE

LGKGASGNESGILSSLILKSKVKLGEFSELSFIEASRFYRQILDLNFKGVVEFAHNDLMQERFDTQRENV

LFKISKNQAFLEEGGVIFPKNLVKNLFEKSKACIYFNHEFQAYKFENECFTLKFKNDIVKSDYAVLIYAM

GADTKDFVFYDEMKLSKVRGQVTHLKPFLDTQFPLSSKAYICPIKDDLQVIGASYDRLDASLESKEEDDK

QNIENIAEFIDKNTKLEIIGSKVGFRSYSSDRFMIVGNAYDEAFYKEEYKALLWTKDKEQKPAKMSCNLY

FNFAHGSRGFSTSVLAARYLCALINNEPLCLEKKYIHAIHPARFLVRKLKKGL

>sp|A7H3U4.1|DNLJ\_CAMJD RecName: Full=DNA ligase; AltName: Full=Polydeoxyribonucleotide synthase [NAD(+)]

MKKEEYLEKVALANLWMRAYYEKDEPLASDEEYDALIRELRVFEEQNKDEVSKDSPTQKIAPTIQSEFKK

IAHLKRMWSMEDVFDESELRAWAKRAKCEKNFFIEPKFDGASLNLLYENGKLVSGATRGDGEVGEDITLN

VFEIENIPKNIAYKKRIEIRGEVVILKDDFEKINEKRALLNQSLFANPRNAASGSLRQLDTSITKERNLK

FYPWGVGENTLNFTKHSEVMQFVRDLGFLKDDFIKLCANLDEVLKAYDELLTLREKKPMMMDGMVVRVDD

LALCEELGYTVKFPKFMAAFKFPALEKTTRLIGINLQVGRSGVITPVAVLEPVNLDGVVVKSATLHNFDE

IARLDVKINDFVSVIRSGDVIPKITKVFKERREGLEMEISHPKLCPTCQSELLDEGTLIKCQNIDCEDRL

VNSIIHFVSKKCLNIDGLGENIVELLYKHKKITTLESIFHLKFSDFEGLEGFKEKKINNLLNAIEQAREC

ELFRFITALGIEHIGEVAAKKLSLSFGKEWHKQSFEAYVNLEGFGEQMALSLCEFTRVNHTRIDEFYKLL

NLKIEKLEVKSDSVIFGKTFVITGTLSRPRDEFKALIENLGGKVSGSVSKKTDYVLFGEEAGSKLSKAKE

LEVKCIDESAFNELVKE

>sp|A7H1I1.1|ATPB\_CAMJD RecName: Full=ATP synthase subunit beta; AltName: Full=ATP synthase F1 sector subunit beta; AltName: Full=F-ATPase subunit beta

MQGFISQVLGPVVDVDFNDYLPQINEAIVVNFESEGKKHKLVLEVAAHLGDNRVRTIAMDMTDGLVRGLK

AEALGAPISVPVGEKVLGRIFNVTGDLIDEGEEIPFDKKWAIHRDPPAFEDQSTKSEIFETGIKVVDLLA

PYAKGGKVGLFGGAGVGKTVIIMELIHNVAFKHSGYSVFAGVGERTREGNDLYNEMKESNVLDKVALCYG

QMNEPPGARNRIALTGLTMAEYFRDEMGLDVLMFIDNIFRFSQSGSEMSALLGRIPSAVGYQPTLASEMG

KFQERITSTKKGSITSVQAVYVPADDLTDPAPATVFAHLDATTVLNRAIAEKGIYPAVDPLDSTSRMLDP

NIIGEEHYKVARGVQSVLQKYKDLQDIIAILGMDELSEEDKLVVERARKIEKFLSQPFFVAEVFTGSPGK

YINLEDTIAGFKGILEGKYDHLPENAFYMVGNIDEAIAKAETLREISRGDTCLDNCKVEQKKAN

>sp|A7H2C0.1|DNAJ\_CAMJD RecName: Full=Chaperone protein DnaJ

MEISYYEILEITQNADKETIKKAYRKMALKYHPDRNQGDKEAEDKFKLVNEAYEVLSNDEKRAIYDRYGK

DALKGGGFGSNSSGFGGFEDLGDIFSSFFGESFGSSSRRRKSSNDEKIPSDFIFNLKLSFKEAVFGCKKN

IDFTYKCSCKTCNGTGAKDGKLQTCPKCQGRGQVGVSQGFITFAQTCPDCQGSGEKASEKCNDCKGLGYN

ESKDSVELNIPEGVDTGMKLRVNAKGNILKNNTRGDMYVKIIAAEDDTFIRDDDDIYIEFPVFFTQAILG

QSIKVPTIRGEVTLNLPKGAKDGQRFVLEKEGVKDVHSSRIGNQIVQISIKFPTSLNDEQKELLEKLSES

FGIKDGMHQEQKGLFEKIANWFKS

>sp|A7H5Y2.1|RNC\_CAMJD RecName: Full=Ribonuclease 3; AltName: Full=Ribonuclease III; Short=RNase III

MKNIEKLEQSLTYEFKDKNLLIHALTHKSFKKSYNNERLEFLGDAVLDLVVGEYLFHKFTKDAEGDLSKL

RAALVNEKSFAKIANSLNLGDFIFMSVAEENNGGKEKPSILSDALEAIIGAIHLEAGFEFAKTIALRLME

KNFPQIDAKILIKDYKTKLQEITQGKIGQTPQYETVRAFGPDHLKQFEIALMLDGKELARAIAGSKKEAQ

QMAAKIALEKLGSLQ

>sp|A7H585.1|GREA\_CAMJD RecName: Full=Transcription elongation factor GreA; AltName: Full=Transcript cleavage factor GreA

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIVELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIMDLDTEKESKYTLVGICEGDLDKGYISIASPIARAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>sp|A7H2D5.1|UVRC\_CAMJD RecName: Full=UvrABC system protein C; Short=Protein UvrC; AltName: Full=Excinuclease ABC subunit C

MTKEKLENELKTLPNSAGVYEYFNQEGKLLYVGKAKNLKNRVKSYFAFTPNLHANPGNSLRIQKMIQETV

HLEFITTNSEADALILENSFIKQLHPKYNILLRDDKTYPYIYVDFKEEFPRFEITRKLVKKSKIKYFGPF

FKGARELLDALYLYYPLKQKASCKSPCIFYQISRCLAPCDKRISKEKYREILDEAMHALLNPSVLLKNLE

KQMLVLAQNENYEEAAKIRDQIATIKDLEVKVEIDIAKLEDFEVFALAFKNSMLSTLRFVVQNGKIISVN

SKITPIKNDIQWDKNEIYKQLILENFSMDIPLLASVIYVYEEFEDRMLLEKILSQRFDKKISIKIPKIGE

KRKICDLAFQNALLNIEKEQKNHDFTIQKELKSYFELENLPNDIEIFDNSHLQGVANVGAMVTYSVNSWD

KSKYRKFHLKHKNDYDQMREVLTRRALDFDKIPPPDLWLIDGGKVLLDLAKEIILSTGANVDILAISKEK

IDAKAHRAKGGAKDKIHSLKGEFSLSVNDKKLQFLQKLRDEAHRFAISFHQNTKKKQDLKSSKLANLGLS

LGVIQKLLAYYGNFESIYKADFKDLAMLVGKKAAQKIKEN

>sp|A7H575.1|PANC\_CAMJD RecName: Full=Pantothenate synthetase; Short=PS; AltName: Full=Pantoate--beta-alanine ligase; AltName: Full=Pantoate-activating enzyme

MEVITSIKEAKQIVKNWKSHHLSIGYVPTMGFLHDGHLSLVKNAKTQDKVIVSIFVNPMQFGPNEDFSSY

PRDLERDIKMCQDNGVDMVFIPDMTQMYLKNFSTYVDMNIITDKLCGAKRPGHFRGVCTVLAKFFNILNP

DIVYMGQKDAQQCVVVRHMVDDLNFDLKIQICPIIREEDGLAKSSRNVYLSEEERKASLAISQSIFLAEK

LVREGKKNTSKIIQAMQDILEKEKLIKIDYIELVDFNTMDNIENIADNVLGAVAVFVGETRLIDNFLVQG

LK

>sp|A7H345.1|OTC\_CAMJD RecName: Full=Ornithine carbamoyltransferase; Short=OTCase

MKHFLTLRDFSKEEILSLVNHASELKKEPKKLLQDKTLAMIFEKNSTRTRMAFELAITELGGKALFLSSN

DLQLSRGEPVKDTARVIGAMVDFIMMRVNKHENLLEFARYSKAPVINALSELYHPTQVLGDLLTIKEWNK

IQNGIAKVAFIGDSNNMCNSWLIAAAILGFEFSIAIPKNYEINPEIWDFAMKQALISGAKISLSHDKFKA

LKDKDVVITDTWVSMGEENEKERKIKEFEEFMIDEKAMSVANEDAILLHCLPAYRGYEVSEEIFEKHADV

IFEEARNRLYVVKALLCFLDNQRGRK

>sp|A7H2V3.1|MURC\_CAMJD RecName: Full=UDP-N-acetylmuramate--L-alanine ligase; AltName: Full=UDP-N-acetylmuramoyl-L-alanine synthetase

MQNIHFIGIGGIGISALARFLKEKGFKISGSDLKESKITKELEKEGVKVSIPHHKDNILNKDLVIYSAAI

KEENPEFKYAKELGIKCLSRKEALPLILEDKRVFAVAGAHGKSTTSSILASLLDDASVIIGAILKEFGSN

MIYKESQNLIFEADESDSSFLNSNPYLAIVTNAEAEHLDHYGNEVSKLHHAYAEFLDTAKIRVINAEDEF

LKNYKNESIKLYPSKDIKNCTMCIENFKPFTSFELKDLGEFKIFGMGYHLALDASLAILAALNFLDIETI

GARLKNYQGIKKRFDILHADENLVLIDDYGHHPTEIKATLSAAQEYAKLGGYKKITAIFEPHRYTRLAVN

LKEFAKAFEGVDELVILPVYAAGEEPIEIDLKAVFPKALFVENIQREGKFLVASKGQVFEEGLIIGFGAG

DISNKLRQKNE

>sp|A7H3F2.2|AROA\_CAMJD RecName: Full=3-phosphoshikimate 1-carboxyvinyltransferase; AltName: Full=5-enolpyruvylshikimate-3-phosphate synthase; Short=EPSP synthase; Short=EPSPS

MKIYKLQTPVNTILENIAADKSISHRFAIFSLLTQGENKARNYLLAQDTLNTLEIIKNLGAKIEQKDSCV

KIIPPKEILSPNCILDCGNSGTAMRLMIGFLAGISGFFVLSGDKFLNNRPMRRISKPLTQIGARIYGRNE

ANLAPLCIEGQNLKAFNYKSEISSAQVKTAMILSAFRADNICTFSEISLSRNHSENMLKAMKAPMRVSND

GLNLEISPLKKPLKAQNIIIPNDPSSAFYFALAAIILPKSQIILKNILLNPTRIEAYKILQKMGAKLEMT

ITQNDFETIGEIRVESSKLNGIEVKDNIAWLIDEAPALAIAFALAKGKSNLVNAKELRVKESDRIAVMVE

NLKLCGVEAKEFDDGFEIEGGCELKSSKIKSYGDHRIAMSFAILGLLCGIEIDDSDCIKTSFPNFIEILS

NLGARIDY

>sp|A7H5U5.1|RPOA\_CAMJD RecName: Full=DNA-directed RNA polymerase subunit alpha; Short=RNAP subunit alpha; AltName: Full=RNA polymerase subunit alpha; AltName: Full=Transcriptase subunit alpha

MRNITISAYTPTEFTIENISDTVAKISAWPFEIGYGITLAHPLRRLLYTSTVGYAPTAIHIDGVAHEFDS

MRGMLEDVALFIINLKKLRFKIKSDSNKEIVEFSFKGSKEIYGKDLNNDQVEVVNKDAYLATINEDAELE

FTLIVEKGIGYIPSEEIKEFLNDPKFIALDAFFTPVREATYDIEKVLFEDNPDYEKVVLTVTTDGQITPN

EAFQNALEAMYKQLSVFDKITNVRSVIKNQATSNELENTKLLQNITDLNLSARSYNCLEKAGVVYIGELA

LMSVSELAGLKNLGKKSLDEIKNIMENIGFPVGTSKLSDNKEILKNKIAELKAQNEG

>sp|A7H5U4.1|RS4\_CAMJD RecName: Full=30S ribosomal protein S4

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>sp|A7H409.1|SECA\_CAMJD RecName: Full=Protein translocase subunit SecA

MFLNTLKAVFGTKNDREVKKYFKRVVQINALEGKYQNLSDDELKAEFEKFKEQILSGEKNENDILNDVFA

IVRETGKRTLNMRHFDVQLIGGMVLHDGKIAEMKTGEGKTLVATLPVVLNAMSGKGVHVVTVNDYLAKRD

AEQMSAIYNFLGFSVGVVLSSQNSDIEHKQAYDCDITYGTNNEFGFDYLRDNMKFSKAEKVQREHNFVIV

DEVDSILIDEARTPLIISGPTNRTLDGYIKANEVAKQMQKGEAVLPPEKPEGDFVVDEKNRSVLITEAGI

AKAEKLFGVENLYSLENAILAHQLDQALKAHNLFEKDVHYVLRNKEVIIVDEFTGRLSEGRRFSEGLHQA

LEAKENVKIQEESQTLADITFQNYFRMYNKLAGMTGTAQTEATEFSQIYSLDVISIPTNIPIKRQDKDDL

IYKTQNEKFKAVIEEIKKANAKGQPVLVGTASIERSEVFHNMLAKEKIPHHVLNAKNHEQEALIIQDAGK

KGAVTIATNMAGRGVDIKIDDEIRALGGLYIIGTERHESRRIDNQLRGRAGRQGDPGISRFYLSLEDNLL

RIFGGDRIKSIMDRLGIEEGESIESRIVTRAVENAQKKVESLHFESRKHLLEYDDVANEQRKTIYRYRNE

LLDENYDIRAKISQNIAEYSANVMNDYMLDESGSNVNFENLKAKILYECSTQISEKDFENLSVIEMQDKL

SQILENSYNEKMSRLEIKELRNIERILYLQVLDNVWREHLYQMDILKTGIGLRGYNQKDPLVEYKKESYN

LFLELVNRIKFDSIKLLFSVQFNQQEAQNLENKANEENEKLLQSSVEMGASEDNLGEAEFKKVPRNAPCP

CGSGKKFKECHGKSGPKQGILA

>sp|A7H4H6.1|YQGF\_CAMJD RecName: Full=Putative pre-16S rRNA nuclease

MRALALDIGLKRIGVALCVDKKIALPLDAVLRKNRNQAANEIKNLLKIHEISLLIVGIPKGGSSEEEMTR

RIKHFVSLLEFDKEICFVDESGTSKKALEYGIANTRKKDGKLDSLAAFIMIKDYFCSLE

>sp|A7H4H5.1|MSRA\_CAMJD 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

MKNIVLGGGCFWCVEAVFERLKGVIDTEVGYSGGNPNPSYESVCNGDGNIEVVKINYDEKQIPLLEILTL

FFKIHDPTSIDKQGADIGIQYRSIIFYENEEDKILAQNFIEKQQKIFSKKIVTQISRLQTYYKAENYHQH

YFMNHPDQGYCQAVIAPKLQKIQSD

>sp|A7H5U9.1|HIS7\_CAMJD RecName: Full=Histidine biosynthesis bifunctional protein HisB; Includes: RecName: Full=Histidinol-phosphatase; Includes: RecName: Full=Imidazoleglycerol-phosphate dehydratase; Short=IGPD

MSQKILFIDRDGTLIEEPKSDFQIDTLEKLRFEKDAIPTLLKLKKFGFKFVMVSNQDGLGTPSFPKENFE

IAHEKMLDILKSCGIEFQDIFICPHFENENCACRKPKTAMLEEYIKHELYDKEQSFVIGDRESDMILASN

LGVRGLKYGALSWKEIENEILSSFRSASYQRTTKETDIKVKVCLNGGKVSIKTGIDFFDHMLEQIAVHGD

IGLEISCKGDLEIDEHHSVEDVALALGACIKKALGDKIGIARYGFTLPMDECLASCAMDFCNRPHLVYKA

KFKKSHLGALSTEMIEHFFYSLSYAMGVSLHLKVKGKNDHHKAEGLFKAFAKALKMAVKIESENLASSKG

VI

>sp|A7H643.1|RS14Z\_CAMJD RecName: Full=30S ribosomal protein S14 type Z

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>sp|A7H514.1|GLMM\_CAMJD RecName: Full=Phosphoglucosamine mutase

MKLFGTDGVRGKAGEFLDSFLAMRLAMAAGIYFKDKSVTNNILVGKDTRRSGYMIENAIVSGLTSIGYNV

IQIGPMPTPAIAFLTEDMRCDAGIMISASHNPYYDNGIKFFDTHGNKLSEDIEKKIEEIYFDDKLIQASK

VDMEKIGQAKRIDDVIGRYIVSIKNSFPKDLTLKSLRVVLDVAHGAAYKVAPTVFKELGAEVIVMSDKPN

GLNINENCGALHPVNLATEVKRLRADVGFAFDGDADRLVVVDEKGEVANGDSLLGVLALYLKEQGKLQSS

VVATIVSNGALKEFLNKHGIELDTCNVGDKYVLEKLKANGGNFGGEQSGHIIFSDYAKTGDGLIVALQFS

ALMLSKKKSASSILGQVKLYPQLLTNLKIAEKKDLDKIKGLKELKKDLENKNINTLFRYSGTENLIRLLL

EAKDIKLLEKEMKNVVEFFKKALNG

>sp|A7H665.1|LEUC\_CAMJD RecName: Full=3-isopropylmalate dehydratase large subunit; AltName: Full=Alpha-IPM isomerase; Short=IPMI; AltName: Full=Isopropylmalate isomerase

MAKTLYEKVFDAHVVYENENELPILYIDRHLIHEVTSPQAFSGLKMAKRRMARADLTLATIDHDVSTKSV

DLNACSDMAKEQITTLMQNTKEFGVRLLGLGDKNQGIVHIVSPELGFTLPGVTLVCGDSHTATHGAFGAL

AFGIGTSEVEHVMATQTLKQAKLKTMKIECKGQFQKGVYAKDLILYLIAQYGTAKGTGYAIEFCGELIRN

LSMEARMTLCNMAIEFGAKVGMIAPDEITFEYIKGKEFAPKGEEFQKYCEYWKSLRSDEGAKYDESITLD

VSKIKPQISYGTNPSQVIGIDEKIPKISDFKNQSEQKSLLDALSYVNLEQDQVIEGVKIDIVFIGSCTNG

RLEDLKIAADILKGRKIHKNVKALIVPGSMQVRKEAENLGLDKIFIEAGCEWRYAGCSMCLGMNDDKANS

GQRVASTSNRNFVGRQGKGSITHLMSPASAAACAIEGVICDNRKYLGV

>sp|A7H3N3.1|FOLD\_CAMJD RecName: Full=Bifunctional protein FolD; Includes: RecName: Full=Methylenetetrahydrofolate dehydrogenase; Includes: RecName: Full=Methenyltetrahydrofolate cyclohydrolase

MTLLDGKALSAKIKEELKEKNQFLKSKGIESCLAVILVGNNPASQTYVKSKAKACEECGIKSLVYHLNEN

TTQNELLALINTLNHDDSVHGILVQLPLPDHICKDLILESIISSKDVDGFHPINVGYLNLGLESGFLPCT

PLGVMKLLKAYEIDLKGKDAVIIGASNIVGRPMATMLLNAGATVSVCHIKTKDLSLYTRQADLIIVAAGC

VNLLRSDMVKEGVIVVDVGINRLESGKIVGDVDFEEVSKKSSYITPVPCGVGPMTIAMLLENTVKSAKNR

LN

>sp|A7H422.1|TRMA\_CAMJD 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

IEYLDFADEKICAFMPKLLEYLRQDDKLKEKLFGVEFLTTKQELSLTLLYHKNIEDIKSNLENLSNNLHI

NLIARSKGKKLIFKTENLRQTLNIQGREIFYEFNNDCFIQPNTTINEKMITWVCEILSIQKRMDLLELYC

GYGNFTLALAQFFFKVLATEISKSSINFALKNCKLNNTTNIHFARLSSEELSLAIKKEREFFRLKDIRLD

DFNFSHVLVDPPRAGLDKSVIDLIKKYENIIYISCNPITLKENLKELSLTHRVENFALFDQFVNTPHLEC

GVFLSKV

>sp|A7H1L7.1|RIMP\_CAMJD RecName: Full=Ribosome maturation factor RimP

MNLEALCKEAELSFYDDELVSENGKKIYRIYVQKEGGVNLDDCARLSEILSPIFDVEPPVNGEYFLEVSS

PGLERKLSKIEHFAKSIGELVKITTNEKEKIEAKIIAVDDENITLENLENKEKTTINFNDIKKARTFMEW

>sp|A7H5V8.1|ISPDF\_CAMJD 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

MSEISLIMLAAGNSTRFNTKVKKQFLRLGNDPLWLYATKNLSSFYPFKKIVVTSSNIAYMKKFTKNYEFI

EGGDTRAESLKKALELIDSEFVMVSDVARVLVSKNLFDRLIENLDKADCITPALKVADTTLFDNEALQRE

KIKLIQTPQISKTKLLKKALDQNLEFTDDSTAIAAMGGKIWFVEGEENARKLTFKEDLKKLDLPKPSFEI

FTGNGFDVHEFGENRPLLLAGVQIHPTMGLKAHSDGDVLAHSLTDAILGAAVLGDIGELYPDTDMKFKNA

NSMELLKQAYDKVREVGFELINIDICVMAQSPKLKDFKQAMQSNIAHTLDLDEFRINVKATTTEKLGFIG

RKEGMAVLSSVNLKYFDWTRL

>sp|A7H4T8.1|ACP\_CAMJD RecName: Full=Acyl carrier protein; Short=ACP

MATFDDVKAVVAEQLSIDADAVKMESKIIEDLGADSLDVVELIMALEEKFEVEIPDSDAEKLIKIEDVVN

YIDNLKK

>sp|A7H649.1|RL16\_CAMJD RecName: Full=50S ribosomal protein L16

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>sp|A7H2Q9.1|PYRB\_CAMJD RecName: Full=Aspartate carbamoyltransferase; AltName: Full=Aspartate transcarbamylase; Short=ATCase

MRHLITTKDFNKIEIMELFKEASDFLDEKPRTFLEGKSITTIFFENSTRTLSSFESAARRLGARVLRLDV

SRSSSSKGETLYDTAANLDAMSPNAIVVRHANSGVPLILAKHMHCPVVNGGDGKHAHPTQALLDLFTIYN

HFQSDVEGKKICIVGDIKNSRVAASNIELLSRFNLDITLVAPPHFMPNTHLKKYYKLDENIIANSDIIMS

LRTQTERHNKTVYASLKDYANDFCIQKSLVKDKKLILLHPGPVNRNIDISDEMMSDERTLVLKQVKNGVA

IRMAVLKKLILENEG

>sp|A7H373.1|PURL\_CAMJD 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

MDKETIKAHKISDEEYTQILEILGREPNLLELGVISAMWSEHCSYKSSKKYLNGFPTKAPWVIQGPGENA

GVIDIGQGMSAVFKVESHNHPSFIEPFAGAATGVGGILRDVFTMGARVVAGLNSLKFGDIHNEKCGKHQK

YLVKGVVNGISHYGNCMGVPTIGGECAFDECFNGNILVNAFALGICKSEDIFYAKAEGVGNPVIYVGSKT

GRDGLGGAVMASDSFNEESKSLRPTVQIGDPFSEKLLMEACLELFKTDYIVGIQDMGAAGLTSSSFEMAG

RSGSGMKLYLDKTPMRESGMTPYELMLSESQERMLICAKKGYEDKVIEIFKKWDLDAVVIGEVTNTEKME

LFWHDELVGLIPIEPLSEKAPILNRPISEPKYLSEIKDYKFELKSSIQELFIQMLQNENINNKAFIYDQF

DSSVQTNTIKADGKLGASVIRIKENGVSVAMAIECNSRLNYVNPKIGAALAVASAGRKVACTGAKPLAIS

DCLNYGNPQNPEVMWQFAQGCEGIKEACKELNTPVVSGNVSLYNETEGVSIYPSPTIVSVGVLEDANKTL

KASFEKENLSVYLLGESLGEFGGSMVMKIQDKKVSGSLKELDYKAELALWDLLYKANQNSLLECANSVGI

GGIAMTLAKMFAISSVGANLTSGFDDEKMIFDESASRAIVGLSKENEETFLTLTKEFGVKAYKLGVSTSQ

KHFKLDSIELNKAELDKLYFESFQEQIQ

>sp|A7H674.1|RUVC\_CAMJD RecName: Full=Crossover junction endodeoxyribonuclease RuvC; AltName: Full=Holliday junction nuclease RuvC; AltName: Full=Holliday junction resolvase RuvC

MNLKILGIDPGSKNCGYAIIERSKGKNILIEAGLIKIKPSTLQYQITELCEGLDLIFKNHSFDEVAIEDI

FFAYNPKTVLKLAQFRGALSLKILQIHGDFAEYTPLQVKKAVTGKAKATKEQVAFMVKRLLGLSKDIKPL

DITDAIAIALTHAANLRTRV

>sp|A7H537.1|NDK\_CAMJD RecName: Full=Nucleoside diphosphate kinase; Short=NDK; Short=NDP kinase; AltName: Full=Nucleoside-2-P kinase

MEKTLSIIKPDAVKKGVIGKILDRFESNGLRIAAMKKVQLSKEQAENFYAVHKERPFFKDLVEFMISGPV

VVSVLEGEGAVLKNRDLMGATNPKEAKAGTIRADFAESIDANAVHGSDSLENAKIEIEFFFKPNEIY

>sp|A7H3P9.1|RS15\_CAMJD RecName: Full=30S ribosomal protein S15

MALDSAKKAEIVAKFAKKPGDTGSTEVQVALLTARIIELTEHLKIYKKDFSSRLGLLKLVGQRKRLLSYL

KRKDYNSYSKLITELNLRDK

>sp|A7H544.1|EX7L\_CAMJD RecName: Full=Exodeoxyribonuclease 7 large subunit; AltName: Full=Exodeoxyribonuclease VII large subunit; Short=Exonuclease VII large subunit

MTVSELNLKVKALLESYFENIILSGEISKITLHGSGHWYFDLKDEKSSISCAMFKGANLKVGFKPAVGDF

LELCGSVSLYAESGRYQFIATSMKKAGFGDLEAQFLALKERLQKEGLFDPRFKKSLPKFPKKVGIITSKT

SAALQDMLKLIHQKEYFLAKIYIFDALTQGNNAPFSLIQALRKADDMDLDVLIIARGGGSREDLFCFNDE

NLAREIFKAKTPIISAIGHEIDYVISDFVSDFRAPTPSAAIDTLFYSKLDIEQSLDLMEEKLIQLWNHKM

QNYENLLLNLSKFFKFNSLPKIIDEKIKQSHNIEKQLNHLLANQMRYNELKLDKLQNAYLQHENFFNKSK

KFICIRKNGKIANLEDLKSDDIVILSSQISQKEAKIL

>sp|A7H1L1.1|LPXC\_CAMJD 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

MKQLTLVKTVKGVGIGLHKGEPIEITLEPLEANSGIVFFRSDLNASYKASPENVINTQMATVLGDDRGFI

STIEHLMSAINAYGIDNVRIVLNANEAPVMDGSSISFCMMLDEAGVKELDAPKKIMVIKKPIEVRDGNKF

VRLTPTKEPRINYTIKFDNAVIGEQSYNFEFSKKNYIENIARARTFGFLKDVQALRSMNLALGGSLENTI

VVDENRILNPEGLRFKDEFVRHKILDAIGDLTLLGYRVFGDYTSYAGSHHLNHLLTKEVLKDKDAYEIVS

LEKTTQKAYEKVFA

>sp|A7H5U2.1|RS13\_CAMJD RecName: Full=30S ribosomal protein S13

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYDKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>sp|A7H5U3.1|RS11\_CAMJD RecName: Full=30S ribosomal protein S11

MAKRKIVKKKVVKKNIAKGIVYISATFNNTMVTVTDEMGNAIAWSSAGSLGFKGSKKSTPYAAQQAVEDA

LNKAKEHGIKEVGIKVQGPGSGRETAVKSVGAMEGIKVTFLKDITPLAHNGCRPPKRRRV

>sp|A7H1X6.1|RUVB\_CAMJD RecName: Full=Holliday junction ATP-dependent DNA helicase RuvB

MDRIVEIEKYSLDETYETSLRPSNFDGYIGQESIKKNLNIFITAAKKRNECLDHILFSGPAGLGKTTLAN

IISYEMDANIKTTAAPMIEKSGDLAAILTNLSEGDILFIDEIHRLSPAIEEVLYPAMEDYRLDIIIGSGP

AAQTIKIDLPKFTLIGATTRAGMLSNPLRDRFGMQFRLEFYKDSELALILQKAALKLNKTCEEKAALEIA

KRSRSTPRIALRLLKRVRDFADVNDEEIITEKRANEALNSLGVNELGFDAMDLRYLELLTAAKQKPIGLA

SIAAALSEDENTIEDVIEPYLLANGYIERTAKGRIASTKSYSALKLNYEKTLFEE

>sp|A7H4B2.1|TRMD\_CAMJD RecName: Full=tRNA (guanine-N(1)-)-methyltransferase; AltName: Full=M1G-methyltransferase; AltName: Full=tRNA [GM37] methyltransferase

MKFSFVSLFPNLMEFYFKDSILARAKEKKLFKLNFYNPRDFSKNSYHKVDDYKIGGGAGLLIQAEPMYEV

LRSIQEKKENPYFIFLNPSGKTFNQKDAKRLSKKEHIVFVCGRYEGIDERVLEIFANEVFSIGDFILTGG

ELPALVMCDAILRNVNGVLGNMESLEEESFENNLFEAPAFSKPFIFEKKNKKFYTPSEFLKGNHARIASL

KTTLASCKTKFFRPDLFLEHERKK

>sp|A7H657.1|RS10\_CAMJD RecName: Full=30S ribosomal protein S10

MERIRLKLKAYDHRVLDRTVAAIVEAVKRTGADIRGPIPMPTKIKRYTVLKSPHINKDSREQFEIRIHAR

MLDIIAATPDTVDSLTKLDLAPEVSVEVRAMGK

>sp|A7H1T3.1|RRF\_CAMJD RecName: Full=Ribosome-recycling factor; Short=RRF; AltName: Full=Ribosome-releasing factor

MLNEIFNKQKTQSEKSLEALKKDFTTLRTGKINTHILDHITVDYYGNQTPLNQVATVLASDASTISITPW

EKPLLKTIESAIAAANIGVNPNNDGESVKLFFPPMTREQREENVKQAKAMGEKAKVSIRNIRKDANDAVK

KLEKDKAISEDEAKKAYDEVQKLTDVYTTKIDESVKSKESELLKV

>sp|A7H450.1|RUVA\_CAMJD RecName: Full=Holliday junction ATP-dependent DNA helicase RuvA

MVVGIEGIITKKEPTFIIVKCASGLSYGIFISLFCSAKIQTQEKHEFFITQIIKEDSNKFYGFLDKDEQK

MFEMLLKVNGVGANTAMAVCSSLDINSFYKALSLGDESVLKKVPGIGPKSAKRIIVELSDTRTKLENVSD

DKSEALAALLTLGFKQEKIISVLASAQATGTSELIKEALKKLR

>sp|A7H4Q9.1|RL11\_CAMJD RecName: Full=50S ribosomal protein L11

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>sp|A7H5C4.1|TPIS\_CAMJD RecName: Full=Triosephosphate isomerase; Short=TIM; Short=TPI; AltName: Full=Triose-phosphate isomerase

MIFAANLKCNHTRASFKIYAEILNKTMGAKCDDIIVFPPSVAFLENENNFMQGAQNFYPCVNGAFTGELG

KEHLDEFGIKCVLIGHSERRALGDEELIKVKFNFAKEHGYKIIFCIGENLDTKNSGKTLEFLKKQLEIID

LNYEKLIIAYEPIYSIGTGVSAQTADIAKVLEFLASLTKVPLLYGGSVNENNIKEILSVNHCGGVLIGSA

ALKVENFIKLIKG

>sp|A7H4M4.1|PUR7\_CAMJD RecName: Full=Phosphoribosylaminoimidazole-succinocarboxamide synthase; AltName: Full=SAICAR synthetase

MTKKEMFYEGKGKKLFKTDDENLLISEFKDDLTAFNAEKRGNESGKGVLNCKISTEIFHLLEKNGIKTHL

VETISDTEQVVKKCKIVPIEVIIRNVATGSLIKRLGIKDGTVLPFALVEFCLKDDALGDPFINDEHCLIL

NLVQNEAQISEIKNMARKINSILTPFFDNKNLRLIDFKIELGLTKDNDLVLADEISPDSCRFWDKFSNEK

LDKDRFRQDLGNVKMAYEEVLKRILN

>sp|A7H2A7.1|RPOZ\_CAMJD 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|A7H642.1|RS8\_CAMJD RecName: Full=30S ribosomal protein S8

MINDIISDSLTRIRNAGMRKLETTKLLHSKAVEALVGIFQAKGYIESFNVIEEDKKKFINVVLKYDEKGK

SVINNLKRISKPGRRVYKGKDEIKRFKNGYGTIVVSTSHGVLANDEAYKAGVGGEILCTIW

>sp|A7H648.1|RL29\_CAMJD RecName: Full=50S ribosomal protein L29

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>sp|A7H331.1|TGT\_CAMJD RecName: Full=Queuine tRNA-ribosyltransferase; AltName: Full=Guanine insertion enzyme; AltName: Full=tRNA-guanine transglycosylase

MEFKLKHKDGMARVCEITTAHSTFLTPVFMPVGTVGAVKSLDANDMKNELDAKIILANTYHMYLRPTSKV

VKDFGGLHGFTKFDRSFLTDSGGFQAFSLSKNSKHFNEGIEFKSHIDGSRHLFTPKSVLDTQYDFHSDIM

MILDDLVALPATKERVKISVDRTILWAKEAITYHKSMQNKGIGIGQNIFGIIQGGTDYEERKRCALSLNE

MPFDGLAIGGLSVGEENALMYETVQNLNPYLDENRPRYLMGVGTPEDLVENVERGVDMFDCVMPTRNARN

GTFFTSFGKFNIKKAEFINDHEAIGPACSCYTCRNFSRGYLNHLFKAKELTFFRLASLHNLHYYLELARE

MREAILNNSFTQFKKNFYHLRGK

>sp|A7H523.1|TRPB\_CAMJD RecName: Full=Tryptophan synthase beta chain

MKKAYYGDFGGQFLPESAMFALNELENAFLKFSKDKFFKKELSELLKTYVGRPTPLYFARNLSKKYQHEI

YLKREDLNHTGAHKINNAIAQALLAKKMGKKKIIAETGAGQHGLATATAAALLGLECEIYMGATDVQRQA

LNVYKMELLGAKIHAVQSGLKTLKEATTAAIQAWVGDIKNIFYVVGSAVGPYPYPKMVTHFQSIIGKECK

MQLQKLNKKVDYIIAAVGGGSNAAGIFYDFIKDENVKLIGIEAGGLGVDTLYHAATLNKGETGIIHGMKT

KVLQDDLGNILPVHSVSAGLDYPGIGPLHAFLFESKRAQYHAISDEECMQALKLLCKEEGIIAAIESSHA

LAFLEKLCPTLKKKSVIVINLSGRGDKDMQMIREYKKGVIYG

>sp|A7H4P6.1|RS7\_CAMJD RecName: Full=30S ribosomal protein S7

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>sp|A7H2T4.1|RS6\_CAMJD RecName: Full=30S ribosomal protein S6

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>sp|A7H4T2.1|RL28\_CAMJD RecName: Full=50S ribosomal protein L28

MARICQITGKGPMVGNNVSHANNKTKRRFLPNLRTVRVTLEDGTTKKMRIAASTLRTLKKQNSK

>sp|A7H4Z4.1|RISB\_CAMJD RecName: Full=6,7-dimethyl-8-ribityllumazine synthase; Short=DMRL synthase; Short=LS; Short=Lumazine synthase

MNIIEGKLNLDSNTKIAIINARFNHIITDRLVEGAKDAFLRHGGKKENLSLILVPGAFELPYALKKAIES

EKFDAICCVGAVIRGSTPHFDYVSAETTKGIANVSLNHNIPVSFGVLTTDTIEQAIERAGSKAGNKGFEA

MTTVIEMLNLTKEL

>sp|A7H291.1|DCD\_CAMJD RecName: Full=dCTP deaminase; AltName: Full=Deoxycytidine triphosphate deaminase

MGLKADNWIRKMALEHKMIEPFCEANIGKGVVSYGLSSYGYDICVGREFKIFTNVNSTVVDPKNFVEENV

VDFEGDVCIVPANSFALARTIEYFKMPDDVLAICLGKSTYARCGIIVNVTPFEPGFEGHITIEISNTTPL

PAKIYANEGIAQVLFLQGDEKCDTTYKDKKGKYQAQTGITLPRILK

>sp|A7H4U5.1|MURD\_CAMJD 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

MKISLFGYGKTTCSIAENLVDKFGPFDIYDDHFTETKKDTLGNLLLNPNDFDDNLSNIEIPSPGFPPNHK

LIQEAKNLQSEYDFFYDVMPKSVWISGTNGKTTTTQMAMHLLSHIGAVMGGNVGTPLAELDPYAKLWILE

TSSFTLHYTHKAKPEIYALLPISPDHLSWHGSFKDYIQDKLSVLKRMNECDVAILPKIHTNTPTKAHIIS

YEDEKDLATKFSIDTEKISFKSPFLLDAIMALAIEKILLDTLSYKLLNNFVMEKNKLEEIKDSQNRLWVN

DTKATNESAVMAALNRYKDKKIHLIIGGDDKGVDLSNLFDFMKGFDIELYAIGISTEKMLNYAKKANLKA

YKCEILQRAVSEISNHLKVNEVALLSPACASLDQFSSYAQRGEVFKECIKKL

>sp|A7H4Z1.1|DER\_CAMJD RecName: Full=GTPase Der; AltName: Full=GTP-binding protein EngA

MQSIILIGKPNVGKSSLFNKMARQRIAITSDISGTTRDANKTEIYIHSKKAMLIDSGGLDESDELFKNVK

KNTLKVAKESDIILYLVDGKLAPDDEDRQFFYSLKKLGKPIALVINKVDNKKDEERAWEFANFGVKEIFN

LSVTHNVGLDELYEWLEKFLHQEFLIPDEEENLEDFLEYYEEGKEFQFKEVDQNHIRVGIVGRVNVGKSS

LLNALVKQERSVVSSIAGTTIDPVNESIVHKDKVIEFVDTAGIRKRGKIQGLERFALNRTEKILSHSQIA

LLVLDTHEGFNELDERIAGLVVKHYLGVIIVLNKWDKSEMDFDKTVKELRLDRFKFLAYAPVISVSALSG

KRVHVLLDKILQIFENFTQKIQTSKLNTLIENATRAHPLPHDYGKLVKIYYAVQYDLAPPKIALIMNRPK

ALHFSYKRYLQNQIRKEFNFEGVPLVIASRKKGSKENDES

>sp|A7H5W2.1|RS20\_CAMJD RecName: Full=30S ribosomal protein S20

MANHKSAEKRARQTIKKTERNRFYRTRLKNITKAVREAAANGDKNAANEALKVANKSIHAMVSHGFIKKQ

TASRRVSRLALLVNKIA

>sp|A7H4F0.1|RL9\_CAMJD RecName: Full=50S ribosomal protein L9

MKVLLIKDVKALGKAGEIKEVKDGYGQNFLIAKGFAKAATNEVLRKYESDKKKEAENLRFEIANLEKLKE

ELSKITLEISKPVGANGSLFGGVTKDEIAHALKEQSHIEIDKKSLECDTLKSLGIHEVSVKLGHAIHAKF

NISIKAE

>sp|A7H4M0.1|HTPG\_CAMJD RecName: Full=Chaperone protein HtpG; AltName: Full=Heat shock protein HtpG; AltName: Full=High temperature protein G

MQFQTEVNQLLQLMIHSLYSNKEIFLRELISNASDALDKLNFLSVSDDKYKSLKFEPKIEIKIDKDKKTL

SISDNGIGMDKNDLINNLGTIAKSGTKSFLENLSGDAKKDSQLIGQFGVGFYSAFMVASKIEVLSKKALD

DKAYLWSSDANGYEINDASKEEQGTSITLYLKDDEFAHAYKIENIIEKYSNHIQFPIFMEKEEFTPAKEG

EEEGKTELKISQINKANALWRMQKSSLKAEDYERFYEQNFHDSNKPLLYLHTKSEGKLEYNSLFFIPQNA

PFDLFRVDYQSGLKLYVKRVFISDDDKELLPTYLRFVRGIIDVEDLPLNVSREILQENQILKGVKEASVK

KILGELEKLKNNDKEKYLSFFKTFGKVLKEGLYGFGGEKDSLLKLMLYKSTKGENLRSLEEYKNDLQGEQ

KEIFYIAGNNESLLRTSPLLEEYKQKNIEVLLMDDEIDSLVTPMLEFEGLKFVAINQVEDKNELSDEEKN

TFAPLVAKFKELLKDQVEDVRLTSRLKDSPSCIVYDKNKLDFAMQQLLKQMGQEQNFKPILEINPKHAIF

TGLKNNETFSADIATLVLNMAKLSEGMGVDNPAEFNASLTKIINKAFS

>sp|A7H2I7.1|MNMG\_CAMJD RecName: Full=tRNA uridine 5-carboxymethylaminomethyl modification enzyme MnmG; AltName: Full=Glucose-inhibited division protein A

MFDVIVIGGGHAGVEASAAAARMGKKTLLLTTLIEQIGAASCNPAIGGLAKGHLVKELDAMGGFMGEITD

EAGIQFRILNESKGVAVQGSRVQIDMDKYRIIARNKLLKLPNLEISQEQVSALIVENDKVKGVKTNLENI

YFAKKVILTTGTFLNGLIHVGENKLQAGRVGELASVNLGNYLQTLGLKMGRLKTGTCPRVDATSIDFSVL

EIQDGDVNPKAFSFRSRNFNPTQLPCYIARTNTTTHEIIKNNFYRAPLFTGQIEGVGPRYCPSIEDKINR

FSDKESHHLFIEPQTIDATEYYINGFSTSLPYEVQTQMLHSVKGFENAKITRFGYAIEYDYIEPTELKHT

LELKKIKNLYCAGQINGTTGYEEAAVQGFMAGINASLSIDMKEPLILRRDEAYIGVLIDDLVVKGTKEPY

RMFTSRAEFRLLLREENAILRLGKYGYVLGLLSEQDFAYIQNIANNLQKGLEFLLSKEFTPNNQNNAFLE

SLGEDKISSIVNFQKIVARASFDIEKLKKLDPMFETMDNYSLREILNEAKYCHYISMQKAQVEKMKNLSE

LKIPENFDFKSVSGLSNEVVEKLNHHKPPTIFAASQISGITPAALDILQIYIKMQKKKA

>sp|A7H3N6.1|MURA\_CAMJD RecName: Full=UDP-N-acetylglucosamine 1-carboxyvinyltransferase; AltName: Full=Enoylpyruvate transferase; AltName: Full=UDP-N-acetylglucosamine enolpyruvyl transferase; Short=EPT

MTYLEIEGTNHLSGNVAISGAKNAALPLIVSSILVKNEVKINNVPNVADIKTLISLLENLGAKVNFQNNN

ALLNTNTLNQTIAKYDIVRKMRASILTLGPLLARFGHCEVSLPGGCAIGQRPIDLHLLALEKMGANIQIK

QGYVVASGNLKGNEILFDKITVTGSENIIMAAALAKGKTKLLNVAKEPEVVQLCEVLKDAGLEIKGIGTD

ELEIYGTDGELLEFKEFSVIPDRIEAGTYLCAGAITNSKITLDKVNATHLSAVLAKLHQMGFETLITEDS

ITLLPAKEIKPVEIMTSEHPGFPTDMQAQFMALALKANGTSIIDERLFENRFMHVSELLRMGADIKLNGH

IATIVGGKELNAADVMATDLRASSALILAALAAKGTSKVHRIYHLDRGYENLEEKFKGLGVKITRLEE

>sp|A7H1R4.1|DAPB\_CAMJD RecName: Full=4-hydroxy-tetrahydrodipicolinate reductase; Short=HTPA reductase

MIKIGIYGAKGRMGKQIEECLKSETQAEISILYNKGGNLEELFEKSDVIIDFSSPSGTHELLNYARTMPK

PLTIGTTGLDEKILHLMQSASKVMPIFYATNMSLGVAVLNYLASKASQMLRNFDIEILEMHHRHKKDAPS

GTAMTLAQSVAKARNLELEKVRVSGRDGIIGERSKDEIAVMSLRGGDIVGRHTVGFYEDGEFLELNHTAT

SRATFAKGAIKIAIWLSKQEAKMYSINDFFRNLKCVQL

>sp|A7H1I0.1|ATPG\_CAMJD RecName: Full=ATP synthase gamma chain; AltName: Full=ATP synthase F1 sector gamma subunit; AltName: Full=F-ATPase gamma subunit

MSNLKEIKRKIKSVHNTQKTTNAMKLVSTAKLKKTEEAAKRSKIYAQKIDEILSEISFQINKIVHNEDDM

RLSLFHKKEQIKTVDLIFITADKGLCGGFNIKTLKTVSEMLKEYEAKNINIRLRAIGKTGIEYFNFQKIE

LLEKYFHLSSSPDYEKACEVIHAAVDDFLNGNTDEVILVHNGYKNMITQELKINHLIPVEPKSIEQTHNS

LLELEPEGIELLEDLMKTYFEYNMYYALIDSLAAEHSARMQAMDNATNNAKARVKQLNLAYNKARQESIT

TELIEIISGVESMK

>sp|A7H1I2.1|ATPE\_CAMJD RecName: Full=ATP synthase epsilon chain; AltName: Full=ATP synthase F1 sector epsilon subunit; AltName: Full=F-ATPase epsilon subunit

MQDLISLEIVTPLGMIYQGEVKSVTLPGSEGEFGVLRGHASLVASLKSGVIDIEKADLNHELIAIDAGHA

KVDEDKICVLAKGAVWVCGSDESEIEKNLAQAKDLIKSMSSDNAALAVTFSKLDNARMH

>sp|A7H2Q2.1|SSRP\_CAMJD RecName: Full=SsrA-binding protein; AltName: Full=Small protein B

MKIIARNKKALFDYSIIERFEAGIVLKGSEVVALRAGRANLKDSFVRIIKSEIFLLNSHISLLHTTHSFY

KHEERGARKLLMHRKQIDKLLGKVSIEGYTIVALDLYFNTKNKVKATLALAKGKNLHDKRETLKKKQADL

EARAAMKNYK

>sp|A7H4Q6.1|RL7\_CAMJD RecName: Full=50S ribosomal protein L7/L12

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAVPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>sp|A7H476.1|KTHY\_CAMJD RecName: Full=Thymidylate kinase; AltName: Full=dTMP kinase

MYVVFEGIDCVGKSTQISLLKEIYKDAIFTLEPGGTELGKHLREILLNKTHPISKRAELLLFLADRAQHF

EEILKTNQNKLIISDRSFISGMAYAKDFENDLLFTLNSFALEDFFPQKIIFLKGDENLIQERLSQKELDS

IEKRGIEYFLSVQDKLKKVLHFLKEKISIEILTLDAKESKEKLHQQIKEFLQ

>sp|A7H2T2.1|RS18\_CAMJD RecName: Full=30S ribosomal protein S18

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>sp|A7H651.1|RL22\_CAMJD RecName: Full=50S ribosomal protein L22

MSKALIKFIRLSPTKARLIAREVQGMNAELAMASLKFMPNKGAKYIANAISSAVANGGFEANEVIVKSCR

VDVAAVLKRFRPRARGSASRIRKPTSHILVEVVKAEVKAEEKKTVAKKTTTTKAPAKKTTSTKKATAKKE

S

>sp|A7H623.1|RECA\_CAMJD RecName: Full=Protein RecA; AltName: Full=Recombinase A

MDDNKRKSLDAALKSLDKTFGKGTILRLGDKEVEQIDSIGTGSVGLDLALGIGGIPKGRIVEIYGPESSG

KTTLTLHIIAECQKAGGVCAFIDAEHALDVKYAKNLGVNTDDLYVSQPDFGEQALEIVETIARSGAVDLI

VVDSVAALTPKAEIEGDMGDQHVGLQARLMSQALRKLTGIVHKMNTTVIFINQIRIKIGATGYGTPETTT

GGNALKFYASVRLDVRKIATLKQNEEPIGNRVKVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVK

LDIVDKSGAWFSYKDKKLGQGRENSKAFLKENPEIADEITKAIQNSMGIEGMISGSEDDEGEE

>sp|A7H1L3.1|KHSE\_CAMJD RecName: Full=Homoserine kinase; Short=HK; Short=HSK

MKILVPATSANLGPGFDCLGLSLKLFNETQIQKSGVFSISIGGEGSDNIFLKKNNIFVNIFYEIYEKLSG

KKDNFRFIFQNNIPLSRGLGSSSAVIVGAIASAYYMSGFKVEKKRILDEALIYENHPDNIAPATLGGFVC

SLVEKNKVYSIKKEIDKDLAAVVVIPNLAMSTEQSRQALAKNLSFNDAVFNLSHASFLTACFLEKKYEFL

KFASQDKLHEINRMKNLPELFEVQKFALENKALMSTLSGSGSSFFSLAFKDDALALAKKMQTKFKDFSVQ

YLEFDDNGFEIC

>sp|A7H1F1.1|AROQ\_CAMJD RecName: Full=3-dehydroquinate dehydratase; Short=3-dehydroquinase; AltName: Full=Type II DHQase

MKIMIIQGPNVNMLGVREVGIYGAMKMEEIHEQMKLAASQNNVELDFFQSNFEGEIVDKIQECLGTVDGI

IINAAGYTHTSVAIRDAIAAVALPTIEVHISNVYRREEFRQKNLIAPVCSGTIVGFGPFGYHLALMGIIQ

ICEQIKNLRAMQQAQQTNK

>sp|A7H239.1|MOBA\_CAMJD 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

MQLNELNCVILCGGKSSRMGQDKSKLILKNQNLTQFQVNKFSKIFKNVYVSAKEDKFENHFNLIKDSLEF

EVYSPMLALYSILSNFKNEFVFVLSVDSPKVGENELLKMLPFLEQNYKIIIAKTPLHKHPLCGFYHSSLA

QTCKNFLEKNEQKIGFLFSEIKTKFVEFENEDAFLNLNFYEEYEKFKSELK

>sp|A7H640.1|RL18\_CAMJD RecName: Full=50S ribosomal protein L18

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAVLAESLRENGIRL

>sp|A7H641.1|RL6\_CAMJD RecName: Full=50S ribosomal protein L6

MSRIGKQPIAIPAGVEVKLEGNLLKFKKGNLAKELDTKANVNVEIKDNNILFSPKGEDRQSRAYWGTYRA

LAYNIVVGLTQGFSKTLEINGVGYKAALKGKVLELSLGFSHPINYDIPGGIEIVVDKNTIAVKGSDKQVV

GQVAAQIREFRPPEPYKGKGVKYSDERIIRKAGKTSKK

>sp|A7H243.1|DXR\_CAMJD 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

MILFGSTGSIGVNALKLAALKNIPISALACGDNIALLNEQIARFKPQFVAIKDSKNKHLVKHDRVFIGQE

GLEQILTECQDRLLLNAIVGFAGLKSTLKAKELGKNIALANKESLVVAGSFLKGAKFLPIDSEHVALKFL

LEGKKNIAKLYITASGGAFYKYKIKDLNQVSVKDALKHPNWNMGAKITIDSATMANKLFEIIEAYHLYDF

KESDALIEPRSLVHAMCEFKNGASTAYFSKADMKLAISDAIFEKQDTPILEAVDFSKMPALKFHKISTKK

YPIFKLKNAFLKEPNLGVIINAANEVGVYNFLENKSGFLDIAQCIFKALDHFGAPKISSIEEVFEYDFKT

REYLRS

>sp|A7H5Y1.1|AROC\_CAMJD RecName: Full=Chorismate synthase; Short=CS; AltName: Full=5-enolpyruvylshikimate-3-phosphate phospholyase

MNIFGTRLKFTSFGESHGVAVGCIIDGMPAGVKFDEEFLQNELDKRKGGSKFATPRKESDKAQVLSGVFE

GYTTGHPIAIVVFNENAHSKDYDNLKDLFRPAHADFTYFYKYAIRDHRGGGRSSARESVARVAGGAVAAM

LLREFGICVQSGVFGVGTFVSNLKEEEFDFEFAKKSEIFCLDPKLESDFKNEILNARNSKDSVGAAVFTK

VSGMLVGLGEVLYDKLDSKLAHALMGINAVKAVEIGEGINASKMRGSCNNDALKDGKFLSNHSGGILGGI

SNGENLILKTYFKPTPSIFAKQESIDKFGNNLEFELKGRHDPCVGVRGSVVASAMVRLVLADCLLLNTSA

NLNNLKNAYGLK

>sp|A7H1U7.1|MOAC\_CAMJD RecName: Full=Cyclic pyranopterin monophosphate synthase; AltName: Full=Molybdenum cofactor biosynthesis protein C

MKLSHLDEKNHPKMVDVSDKNITSRMATASGVIYMSQEAFDVIKNNTAKKGPVLQTAIVAAIMGAKKTSE

IIPMCHPLMLSKIETDIVEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRY

>sp|A7H2U1.1|GATA\_CAMJD RecName: Full=Glutamyl-tRNA(Gln) amidotransferase subunit A; Short=Glu-ADT subunit A

MITLKEALKYSKEELENLKKELNEKAKKEKKLGAYIEQFLDKDLSVSGEGVPVAIKDNISVKGWELTSAS

KILQGYIAPYDASAIVNLKANGFAPFGRCNMDEFAMGSSTASSCYGKTLNPLNFERVPGGSSGGSAAAVA

GGLALASLGSDTGGSVRQPAAFCGCVGFKPSYGRVSRYGLASYSSSLDQIGVLTQNVEDAAILYDAIAGY

DKMDSTSANIEFIKTAPNLNANEKLKIAVIENYVNDADTEVKNALLKTIDMLKANGHEIVYKNLLDSKFD

IAAYYIIATAEASANLSRYDGVRYGKRSENIQNLKEMYVNTRSEGFGEEVKRRILLGTFVLSSGYYDAYY

IKAQKARAFIKAKYEEILQDCDLIFMPVTPTMAFKFDTQKSPMQTYLEDVYTISVNLAGLGGISVPVAKD

KEGLNISAQLICKAYDEQTLLDGALSLEQMIKN

>sp|A7H3C0.1|ARLY\_CAMJD RecName: Full=Argininosuccinate lyase; Short=ASAL; AltName: Full=Arginosuccinase

MKNEMWSGRFSGASDELLKEFNASLNVDKTLFNEDIQGSIAHATMLESCGILKKEELDAIVKGLEQVRSE

IEQGKFIFDIKDEDIHMAIEKRLSEIIGSEIGGRLHTARSRNDQVATDFKLFVKKSHIELIKLLKELIQT

MLEHAKVHKKTIMPSFTHLQHAQPVSFSFYILAYAFMLMRDVKRLQNSLELAGFSPLGSCACAGTSYATN

RELSAKILGFKDIMPNAMDGVSDRDFVLDLLYDIAVIFTHTSRLCEEMILFSSSEFSFITISDSFSTGSS

IMPQKKNPDVCELIRGKTGRVYGNLISLLTIMKALPLAYNKDMQEDKEGLFDSVKTAKDSLIILNVMLKE

IRINKENMLNACKKGHLLATDLADYLVREKNIPFRKAHFIVGNVVAQAEVQGIDISEIKDLSKIDPIFDE

KAMELLNFEFSLNSKQSEGSSSIASVEKQIQILQEFIKKL

>sp|A7H1N9.1|MOAA\_CAMJD RecName: Full=GTP 3',8-cyclase; AltName: Full=Molybdenum cofactor biosynthesis protein A

MLIDQFDRKINYLRISVTQRCNFRCLYCMPKIPFDYQPKENLLSFEELFLFVKATIDEGIEKIRITGGEP

LLRKDLSIFIKMISDYKSDIDLAITTNGFLLKDFAKDLKNAGLKRLNISLDTLDHKKAKTLAQKDVLDSV

LSGIDEALNLDLKVKLNTVALKNLNDDELISLLEFAKSKKAQIRFIEFMENTHAYGKLQGLKRDEIIQIL

SQKYQIQLIKKDEKAPVSIYKADDYEFGIIDPHSHEFCDSCNRIRLSAEGLLIPCLYFDEASSIKEAVRK

GDIKAAVEILQEVLRNKPEKNKWSVVDNETSSRAFYQTGG

>sp|A7H3F3.1|ISPH\_CAMJD RecName: Full=4-hydroxy-3-methylbut-2-enyl diphosphate reductase; Short=HMBPP reductase

MIIELAKNYGFCFGVKRAIKKAEQIKDAATIGPLIHNNEEISRLQKNFNVKTLENIKSLSNETKAIIRTH

GITKQDLEELRKKDIEIFDATCPFVTKPQQICEQMSKEGYEIVIFGDENHPEVKGVKSYVNTKAYVVLDK

KELQNIKLPSKIAVVSQTTKKPEHFMEIVNFLMLKAKEVRVFNTICDATFKNQDAIKELSLKSDVMVVVG

GKNSANTKQLFLIAKTNCEDSYLIETEEELKKEWFLDKKHCGISAGASTPDWIIQKVIAKIENFGIN

>sp|A7H4K0.1|HEM1\_CAMJD RecName: Full=Glutamyl-tRNA reductase; Short=GluTR

MYYCISFTYKNTDIALREKLSFSNETKKSEFLKIISTHENIEECLVISTCNRVEIVAFVKMACAEFIVKS

LALLCDVDKDILLEKADIFEDSGAIHHLFSVASSLDSLVVGETQIAGQLKDAFAFAVKNSFCGVHLSRAV

HSAFKCATKVRNETQISKKPISVASVAVAKAKELADLTQKKAVVIGAGEMGELAAKHLIAAGAKVIILNR

DLQKAKDLCERLGVLSEYDSLENLKKYLNQYEFFFSATNAPNAIITNSLIEELPYKRYFFDIAVPRDIDI

NENENISVFAVDDLEIVVQKNLALREQEARMAYGIIGRETSEFFRYLNDLALMPIIKAIRLQAKEYADKQ

LEIALKKGYLKKSDKEEARKLIHQVFKAFLHMPTVNLKHLQGKMQSDTVINAMRYVFDLKNNLEGLNQYK

CEFDMENNDEIY

>sp|A7H2Q3.1|ISPE\_CAMJD 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

LSRRYNNELKELFSKKSLKLTKNIPVCAGLGGGSSDCASFLLLMNETLNLKLNLQELINLSIQLGSDIAF

FLSGFNSANVSGCGEIIEEFEDDIPTLKWTFPQISCQTKAVYDEFDREIFDFQKNNNQAQIYKKLSTKEL

LQNFKNKELNDLFTPCATLYPKMKSYLQEDFFLSGSGSSVFKVDR

>sp|A7H475.1|COAD\_CAMJD RecName: Full=Phosphopantetheine adenylyltransferase; AltName: Full=Dephospho-CoA pyrophosphorylase; AltName: Full=Pantetheine-phosphate adenylyltransferase; Short=PPAT

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>sp|A7H1S3.1|ARGC\_CAMJD RecName: Full=N-acetyl-gamma-glutamyl-phosphate reductase; Short=AGPR; AltName: Full=N-acetyl-glutamate semialdehyde dehydrogenase; Short=NAGSA dehydrogenase

MKIKVGILGASGYAGNELVRILLNHPKVEISYLGSSSSVGQNYQDLYPDTPLNLCFENKNLDELELDLLF

LATPHEFSAKLLNENLLKKMKIIDLSADFRLKNPKDYELWYKFTHPNQELLQNAIYGLCELYKEEIKKAS

LVANPGCYTTCSILSLYPLFKEKIIDFNSVIIDAKSGVSGAGRSAKVENLFCEVNENIKAYGLASHRHTP

EIEEHLSYVAKEKITLQFTPHLVPMQRGILISAYANLKENLQEQDIRDIYTKYYQNNKFIRLLPPQSLPQ

TRWVKSSNFADINFSIDQRTKRVIVLGAIDNLIKGAAGQAVQNMNLMFDFDEDEGLKFFANL

>sp|A7H5U6.1|RL17\_CAMJD RecName: Full=50S ribosomal protein L17

MRHKHGYRKLGRTSSHRAALLKNLTIALVNSGKIETTLPKAKELRAYVERLITRARLGDFNAHRAVFASL

QNKNATNKLVTEIAPKFKDRNGGYTKIIKTRIRRGDAAEMAFIEFVA

>sp|A7H2A6.1|PYRH\_CAMJD RecName: Full=Uridylate kinase; Short=UK; AltName: Full=Uridine monophosphate kinase; Short=UMP kinase; Short=UMPK

MQERKRVLVKFSGEALAGENGFGIENSILKFIASEIKELIKNQIEVGIVIGGGNIIRGVSAAKGGLIKRT

SGDHMGMLATVINAIAIQEALERSGLEVRVQSAIQMEAFCETYIMRRAQRHLEKGRVVVFAAGTGNPYFT

TDTTAILRAVEIDADMVIKATKVNGVYDKDPKQFDDAVFLNTLSYDEAMQDNIKVMDDTAIALAKDNKLP

IVVCNMFEEGNLLKIIQGDTSLCSIVKNN

>sp|A7H3U1.1|CMOA\_CAMJD RecName: Full=Carboxy-S-adenosyl-L-methionine synthase; Short=Cx-SAM synthase

MKDELFKQNPKKQFEFDKSVASVFDDMINRSVPFYRENLELCGNLLAKILPTNASICDLGCSSANFLIFL

ANLRKDFKLFGVDNSASMLEVAKSKAKAYGLDISFFEANLCEFDFFICDVFVANYTMQFIRPPKRQELLD

KIYKNLNSKGILIMSEKILYEDAFLSKNIIELYADYKEKQGYSKFEIAAKREALENVLIPYSQKENLNML

EKAGFKKIESIFKWANFETFIAFKD

>sp|A7H194.1|DNAA\_CAMJD RecName: Full=Chromosomal replication initiator protein DnaA

MNPSQILENLKKELNENEYENYLSNLKFNEKQSKADLLVFNAPNELMAKFIQTKYGKKIAHFYEVQSGNK

AIINIQAQSTKQSNKSTKIDIAHIQAQSTILNPSFTFESFVVGDSNKYAYGACKAIAHKDKLGKLYNPIF

VYGPTGLGKTHLLQAVGNASLEMGKKVIYATSENFINDFTSNLKNGSLDKFHEKYRNCDVLLIDDVQFLG

KTDKIQEEFFFIFNEIKNNDGQIIMTSDNPPNMLKGITERLKSRFAHGIIADITPPQLDTKIAIIRKKCE

FNDINLSNDIINYIATSLGDNIREIEGIIISLNAYATILGQEITLELAKSVMKDHIKEKKENITIDDILS

LVCKEFNIKPSDVKSNKKTQNIVTARRIVIYLARTLTALTMPQLANYFEMKDHTAISHNVKKITEMIEND

TSLKAKIEELKNKILIKSQS

>sp|A7H1G3.1|UNG\_CAMJD RecName: Full=Uracil-DNA glycosylase; Short=UDG

MKEITINIDKIKINDDWKEFLRDEFQKKYFLEIKKQYLNAINQNIIIYPPANLIFNAFNLCPLKEIKIVI

LGQDPYHQENQAMGLSFSVPKNVKIPPSLNNIFKELQNDLNITPAKSGDLSFWAKQGVLLLNSILSVEAN

KAASHSSWGWQEFSDAVIHKLSNEKSGLVFMLWGNYAKSKEILIDNTKHLILKAAHPSPLARTGFLGCKH

FSKANEFLKKVGKIPIDWKIV

>sp|A7H4J7.1|HEM3\_CAMJD RecName: Full=Porphobilinogen deaminase; Short=PBG; AltName: Full=Hydroxymethylbilane synthase; Short=HMBS; AltName: Full=Pre-uroporphyrinogen synthase

MKLIIATRKSQLALWQSEHVAQILKNTHQIEVLLEGFKTKGDVLLDSPLAKIGGKGLFTKELEESMLRKE

AHLAVHSLKDVPSFFPQGLVLAAVSKREQSTDAMLSQNYKDFLSLPKGAKIGTTSLRRKMQLLLLRPDLE

IISLRGNVNSRIEKLKNNEFDAIILAMAGIKRLNLDKQVNFVYEFSKDELIPAASQGALGIESIKDEKIL

ELLKCLNDENALIETSIEREFIATLEGGCQVPIGINAELLGDEICVRAVLGLPDGSEILKDKRMIKKNDF

KGFGEGLAKEFITKGAKELLKKAESII

>sp|A7H372.1|MNME\_CAMJD RecName: Full=tRNA modification GTPase MnmE

MSDTIAAIATAHGVGSISIVRLSGERALEFALRFSRKTKLTPRHATFTKLFNQNNEIIDEAIMIYFKAPY

SFTGEDIVEFQTHGGFSVSEVLLEELVSLGARFALAGEFSKRACLNGKMTPLKALNIQDLILSKSALAAK

IIARNMQGNLGELLEKIRTDLVKTLAFVETSIDYADDDLPSDLLEKISTMCEENSKILKEIYTLSQSKKG

LIEGFKIAIIGKPNVGKSSLLNALLSYERAIVSDIAGTTRDTIEESFKLGTHLLRIIDTAGIRESKDTIE

QIGVALSKKSLEDADIILAVFDASRVQDKEDEKIFELLANTDKKIFWILNKSDLENVFKNTRNKNFIKLS

AQKDIALLKEELQNYLNSFDSEGIMVSSLDLINACKISSEAIFRAKELLEESSLELFAFELNLAINELAR

FTKDFQRDEILDEMFGNFCLGK

>sp|A7H1W2.1|SELA\_CAMJD RecName: Full=L-seryl-tRNA(Sec) selenium transferase; AltName: Full=Selenocysteine synthase; Short=Sec synthase; AltName: Full=Selenocysteinyl-tRNA(Sec) synthase

MNKFRTFPQINTLIQDESLKSYPFYIKAFFCKKVVAKLKENFSRDEISKDKLLLEIKKEIKTFYRKDLQS

VINASGVVIHTNLGRSVIHEELYEACKDIICNYSNVEFDLENGKRGSRYALVLEKLKMLFECEDALVVNN

NAAAVFLVLNSLCYDKEVISSRGELVEIGGSFRVPEVIKAAGVKLCEVGTSNKTHLKDYEQAINENTALI

LKTHKSNFALMGFHSEVNIKDLHELVKEKGLLSYYDLGSGWCENLNEKLIKNEPKIKKLVQECDILSFSG

DKLFGSVQAGIILGKKELIGKLKQNQLLRMLRVDKLTLSFLNESLKAYLQKDYEKIITLKLLNDDLSFIE

EKALRVQKELKFQTQLKKSKSLVGGGSMPDKSLDTYILTFQGDALKLQTRFRKENIIGRIENDEFVLDFR

TIRENELQKLILKINQMENL

>sp|A7H578.1|SURE\_CAMJD RecName: Full=5'-nucleotidase SurE; AltName: Full=Nucleoside 5'-monophosphate phosphohydrolase

MKEILITNDDGYESEGLKKLVKMLKKEFKAKITIVAPASEKSACSHSITLTKPLRFVKVGKRFYKLDDGT

PADCVYLAFHALYKTRLPDLVISGINKGANVGEDITYSGTCAGAMEAALQGISAIALSQFYKKSEKELDY

KNALKITKKIIQNIFDKDFPLEKKEFLNINFPAKSKIKGIKICKAGKRVYNFEAHSNINPRGVEYYWLAA

ANLDFEDEKNSDIVLLKKGYATITPIMLDLTAYERMKKVKKWLKANNE

>sp|A7H646.1|RL14\_CAMJD RecName: Full=50S ribosomal protein L14

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>sp|A7H563.1|PTH\_CAMJD RecName: Full=Peptidyl-tRNA hydrolase; Short=PTH

MILVVGLGNIGVEYENTRHNVGFMLIDLLLKESNFTNLTNSKFKGELFKIGSSLLLLKPSTYMNNSGLSV

KAVNDFYKCERMIVIHDDIDINLGALRFKKGGSSGGHNGLKSIDALCGNDYERVRIGVGKGENVISHVLD

KFKPEEEITLSKVLEHTKKALLELIEKDDLSAISSKYSLKA

>sp|A7H438.1|LPXK\_CAMJD RecName: Full=Tetraacyldisaccharide 4'-kinase; AltName: Full=Lipid A 4'-kinase

MSEEKKYELWLDNYFFKPNFWQKCLAFVLLPLSVLYAFFAILNTFFRKKIVFKKPVISVGNLSFGGNGKT

PLCKAIAREFDGVFIVLRGYKRKSKGLFVVKNQNEILCTLAQSGDEAMEYAFEENVKGVIVSEDRVKGIK

KAFELGAKIVVLDDAFSKFHIKKFDILLESKIKPYFNFILPSGSYRLPKFYERRADFIALEGRDFLRYSF

VKKNLKAVLVTAIAKPFRLYEHFIKARACYFFKDHYEFKKEELENLLKKHNCDTLMLTFKDFVKVKDFGF

KCQIIELNIELKDSLREKIKTYIKEFEQ

>sp|A7H1S1.1|IF3\_CAMJD RecName: Full=Translation initiation factor IF-3

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVVLLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>sp|A7H4Y0.1|GATC\_CAMJD RecName: Full=Aspartyl/glutamyl-tRNA(Asn/Gln) amidotransferase subunit C; Short=Asp/Glu-ADT subunit C

MQIDEKLLSKLEKLSALQITKNRNETIAQLSEIVNFVKKLNELDLDSQEITVSTIKGGAPLRIDEIRNSN

VIDEVLDCAPKKQEHFFIVPKIIE

>sp|A7H333.1|AROB\_CAMJD RecName: Full=3-dehydroquinate synthase; Short=DHQS

MQVEVKLKENAYKVYIDELEELEFDTKVFILSNPKISGLHLKTLLSKIKAKEISIATVKDGEEYKNLSTM

EEILSQMFNSKLDRKSVLISFGGGVISDMGGFAASIYQRGIDFINIPTTLLACVDAAVGGKTGVNNNFGK

NLIGTFYQPKAVYCESSFLKTLSSRELAAGMAEFIKMAAIFDDSMLDFIEKIDEKSFLNATCENEIFTQI

IAKSIELKARVVEQDEKESGLRMLLNYGHTFAHVIENFTDYKLYLHGEAVAIGMVMANQLALNLGLLDKM

QSQRIKDILLKFGLPISYKINSVDEFYEAFFMDKKSSNKKINFVLASPLGKGLIKGDISKEDIITTLREF

Q

>sp|A7H491.1|G6PI\_CAMJD RecName: Full=Glucose-6-phosphate isomerase; Short=GPI; AltName: Full=Phosphoglucose isomerase; Short=PGI; AltName: Full=Phosphohexose isomerase; Short=PHI

MKSLTHLSSYRALSTHFSIIKDLHMRVLFKEDENRGFRYFLQSGDLKLDYSKNRISDETLKLLFDLANEC

SLKNKIKAMFEGQKINNTENRAVLHTALRNKTNRSVKIDDMDIMPNVREVLAKMQKFSDSLRTGSWLGYT

NQIITDVVNIGIGGSDLGALMVCKALKNYAHPRLHMHFVSNVDGTQLQDVLERVHPASTLFIVASKTFST

QETLTNAFTARKWFLKHALDEKHIAKHFVAVSTNKEAVKDFGIEPENMFEFWNWVGGRYSLWSAIGLAIM

IYLGKENFSSLLEGAYLMDEHFYNEPFEKNMPVIMALIGIWYINFFDAGSHIIAPYDSVLRYFPKFIQQL

DMESNGKQIRKNGKKVDYDTGPIIWGDTGINAQHAFFQLLHQGTHLSPIDLIASLNKKGNLPDHHEILLS

NVFAQAEAFMRGKTLEEVQEEMAKKGLKEDQIQKLAPHRVFSGNRPSNILLLDEIHPRSIGSLVALYEHK

IFVQGVIWDINSFDQWGVELGKELAKTILSELKGGKTQEHDSSTNHLIQIYKNFNSN

>sp|A7H1D7.1|MNMA\_CAMJD RecName: Full=tRNA-specific 2-thiouridylase MnmA

MKILVAMSGGVDSTVTAYKLKNLGHEVIGCYMKLHGKPNYHEENIKKVEKVANFLQIPYHILDLQEDFKN

KVYMPFVDTYKEGKTPNPCALCNRFIKLGKLLEFAKNLGCEKLATGHYARLENNLIKTAVDESKDQSYFL

ASADKEALKYLIFPLGEMKKEDVKKFASTIEVLKSFATQKESSEICFVEDTYVQVLDQFMDTKIPGEVLD

SSGKVVGKHEGYMHYTIGKRRGFEVRGTHEPHFVLKINPKQNQIIVGTKEELKISEFNLKNINLFIDAKE

LDCEVKIRYRSKSTPCKVEIYEDKSAKITLKDPVYGLASGQMAVFYNHDKVIASGFIE

>sp|A7H4D2.1|RSMH\_CAMJD RecName: Full=Ribosomal RNA small subunit methyltransferase H; AltName: Full=16S rRNA m(4)C1402 methyltransferase; AltName: Full=rRNA (cytosine-N(4)-)-methyltransferase RsmH

MEIPHIPVLLNEVQEIFKNLKTGYFLDCTLGFGGHSETLLKNHPGLKFIACDQDQQALEFSKKRLKDFHN

RITFIQSNFSEVLEKISHKEELRGILADIGVSSFQLDNNERGFSVNSDFLDMRMNQNSKISAYEVVNAYT

KEQLTSIFKDYGELHDAHFIAEKICLERSKNLIKSAKELYQIIGKGKQNHRKISKATLAFQAIRIEVNQE

LKVLKDFLGYLENLKPKNCILAIISFHSLEDRIVKNFFKKWSKNCICDEKIMRCKCGNNHSLGQIITKKS

ISASKEELLKNSRSSCAKMRAFYFNNLDNK

>sp|A7H662.1|RLMN\_CAMJD 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

SKDGSIKYLFELIDGLRVESVLLPMKEEKIDTEGKRISHARYTICVSSQVGCKSSCSFCLTAKGGLKRNL

SAGEIVGQILWIKKQNNIPYERRVNIVYMGMGEPLDNLKNVSKAVKILAQNDGLAISPRRQTISTSGLAK

QIKELGQMNLGVLLAISLHAVNDELRTELMPINKAYNIAAIMDAVREFPIDQRKRVMFEYLLIDGINDKL

EHAKELVKLLNGIKAKVNLILFNPHEGSLYKRPSLENAIKFQDLLSSKGVTCTIRESKGLDISAACGQLK

ERAKEQ

>sp|A7H2Z9.1|MURG\_CAMJD RecName: Full=UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol N-acetylglucosamine transferase; AltName: Full=Undecaprenyl-PP-MurNAc-pentapeptide-UDPGlcNAc GlcNAc transferase

MTIALTGGGTGGHLAIVRCLLESAIKKNIECVYIGSQNGQDKAWFENEARFKEKFFLSSKGVVNQNKFGK

ISSLLHTLKLSKDCREIFKKYHIQAVFSVGGYSAAPASFAALFSHLPLFIHEQNSKSGSLNMLLKPFATK

FFSAFEKEFSPYPVANKFFDNARIRKELKNIIFLGGSQGAQFINELALNLAPKLQEQNIKIIHQCGKNDF

EKCKKHYQSLNIQADVFDFSSNLGEKMKNADLAISRAGASTLFELCANTLPAIFIPYPYATKNHQYFNAK

FLQDQALCQIFTQDSINLDDFFKAMLKLNLEDISTRLQNIAQKNGGDILLEKALSNNLAFIR

>sp|A7H1W5.1|IXTPA\_CAMJD 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

MKIILATSNKHKVLELKEILKDFEIYAFDEVLTPFEIEENGKTFKENALIKARAVFNALDEKQKKDFIAL

SDDSGICVDVLEGNPGIYSARFSGKGDDKSNRDKLVNEMIKKGFNQSRAHYVAAIAMVGLMGEFSTHGTM

YGKVIDTEKGENGFGYDSLFIPKGFDKTLAQLSVDEKNNISHRFKALELAKIILKILTKG

>sp|A7H4X6.1|GLYA\_CAMJD RecName: Full=Serine hydroxymethyltransferase; Short=SHMT; Short=Serine methylase

MSLEMFDKEIFDLTNKELERQCEGLEMIASENFTLPEVMEVMGSILTNKYAEGYPGKRYYGGCEFVDEIE

TLAIERCKKLFNCKFANVQPNSGSQANQGVYAALINPGDKILGMDLTHGGHLTHGAKVSSSGKMYESCFY

GVELDGRIDYEKVREIAKKEKPKLIVCGASAYARVIDFAKFREIADEVGAYLFADIAHIAGLVVAGEHPS

PFPHAHVVSSTTHKTLRGPRGGIIMTNDEQLAKKINSAIFPGIQGGPLMHVIAAKAVGFKFNLSDEWKVY

AKQVRTNAQVLTNVLMDRKFKLVSDGTDNHLVLMSFLDREFSGKDADLALGNAGITANKNTVPGETRSPF

ITSGLRLGTPALTARGFKEKEMEIVSNYIADILDDINNEKLQENIKQELKKLASNFIIYERAMF

>sp|A7H2P1.1|PRMA\_CAMJD RecName: Full=Ribosomal protein L11 methyltransferase; Short=L11 Mtase

MQKKYYELFFIVEEQYKNLFLGFAFDLGIEAIEEKDNGIYIRSHESLEELSWALEIFAQKLTTTFNLNHK

IISNLSLVEKENKDWIQEYKKGIKPILVDNVYIHTTWQEEKKNCINIKINPALAFGSGHHESTHSCVKFL

QKFSKSKLRALDLGCGSGILGIIMAKFGCNVEICDTDELAIDSSLENARLNGVDFHKAWCGSIDKANGLY

NLIVANIIADVILILEKDIKNHLEDNAILILSGILDKYSTRIKEKFQDLELIDEMQINEWCSFVYKNNKK

DK

>sp|A7H5S8.1|NUOD\_CAMJD RecName: Full=NADH-quinone oxidoreductase subunit D; AltName: Full=NADH dehydrogenase I subunit D; AltName: Full=NDH-1 subunit D

MQIPSKLKPYYENIAFEQEDSKMIINLGPQHPSAHGNLRLILELDGEQVVKARPCIGYMHRGMEKMAENM

IYQEFIPTTDRMDYIAASANNYAYCAAVEKLCGLEIPRRAAVIRMILLELNRITSHLLWLATHALDIGAM

SVFLYCFREREYVLDLIEKYCGARLTHSSMRIGGVMLDLPENYLEEMLVFCDKFPNDLKDYEDLLDDNRI

WRLRTENVGVVTKEQALNWGCTGVMLRGSGIKYDIRKEEPYLLYNEVEFGVPYATQGDSYARYKVYMQEF

RESLKILRQCATLYKDTPPEILATHPEYVSASKEQILTQNYSLMQHFVLITQGLKPPKGEVYVPTESPKG

ELGFFIHSDGTGRPYRLKARTPSYWHCAFFEEMLVGTYLADVVAIMGNVNIVLGEIDR

>sp|A7H4S5.1|MIAB\_CAMJD RecName: Full=tRNA-2-methylthio-N(6)-dimethylallyladenosine synthase; AltName: Full=(Dimethylallyl)adenosine tRNA methylthiotransferase MiaB; AltName: Full=tRNA-i(6)A37 methylthiotransferase

MSAKKLFIQTLGCAMNVRDSEHMIAELTQKENYALTEDIKEADLILINTCSVREKPVHKLFSEVGGFEKV

KKEGAKIGVCGCTASHLGNEIFKRAPYVDFVLGARNISKITQAIKTPKFMGIDIDYDESEFAFADFRNSI

YKSYINISIGCDKHCTYCIVPHTRGDEISIPFNIIHKEAQKAVEKGAKEIFLLGQNVNNYGKRFRNEHKK

MDFSDLLEELSTIEDLERIRFTSPHPLHMDDKFLEVFANNPKVCKSMHMPLQSGSSEILKAMKRGYTKKW

YLNRALKLRELCPNVSISTDIIVAFPGESEKDFEETMDVLEKVRFEQIFSFKYSKRPLTKAATMSNQIDE

ETASRRLSTLQNRHSEILDEIVKKQENKTFKVLFEELRVGNSIAGRTDNNFLVQVEGSEELLGQFKEVKI

TNAKRMVLYGEII

>sp|A7H2D2.1|GUAA\_CAMJD RecName: Full=GMP synthase [glutamine-hydrolyzing]; AltName: Full=GMP synthetase; AltName: Full=Glutamine amidotransferase

MKKADILVLDFGSQYTQLIARRLREQGVYAEILPFNVSLADIKAKEPKGIILSGGPASVYATDAYFCDKG

IFDLGLPVLGICYGMQLMAHHYKATVAPAGHKEYGKANIEVKKDSALFKNLPKKQTVWMSHSDKVENLSQ

GFEVLATSENSPFCVFGNEDKKFFALQFHPEVQHSEFGKNILKNFAKYACNCESVWNMGSFAKTQAEKIR

EEVGNDKVLCAVSGGVDSSVVAALLASAIKEQVIVVFVDNGLLRSGEKEQVEFMFKNTLGIDLISIDASE

IFLSRLANVRDPEQKRKIIGNTFIEIFEEEAKKHKDVKYLAQGTLYTDIIESSVVGASKTIKSHHNVGGL

PEKINLKLIEPLKEIFKDEVRALGLELGLSKEVVYRHPFPGPGLAIRIMGEVNRPSLELLRKADVILLEE

LKSTGWYDKTWQAFCVLLNVKSVGVMGDNRTYDNAVCIRVVDASDGMTATFSHLPYEVLENISRRIINEV

EGINRVVYDISSKPPATIEWE

>sp|A7H1B7.1|PYRG\_CAMJD 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

MKQTKYIFVTGGVLSSLGKGIAAASIATLLKNSGLKASILKADPYINVDPGTMSPFEHGEVFVTDDGAET

DLDLGHYERFLDESLSQDNNFTTGRVYQSVIEKERRGEYLGKTIQVIPHIVGEIKDRIKKAGEGKDILIV

EIGGTVGDIEGLPFLEAIRALRLEVGKNNAMNIHLTLVPFIKAAGELKTKPTQHSVGELRRIGISPDMII

CRSEKALDRDLKDKIAISCGVEKNCVIESVDAASIYQIPLNFLKQDILNPIAEILDLKNLKPNMENWDSL

VKRVIAPSNEVKIAFVGKYVDLKESYKSLTEAIIHAGAALDTKVELKWVDSEKLENMESAEVFKDVSGIL

VAGGFGYRGVEGKIKAIQYARENKIPFLGICLGMQLALVEFARNVLKLKDANSSEFDEKCENPVVYLIDE

FMDTNGEKQIRTAKTPLGGTMRLGAYKCDIKEKSLLAKVYNEAKSVKERHRHRYEANPKYRVDFEKHGLI

VSGESKGLIEAVELNCHPFFLAVQFHPEFTSRLEHVNPVICGFIKAAINYEDN

>sp|A7H443.1|DAPA\_CAMJD RecName: Full=4-hydroxy-tetrahydrodipicolinate synthase; Short=HTPA synthase

MDKNIIIGAMTALITPFKNGKVDEQSYARLIKRQIENGIDAVVPAGTTGESATLTHEEHRTCIEIAVEIC

KGTKVKVLAGAGSNATHEAVDLAKFAKEHGADGILSVAPYYNKPTQQGLYEHYKAIAQSVDTPVLLYNVP

GRTGCEISTDTIIKLFRDCENIYGVKEASGNIDKCVDLLAHEPRMMLISGEDAINYPILSNGGKGVISVT

SNLLPDMISALTHFALDENYKEAKKINDELYNINKILFCESNPIPIKTAMYIAGLIESLEFRLPLCSPSK

ENFAKIEEVMKKYKIKGF

>sp|A7H3E3.1|ALR\_CAMJD RecName: Full=Alanine racemase

MSLIKIDQKAYEYNLRHIAKKIGSFQRLICVFKDNAYGHGAKLLAPLAKNLGVSFVAVKSEEEAREIEEF

FENILILSHRPHGNENSRFIYALNDISQVKNYKQDIKIHLKIDTGMHRNGICVENLEHAIDLIRSSNLKL

TGMFTHFASADEMDGSFFVQKENFQKAKKMVKKYFSNLLFHSHNSAALFRGKIPEDEYCRIGLVQFGYGD

SNLKRILSLYAHRLSQRILQKGQSIGYGGIFTAVKDMEVATYDLGYADGLFRYNGKGELVLGNGKAMLGK

MSMDSFSCENSGEEICVFKDADIWADFFHTINYEILVKLNPNIQRVLV

>sp|A7H1N3.1|RL31\_CAMJD RecName: Full=50S ribosomal protein L31

MKKEIHPEYVECKVSCACGNTFATKSNKAELRVDICSNCHPFFTGSEKIVDAAGRVEKFKKKYAM

>sp|A7H3L9.1|F16PA\_CAMJD RecName: Full=Fructose-1,6-bisphosphatase class 1; Short=FBPase class 1; AltName: Full=D-fructose-1,6-bisphosphate 1-phosphohydrolase class 1

MQEVISYIQKAVLEISNALKFPDTSYSQNQNFTGDTQLKFDVLSDEIITKTLSQCSSIKAIISEEKDEIL

TLNEKAKLIVAYDPLDGSSLMDVNFAIGSIFAIYEEKASAKKLRAALYSMYGARLELVICKEQPKLYRLN

ANNEFIFIKDLKINEKGKINATGGTQKFWEEKHAKFIKSLFDEGYRLRYSGAMVSDINQILLKGGGIFSY

PATQDAPNGKLRAFFEVFPLAFIIEKAGGKTTNGKNHSLLELEFDKIHATTPCFFGSKYEISKLLKAYNE

>sp|A7H4R2.1|RL33\_CAMJD RecName: Full=50S ribosomal protein L33

MRIKVGLKCEECGDINYSTYKNSKNTTEKLELKKYCPRLKKHTFHKEVKLKS

>sp|A7H492.1|GLK\_CAMJD RecName: Full=Glucokinase; AltName: Full=Glucose kinase

MSISQNKKSYPRLLADIGGTNARFALEVEANIIKNIEIFPCNDYNTVVDAVKVYLNKFGNPTIKYGAFAI

ANPVVGDWVQMTNHHWAFSIETTRQALNLEVLILINDFTAQAYAISRMSSSELIQIGGNFCTINAPKAVL

GPGTGLGVSGLIPCGNGDYIALSGEGGHTSFSPFDDTEVMIWQYAKKKYGHVSTERFLSGSGLVLIYEAL

ADREGIKSAKISPELISEQALSGKSPLCRLTLDIFCAMLGTISADLALTLGARGGVYLCGGIIPRFIDYF

KTSPFRVRFEDKGRFDAYLAAIPVYVVLAKYPGIFGVAVALENHLKDYFSKK

>sp|A7H439.1|NADE\_CAMJD RecName: Full=NH(3)-dependent NAD(+) synthetase

MDWQKITEKMCDFIQEKVKNSQSQGVVLGLSGGIDSALVATLCKRALKENVFAFLMPTQISNKTNLEDAL

RLCVDLNLEYKIIEIQSILDAFIKQSENTTLVSLGNFAARIRMSLLYDYSAMKNSLVIGTSNKSELLLGY

GTIYGDLAYAFNPIGSLYKSEIYALAKYLNLHENFIKKTPSADLWENQTDEADLGFSYAKIDEGLKALET

NDEKLLKILDPSLIAMLKNRMQKNAFKGKMPEILEI

>sp|A7H2L7.1|HLDE\_CAMJD 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

MLEFLSQQKPKILIIGDFMVDNYTWCDCSRISPEAPVLVAKTLKEDKRLGGAANVYANLKSLGADVFALG

VVGDDESGKFLQENLKGEFLIQKGRKTPFKNRIMAHNQQVLRLDEEDTSEILLENELIALFDEKIKDFKA

VVLSDYAKGILTPKVCKALIKKAKALNIPVLVDPKGSDFSKYSGATLLTPNKKEALEALKFENLEGENLE

KGIKKLKEDFALRYSIITLSEAGIALFDKSLKIAPAKALEVYDVTGAGDSVIAVLAFCLANGVEIFKACE

LANEAAAVVVGKIGSVSVSFDEIKSFNRVDFEKKIKSKEELLTLLKQKDKKIVFTNGCFDIVHFGHIKYL

EKAKRLGDVLIVGLNSDASVKKLKGESRPVNSEFQRACMLAAFYFVDFVVIFDEDTPLELISFLKPDILV

KGADYKDKIVVGADIVSKVELIDFEEGFSTSKIIEKIKDKK

>sp|A7H556.1|HIS8\_CAMJD RecName: Full=Histidinol-phosphate aminotransferase; AltName: Full=Imidazole acetol-phosphate transaminase

MKFNEFLNHLSNYEPGKDIELIAKEYGVKEVIKLASNENPFGTPSKAIECLRQNANKAHLYPDDSMVELK

SALAQKYKIQNENIIIGAGSDQVIEFAIHSKLNSKNAFLQAGVTFAMYEIYAKQCGAKCYKTQSITHNLD

EFKKLYETHKDEIKLIFLCLPNNPLGECLDASEVIEFIKGVHKDCLVVIDAAYNEFASFKDSKKHLEPCE

LIKEFENVLYLGTFSKLYGLGGLRIGYGIANANIISAFYKLRAPFNVSNLALKAAVVAMDDDEFTKKTLE

NNFSQMQLYKEFAKKYDIKIIDSYTNFITYFFDEKNSTDLSEKLLKKGIIIRNLKSYGLNAIRITIGTSY

ENERFFTEFDKILR

>sp|A7H4Z6.1|PYRF\_CAMJD RecName: Full=Orotidine 5'-phosphate decarboxylase; AltName: Full=OMP decarboxylase; Short=OMPDCase; Short=OMPdecase

MKLCVALDLSTKEECLQLTKELKNLDIWLKVGLRAYLRDGFKFIEELKKVDDFKIFLDLKIHDIPNTMAD

ACEEISKLGIDMINIHASAGKIAMQEVMTRLSKFSKRPLVLAVSALTSFDEENFFSIYRQKIEEAVINFS

KISYENGLDGMVCSVFESKIIKEHTQKNFLTLTPGIRPFGEKNDDQKRVANLTMARENLSDFIVVGRPIY

KDNNPRKICEKILQEI

>sp|A7H1T2.1|PYRE\_CAMJD RecName: Full=Orotate phosphoribosyltransferase; Short=OPRT; Short=OPRTase

MNLEQIYKDRGAYLEGHFLLSSGKHSQFYLQSAKVLEDPKLAAKLCDELAKIIASYKIEFDSICSPALGG

ILAGYELARACNKRFIFTERVNKEMTLRRGFEVKKGKKFIICEDIITTGGSALESAKTIESLGGIVVGFA

ALANRGFCGVENLKSPRKDNAKLPENLPLFTLGNFEFEIYDETNCPLCKKGSKAIKPGSRGN

>sp|A7H5V4.1|HIS6\_CAMJD RecName: Full=Imidazole glycerol phosphate synthase subunit HisF; AltName: Full=IGP synthase cyclase subunit; AltName: Full=IGP synthase subunit HisF; AltName: Full=ImGP synthase subunit HisF; Short=IGPS subunit HisF

MLTKRIIACLDVKDGRVVKGTQFKNHKDMGDIIELARYYSQNGIDELVFYDIAASARKERISREWVSEVA

KNINIPFCVAGGIKSEEDAAELLANGADKISINSPALNDPSLITRLAKSFGVQCVVVGIDSFKDENGNLK

VFQYTGDEKTSKHSGKSTLEWVKEVQDLGAGEIVLNMMNQDGVKNGYDLEQLEAVYKICKIPLIASGGAG

KMEHFLEAFKLGIDGALAASVFHQKLIDIKELKIYLKNQGLSIRI

>sp|A7H1R9.1|UPPP\_CAMJD RecName: Full=Undecaprenyl-diphosphatase; AltName: Full=Bacitracin resistance protein; AltName: Full=Undecaprenyl pyrophosphate phosphatase

MGNLYALILGIIEGLTEFLPVSSTGHMILGTTILGIDIDEFWKSFLIIIQLGSILAVIFVFWRKLFQGLD

IWLKLSVGFFPTGVIGFFVAKYLNALFNGWVVVGMLIFGGVMFILIEFAHKNKQYRINSLEEISFKQAFC

IGIFQSLAMIPGTSRSGASIIGGLLLGFNRKVAAEFSFLLAIPTMIIATAYSIYKEPELLSNANSLIPLG

IGFITAFVVAVLVIKFFLKFISKFDFIPFGIYRIILGFVFFYLYYSGILNAGSEFKL

>sp|A7H5V3.1|HIS4\_CAMJD RecName: Full=1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerase; AltName: Full=Phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase

MTQIIPALDLIDGEVVRLVKGDYKQKKVYKYNPLKKFKEYEKAGAKELHLVDLTGAKDPSKRQLVLIEKL

AKEVSVNLQVGGGIRSKEEVKALLDCGVKRVVIGSMAIKDATLCLEILKKFGSEAIVLALDTILKEDYVV

AVNAWQEASDKKLMEVLDFYSNKGLKHILCTDISKDGTMQGVNVRLYKLIHEIFPKICIQASGGVASLKD

LENLKGICSGVIVGKALLDGVFSVEEGIRCLQNA

>sp|A7H361.1|CMOB\_CAMJD RecName: Full=tRNA U34 carboxymethyltransferase

MQENLLEKQFLNHPLYAKIQELKALNLACNFSLDDSVNLSTNSQAKDEILTITKKLKPWRKGPFKIDDLF

IDTEWQSFIKFNILKPFMGEISQKCVADIGCNNGYYMFKMLEFNPAKLIGFDPSIKYRLQFELINALAKT

PIKYELLGVEDLPNYGLKFDVIFCLGVIYHRSDPIKMLKDLKAGLNKNGVVFLDTMYIEDEREIALVPNK

TYSKIPNIYFVPSISALKNWCERAGFKEFEVLATKKTDENEQRKTEWIDSFSLENFLDPKDKNLTIEGYE

APKRVYIRIKI

>sp|A7H3N1.1|GSA\_CAMJD RecName: Full=Glutamate-1-semialdehyde 2,1-aminomutase; Short=GSA; AltName: Full=Glutamate-1-semialdehyde aminotransferase; Short=GSA-AT

MTNKKAFKEACKFIAGGVNSPVRAFANVQSEPKFISHGKGAYIFDIDGNSYIDYVQSWGPLLFGHCDKDI

QKACQKALHKGSSFGAPTLLETELAKLVLSDFPHLEKIRFVSSGTEATMSAIRLARGFTKKDKILKFEGC

YHGHSDSLLVSAGSGAATFNSPSSLGVLEDVAKHTLVAKYNDINSVKELFEKNKDIACVIIEPIAGNMGL

VPAKQDFLEELAKICKNNQTLLIFDEVMSGYRASYLGSYGINHIQADIITFGKVIGGGLPAAAFASRAEI

MDILSPLGGVYQAGTLSGNPLAMAAGIASLTKAKKKTKLYDKLGTLAKKLTQGMKKLADEKGLPLQACHV

GSMFGYFFTKDPVSNYQDALKSNLALFSKFHKNMLENGIYLAPSQFETGFICSKMDDKVIDITLEAVRES

FKRI

>sp|A7H2A2.1|TRMB\_CAMJD RecName: Full=tRNA (guanine-N(7)-)-methyltransferase; AltName: Full=tRNA (guanine(46)-N(7))-methyltransferase; AltName: Full=tRNA(m7G46)-methyltransferase

MPNFKSKKIKEINLPYSKDDVEFLWFAKNDNVSLIYTKVQEESFFLQIKKAQNGFVIKGDKHTKPSKIGY

LQKALKIFKEGFCEDIINEAFGLKNNALIEKTPFIVDNFDELLSKLQGKIYIEIGFGSGRHLLYQAKENP

NVLILGVEIYNPALTQVAKLAKAQNVNNILLIQSDARLLLSVLKSKSVEKIFLHFPVPWGKKPHRRVIGK

DFCKECARVLVQNGRFELRTDSFEYFNFTLEQFLTFPAPKFSLRKNENLEISSKYEDRWKKQEKNIYDLW

VWNFNQECQNYELNEFNLSSVEFSKEDLKKIEQNFKNITIKKDDFFLHFESIYKQDENLLLKVAFGAFNK

SEHCYLHLDKTIDFAFKEPFKIQENIKAINELKEILKVQFKI

>sp|A7H4H3.1|KAD\_CAMJD RecName: Full=Adenylate kinase; Short=AK; AltName: Full=ATP-AMP transphosphorylase; AltName: Full=ATP:AMP phosphotransferase; AltName: Full=Adenylate monophosphate kinase

MKELFLIIGAPGSGKTTDASLIAQADATNITHYSTGDLLRAQVASGSELGKTIDSFISKGNLVPLDVVVN

TIVCALKAAPTKTIIIDGYPRSVEQMMEFDKVLSEQNEICLKGVIEVRVSEEVAKKRVLGRNRGADDNEE

VFYNRMKVYTEPLNEILDFYQKKKLHFIIDGERTIEPIVADMKELIKKIQSI

>sp|A7H515.1|PLSY\_CAMJD 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

MENLIIYAFIYLLGSISFGLILTKFFAKTDIKKEGSRSIGATNVLRVVKEKNPKLAKKLAIATIILDFAK

AAIPLLILKFLHYDQALLWSVAVLAIFGHCFSIYLLFEGGKGIATGAGAMIVLLPLEVLTAFIVWAVTGK

IFKISSLASLAALLAFIVSSFIFNYDLEIHTHAPVFIIAFIIVYKHLPNIKRLIFKEECKVI

>sp|A7H543.1|SERC\_CAMJD RecName: Full=Phosphoserine aminotransferase; AltName: Full=Phosphohydroxythreonine aminotransferase; Short=PSAT

MRKINFSAGPSTLPLEILEQAQKEFCDYQGKGYSIMEISHRTKVFEEVHFGAQEKAKKLYGLNDDYEVLF

LQGGASLQFAMIPMNLALNGVCEYVNTGVWTKKAIKEAQILGVNVKIVVSSEESNFDHIPRVEFSDNADY

AYICSNNTIYGTQYQNYPKTKAPLIVDASSDFFSRKVDFSNIALFYGGVQKNAGISGLSCIFIRKDMLER

SKNKQIPSMLNYLTHAENQSLFNTPPTFAIYMFNLEMDWLLNQGGLDKVHEKNSQKATMLYKCIDLSDGF

YKGHADKKDRSLMNVSFNIAKNKDLEPLFVKEAEEAGMIGLKGHRILGGIRASIYNALNLDQVKILCEFM

KEFQGKYA

>sp|A7H5S4.1|NUOH\_CAMJD RecName: Full=NADH-quinone oxidoreductase subunit H; AltName: Full=NADH dehydrogenase I subunit H; AltName: Full=NDH-1 subunit H

MSDFAFFALEALIKCIIIIAIFASLAGLATYAERKVLAYFQRRIGPDMVGPFGLIQLVADMIKLFTKEDI

IPSNSQKFIFAIAPLISAICAFVSLAAIPMLPEFTLFGRVIQPIVADINVALLFVIGTSGLCFYAVFLGG

LASNNKWSILGAARGLVAIISYESVGALALIAIVMLVGSFSLVDINNYQSDGFFSWLIFKQPLAFVLFII

ALFIETNRTPLCLTENDAEIVAGYGTEYSGLRWGMFFIGEYASMIAGAILVTLLFLGGFNGFWIIPGWIM

MIVKSSFIFFWYFWARAAFPQLRPDQVMKMCYLILIPLAVVNLLITALAVLL

>sp|A7H2H6.1|METE\_CAMJD RecName: Full=5-methyltetrahydropteroyltriglutamate--homocysteine methyltransferase; AltName: Full=Cobalamin-independent methionine synthase; AltName: Full=Methionine synthase, vitamin-B12 independent isozyme

MKNSIISYPRIGANRELKFAIEKYFKAQSSKEELLETAKNLRARHWKDIQNAGIDFIPSNDFSLYDNVLD

TAVLFNIVHTKYKNLNLDALDEYFAQSRGYQGENGDVTALAMKKWFNTNYHYLVPECDDASIIALTGDKI

FKEYLEAKELGIESKPVLIGIFTLFKLIAFKDKKTQKLAKEKLLNAYIELFDKLNELKVTWLELDEPYLV

YDLSKEDIALFEEFYQELLNHKKDLKILLQSYFGDLRDIYPKLLESKFDALGLDFIEGKQSLALVQQYGF

AKDKILFAGLINGKNIYANDYAKSLKLIKELQKYTQNIILNTSCSLLHVPYSTEFESKLDPSYLKLFAFA

KEKLQELKDLKEILNSSEENPLFKANQELFKNIPERLDEKVKARLKALKKEDFTRTPSFKERALIQKEFL

KLPLLPTTTIGSFPQSADVRSNRLAFKQKKISAQNYTEFNQQKIKECIQIQEEIGLDVLVHGEFERNDMV

EYFGENLKGFLFTQNGWVQSYGTRCVKPPIIWGDVSRTKPITLACSKFAQSLSQKIVKGMLTGPVTILNW

SFPREDISLKESTEQIALAIRDEVLDLENAGIKIIQIDEAALREKLPLRKSDWHSEYLDWAIPAFNLVHS

GVKAKTQIHTHMCYSEFSDILKEIDAMDADVISFEASRSNLSLLDTLKAVHFKTEVGPGVYDIHSPRVPS

VEELSLTIEKILNKLPKEQIWINPDCGLKTRAYEEVIASLKNLVTATQKIRKQL

>sp|A7H541.1|FABH\_CAMJD 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

MLKASLKSIASYIPEKILSNTDLEKMVDTTDEWIARRTGIKERRIANENENTSDLGTKAALKAIERANLK

PEDIDAILVATLSPDYFTMPSTACKIASNLGLVNISAFDISAACSGFIYLLEQAKALVESGLKKNVLIIG

AEKTSSIMDYSDRSICILFGDGAGAGVVSLDNENYILDVHTASNGNYGDLLMTQRSQKSSLCQTLSMQMK

GNEVFKIAVNTLSNDVVEILAKNNILAQEIDLFIPHQANLRIIKAVQEKLNLSDEKCVITVQKYGNTSAA

SIPMAMNDAYEEGRLKKGNLILLDAFGGGFTWGSALLKFGGENF

>sp|A7H5L7.1|PURA\_CAMJD RecName: Full=Adenylosuccinate synthetase; Short=AMPSase; Short=AdSS; AltName: Full=IMP--aspartate ligase

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>sp|A7H4P7.1|RS12\_CAMJD RecName: Full=30S ribosomal protein S12

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>sp|A7H1M6.1|Y163\_CAMJD RecName: Full=UPF0102 protein JJD26997\_0163

MGVKAYLDGILGEDKACKFLKKQGFEILKRNFHSKFGEIDIIAKKDEILHFIEIKFTQNNYEVSERLDRK

KLEKILKTIEFYHLKNGISSDFQIDLICIKNDVIQFCENISF

>sp|A7H539.1|RL32\_CAMJD RecName: Full=50S ribosomal protein L32

MAVPKRRVSKTRAAKRRTHYKVSLPMPVKDKDGSYKMPHRANPTTKEY

>sp|A7H4Q7.1|RL10\_CAMJD RecName: Full=50S ribosomal protein L10

MTRSEKVEIIAKLEEGFKASEAIVVCNYRGLSTKKLEELRNNARENNVKVQIVKNTLANIALNNSGKTGL

VLKDTNIYLWGEDQLSVSKVAAKFEENNDKFEIKTAHIEGEVADVAKIKALAKMPSRNELLAMLLQVWNA

PITNFTIGLNALKNKKESE

>sp|A7H4P0.1|TRPC\_CAMJD RecName: Full=Indole-3-glycerol phosphate synthase; Short=IGPS

MILDKIFEKTKEDLKERKLKLPYDMLGRSLASNPFFPKDVIKALKRVEKEVKIIAEVKKASPSKGVIRED

FDPLSIALNYEKNKAAAISVLTEPHFFKGSLEYLSLIRRYTQIPLLRKDFIFDEYQILEALVYGADFVLL

IAKMLSMKELKKLLEFARHLGLEALVEIHDKEDLSKAIFAGADIIGINHRNLEDFTMDMSLCEKLIPKIP

NSKIIIAESGLENKEFLEYLQNLGVDAFLIGEYFMREEDEGKALKALL

>sp|A7H2J8.1|TATA\_CAMJD RecName: Full=Sec-independent protein translocase protein TatA

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>sp|A7H368.1|RNPA\_CAMJD RecName: Full=Ribonuclease P protein component; Short=RNase P protein; Short=RNaseP protein; AltName: Full=Protein C5

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFVAKNEITELSFSRLEKNLKWGLKKLECFK

>sp|A7H4X1.1|LGT\_CAMJD RecName: Full=Prolipoprotein diacylglyceryl transferase

MEFWQHIYSNFNVIAFSIFGLKVHWYGIMYDVALLLALLLAKFFVRKFQLDINEKHLYSYFIWVEIGVIL

GARLGYILIYDANTMYYITHPWQIFNPYINGEFVGIRGMSYHGAIIGFLIATLLFCKKYKTNPWIFLDLV

ALSVPLAYVFGRIGNFLNQELFGRITNVPWGIYIDGVLRHPSQFYEAFLEGIVVFIIVYLARFKQSFQGE

LILVYAGAYSLARFICEFYREPDFGIGFVLWGMSMGQILSFIMFITALLVYICIKFKKVNI

>sp|A7H4G2.1|ENGB\_CAMJD RecName: Full=Probable GTP-binding protein EngB

MIISAKFITSLVVKFDENLSSNFSEVAFLGRSNVGKSSLINSLCKQKNLAKSSATPGKTQLINFFEVTCK

RNEEKFNINFIDLPGFGYAKVSKNLKEIWNQNLDEFLKFRTSIKLFIHLIDSRHTHLEIDVNLNDYLKRF

LRPDQKILKVFTKCDKLNQSEKARLKNEFKDSILVSNLNKFGLDSLEDVIINQTLGFDK

>sp|A7H591.1|TAL\_CAMJD RecName: Full=Transaldolase

MKNFSLWCDFIENSFLDNEFLNLLSHEINGATSNPAIFKNAILNSPIYKDKILKLKGKKTKDIYEELAIS

DIQKAADKLAPLFYQKNDGFISIEIDPRLHDNTTLSLGEAKRLYSAIGKENVMIKIPATKASYEVMYELM

KNGISVNATLIFSLEQSQKCFEALNAGLVEFRKNNIALKEQNTRTPQAVISIFVSRFDRLLNPKTKEQNR

IGILNANLAYNNIYSKNEPNIRALFASTGVKGDNLPKDYYIKELLFENSVNTAPLDAIEAFKGKMDFKKP

LMNFEIYTALNQIISQSEREKACNDLLSDGIEQFCIAFEDILKAL

>sp|A7H1G9.1|RL27\_CAMJD RecName: Full=50S ribosomal protein L27

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>sp|A7H2P8.1|LFTR\_CAMJD RecName: Full=Leucyl/phenylalanyl-tRNA--protein transferase; AltName: Full=L/F-transferase; AltName: Full=Leucyltransferase; AltName: Full=Phenyalanyltransferase

MESSNLYSKLLNAPKNTPVFLSQNLEADFIVKAYTFGLFPWTSKPVTWWCPDPRCVLNPNQIHIQKNMKK

FINLYQIKLDYDFLKLITLCRDARSQSWIDDEFITTYYKLFTQGYAHSLELYENNELIGGIYGLILGKVF

FGESMVNIKKNASKVAMIKLCDLLKPYDFIIDCQVYNQHLEFMGAHNISRKEFLNILKEKCNQESGFKNF

KDLIT

>sp|A7H342.1|RSMG\_CAMJD RecName: Full=Ribosomal RNA small subunit methyltransferase G; AltName: Full=16S rRNA 7-methylguanosine methyltransferase; Short=16S rRNA m7G methyltransferase

MIFKDYDFLQNYDLKNFGEKVKIYKELLSKFNRIHNLTHLKNIDENIFDSIKILDFYDFSKAKNIADIGS

GAGFPAVFLAFLLQSNFHLFEPNPKKTAFLRTLKIECELSNLHIYKEKVQEYKNTFKADIITSRALMDIK

PLLEICTNLKDENTVFILWKGSEIYQELENIKDYEIFENNLRKYCIVK

>sp|A7H5P5.1|DAPF\_CAMJD RecName: Full=Diaminopimelate epimerase; Short=DAP epimerase; AltName: Full=PLP-independent amino acid racemase

MKFYKYCASGNDFVITNADRKEDRSSLAKELCNRYEGIGADGFIVILPHEKYDFEWEFYNNDGSRAAMCG

NGSRAAAHFAHHINKINPSMIFLTGAGVIKAKVNQDKVEVSLGKIKSVQNTFEKLGKTWQLCDTGVPHLV

HFCQSLDEFDTMLCQKMRQKYNANVNFVKILDENHLKVRTYERGVEDETLACGTGMGACFYLAFLNKKVQ

NKVKITPKSGEEMGFAYKNEELFFEGKVKYCFEANYNFS

>sp|A7H506.1|RS21\_CAMJD RecName: Full=30S ribosomal protein S21

MPGIKVHPNESFDEAYRKFKKQVDRNLVVTEVRARRFFEPMTEIRKKQKISARKKMLKRLYMLRRYESRL

>sp|A7H5W3.1|RF1\_CAMJD RecName: Full=Peptide chain release factor 1; Short=RF-1

MLASKLDPFLKRFEELNSLLSSSDILNDISKMTTLSKEQKNLEPIVLKTKEYLKTLDNIEENKALLNDPE

LGELAKEELKTLEELKPKLEEEIKILLLPKDLNDERNIFLEIRAGTGGDEASLFVGDLVKAYARYAENRG

YKLEIVSSSEGSVGGFKEIIMLVKGTGAYSRLKYEGGTHRVQRVPQTESQGRVHTSAITVAVMPEVDDIE

IEINPNDLKVDVMRSSGHGGQSVNTTDSAVRITHIPTGIVVVNQDGKSQHKNKESAMKVLKARLYEMQEN

ERLAKESEARKSQVGSGDRSERIRTYNFPQNRISDHRINLTLYRLDAIMQDGLFDEIIEPLITHHQAQAL

QEQNL

>sp|A7H3B9.1|PCKA\_CAMJD RecName: Full=Phosphoenolpyruvate carboxykinase (ATP); Short=PCK; Short=PEP carboxykinase; Short=PEPCK

MKKFDNLGLDNIKEIFHNLSYDELNAHEKVNNEGLSTDNDTFCVDTGIFTGRSPKDKYFVKQDPSSKYIA

WGKVNQPITKELFDKLLTKAKQELSGKKIYVQDAFCGASLQSRKAVRFVTEIAWQAHFVKNMFIRPSQEE

LENFKADFIVYNACKCINEDYKQDGLNSEVFVIFNVEENIAVIGGTWYGGEMKKGIFSMMNYWLPLENKL

SMHCSANVGEKGDVALFFGLSGTGKTTLSTDPKRKLIGDDEHGWDDEGVFNFEGGCYAKTINLDPEHEPE

IYGAIKRNALLENVVLRADKSVDYADASKTENTRVSYPIEHIENHEPSLKAGHPKNIIFLSADAFGILPP

VSKLSKEQAMYYFLSGYTAKVAGTERGITEPQATFSACFGEPFMPLHPTVYARLLGEKIEKYEVNVYLVN

TGWSGGSYGVGKRMSIKATRACINAILDGSITKCEFENFEVFDLAIPKALEGVESTLLNPINTWSDKNAY

TETRDKLAHMFVQNFKRYEDVKEGIEFSKFGPKI

>sp|A7H4F1.1|HSLV\_CAMJD RecName: Full=ATP-dependent protease subunit HslV

MFHATTILAYKGKNKSVIGGDGQVSFGNTVLKGNAIKIRKLNNGKVLAGFAGSTADAFNLFDMFENLLQS

SKGDLLKAAIDFSKEWRKDKYLRKLEAMMLVLDRNHIFLLSGTGDVVEPEDGQIAAIGSGGNYALSAARA

LAKHANLDEEELVKSSLQIAGEICIYTNTNIKTYVIEDEK

>sp|A7H4F2.1|HSLU\_CAMJD RecName: Full=ATP-dependent protease ATPase subunit HslU; AltName: Full=Unfoldase HslU

MNLTPKEIVKFLDDYVIGQKKAKKIIAIALRNRYRRMQLSPELQDDIVPKNILMIGSTGVGKTEIARRLA

KMMGFPFIKIEASKYTEVGFVGRDVESMVRDLTNAALNLVKNEQREKNKDKINEFIENKILEKLLPPLPK

GISDEKQEEYKNSLEKMRTKLRNGDLDESTIEIEISQNMFDTNPNLPPEMGAMQDIVKVIGVGSKKVKKE

MKIKDAKNALKNEAGEKILDQESIKSEALKRSENEGIIFIDEIDKIAVSSGNSNRQDPSKEGVQRDLLPI

VEGSNVQTKIGTLKTDHILFIAAGAFHLSKPSDLIPELQGRFPLRVELDSLDDKAFYEILTRPKNSLLKQ

YSQLLKTENLELDFDNEAIKEIAKIASRANEEMQDIGARRLHTVIEKLLEDLSFEADEYAGKKFVVDKKM

VEEKLGDIIENKDLARYIL

>sp|A7H4E9.1|ASSY\_CAMJD RecName: Full=Argininosuccinate synthase; AltName: Full=Citrulline--aspartate ligase

MKNEVKKVVLAYSGGLDTSIILKWLQDEYNCEVVTFTADIGQGEELEPARKKALSLGIKEENIFIKDLRD

EFVKDYVFPMFRANAIYEGEYLLGTSIARPLIAKTQAQIALQTGADAVSHGATGKGNDQVRFELGYLAFN

PDLKIIAPWREWDLNSREKLLAYAQKHGIDISKKKGKSPYSMDANLLHISYEGLVLEDPAHAPEEDMWRW

SKSPKDAPHESEIIELDFQKGDLVAINGEKLSPAGLLTKLNELGCKHGIGRLDIVENRYVGMKSRGCYET

PGGTILLKAHRALESITLDREAAHLKDELMPKYASLIYNGYWFSPERMMLQALIDESQIHANGRVKLELY

KGNVMVIGRQSANDSLFNAAYCTFEEDEVYNQKDAAGFIKLNALRFIIAGKNGRKF

>sp|A7H4Q8.1|RL1\_CAMJD RecName: Full=50S ribosomal protein L1

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>sp|A7H1R1.1|GCH1\_CAMJD RecName: Full=GTP cyclohydrolase 1; AltName: Full=GTP cyclohydrolase I; Short=GTP-CH-I

MQKKFEDCVKTMLEIIGENPNREGLIKTPNRVFKAYEFLTSGYTQNVKEILNDALFESSNNEMVLVRDIE

FYSLCEHHLLPFFGRAHVAYIPNKKVVGLSKIPRLVEVFARRLQIQEQLTEQIAQALMENADAKGVGVII

EARHMCVEMRGVQKANSTTTTSALRGIFLKNEKIREEFFSLINSAKQVRF

>sp|A7H5U7.1|HIS1\_CAMJD RecName: Full=ATP phosphoribosyltransferase; Short=ATP-PRT; Short=ATP-PRTase

MQENTRLRIAIQKSGRLSKESMKLLSECGVKMHIHEQSLIAFSTNLPIDILRVRDDDIPGLIFDGVVDLG

IIGENVLEENELKRQSLGENPNYKLLKKLDFGFCRLSLALPQENKFQNLKDFEGLRIATSYPQLLKRFMK

ENGINYKNCMLTGSIEVAPRANLADAICDLVSSGATLQANNLKEIKVIYESRACLIQKENALIKEKQALV

DKIMLRVAGVMQARESKYIMLHAPKEKLDKIQALLPGVERPTILPLAHDEKNVALHMVSKENLFWETMEA

LKEEGASSILVLPIEKMLK

>sp|A7H4N6.1|HEMH\_CAMJD RecName: Full=Ferrochelatase; AltName: Full=Heme synthase; AltName: Full=Protoheme ferro-lyase

MRLVLFLNMGGAMNLQDCEVFLKNMFNDPYILGIKNRFLRKFVAWIITKARVKAMQENYKKMGGKSPLNE

LTQSLCDKLNLKQDEFKFDFVNLYVPPFATEILQKYTLNENDEIILFPLYPHHSCTTVTSSLEILQDEIS

KQKIQAKVKTIDIFYKNKLYNEMIVSHILAKKNKFDAKILIFSAHSLPQSIIDKGDLYEKHVKDHVEILK

EKLKDHFDEFILAYQSKLGPVKWLEPNTSDVLANLNDKALIYPISFCIDCSETIFELGMEYKHLAKCDYD

LISCPNDSDEFAQFILKYLSDLN

>sp|A7H574.1|PANB\_CAMJD RecName: Full=3-methyl-2-oxobutanoate hydroxymethyltransferase; AltName: Full=Ketopantoate hydroxymethyltransferase; Short=KPHMT

MRKSILSFLEKKGKNEKITMVSAYDYHSAKILDNCDIDIILVGDSLAMIVLGMQDTLSVTMDEMLIFTKA

VSRGAKKSFVLADMPFMSYQGSDRDAILNASRFIKESHANGVKVEGGIEIASKIKLISQSGIPVVAHLGL

TPQAVNILGGYRIQGKDLQSAQKIIDDAKAVQDSGACMLVLECVPIKLAQKISSILEIPTIGIGSGKYCD

GQVLVYHDLLGLNKDFKAKFVKHFDKIDPQIGVEKYRDEVKSGIFPSEEHSFDYLGEELLDKLY

>sp|A7H3C4.1|APT\_CAMJD RecName: Full=Adenine phosphoribosyltransferase; Short=APRT

MIKLTQEEQKYLLDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>sp|A7H485.1|GRPE\_CAMJD RecName: Full=Protein GrpE; AltName: Full=HSP-70 cofactor

MSEQKQEFENENAENSEHLQDENLQNIEDVEQNKLQKDYDELKDKYMRANAEFENIKKRMEKEKLSAMAY

ANESFAKDLLDVLDALEAAINVECHDEISLKIKEGVQNTLDLFLKKLEKYGVTLIKEEKEFDPNLHEAMF

HVDGENHQSGEVVTVLQKGYKIADRVIRPTKVSVAK

>sp|A7H2Q0.1|CLPS\_CAMJD RecName: Full=ATP-dependent Clp protease adapter protein ClpS

MLKTQTLEQTKLSEPKMYKVILLNDDVTTMDFVIEILMNIFHQNLEKASQTMLEIHHNGSGICGIYTQEI

ALSKQKKVIDAAKLANFPLQAKVEEE

>sp|A7H522.1|TRPA\_CAMJD RecName: Full=Tryptophan synthase alpha chain

MVDFRKFYKENANVAYTVLGYPNLQISEAFLQRLDQSPIDILELGVAYSDPIADGEIIADAAKIALDQGV

DIHSVFELLARIKTKKALVFMVYYNLIFSYGLEKFVKKAKSLGICALIVPELSFEESDDLVKECEKYNIA

LITLVSVTTPKERVKKLVKHAKGFIYLLASIGITGTKSVEEAILQDKVKEIRSFTNLPIFVGFGIQNNQD

VKRMRKVADGVIVGTSIVKYFKQENLDIIMKDIEEIFKK

>sp|A7H367.1|RL34\_CAMJD RecName: Full=50S ribosomal protein L34

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>sp|A7H4Z3.1|KDSA\_CAMJD 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

MKKMILIAGPCVIESKDLIFKVAKQLKNFNENPNIEFYFKSSFDKANRTSINSFRGPGLEEGLKILQSVK

DEFGMKILTDIHESNQANPVSEVADVLQIPAFLCRQTDLLVAAAKTKAKVNIKKGQFLNPSDIKYSVKKV

LQTRGIEDEGYEAAQKNGVFVAERGASFGYGNLVVDMRSLVIMREFAPVIFDATHSVQMPGAAGGSSGGK

SEFVEPLARAAAAVGIDGFFFETHINPCEALCDGPNMLDLTRLKNCVNTLLEIQNII

>sp|A7H552.1|DXS\_CAMJD RecName: Full=1-deoxy-D-xylulose-5-phosphate synthase; AltName: Full=1-deoxyxylulose-5-phosphate synthase; Short=DXP synthase; Short=DXPS

MSKKFAHTQEELEKLSLKELENLAASMREKIIQVVSKNGGHLSSNLGAVELSIAMHLVFDAKKDPFIFDV

SHQSYTHKLLSGKEEIFDTLRQINGLSGYTKPSEGDYFVAGHSSTSISLAVGACKAIALKGEKRIPVALI

GDGALSAGMVYEALNELGDSKFPCVILLNDNEMSISKPIGAISKYLSQAMATQFYQSFKKRIAKMLDILP

NSATYMAKRFEESFKLITPGLLFEELGLEYIGPIDGHNLGEIISALKQAKAIQKPCVIHAQTVKGKGYAL

AEGKHAKWHGVGAFDIDSGESVKKNDAKKSATEIFSKNLLDLASKYENIVGVTAAMPSGTGLDKLIEKYP

NRFWDVAIAEQHAVTSMAAMAKEGFKPFIAIYSTFLQRAYDQVIHDCAIMNLNVVFAMDRAGIVGEDGET

HQGVFDLSFLAPLPNFTLLAPRDEQMMHNIMEYAYLHQGPIAFRYPRGSFILDEEFNPCEIKFGKAQWLV

KNSSEIAFLGYGQGVAKAWQVLRALQEMNNNANLIDLIFAKPLDEELLCELAKKSKIWFIFSENVKIGGI

ESLINNFLQKYDLHVKVISFEYEDKFIEHGKTSEVEKNLEKDINSLLTKVLKFHH

>sp|A7H4D5.1|ACKA\_CAMJD RecName: Full=Acetate kinase; AltName: Full=Acetokinase

MKILVLNSGSSSIKFKFFDNKIIKASGLVEKIGEQNSKVILKNVLNNESFERELTINNHEEGLSIVNELF

KESGILADLNTLDGCGHRIVHGGRNLSEHCLVDDYVLKEIDRVSIFAPLHNPAHLAGIKTMIKAAPSVAN

VAIFDTAFHRTMPDFAYMYALPYDFYDKHNIRRYGFHGTSHAFVSSRAASLLEKDKSELNVISAHLGNGA

SVCAIEKGKSVDTSMGFTPLEGLVMGTRCGDLDPAILPFISHLKGLTIEEIDTLMNKKSGVYGICGYNDF

RDIEREIEQGNDKARLALDMFCYRLVKYIGAYFAVLPKTDAIVFTGGIGENDSLVRQKVCERLAHLGIEL

DFELNKQRISGERMINHANSKVKVLVIPTDEELEIARITEELIGKN

>sp|A7H346.1|Y796\_CAMJD RecName: Full=UPF0763 protein JJD26997\_0796

MKELEKYSTCLKCIDEFSQNLGIKKKDRTIFKMKQSENENEKCLVLENGSFESPEPWFVIDENDEIHTLL

SLQSLKNILESLKQSQKENFELRLEKAIYQQIPVDFNDVWTVAMDEIKQKAQNGTMEVSIDLEKLISKIK

QEHPNLFVDMQAMIEKVNQNERL

>sp|A7H4K9.1|SUCC\_CAMJD RecName: Full=Succinate--CoA ligase [ADP-forming] subunit beta; AltName: Full=Succinyl-CoA synthetase subunit beta; Short=SCS-beta

MNIHEYQAKAIFADNGILTLKGKVAFSVDEAVSNAKELGGSVWAVKAQIHAGGRGLGGGVKIAKNLDEVK

DYASKILGMNLVTHQTGPEGKLVQKLYIESGANIVKEYYLAILFNRMAEQITIIASSEGGMDIEKVAKES

PGKIAKVGIDPQIGFKMFHGLEVARVLGLDKDEGKKLISMIAKLYKLYMDKDMNMLEINPLIKTAEGDFY

ALDAKCSFDDSALYRHPEIAELRDITEENPAEREAAEFGLSYVKLDGDVACMVNGAGLAMATMDIINYSG

AKPANFLDVGGGASPETVAKAFEIILRDKNVKVIFINIFGGIVRCDRIANGILEATKNVEVNIPIVVRLD

GTNAAEAKTILDNSNLKNIKAATNLKNGAELVKSLVG

>sp|A7H639.1|RS5\_CAMJD RecName: Full=30S ribosomal protein S5

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>sp|A7H668.1|QUEF\_CAMJD 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

MRYGEKEIKEFDVENMEIWPNDAKNDYIIKITLPEFMCCCPRSGYPDFATIYLEYMPDKFVIELKAIKLY

INTFMYRNVSHEASINEIYNTLKDKLKPKWIKVVGDFNPRGNVHTVIECRSDMVVP

>sp|A7H1A8.1|QUEC\_CAMJD 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

IGGNALTDKSIDIPKNELCISDIPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>sp|A7H5S3.1|NUOI\_CAMJD RecName: Full=NADH-quinone oxidoreductase subunit I; AltName: Full=NADH dehydrogenase I subunit I; AltName: Full=NDH-1 subunit I

MKNYYLVDEKRKTPVSTWEKISQALRRSVKLELFVGLFVMMRELLKRNNSATIKYPFEKVKLDNRYRAVH

RLMRFIESENERCIGCGLCEKICISNCIRMETSLDENGRKKVGNYSINLGRCIYCGFCAEVCPELAIVHG

IEYENAAEQRSYFGYKQDFLTPIDKLKNQVEFEGAGSLRKDANLWVKKTPNYYDVMQERVLENQNTKEQG

ENK

>sp|A7H2D8.1|DCUP\_CAMJD RecName: Full=Uroporphyrinogen decarboxylase; Short=UPD; Short=URO-D

MIFIDACFKKPTPYTPIWMMRQAGRYLPEYMEVRKQAGDFLSLCKDYKKASEVSLQPIDILNVDAAIIFS

DILVVPLEMGMNLRFEKGEGPIFDNPISTLEDLEKLDDQNAHKKLNYVYNALKLTREKLSQNKALIGFCG

SPWTIATYMIEGSGSKNYAKCKKMLYQNPELLHKILNKLTQVLKLYLEEQIKAGANAIQIFDSWASALEY

DKFFEFSFSYMLEISNFIKSKYPNIPVILFPKGISGYLDRIDGNFDVFGVDWSTPLDLARDKLSHKYALQ

GNMEPCRLYDKNAIKEGVEKILKTMQNKAHIFNLGHGILPDIPVENAKYFIKLVQESSAK

>sp|A7H369.1|YIDD\_CAMJD RecName: Full=Putative membrane protein insertion efficiency factor

MICLKILRFYQKFLSPLKPAACRYYPSCSEYALWQFQKKNFFLAFLSTFFRILRCNPFFKGGFDYPKVSK

NFYPMNLCFKPMFLAKKQLCFLYIPYKNKSFYLIKIIFKRTNQ

>sp|A7H652.1|RS19\_CAMJD RecName: Full=30S ribosomal protein S19

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>sp|A7H647.1|RS17\_CAMJD RecName: Full=30S ribosomal protein S17

MAFKREIQGVVVKIAGEKTVSVLVERKVVHPKYRKIVKRFKKYLIHDERNEVKVGDTVVAVECRPLSKRK

SFRLKSVLATGVE

>sp|A7H5K0.1|RS9\_CAMJD RecName: Full=30S ribosomal protein S9

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>CDK02611.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_26997, partial [Campylobacter jejuni subsp. doylei 269.97]

ANNVKFAPAYAKAA

>CDI30473.1 TPA: proteolysis tag peptide encoded by tmRNA Campy\_jejun\_26997, partial [Campylobacter jejuni subsp. doylei 269.97]

ANNVKFAPAYAKAA

>WP\_002861924.1 MULTISPECIES: MerR family DNA-binding transcriptional regulator [Campylobacter]

MEHHYDEPVYLISVVAKVLSIHPQTLRQYEREGLIEPSRTDGKIRLYSQRDIDRIKLILRLTRDMGINLA

GVDVILKLKNQLHEFENLIDELRLELSKQQDKEAASKAVVKHKNSFDLIFYEKK

>WP\_002854819.1 MULTISPECIES: 4Fe-4S dicluster domain-containing protein [Proteobacteria]

MSMTAPKDTPVWVDEHRCKACNICVSYCPAGVLAMRDDVHAVLGQMIEVVHPESCIGCTECETHCPDFAI

MVAKRDEFKFAKLTAEAKDRAVAVKNNKYKKLA

>WP\_002829517.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MEKQFYEILENILETKVDENTNLSMENCKNWTSLAHIDIIMSLEEEFEIKFNKEDLSLLKSQNALLEKIQ

TLKAEK

>WP\_011990506.1 phosphoribosylformylglycinamidine synthase, purS protein [Campylobacter jejuni]

MEVIVNISLKNGVLDPQGKAVEKALHSLNFNSVKEVKIAKQIKISLDEKDEKLAKEQVKKMCEELLVNGV

IEDYELVIEKE

>WP\_002864726.1 MULTISPECIES: RNA-binding S4 domain-containing protein [Campylobacter]

MRVDKFLNVVNITKRRAISEDMCKSGVVGINGVIVKASKEVKVGDIITLHFTEYTQKYKVLALPSTKSIP

KNAQNEYVVKL

>WP\_002854237.1 MULTISPECIES: protoporphyrinogen oxidase HemJ [Campylobacter]

MTEWINDYYFWIKWVHYLAFVSWMAGLFYLPRLFVYHAEHKDNKGFVEVVKIQERKLYYYIQTPAMIVTL

ITGSLMLHAHKEVLMVGAGFMHVKLTCVTLLIIFHIHNYYCLKALANDTSTKSGKYFRIYNEFPTIMFII

IALMMVVRPF

>WP\_002855356.1 ABC transporter permease [Campylobacter jejuni]

MLNVIHALFFRELKTRFGKNRYLGYFWVVGEPMAIVLVITTIVTIIREYHHQVMPEGISIFMFLISGIVP

FFMFRSIVNQLMSGTQANLSLFAYKPVKPIHVFIARTLLEFCIYFVIFITVLFFAGWFFRFDIFPIHLSG

VLFCIFLLMCSAFALGICFAIIWHFVEPLRTLLAYFSIVFYWTSGVIFPTWFMPRPLLDLFYYNPLLHIF

ELLRFNFFEHYPLQDEYSYFYPIFWILLVLFIGLFVYYYNRQALTAAKKE

>WP\_011989565.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MMLEIKNLSKNFGKIQALENINLHVKEGEFLSILGGSGSGKSTLLRIIAKLEQASSYDLFSCKGEVALMF

QNYALFPHLNVEKNILFALYDKKDKNQILNHLLKTFEIEDLRYKKIDEISGGQAQRVAFARAIARGCKLL

LLDEPFSNLDQNLKQDLRRELKKMIENQGITAIMVTHDIEDAYCMSNQIAFLEKGKILAHANPKELYFKP

DFKSAQILPDLNIIEEKLDLEDEFFAWIASKNYIFGYAELKIGNRFEAKILQKEFLGAFYRLKLRYKNIE

FFMLLSSNYNLEEKINFDIINF

>WP\_002860384.1 MULTISPECIES: holo-ACP synthase [Campylobacter]

MRVGCDIIAISRIEKIHSRHGKNFLDKFLSPKEQILIKNPATLAGLWAAKEAASKALGVGICELCSFFDI

EISKDERNAPKLKYSQKITKDFNITQTSLSISHDNGFAIAIVAIV

>WP\_029588158.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRLCFSLFAFFMRNLLRLQFLKLNLLRIDNEI

>WP\_002937878.1 MULTISPECIES: ribosome maturation factor RimM [Campylobacter]

MSEKDFVQVAKLGKTVGLKGYVKLHNLSDFSSQFKKDATFFIKNTKEMLKIKHYNASNSTVLFENYEDIE

KAKELTNLILFQSIEKSRQTCKLKKDEFFYFDILECEVFEEDKRLGKVVDILETGASYLFEIQSDEKWVE

KKYPKIFFIPYLDKFVKNIDIEKRQIFCTQDAFLILENS

>WP\_002933471.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKQWLNDFKLALIQEDVNKLKNLLDELDMKAFVKNLAKKSPSEDFLKENANDVFYQIQALLQEAVVLIEQ

KKKTKAVEIQKFQKALTYFKS

>WP\_002877126.1 MULTISPECIES: cbb3-type cytochrome oxidase assembly protein CcoS [Campylobacter]

MNSIIMMMIGVSILAFFIILATLLWGIKNKQFDDDYKFTTLNDDEDSLRDAIELERRKKEALNKKRLS

>WP\_002867099.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDKKIKYFILDKFDYSYPILTKDTKCSFCENFFPIEYSSNLKTIEKECPFCNNKMDIKLKD

>WP\_002854354.1 MULTISPECIES: 4Fe-4S dicluster domain-containing protein [Campylobacter]

MAVKITDICIACGSCIDECPVSAIVDDANNPEGEDRYYVYANKCVECVGHNDQPACASACPTDGCIVWSA

VESGQPSRDNIGADMRSGDTPVFA

>WP\_011990813.1 cytochrome-c oxidase, cbb3-type subunit II [Campylobacter jejuni]

MFSWLEKNPFFFAVAVFVVIAYAGIVEVLPNFAENARPIEGKKPYTVLQLAGRAVYIKDSCNACHSQLIR

PFKSETDRYGMYSVSGEFAYDRPFLWGSKRTGPDLARVGNYRTADWHENHMWDPTSVVPDSIMPSYKHMF

KNNADIETVYAEALTVKKVFNVPYDTENGTKLGSWEDAQAEVKAEAQAIVDQMKNQEVKDAFAKGEIKEI

VALIAYLNSLK

>WP\_002783013.1 MULTISPECIES: QacE family quaternary ammonium compound efflux SMR transporter [Campylobacter]

MNIAKKELFVAWFFLIAAIVFEVLGTSFLKMENQILGYIFMALFIAFSYFFMGKAIKKIQVGIAYAVWEL

LGIILILLVSFIVFKESLTLTQILGIILSIVGIIMINIGEVKE

>WP\_002855252.1 MULTISPECIES: LPS export ABC transporter ATP-binding protein [Campylobacter]

MSKLEIVNLEKIIKKTKIIHGISLEVNSGEVVGLLGPNGAGKTTTFYMICGLISPSSGKVLLDGLDVTKD

PLNKRARSGIGYLPQESSIFKDLSVEDNLLLAAQIFYKDKKILHDKVEQMLELLSIEPIRLRKGLSLSGG

ERRRCEIARSLMCEPKFLLLDEPFAGVDPIAVAEIQTLIKELKRLGIGVLITDHNVRETLAICDRAYVIR

SGSLLASGNADEIATNKDVKKYYLGAEFKLLD

>WP\_002779567.1 MULTISPECIES: type II toxin-antitoxin system YafQ family toxin [Campylobacter]

MRKINLLRSFKKDYEKVKKQSWDLNTIDDVIQCLMNLDVLPTRLKDHALKGEFKDFRECHIFGDLVIIYK

RDDKILSLYRIGRHQDLFKKY

>WP\_002933873.1 flagellar type III secretion system protein FliR [Campylobacter jejuni]

MEFVNYLGDKNVVTFMLLLARMSGLIVFFPFFSHNSIPMVIKSTIVLFLTMYLYPLARLESLHLDSFFVL

QLISEVIFGMIAGLMLQIIFAIIMMAGEQIAFTMGFTMASILDPSSGTSMPITAQILNLLALMFFLAFDG

HHLMLLFLSHSLGYISLGGFYPHENLMHYLNIGMFNIFIIGFTMSFPILGISLLADVIFGLLMKTMPQFN

LLVIGYPIKIALGFVVLIAILLVMMQYFKNLILELFTHMQTLFFS

>WP\_011989590.1 protein-L-isoaspartate(D-aspartate) O-methyltransferase [Campylobacter jejuni]

MNAFEQKRCQNMAEEIAQKVFINEELFNAFCQIPREIFSPLKAHAYRLDALPLANSQWISSPLTVAKMTM

ALNFKNADSILEIGCGSGYQAAILSKVIRRVFTIERIENLAKKATQTFRELELFNINVKFDDGQNGWKNY

APYDRILFSAYATQIPEILLDQLSDGGILVAPILHNGKQFITRLRKNGTNLQKETLEECLFVPIVDGKE

>WP\_002858466.1 MULTISPECIES: NADH-quinone oxidoreductase subunit NuoK [Campylobacter]

MIEKYFFIAILMFVIGLVGILKRQNLIMLFISSEILLNSANLALVAASKMHNDLNGQVFALFIMGVAACE

VAVGVALCVLWYRRKGTLELKSLKEVEA

>WP\_002855574.1 MULTISPECIES: DUF655 domain-containing protein [Campylobacter]

MKKLLFLFFALTAFLFGAVNINTATLKELKSLNGIGEAKAKAILEYRKEANFTSIDDLKKVKGIGDKLFE

KIKNDITVE

>WP\_002854361.1 MULTISPECIES: MotA/TolQ/ExbB proton channel family protein [Campylobacter]

MNFEAIFHFFNSSSIITYIVLLWLSLYFILAFSILFARLTYLATWRNKEKESLETLLLGEKDLSRTDSIL

RKCNDTTSNHLEIYKNLASRRASAGLTWLSIIASTSPFIGLFGTVISILETFGGLGTQNSLSIIAPKISE

ALVATGCGILVAIPAYTFHLIIKRKAFELLSIIDSEIKVISSSK

>WP\_002852622.1 MULTISPECIES: type II toxin-antitoxin system Phd/YefM family antitoxin [Campylobacter]

MLSFKQDEIYTATEVVRNFSPIMEKLKKSESGKIVILKNNKFEAVMLSMKEFERLQNAMQLLENIYKNQK

A

>WP\_002861392.1 MULTISPECIES: KH domain-containing protein [Campylobacter]

MVENFLREYAKLIADYPEQINTQKIELSENFFEIVLFAHKVDTGKLIGKNGKMINAIKTVISAYKSKDAS

SYRVTVKALE

>WP\_002859818.1 MULTISPECIES: tetratricopeptide repeat-containing protein [Campylobacter]

MMKNTVTEASIYEAQGLKDEALEIYKNILKEDPDNQNAIDAVRRLSGFRSKHKDLNTQMLDFFINMKSDE

EINEFKRWLIKI

>WP\_072223679.1 MULTISPECIES: DUF4006 domain-containing protein [Campylobacter]

MMENNNRCVFSLSGVTGMLIATVLLLAILVVLTIWGLKAQQEVMQKPYSLKDAQSVKMFGSKEQDHRSIK

EAQ

>WP\_002873817.1 DUF3972 domain-containing protein [Campylobacter jejuni]

MQTYLELEEFCKLVHLNEDVVKGMMANGALNFKEEEGKIYIEAHQGTFSVVPSAAKSQPAMVNSMTLAGE

SFVEKTIGTILNLHEKVLDAKDETLEALKNENKFLKDALYSMQELYDEDRKTIETLNNELKHAREEIEFL

KRKYRLMWSKTAEIFGAKTEPDLEMNKNLEKPIENMEQ

>WP\_002851269.1 MULTISPECIES: DUF507 domain-containing protein [Campylobacter]

MRIKLPHIPYIANKMMLDIANSSFVEIKDQLEKLKVCIIEVLEKDILNERKLDERVKELLEQQEDEMELM

QVDRKNMFWLVKKKLAPEFNVILDSEDRHNHLAHQILEELVENDYINFIVSENRVKNLIFSSIESYLKIY

EKLEDEVYEKISNYKTKPIPGSEEYDLIFEKLYQEELRKKGMF

>WP\_011990522.1 HIT domain-containing protein [Campylobacter jejuni]

MQYLYAPWRSEYFEKEKSVCPFCDCANKIKSDEELGVIFRAKHCFGVMNRYPYSAGHFMVIPYVHEEHIE

NLSDEIWQEMSHFVRLGVKILKEQIHANGVNIGMNLSKDAGAGIAFHCHYHLVPRWAGDTNFITTIGETR

VCGTNIEQVYQKLVLAFKNAQ

>WP\_011990155.1 DUF4160 domain-containing protein [Campylobacter jejuni]

MPTLLEINGFKFFFYSNEHEPKHIHVMKGNEFAKINLEDLQVRFSSFKNKDLSFILETVKKHRLEFERRW

NEYFS

>WP\_011990559.1 DUF465 domain-containing protein [Campylobacter jejuni]

MLHEYRELMSELKGKDAHFDKLFDRHNELDDMIKDAEEGRTSLSSMEISTLKKEKLHIKDELSQYLANYK

K

>WP\_002855637.1 MULTISPECIES: DUF2325 domain-containing protein [Campylobacter]

MSVLVIGADEITPIRAVLHDLGAKKIEHWDARNENRVNRKPIPCDTECIVMLTSFLNHNTMKKIKNEAKK

RKIPLVCAKRSVSCVYCEYCKIFNLNKEFSCYKG

>WP\_002791314.1 MULTISPECIES: 50S ribosomal protein L25 [Campylobacter]

MLEGIVRESIGRKAAKALKRDGYLIANIYGKGLENINAAFKVNEFIKEVRKKTTLIFDVKVGSQTLSVVV

VDYQKDPVTAELKHVDLKVAQKGVISKYMVPVKITGTAIGLKNKGVLIQSKRRLKVKCAAENLPNFFELD

VSKLDVGDALLVRDIVVPAGVTMIDADRVAVVGVEKAR

>WP\_011990857.1 flavodoxin family protein [Campylobacter jejuni]

MKNILLLNGAKEFGNSKGQLNLTLHNHALEILKTLGYEVDQTHIDQGYDPKEEIQKFIKADAVIYQMPAW

WMGEPWIVKKYIDEVFGLGAGVLFKNDGRTHENPSKNYGKGGLDHGKKYMFSLTWNAPLEAFNDKNEFFE

GKGVDMVYWHLHKAHEFIGMKALPTFMCNDVVKNPQVEKYLNEYELHLKKNF

>WP\_011990154.1 DUF2442 domain-containing protein [Campylobacter jejuni]

MNTLVKAKNVKFNKDYLIVLLEDERIIQTPLKWYKELENANLEDLEKWHFICGNTGIEWEELDCHLSIEA

MLKSNANKVA

>WP\_011989434.1 HD family hydrolase [Campylobacter jejuni]

MINIKLIEHIFKAASISRWNDYPRMANLVELDKQAHKFIIAYFIAKMEKDVDMRVIIEGGIFEFLSRVVV

TDIRPDVYHEIVRQKKAEVNAWVLSKIEPMIEDIEDGEFLKRFEAYLNGNAYAKERLILKAASYFATRWE

FNIVYQTSAFLNDIDEIKNKVEEELEDYYELIGARKIALNQKIAKIIDLSGRLRFQKRWAQTPRIPETAV

LGHMLVVAILGYFYSLKIKACDKRLENNFYCALFHDLPESLTRDIISPVKYGIDGLHDIINDYEMKLINE

KILPFVPEGLRAEFSYILGIREGRNDESNFVKNEFENRTYKNAKIELCSGSLSSFNENEFGAIDGKALKY

CDKIAAYIEAGLSISYGVKSKELESGFLGMHEFFKENPTIDGVNFFEICESLREYFKI

>WP\_002897482.1 DUF466 domain-containing protein [Campylobacter jejuni]

MNFKKFKYYYEKAERFFHPLVGLSSYDKYLEHMKQKHPGKIPKTREEFFKECLDKKYNSGGLNKC

>WP\_002862283.1 MULTISPECIES: ABC transporter ATP-binding protein [Campylobacter]

MVIKAQNIITKFGEKIVHDGVSFEIKKNEIFGILGGSGSGKSVLLKQMLMLEHFDGGEYEILGYKLKNIN

EEDALALRKKWGVVFQFAALFSFFNVYENIAIPLKEYTHLDENSIQELVLMKLKMVGLNESVLKQFPSEL

SGGMQKRVAIARALALDSKLLFLDEPTSGLDPHSSREFDDLVLELKKSFDLNIILVTHDKESMKNLLDRF

IILENKKVGFCGTYEELRLQNERLFKRFME

>WP\_002854219.1 MULTISPECIES: peroxiredoxin [Campylobacter]

MIVTKKALDFTAPAVLGNNEIVQDFNLYKNIGPKGAVVFFYPKDFTFVCPSEIIAFDKRYQEFKNRGIEV

IGISGDNEFSHFAWKNTPVNQGGIGQVKFPLVADLTKQIARNFDVLYAEAVALRGSFLLDADGTVRHAVV

NDLPLGRNIDEMLRMVDTMLFTNEHGEVCPAGWNKGDEGMKANPKGVAEYLGKNEAKL

>WP\_002852655.1 MULTISPECIES: class I SAM-dependent methyltransferase [Campylobacter]

MLEKQMIKFILSKWNYGNFRIVFWDQEEFHVGNQPAKFSLIFKEKIPFLKLFSDTSLVFAKHYMESKLEI

EGDYDEIAKVLYYFSNKRFLKNTEDILSKIAQKQESKNIKSHYDIGNDFYKLWLDDTMSYSCAYFKEPNN

TLYEAQINKIEHTLKKLDLKEGEKLLDIGCGWGWLSIMAAQKYGVKVVGITISEEQCKKAKERVKELGLE

DKIEIRLQNYQDLEFENYFDKVVSVGMFEHVGKENLGLYFMKVKQVLKPGGSMLLHSILAMFEGKTNAWI

DKYIFPGGYLPSLREVVSAMSEWDFHLLLAESLRMHYAKTLDLWDENFNKVLDKVREKYDEEFIRMWDLY

LRSCASAFRVGSVDLFQFLITKEINNNLSLTKDYIYK

>WP\_002851789.1 MULTISPECIES: tRNA threonylcarbamoyladenosine biosynthesis protein TsaB [Campylobacter]

MIGIYQDDKLIKTYKSEEKASEFLPKILDELLKEYDFTSLIYANGPGSYMGIKISYVSLSTLSIVKNIPL

FAVSAFELNGYKPISANKNFCFVYKEGEICLEQNIPAEFFLPKNLQELKLNNDNLPFYFLDAI

>WP\_002851697.1 MULTISPECIES: ParA family protein [Campylobacter]

MSEIITIANQKGGVGKTTTAVNLAASLAVAEKKVLLIDVDPQANATTGLGFNRNNYEYNIYHVFIGRKKL

SDIILKTELPQLHLAPSNIGLVGIEQELAKGENNEKKMLLKNQIQEVIDEYDFIIIDSPPALGSITINAF

AASDSVIIPIQCEFYALEGVAMVLNTIKIIKKTINSKLRVRGFLPTMYSSQNNLSKDVVDDLKQNFKKQL

FTINGNEDDFIVIPRNVKLAESPSFGKPIILYDIKSPGSVAYQNLAYSILG

>WP\_002846242.1 MULTISPECIES: DUF262 domain-containing protein [Campylobacter]

MAEMKTERKSVLDYLSKNKFLIPMYQRPYAWTLEECEQLWNDIVTFFNDEDRKPEDEYFLGSIVMYKQNN

HQNIIDGQQRTISLSLLLKALYVKAFKDRSEETKNLVAMLESCLWDIDDISGKADYNASHLESDVITKED

EDILKQILTNEYRLENNDIETKIKKVKSNYEKNYLFFLLKSDEFAKENPTKWEKFCVVLLKSCILLPIEC

EGYDEDSRLENALRIFNTLNNRGIPLSDSDIFKSIIFKSKKTLERRKEFANKWKELEDKKDMDFIFRNYM

HVIRARNKIKTSEIGLRVFFTKEYKNILQDDNIISEIEQLSKFWNDEFSDLYNNRSYQFYEVLNELPNEY

WKYLDSAYYMYCQDKKINYYKNHENFLAKIIANFLVKLINKPTIAEVKPIVFNAYTSLYSKGELNFQTDS

KQILENEILFKEQFFKANKLIPALLTLNLYIKYPNQKTDIKAEIEHIFPKTTQWRPSYTGWDKEEAKSYI

ESIGNKMWLEKRLNIKAGNNYFDEKKEKYKESNFLEAQELSKYTKNDWLKEDIEKRNEEIYNRLVDFFKQ

NID

>WP\_002826355.1 MULTISPECIES: chemotaxis protein CheW [Campylobacter]

MSNEKLEQILQKQQTQMAGPDVDQREDDIIQLVGFVVGDEEYAIPILNIQEIIKPIEYTRVPSVPDYVLG

VFNMRGNVMPLIDLAQRFHLGSSKMTPQTRYIVLRGETNGTGVGGNAGFVIDRLTEAIKIHRNRIDPPPE

TLVKDKGMIYGIGKRDENILTILKVEALLKREF

>WP\_002779488.1 MULTISPECIES: molybdopterin synthase sulfur carrier subunit [Campylobacter]

MVKVEFLGPINKENLELEVKNLKELKEILQKDESLKEWLELCAVSLNDEIIFDENTKLKDGDKIALLPPV

CGG

>WP\_079860254.1 MULTISPECIES: acetylglutamate kinase [Campylobacter]

MIMQKYLEKANVLIEALPYIRKFNSKIILIKYGGSAMENEELKHCVMQDIALLKLVGLKPIIVHGGGKDI

SAMCEKLGVKSEFKNGLRVSDKATTEVASMVLNHINKNLVHSLQNLGVKAIGLCGKDGALLECVKKDENL

AFVGTIQKVNSKILEELLEKDFLPIIAPIGMDEDFNTYNINADDAACAIAKALRAEKLAFLTDTAGLYED

FNDKNSLISKISLEQAKILAPKIEGGMHVKLKSCIDACENGVKKVHILDGRVKHSLLLEFFTDEGIGTLV

G

>WP\_002852866.1 MULTISPECIES: twin-arginine translocase TatA/TatE family subunit [Campylobacter]

MGGWSSPSHWLIILLIVVLLFGAKKIPELAKGLGKGIKTFKDEMNNDDEVAKNTQKIEENKNTTNNTNAD

ASIDETKKA

>WP\_011812746.1 MULTISPECIES: hypothetical protein [Campylobacter]

MLEFPKNKVVFMEILDFILIVIFVFLMIVLVIGFNRQMMQKNKEREERFKKYKKGEQNE

>WP\_002859498.1 MULTISPECIES: hypothetical protein [Campylobacter]

MMAKFRIQYSAGFGHYTQNHKGFGPTIYIEEVVEFDNGKDYFDYIDFYKTYSKSDDTYFHISFLEDRPLS

DKEITIRNEYRKMRDENCKKAKEEFIANNELDVEHLPTHHD

>WP\_002859022.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKILKDLAMELKLARTLINEKPKNISLEKIEEAIEKEGQKFFYFDKDNTHKQLIALVNHFEKKGVSIYHR

TVKYGLDDNDFMYEVHIL

>WP\_002873623.1 cyclic pyranopterin monophosphate synthase MoaC [Campylobacter jejuni]

MKLSHLDEKNHPKMVDVSDKNITSRMATASGVIYMSQEAFDVIKNNTAKKGPVLQTAIVAAIMGAKKTSE

IIPMCHPLMLSKIETDIVEFVKECAFKLIVTVKCEGKTGVEMEALSGVSIGLLTIYDMIKAIDKSMRITD

IVLESKEGGKSGKFVRY

>WP\_011989587.1 N-acetyltransferase [Campylobacter jejuni]

MLIRAMQKSDYEAVYKLWCEIKGFGIRSIDDSKENIENFLDRNPDLSVVAVLDEEIVGSILCGHDGRTGG

FYHVCVHKDHRKKGIAHEMTKFCLEALKAQKINKIALIAFKNNDLGNEFWKHYGFTLREDANYYDLSLNE

YNQTSFNA

>WP\_041176715.1 MULTISPECIES: hypothetical protein [Campylobacter]

MRLLKVLHIACLVADLTIIGAFFGIPIFLALWIFQYIFANEKNPFFVFRKYNPKPYQEEDIIDVEVEDEK

PKKSLKTFLENWKD

>WP\_011990975.1 MULTISPECIES: 50S ribosomal protein L18 [Campylobacter]

MRANVLKRKLTLRIKRKKRIRAKISGCENFPRISVFKSNRTLYIQAIDDVKAVTLAAVDGRKLGVKANKE

GAKKIAAEFAKTLKAKKIEQAVFDRNGYVYHGVIAVLAESLRENGIRL

>WP\_011990085.1 MULTISPECIES: hypothetical protein [Campylobacter]

MNILLRNDIDDLNSKEFKKFLECREAFCLRGMKNKNQEIFVKRMAKGEKIIARISSVIDVKEKVKIEILK

ISRKEKGIKEEILFEESFFTNYHEKTQFHDFHGFIIYRIIKLFLRDYLKL

>WP\_011989739.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MTKTEFLEELKEAMHRDENLSEDMLLDDIDEWDSLAFVSVMVLYKNLFALKITAEDLKNCQKVSDLINLA

KLD

>WP\_002883441.1 MULTISPECIES: recombination protein RecO [Campylobacter]

MQGFILHTQKVKDEDLIVYILSPKMLIKVYRFYGLRHSSILSGYKIDFALEENPSFLPRLKDVLHLGFLW

IMQRDKMLIWQEFIRLLYRHLKDVEELDSFYFDLLQECVKRFEKQNPKRVIVDAYLKILEFEGRLHKDFF

CFACDEKIQNSITLLRAFLPSHSQCALGFEFEEKKLKQFYSSKNCAIFDDEEIENLYHLIKEGL

>WP\_002880492.1 MULTISPECIES: flagellar motor protein MotA [Campylobacter]

MDLSTILGMVLAVTSISVGDILEGGNPLHVIHLSSFLIVMPTAAFCAMTSTHKKIVKAAYKELKVVFKGS

GVNLPERIAQLIEFAIIARRDGLLALESRTNEIENEFLKNAMMMLVDGKSFEEIHESMEIQTEQLEEHYK

ECAEYWIVFGETCPTMGLVGAVFGLILALKLLDNPQAMAAGISGAFTATVTGIFGAYALFAPWGRKMKAN

GMDLVKEQIVITEAIKGIAEGANPRDLEAKLFNFLSHDDPKISQFDKG

>WP\_002868758.1 MULTISPECIES: hydrolase [Campylobacter]

MKKAFVLVDYQNDFIDGSLGFDKALKIKENILKALNQIDFNNTHLLLTYDTHDEHYLQSKEGLNLPVKHC

IKESLGWQMPKEFEPFLQKAHKIFYKNTFGSLELANFIQKSDYKELHFAGLVSHICVFCNIILAFGAKPN

ARIILHQNLSASFDKNLEKSAFDLLRAYGIEIV

>WP\_002866784.1 MULTISPECIES: single-stranded-DNA-specific exonuclease RecJ [Campylobacter]

MKIINKNEIKKILASRFEKDLHTKLCDLPLPCCLKDAYKAANRIKEAVEKNEKVAIVGDYDVDGIISCVI

MAEFFDDIGFDYIVRIPNRFKDGYGLNAEIINELDVNLIITVDNGIAALEAAKLCKEKNIDLIITDHHMP

QDVLPDAFAIINPKQKDCDFPEIEICGAQVAWYLIAALKEVCKLKYDMSKFLELLAIAIIADMMELRDLN

RALVRRGIDHINKSKRAAFRAIKHYYQKDKFALDNIGFLIAPLINSAGRMDDASISYEFLHTKDFNKALE

YLEQIVSFNESRKDEEKQLFEDSLNQIDENDSCIVVSGLNWHEGVLGIVASRLAKHFNKPAFVFSQNEEH

LKGSARSVGKIDILALISKTNSILSNYGGHKGAAGISLNSENFEQFKNKIKKECSQISESEFLDTDEILG

ILEPSEIDFEMLEILESFEPFGHKNPRPFFVLENLCVKNKKLLGKDEKHLKLILTKENKTIEALFFNFDK

EPELNQNISLLGSISKNEFRGLVTPQFVIKEIL

>WP\_002865902.1 MULTISPECIES: polar amino acid ABC transporter ATP-binding protein [Campylobacter]

MIELKNVNKYYGTHHVLKNINLSVKEGEKLVIIGPSGSGKSTTIRCMNGLEEVSSGEVVVNNLVLNHKNK

IEICRKYCAMVFQHFNLYPHMTVLQNLTLAPMKLQKKSKKEAEETAFKYLKVVGLVDKANVYPATLSGGQ

QQRVAIARSLCTKKPYILFDEPTSALDPETIQEVLDVMKEISHQSNTTMVVVTHEMGFAKEVADRIIFME

DGAIVEENIPSEFFSNPKTERARLFLGKILKN

>WP\_002865899.1 MULTISPECIES: adenine phosphoribosyltransferase [Campylobacter]

MIKLTQEEQKYLLDSIRIIPDFPKKGIIFRDITTLLNNKEALNFLLKHLKERYKDYNLDFIAGTESRGFI

FASMICAKLNLPFVPIRKPGKLPFETFSCEYDLEYGSDKVELHKDAFKNIQNARVLLVDDLIATGGTAIA

SYELIQKAGAKCVEACFLMNLKDLNGANKLEKLTSVYSVLEI

>WP\_002862578.1 MULTISPECIES: 50S ribosomal protein L32 [Campylobacter]

MAVPKRRVSKTRAAKRRTHYKVSLPMPVKDKDGSYKMPHRANPTTKEY

>WP\_002861961.1 MULTISPECIES: quinone-reactive Ni/Fe-hydrogenase small chain [Campylobacter]

MIDYHQIESRLSALEKLPSLKDNDSIAKALEKSGFSRRDFMKWAGAMTAFLALPASFTPMVAKAAELADR

LPVVWLHMAECTGCSESLLRSDTPTIDSLIFDYISLEYHETVMAAAGWQAEENLESAIQKHKNKYILMVE

GGIPMGDTEHFLTIGAHGKTGYELSKMASENALAIFAIGTCSSFGGIQAARPNPSNAQPLSKVTSKTVIN

VPGCPPSEKNIVGNVLHYLLFGELPALDVYNRPKWAYGLRIHDLCERRGHFDAGEFVHAFGDEGAKQGFC

LYKVGCKGPYTFNNCSRERFNQHTSWPIQAGHGCIGCSEPDFWDTMGPFEEPMASRKFDTVFGLGADSVS

DKIGIGVLTLTGVAIAAHAVISSMQKDKE

>WP\_002861764.1 MULTISPECIES: adenylosuccinate lyase [Campylobacter]

MQIVQTLETINVNTDDISVFQYFKDLITKNFTKVIGRKNKIFSFFEENEIPQRRYFLKVLDQKYRKSTNE

GIENLQDAHFKTFRLNFEQNNMLKPMLFIKIDFAAGRILMKLSSNEKLFVTYIRNYFQDHNIEYNEMTNI

LILEYKNENTLELFEAFADESEHLKYCVNFEVDREEYKKFRQNIHNKENMKWKFNALAKLFSNYFNTLEC

TPQNDLSEIRQKYLILVKLYHPDFHQGKSAIEKAYAREQFEKIQIAYDNLKALYKNNT

>WP\_002861015.1 MULTISPECIES: translation initiation factor IF-3 [Campylobacter]

MSKEKEVLLNEEIRADEIRCVGDDGKVYGIISSDEALEIANRLGLDLVMIAADAKPPVCKIMDYGKFRYQ

QEKKQKEAKKKQKVIDIKEIKLSVKIAQNDINYKVKHALEFLEQGKHVRFRVFLKGREMATPEAGVVLLE

KIWTMIENEANRDKEPNFEGRYVNMLVTPKKA

>WP\_002854663.1 MULTISPECIES: hypothetical protein [Campylobacter]

MELTLFKAGFEAHLECCEIENNRFLGEYLKLGAISQILKWKKLALRIDFDEGEKIIFDLLLSLKEDILRL

ENSLDKNKELIPLKQKGVIESLNFEYLNFLDTILEEDKEYYLRFDLNNQKIAIFIKAQSQTLAKIIKIKP

EDKMAFDAFVVEIQRNMIRNKKGQE

>WP\_002854407.1 MULTISPECIES: hypothetical protein [Campylobacter]

MDKTKIVQNLNALFKQRAEFYSYFDENVAKINNTEVFDFKNAKNLNPEEVYKQFYHFDYAIRKLLPAIYK

AYEITDADLDKDF

>WP\_002853792.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFKTIVCFLALNLSLFAVGFDLKPIKSELVKVDDIYGYIKDSDDIKLYSSGVVVQHFSNSQSIIARASVI

DKKNGLAKLEFSVFSALKQDALPLPNVLPKVGDEVVLNFLYDRGLVIAPDEQTYNELVREFPQIYFTHID

IFGAQLIRTATLSPKRSDFRQFCDDNAVGILVVALENQAEVVDCQDFNKLYEVPISKPTSVQVPFYSRIG

GYKSNFFDFNSQEIGNYYRYYDALINLPKVQ

>WP\_002851537.1 MULTISPECIES: Tat pathway signal protein [Proteobacteria]

MKNRREFLKKSAFALGAAGVLGSTTLALAKDEERKDLVKGKSKKKEVLFQRSANWENYYIKAE

>WP\_011990593.1 succinate dehydrogenase/fumarate reductase cytochrome b subunit [Campylobacter jejuni]

MRELIEGYLGKSIEGKKSKMPAKLDFIQSASGLFLGLFMWVHMLFVSTILVSEDFFNSVVHFLELKFVYD

NPVMSYLTSFLAACVLVVFFVHALLAMRKFPINYRQYQILRTHSKKMNHSDTSLWWVQAFTGFIMFFLGS

AHLIFIVTNADKISGDMSGDRVVSHFMWLFYAVLLVCVELHGSIGLYRLCVKWGWFEGKNVKESRKKLKT

AKWIISIFFLVLGVLSLAAFIKIGYENYQNQTQATAMIKNYNGANYEYTI

>WP\_002858971.1 MULTISPECIES: NifU family protein [Campylobacter]

MMPFSDEELINPVKASLEKSLPMLERDGGGLEFLGIKNGIVYVHLIGACKGCASSGTTLKYGLERQLKID

IHPEITIINLNGGADEFAKL

>WP\_002905691.1 hypothetical protein [Campylobacter jejuni]

MLGIYLLIAALSFLALYFAVKKLTLNIDERTLLEPIKMDIYPKFCDLIDEKIREFKENIQNANLALKNSD

QKDEFLEKLGDLSRELTFIQTMNLSNKNDSIWQNELFSFLKELENLLLEYLEKGEEEAENLREFLMNEFE

KLKG

>WP\_002858872.1 MULTISPECIES: hypothetical protein [Campylobacter]

MSKALEYLIVIGLVVAAAITAWSVLTVNHLHIG

>WP\_002854947.1 MULTISPECIES: hypothetical protein [Campylobacter]

MADNLKQVIVNVNAKDFIVKCSEEFANFLEDDIALISGGTKKIELKRFVDAFVKKSYENYILERELKKLI

KAINEELPTK

>WP\_002854718.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFQNIIKYKDFIIFILNLKQNLYLLIKINLDFKNFHKSLNF

>WP\_002839177.1 MULTISPECIES: hypothetical protein [Campylobacter]

MIFWAFLVVIGAIYFGNMFFGQYSLDTLLSLENTKEELNKKIILLKEQNAKAQKDYFELKGLYPNEN

>WP\_002779572.1 MULTISPECIES: hypothetical protein [Campylobacter]

MHTITITSDNIDFIKSLECLSKNAGAIFKISKNDLEATLDNYEDNRTLDEVKKEAEETLLHYKQGKLSVT

PLGSEWL

>WP\_002873816.1 5-(carboxyamino)imidazole ribonucleotide mutase [Campylobacter jejuni]

MNFVSILMGSKSDYETMKEAAKTLESFGVKYELIISSAHRSPKRTKEYIANAEEKGAKVFIAAAGMAAHL

AGAVAAYTTKPVLGVPMPGSNLASMDSLFSTVQMPSGIPVGTLAIGKAGAINAAYLAMQILAIYDVDLAQ

KLKEDRFEKEKKLVSDSKEVEVLL

>WP\_011990918.1 TonB-system energizer ExbB [Campylobacter jejuni]

MEFLKDYIDLIIFLILGIMAFIAFWCVVERMLFFRKINFKNYENQEQFDDAISENLTTIYIIYSNAPYIG

LLGTVIGIMVTFYEMGLAGNIDVKSIVVGLSLALKATALGLLVAIPALMAYNALLRKISLLSNAYKAHKN

A

>WP\_002852327.1 MULTISPECIES: hypothetical protein [Campylobacter]

MFDEKIINTMTDKVNELIEKYNEVCEANEALRNELVSVKAQNEAKSNQIMRLEEELKSRNIESEDIYKKI

EAVLGR

>WP\_011989515.1 rRNA maturation RNase YbeY [Campylobacter jejuni]

MILSDEKCDFLESIASFLGPKDVELVFVDSKEMQEINLEQRKQDKTTDVLSFPLENIDESLPLGSVVINV

DLAKEKAKELGHSYEEEISLLFIHAMLHLLGFDHENDNGEMREKEKELIEHFNLPKSLIVRTLEG

>WP\_002924156.1 co-chaperone GroES [Campylobacter jejuni]

MNFQPLGKRVLVKRVEETKTTASGIIIPDNAKEKPLMGEVVAVSKEITDIANGDKIMFAKYGGTEIKLDN

NEYLVLNLDDILGILK

>WP\_002936574.1 cytochrome c [Campylobacter jejuni]

MIVRWLFISSIFVVALFGINLKSFFTYTFDANKQYDMEKAKALYFQNKCNTCHGDNAEKSVIGSRILKDM

SPEDIKGALIGYTLDSSSSTTASQMAFYARNLSHEDIDNIIAYIKGGNFALDLQVKDLLEEEPAQKTKHN

IFLK

>WP\_002853034.1 MULTISPECIES: exodeoxyribonuclease VII small subunit [Campylobacter]

MSFEENLKHANESLEKLNNQELALDESVKIYKEGLESIKKARLELEKAKLEVEQIDE

>WP\_002873818.1 glycine--tRNA ligase subunit alpha [Campylobacter jejuni]

MTFSQMILNLQNYWQEQGCVIMQPYDMPAGAGTFHPATFLRSLGKKPWAVAYVAPSRRPTDGRYGENPNR

LGAYYQFQVLIKPSPDNIQELYLKSLENLGFDLKSHDIRFVEDNWESPSLGAWGLGWEVWLDGMEVTQFT

YFQQVGGIAVDLVSAEITYGLERIAMYLQNVDNVYDIVWSEFNGEKIKYADVHKQSEYEFSKYNFEVSDV

KILNEQFENSYKECKNILEQGLALPAYDYCMLAAHTFNLLDARGAISVAQRQDYMLKIRELSKNCAEIYK

KNLNETE

>WP\_011989982.1 MULTISPECIES: thiamine biosynthesis protein ThiS [Campylobacter]

MIINGEKLEFKELKFMDFIKEKGLKIELIALELNGEIIPKSEFENLILKENDKAEIVSFVGGG

>WP\_002922325.1 glutamine amidotransferase [Campylobacter jejuni]

MKKILFIDNYDSFSYTIIYYLKELGFECKVIKNDAFKKAKELEKFDFTHLIISPGPHSPKESKLSLKAIK

YFKKNKKILGICLGHQCIAEVFGGRVSKMQNPMHGKISKLYFKKDPIFKGIKKEIEICLYHSLHISSMPK

KCKILAHNSENIIMAIKHKKYPIYGLQFHPEAVLTQKGKKILKNFMKL

>WP\_002854230.1 MULTISPECIES: transcriptional repressor [Campylobacter]

MLIENVEYDVLLERFKKILRQGGLKYTKQREVLLKTLYHSDTHYTPESLYMEIKQAEPDLNVGIATVYRT

LNLLEEAEMVTSISFGSAGKKYELANKPHHDHMICKNCGKIIEFENPIIERQQALIAKEHGFKLTGHLMQ

LYGVCGDCNNQKAKVKI

>WP\_011990283.1 transcriptional regulator [Campylobacter jejuni]

MTAQEIKEFCKNIGITQKELAEKVGMSQEGLNSILSTGKISKTLEASINLLMENEKLKQELKNYENLKNS

LKQALS

>WP\_011990234.1 MULTISPECIES: phosphate ABC transporter ATP-binding protein [Campylobacter]

MIAKTTNLNLFYGKKQALFDINMQIEQNKITALIGASGCGKSTFLRCFNRMNDKIAKIDGLVEIEGKDVK

NQDVVALRKNVGMVFQQPNVFVKSIYENISYAPKLHGMIKNKDDEEALVVDCLQKVGLFEEVKDKLKQNA

LALSGGQQQRLCIARALAIKPKLLLLDEPTSALDPISSGVIEELLKELSHNLSMIMVTHNMQQGKRVADY

TAFFHLGELIEFGESKEFFENPKQEKTKAYLSGAFG

>WP\_002851782.1 MULTISPECIES: beta-hydroxyacyl-ACP dehydratase [Campylobacter]

MIDVMQIQEILPHRYPFLLVDKITELKVKEVVRGYKNISISDHVFMGHFPGHPIYPGVLILEGMAQTGGV

LAFESMEDKVDPKSKVVYFTGIDGAKFRNPVRPGDRLDYEMSVVKNRGNMWIFKGQAFVDGNLVAEAELK

AMIVDK

>WP\_011989774.1 DNA-binding response regulator [Campylobacter jejuni]

MINVLMIEDDPDFSQLLSEYLAQFNIKITNFENPKSALNVGIRGYDCLILDLTLPGIDGLEVCREIRQKN

NIPIIISSARGDLSDKVVGLQIGADDYLPKPYDPKEMYARIMSLIRRTKRVEHANNENINSAFKIDERRH

EITYEDKALTLTPAEFEILEYLIQQHGYSVSREQLVSRCKNLKDKDSKSLDVIIGRLRVKIGDSSKSPKH

IFSVRGIGYKLIG

>WP\_002883730.1 DNA-binding response regulator [Campylobacter jejuni]

MLKFKILIIEDDVDLNELLVLKLKSSDYEVISLVDFFGVEDLLDNEQIDLLIVDRNLPSGDSLEKIQDLR

EQGYKEAVIFLTAKALHQDLLEGFESGCDDYVCKPFDFNELLLRIKAILKRHKKEEEKLFFGDFILDLAN

YEFFYKNQKLEISNLDYELLKCFFENPNTLLTRQFLSESVWKDDTTSDKTINIALTRLRNKFPKLKDHII

SVRGVGYKLC

>WP\_002777451.1 MULTISPECIES: DNA-binding response regulator [Campylobacter]

MTNILMIEDDLELAEITAEYLEKFDMKVDIAHEPYIGLSKLALKEYQLIILDLSLPGLDGLEVCEEIRKK

YDTPIIISSARHDITDKVNALELGADDYLPKPYNPKELQARIKSHLRRISNTKSAIAKSVKDLVYDQYKH

IITMKGQELTLTNAEFDILSYLIKKEGGVVSREELVYNCSSISEDSSNKSIDVIISRIRQKMGDDPKTPK

YIHSIRGIGYKLTQ

>WP\_002866134.1 MULTISPECIES: two-component system response regulator [Campylobacter]

MKLLVVDDSSTMRRIIKNTLTRLGHDDVLEAEHGVEAWDLLTKNEDVKVLITDWNMPEMNGLELVKKVRA

EKKYEDMPIIMVTTEGGKAEVITALKAGVNNYIVKPFTPQVLKEKLEDVLGTGSGEGAAE

>WP\_011989916.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKAYVLIWTIFLILLISLWMSLTLNISSYTPKIIQDSYYYLQAQILSHNATQFSKYFLYQARQENKECL

DNIYFNYTKALIKIKYFYPIAQCVNFKFSNFNPDANLNKDGVIIAHISIALNRDKNVNDEILLTKSIIIY

PKENFWNLKN

>WP\_002864641.1 MULTISPECIES: 2-oxoglutarate:acceptor oxidoreductase [Campylobacter]

MKYQLRFGGEGGQGVITAGEILAEAAIKEGRQAFKASTYTSQVRGGPTKVDIIIDDKEILFPYAVEGEVD

FMLSTADKGYKGFRGGVKEGGIIVVEPNLVHPESEDYKKWQIFEIPIITIAKDEVGNVATQSVVALAIAA

YMSKCIDLDVLKETMLHMVPAKTRDANAKAFDLGVKYATQAKPHS

>WP\_002859562.1 MULTISPECIES: DNA-binding protein HU [Campylobacter]

MTKADFISLVAQTAGLTKKDATTATDAVISTITDVLAKGDSISFIGFGTFSTQERAAREARVPSTGKTIK

VPATRVAKFKVGKNLKEAVAKASGKKKK

>WP\_002855562.1 MULTISPECIES: rubrerythrin [Campylobacter]

MRQYETYKCQKCGNEVEVQNVGGGKLSCCGEEMKCITTDLTAVNLMKAFAGESMARNKYDLFADVAEEEG

WHAVARHFREAAENEKWHARAEFKAYHEIVDGKPLEVTTKNLVSAAEGENYEHTTMYPNFAKIAEDEGKK

AIARLFTAIGKVEIEHEREYLALKKMLEEEEFFNSEVEELWVCEVCGHIHRGKKAPAACPLCKAPKEYFK

REFLG

>WP\_002855302.1 MULTISPECIES: adenylosuccinate synthetase [Campylobacter]

MSKADIIVGIQWGDEGKGKVVDKLCENYDFVCRSAGGHNAGHTIWVNGVRYALHLMPSGVLHPRCINIIG

NGVVVSPEVLIAEMAQFENLKGRLYISDRAHLNLKHHSLIDIAKEKLKGKNAIGTTGKGIGPSYADKINR

TGHRVGELLEPQRLCEALIKDFEANKTFFEMLEIEIPSAEELLADLKRFNEILTPYITDTTRMLWKALDE

DKRVLLEGAQGSMLDIDHGTYPYVTSSSTISAGALTGLGLNPKEAGNIIGIVKAYATRVGNGAFPTEDKG

EDGEKIAQIGKEIGVSTGRKRRCGWFDAVAVRYTARLNGLDALSLMKLDVLDGFEKIKICRAYEYKGMEI

DYIPSDLENVQPIYEEMDGWDKVFGIKDYDLLPENAKKYIARLEELAGVKVKYISTSPERDDTIIL

>WP\_002855271.1 MULTISPECIES: elongation factor Tu [Campylobacter]

MAKEKFSRNKPHVNIGTIGHVDHGKTTLTAAISAVLSRRGLAELKDYDNIDNAPEEKERGITIATSHIEY

ETDNRHYAHVDCPGHADYVKNMITGAAQMDGAILVVSAADGPMPQTREHILLSRQVGVPYIVVFMNKADM

VDDAELLELVEMEIRELLSSYDFPGDDTPIISGSALKALEEAKAGQDGEWSAKIMDLMAAVDSYIPTPTR

DTEKDFLMPIEDVFSISGRGTVVTGRIEKGVVKVGDTIEIVGIKDTQTTTVTGVEMFRKEMDQGEAGDNV

GVLLRGTKKEEVIRGMVLAKPKSITPHTDFEAEVYILNKDEGGRHTPFFNNYRPQFYVRTTDVTGSIKLA

DGVEMVMPGENVRITVSLIAPVALEEGTRFAIREGGKTVGSGVVSKIIK

>WP\_002854985.1 MULTISPECIES: preprotein translocase subunit SecE [Campylobacter]

MEKLITYFKLSKAELRKVIFPLKEQVRNAYITVFVVVAVISLFLALVDWLMSSIVSAIV

>WP\_002854928.1 MULTISPECIES: 50S ribosomal protein L1 [Campylobacter]

MAKIAKRLKELSQKIDSNKEYALSDAIDTIKTLKSAKFDETVEIALKLNVDPRHADQMVRGSVVLPAGTG

KKVRVAVIAKDAKADEAKNAGADIVGSDDLVEEIQKGNMNFDVLIATPNLMGLVGKVGRILGPKGLMPNP

KTGTVTMDVAQAVNNAKSGQVNFRVDKQGNIHAGLGKVSFSKEQLWDNVSTFVKAINKHKPAAAKGRYIK

NAALSLTMSPSVKLETQELLDMK

>WP\_002854302.1 MULTISPECIES: fumarate reductase iron-sulfur subunit [Campylobacter]

MSRKLTIKAFKYNPLSKISKPHFVTYELEETPFMTVFVCLTLIREKMDADLSFDFVCRAGICGSCAMMIN

GVPKLACKTLTKDYPDGVIELMPMPAFRHIKDLSVNTGEWFEDMCKRVESWVHNEKETDISKLEERIEPE

VADETFELDRCIECGICVASCATKLMRPNFIAATGLLRTARYLQDPHDHRSVEDFYELVGDDDGVFGCMS

LLACEDNCPKELPLQSKIAYMRRQLVAQRNK

>WP\_002853464.1 MULTISPECIES: DNA-directed RNA polymerase subunit omega [Campylobacter]

MDKRIEEVAAKALEKMGNDRYRLSLVVAKRAEQLANGATPLVDFDKNKNKLADIALYEIAENKITLEGLV

ETNR

>WP\_002853349.1 MULTISPECIES: ribonuclease P protein component [Campylobacter]

MKNFDKFSTNEEFSSVYKVGKKWHCEGVIIFYLNSYEKKIAVVASKKVGKAVVRNRSKRILRALFAKFER

YLQDGKYIFVAKNEITELSFSRLEKNLKWGLKKLECFK

>WP\_002853247.1 MULTISPECIES: membrane protein [Campylobacter]

MFTNWLVLTILICATIYLIVMLFYYKTLLNKEKTSKDFIKNNLDDTEIVIRKLQIQLQRSLGNIDILTEE

LNKIKADLTSLRTRNSQYRLENDKLRQRIKELEAKIEALL

>WP\_002853032.1 MULTISPECIES: 30S ribosomal protein S18 [Campylobacter]

MAEKRKYSRKYCKYTEAKVEFIDYKDTAMLKHALSERFKIMPRRLTGTSKKYQEMVEVAIKRARHVALIP

YIVDRKEVINNPFEGL

>WP\_002853004.1 MULTISPECIES: hypothetical protein [Campylobacter]

MKKIFLIGMILNHFVFAAPLDEVFKDIEVSGTVRYRYDIKKEKKYNKKTHRYQNKTQTEITIK

>WP\_002852919.1 MULTISPECIES: membrane protein [Campylobacter]

MLEKIFESLLVRSRIVTILPVIFGLIGAFVLFFIASYDVLKVIFYTYNYFFDAGSNVDLHEDVVALIIGA

VDLYLMALVLFIFSFGVYELFISEIEEFKQTKQSKVLEVHSLDQLKDKLAKVIIMVLVVNFFQRVLQMKF

ATPVDMAFLAGSILALCVGLYFLHKGGH

>WP\_002852871.1 MULTISPECIES: membrane protein [Campylobacter]

MYIKDIQRFEDNRYRARAYMSYILTRNLPNKLPDIHLETIKTALDKIAHEVVVFDALYILDISGMQIENA

ISLNKAHEIGQGEDRSTRSYFYRAVKLRRCVLSDPYPSVLNNELCVTASMPIYDDKNNLLFVVCIDIKLE

DILKIIQAGKFEFVFTQFSRLVYFCFALVLFVITCFLFQKGFFSLFDNQAIGIEHMFESTIAITLALAIF

DLAKTLIEQEVLGRTKKEEGGIQKTMVRFLGSIIIALAIEALMLVFKLAIGDLSQMIYAIYLIGGVSLLL

LGLSVYLFTVKYKNNNI

>WP\_002852854.1 MULTISPECIES: carbon storage regulator [Campylobacter]

MLILSRKENESIIIGEGIEIKVVQTGKGYAKIGIEAPKSLMILRKELVQQVKDENLHSVVQNDIKLDDLS

KKLIK

>WP\_002852609.1 MULTISPECIES: transcriptional regulator [Campylobacter]

MLFTKASEYALLSLIYISQKETPQDVDSLALELDIPKSFLAKILQTLAKDGLLKSFKGAKGGFVLIKEPS

QYTIKEIVNSAEKKDISVFECSGGTCPNNKEENCTLMPMLVNLQNKVDEFLDSITLEDIMKNNGKK

>WP\_002852274.1 MULTISPECIES: 30S ribosomal protein S16 [Campylobacter]

MTVIRLTRMGRTKRPFYRIVVTDSRKRRDGGWIESIGYYNPMVEPEVIKVDAERLAYWKSVGAKLSDKVA

SITSK

>WP\_002852227.1 MULTISPECIES: RlpA-like lipoprotein [Campylobacter]

MQIKTITLKLSAVSLGALFFSGCLGTSFFSSLDNAQVYYPSNDFKSSPSSSGTKGTMKPYTINGKTYYPT

VVAVGETADGIASWYGPGFHGKKTSNGETYNQNALTAAHKTLPMNTILKVTNLNNNRQVTVRVNDRGPFV

NNRIIDLSKGAASQIDMIASGTAPVRLEVIGFGSSNSGNNIVHSNVNYGNSGEIANNGQIYEGGNFMVQI

GAFKNPAGAQTIAARYKTYRTYSSTIRTSSVDGLNRVFLTGFRSEDEARDFAASGAFAGAFVVRE

>WP\_002851936.1 MULTISPECIES: peptide deformylase [Campylobacter]

MVRKIITYPNPRLFLNSEIVNKFDTELHTLLDDMYETMIASNGVGLAAIQVDIPLRVLLVNIFDENDEQK

KEDLLEIINPEIIPLDEEMITCTEGCLSVPDFFEEVKRYNHILLKYQDRFGEFKELEAKGFLAVAIQHEN

DHLNGHLFIEKISFAKRQKFDKEFKKKKKNHKKEK

>WP\_002851292.1 MULTISPECIES: 50S ribosomal protein L15 [Campylobacter]

MNLTKAAGSTHKTKRIGRGQGSGMGKTATKGGKGQTARKGYNEKRGFEGGQQPLQRRLPKVGFTSKIQKP

YVINVEKITAVKELSEITFESIKSVHKISKSVNKIKLIGASAKDLVSKIKDENISVTGSK

>WP\_002852633.1 MULTISPECIES: phosphopantetheine adenylyltransferase [Campylobacter]

MTCLYPGTFDPITNGHLDVIKRALKIFDEVIVAIAKSEHKKPCYDLEKRKELALLATQNLKNVKIIAFDN

LLVDLAKELKVNTIIRGLRAVSDFEYELQIGYANHALWEDMETIYLMPSLKHAFISSSIVRSIVAHGGDV

SSLVPKEILPFLKDQSCM

>WP\_002851459.1 MULTISPECIES: 30S ribosomal protein S9 [Campylobacter]

MATTYATGKRKTAIAKVWVKPGSGKISVNGVDLNTWLGGHEAIKLKVVQPLLVTKQETSMDIKATTLGGG

YSAQAEALRHGISRALAAMDADFRALLKPKGLLTRDSRTVERKKYGRRKARRSPQFSKR

>WP\_011990706.1 ATP-dependent Clp protease ATP-binding subunit ClpX [Campylobacter jejuni]

MPRKCSFCNEVENPQRRILANENDDAFICEYCVEGAYSIIYGEEKEFKEPKQSHKEFKDITPKELKAYLD

RYVIGQDRAKKVFSVGVYNHYKRLFKAELQDDDTELFKSNILLVGPTGSGKTLLAQTLAKFLDVPIAICD

ATSLTEAGYVGEDVENILTRLLQAADGDVERAQKGIVFIDEIDKIARMSENRSITRDVSGEGVQQALLKI

IEGSLVNIPPKGGRKHPNQEFIQIDTSNILFVCGGAFDGLETILKRKLGDKVVGFFDDAKEENKALLEKI

EPDDLVHFGLIPELIGRLHVIASLNELNEEDMVRILTEPKNAIIKQYQKLFAIDGVNLKFEEDALRAIAQ

LALERKTGARGLRSIIEEMMVDLMFELPEYKNYDIVITKEVVKDNAKALLIKRKIS

>WP\_002851566.1 MULTISPECIES: 50S ribosomal protein L29 [Proteobacteria]

MKYTEIKDKTAAELATMLKEKKVLLFTLKQKLKTMQLTNPKEISQVKKDIARINTAINALR

>WP\_002797817.1 MULTISPECIES: CRISPR-associated endonuclease Cas2 [Campylobacter]

MIEDKFMRVLLMFDVPTKSKKEQKLASKFRNNLIKLGYFMLQFSVYMRICKGLSSAKSSIENVKKILPPY

GNVRALIITEKQFDKMELLLGGIVFNEKVNNETNLTLFDIDSHGEFKYKNSNNEEIQINKKQEKYHQQNL

FEF

>WP\_011990688.1 aspartate 1-decarboxylase [Campylobacter jejuni]

MNIALLKSKIHRASVTEARLDYVGSISIDEKLLQASGILEYEKVQVVNINNGARFETYTIATQEEGVVCL

NGATARLAEVGDKVIIMSYADFNEEEAKTFKPKVVFVDENNTATKITNYEKHGSIF

>WP\_002781436.1 MULTISPECIES: translation initiation factor IF-1 [Campylobacter]

MAKDDVIEIDGTVLEALPNANFKVELDNKHVILCHIAGKMRMHYIRIMPGDKVKVELTPYSLDKGRITFR

YK

>WP\_011989920.1 flagellar assembly factor FliW [Campylobacter jejuni]

MTLAVKCPILGFEETKNMEFSTIDEVFVRLKSLDGKDFSFVLINPYLIRPDYEFDIPTYYQELLSLTPES

NMKIFNIVAIAKSIEESTVNFLAPVVINLDNNTMAQVILDTVNYPDFFQADQIANYIKK

>WP\_002851478.1 MULTISPECIES: 30S ribosomal protein S14 type Z [Campylobacter]

MAKKSMIAKAARKPKFKVRAYTRCQICGRPHSVYRDFGICRVCLRKMGNEGLIPGLKKASW

>WP\_002777888.1 MULTISPECIES: NADH-quinone oxidoreductase subunit B [Campylobacter]

MAEHQVNYASGLPVVLTSVDKLVQWGRSNSLWALSYGLACCAIEMMAAGGSRYDFDRFGTIFRASPRHSE

VMIIAGTLCKKHAEFTRRLYDQMPDPKWVISMGSCANTGGMFNTYSTVQGVDRIIPVDIYVPGCAPRPES

FQFALMILQKKIRKEKASRKIAPKRLV

>WP\_002855210.1 MULTISPECIES: elongation factor P [Campylobacter]

MASYSMGDLKKGLKIEIDGIPFKIVEYQHVKPGKGPAFVRIKIKSFIDGKVLEKTFHAGDKCEAPNLEDK

TMQYLYDDGENCQFMDTQTYEQVAISDDDVGEAKKWMLDGMMVDVLFHNGKAIGVEVPQVVELKIIETAP

NFKGDTQGSNKKPATLETGAVVQIPFHVLEGEVIRVDTVRGEYIERANK

>WP\_002851887.1 MULTISPECIES: carbonic anhydrase [Campylobacter]

MENLISGAIKFMQEDFKEHEELFESLKNKQNPHTLFIGCSDSRVIPNLITNTGPGELFVIRNIANIVPPY

RVGEDYLATTSAIEYALNSLHIKNIVVCGHSNCGGCNALYYSDEELNKIPNVKKWLTMLDPIKKDVMIFA

RDDLAMRSWLTEKLNLVNSLQNILTYPGVQEALDEGKIEVHAWYYIIETGEIYEYDFKAKIFTLIQDRKV

Q

>WP\_002851509.1 MULTISPECIES: 30S ribosomal protein S19 [Campylobacter]

MARSLKKGPFVDDHVMKKVIAAKKANDNKPIKTWSRRSTITPDMIGLTFNVHNGKSFIPVYITENHIGYK

LGEFAPTRTFKGHKGSVQKKIGK

>WP\_029587932.1 membrane protein [Campylobacter jejuni]

MSNILKEEKNHLENSNNKRQKIVRKTLEAADGLSLGISMVVAVFIGVGIGYLLKKFTPYPWLFWLGVFWG

ISAAILNVYKAYKVQVKSYEEFKERDELIKEKIQKEKNK

>WP\_029587799.1 hypothetical protein [Campylobacter jejuni]

MLEKILKNENFIHTMQKHCHEIISHLIEENIEFSIVANTNFIDFDPELPKELDVKQNPYALFALGGYTFE

SIQLNKDFIQFHAGFGNNDFDSFVKVDLGAITQIQIENSILFVNFSLYKREDSKNLQKSKNIFLNNPKNK

DIFKK

>WP\_002856574.1 MULTISPECIES: 30S ribosomal protein S4 [Campylobacter]

MARYRGPVEKLERRFGVSLALKGERRLAGKSALDKRPYAPGQHGARKGKISEYGLQLREKQKAKFMYGVS

EKQFRRLFAEAARREGNTGVLLIQLLEQRLDNVVYRMGFATTRRFARQLVTHGHVLVNGKRVDIPSFRVE

AGAKIEIIEKSKNNPQITRAIELTAQTGIVAWVDVEKDKRFGIFTRKPEREEVVIPVEERFIVELYSK

>WP\_002824739.1 MULTISPECIES: flagellar motor switch protein FliN [Campylobacter]

MSDDIEFNIHHGLLQSYEDILDITVDFVSELGTTNMSVAELLKLEVGSVIDLEKPAGESVELYINKRIFG

KGEVMVYEKNLAIRINEILDSKTVLQYFKKEI

>WP\_002812868.1 MULTISPECIES: 30S ribosomal protein S6 [Campylobacter]

MKHYEVLFILKPTLTEEEVNAKLEFVKEVLTKNGAEIETVVPMGTRKLAYKIKKYERGTYFVIYFKAPTN

LIAELERVLRITEEVIRFLIVKYENKKEIAAWEKLSHGIKQSKKEIKPLDAPEIQ

>WP\_002806309.1 MULTISPECIES: ATP-dependent Clp protease proteolytic subunit [Campylobacter]

MFIPYVIEKSSRGERSYDIYSRLLKDRIIMLSGEIHDELAASIVAQLLFLEAEDPTKDIYLYINSPGGVI

TSGFSIYDTMNYIKPDVCTICIGQAASMGAFLLSCGAEGKRFALPNSRIMIHQPLGGARGQATDIEIQAK

EILRLKTILNDILAKNTKQKVAKIAKDTERDFFMSAQEAKEYGLIDKVLEKSFK

>WP\_002800974.1 MULTISPECIES: 50S ribosomal protein L27 [Campylobacter]

MAHKKGQGSTQNNRDSIGRRLGVKKFGGEFVRAGNIIIRQRGTATHAGNNVGMGKDHTIFALIDGFVKFE

RKDKDRKKVSVYPA

>WP\_002800121.1 MULTISPECIES: 30S ribosomal protein S13 [Campylobacter]

MARIAGVDLPKKKRIEYGLTYIYGIGLFTSRKILDKVGISYDKRVHELSEDEAAAIRKEIQENYMVEGDL

RKQVAMDIKALMDLGSFRGLRHRKGLPVRGQKTKTNARTRKGKRKTVGAKS

>WP\_002782934.1 MULTISPECIES: 30S ribosomal protein S12 [Campylobacter]

MPTINQLVRKERKKVLEKSKSPALKNCPQRRGVCTRVYTTTPKKPNSALRKVAKVRLTSGFEVISYIGGE

GHNLQEHSIVLVRGGRVKDLPGVKYHIVRGALDTAGVAKRTVSRSKYGAKRPKAGAAK

>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\_002779471.1 MULTISPECIES: 30S ribosomal protein S7 [Campylobacter]

MRRRKAPVREVLPDPIYGNKVITKFINSLMYDGKKSTATTIMYGALEAIDKKGGEKKGIDIFNDAIENIK

PLLEVKSRRVGGATYQVPVEVRPARQQALAIRWIISFARKRSERTMIDKLAAELLDAANSKGASFKKKED

TYKMAEANKAFAHYRW

>WP\_002779452.1 MULTISPECIES: 50S ribosomal protein L11 [Campylobacter]

MAKKVVGEIKLQIAATKANPSPPVGPALGQQGVNIMEFCKAFNERTKDMAGFNIPVVITVYADKSFTFIT

KQPPATDLIKKAAGISKGTDNPLKNKVGKLTRAQVLEIVDKKIADLNTKDRDQAAKIIAGSARSMGVEIV

D

>WP\_002779446.1 MULTISPECIES: 50S ribosomal protein L23 [Campylobacter]

MADITDIKTILYTEKSLNLQEQGVVVIQTSPKMTKTGLKAVLKEYFGVTPKSINSLRMDGKVKRFRGRLG

QRNDYKKFYVKLPEGVSLENAEA

>WP\_002779441.1 MULTISPECIES: 50S ribosomal protein L16 [Campylobacter]

MLMPKRTKYRKMMKGRNRGYANRGTEFTFGEFALKATEAGRINSRQIEAARIALTRFVKRQGKTWIRVFP

DKPLTKKPLETRMGKGKGAVEEWVMNIKPGRIIYEMAGVSEEMAREALTLAMHKLPFKTKFVTRESQNEI

Y

>WP\_002779438.1 MULTISPECIES: 50S ribosomal protein L14 [Campylobacter]

MIQSFTRLAVADNSGAKELMCIKVLGGSKRRYATVGDVIVASVKKALPNGKVKKGQVVKAVIVRTKKEIH

RDNGSLIRFDENAAVILDNKREPIGTRIFGPVGREVRYGGFMKIVSLAPEVL

>WP\_002779428.1 MULTISPECIES: 30S ribosomal protein S5 [Campylobacter]

MEKYNREEFEEVIVDIGRVTKVVKGGRRFRFTALVIVGNRKGLVGVGYGKAKEVPDAIRKAVDDAFKNIV

EVKTKGSTIAHDVEVKYNASRILLKPASEGTGVIAGGSTRPIVELAGIKDILTKSLGSNNSANVVRATIK

ALTMLKG

>WP\_002779270.1 MULTISPECIES: dihydroneopterin aldolase [Campylobacter]

MEFLELLLVLIALILIIKKPEKENLAFGLVMVAWLLMVFFYVGHKTGALLTIMNL

>WP\_002778842.1 MULTISPECIES: iron transporter [Campylobacter]

MIKKVLSVVAAAAVISTNLFAGEVPIGDPKELNGMEIAAVYLQPIEMEPRGIDLAASLADIHLEADIHAL

KNNPNGFPEGFWMPYLTIAYELKNTDTGAIKRGTLMPMVADDGPHYGANIAMEKDKKGGFGVGNYELTFY

ISNPEKQGFGRHVDEETGVGKWFEPFKVDYKFKYTGTPK

>WP\_002777686.1 MULTISPECIES: acyl carrier protein [Campylobacter]

MQEIKQFFINIERTDINESMENLVSEDFIDSIDIMALVAEIEKFYKKPLKAEFITPENFESFENIKKMLE

TAMKD

>WP\_002776864.1 MULTISPECIES: 50S ribosomal protein L34 [Campylobacter]

MKRTYQPHGTPRKRTHGFRVRMKTKNGRKVINARRAKGRKRLAV

>WP\_002856364.1 tautomerase [Campylobacter jejuni]

MPFVNIRITKENGEPTTEQKQELIAGVTDLLAKVLNKNKSSTVVIIDEIDTDNYGLGGKSITQVRKEKS

>WP\_011990718.1 membrane protein [Campylobacter jejuni]

MPADLNDYFNKKNGNSNNNGNNNRQNFNFKAPEFNFKGFGKFSPFVYGVIIIVLFLIVAKPFMVINSGEM

GIKSTTGKYDPNPLEPGLHFFLPFVQKITIIDTRVRQINYASIEGSNENLSLGSGVINKNSISVLDSRGL

PVSIDVTVQYRLNPLQVPQTIATWSLNWENKIIDPVVRDVVRSVVGKYTAEELPTNRNTIATQIEEGIRK

TIEAQPNEPVELRAVQLREIILPSKVKEQIERVQIAKQEAERTKYEVERANQEALKKAALAEGEANATII

SAKGKAMAVKIEADAQAYSNKEIANSLNTPLLNLKQIETQKEFNEALKVNQDAKIFLTPGGAVPNIWVDT

KDAKKQSSANMN

>WP\_011990407.1 ArsC family transcriptional regulator [Campylobacter jejuni]

MKLYGIKNCNSVKKAMDALTQKGIVFDFMDIKKINQDILYTWLKQKSFEELINTAGLTSKKLGLNKEKVK

SLNEKELEKIVLENPSCIKRPIIEYEQNIYIGKEYEKML

>WP\_011990199.1 MFS transporter [Campylobacter jejuni]

MSPKKIIKSMTALFAGMAFLFAGNALIVSSIGVILKENGESSLAVGMVSSCFFVGALVGTISAHKIISRI

GHIRSFGLFGAIFGISAMLHTVSENLIFWAVLRFFIGICYYGLLMVIESWLNEKSKNAIRSRILGFYEIV

FYLAFGIGVLIIALNLSKHSVFILSATLILLSSLPLNLIKIKEPVLPASSPISIPKIFDIAPLAIVTSFI

AGMLINGFFSMASLFILLQGFDTKAVSYFIFCGVLGGFIAQTIIGTISDKLGRKFAIITCASIGFITMFI

FIFFKLHLYMQYFLGITLGIGIFCLYALALARANDVLVSKNKGVELGRGVLFCYSLGSLFGPLVLGFLMQ

YFEIKGFLWFYIISLAFLILFAINKPNILNKKFKKKPGNMVIFDD

>WP\_011990122.1 amino acid ABC transporter permease [Campylobacter jejuni]

MNQKNIRIFVFFVIIILWGYFSFPIEILKIQDPSGVVSYGYTENAKAYLKSYLITLLLTACAVIIGVIIG

FNLAILRFSKFKTLNFIIDEYIDIIRGTPVILQLMIFAFVIFTFIDNLYAAILALGLNSSAYIAEIVRSG

INSVDKGQMEAARAMGLDYKTSMKEIILPQATKNILPALANEFISLFKETSVVGFISVIDITMQSQSLQA

VLYNPKPIIFTGLVYYVSVKIFSYFAKKLELRMNKND

>WP\_011989885.1 phosphatidylserine decarboxylase [Campylobacter jejuni]

MKDFIAKDGYLSLIILSLIFIFVWIFYSFSILLLALIVICIFLFRTPKREPVCSDEKAIFAPIDGRVTKI

ENIHHKDLGECVEITIKNALYDAGNFNTPFAMSIIDIRLRHGLFLCSELKSVKMMNERAFILAKVKENKT

IALRIYAGSFDRKLKLDNISHDLKAGDRMGFLINGSISLLLPKDTRIHIGLNDEIKAGSLLGYFA

>WP\_011989435.1 7-cyano-7-deazaguanine synthase [Campylobacter jejuni]

MSKKALCIISGGMDSTLCAYLAKKEGYEIIALHFDYEQRTQEKEKECFKQICKALKVEKSYILDVSFIKD

IGGNALTDKSIDIPKNELCISDIPPITYVPFRNGIFLSIAGSLAEKENCESIFIGVVEEDGSGYPDCTDE

FIQKAQEFINEGTSKNFKVCIKTPLVRLNKAKIVELALKENVPLELTWSCYESEDEACGECDSCLLRLRG

FEKAGFKDKIKYKS

>WP\_011990784.1 hypothetical protein [Campylobacter jejuni]

MKNYKLDEMIRGWFVGNFDPSVFKTNDVEVGVKEYKKGDTEEKHHHKIATEITVIISGKVRMNDRIYSKG

DIVMIYPGEATDFEALEDTTNVVVKLPGANDDKYLGECQ

>WP\_011990537.1 50S ribosomal protein L7/L12 [Campylobacter jejuni]

MAISKEDVLEYISNLSVLELSELVKEFEEKFGVSAVPVMVAGGAAAGGAAAAAEEKTEFDIVLTDGGAKK

IEVIKIVRALTGLGLKEAKDAVEQTPSTLKEGVAKAEAEEAKKQLEEAGAKVELK

>WP\_011990421.1 cell division protein FtsZ [Campylobacter jejuni]

MSEFLVEEMQHNKGAKIKVIGCGGGGGNMINHMVKMGLNDLDLIAANTDAQAISISLAKTKIQLGEKKTK

GLGAGMLPEVGAESARESFEEIKASLSQSDIVFIASGFGGGTGTGATPVIAQAAKEIGALTVSVVTMPFA

FEGKQRKKLAESGLLELKKESDSILVIQNEKLLSIIDKKAGIKDAFRLVDDILARAVKGMVSILLDNGDI

NVDFADVRTIMSHRGLALMGVGSASGENAIEEALSNAIESPLLDGMDIKGAKGVILHFKTSSNCSLFEIS

AAANSIQEIVDENAKIIFGSTTDDSMEDRVEVTIIATGFEDKDTVAKKSTEEAQASKKNPYLSLKKISGG

YDEEIMAQIETPTFLRRQMD

>WP\_011989886.1 CDP-diacylglycerol--serine O-phosphatidyltransferase [Campylobacter jejuni]

MSNRPQLIYILPNLFTAASAFLGVISIIASIHGNYYTALIYIILSLICDGLDGRVARLTNSTSKFGVEFD

SLADLVAFGVAPAVLFYMAIGYDFGKLGSLITAFFVVFGAIRLARFNVTTGTYEPSVFIGLPIPTAAVVS

AIWTYAFISYDFLKPYGVVFLVLQAILGLLMVSNIRYPSFKKLDFNRSSVLKVLIILIIIFSFLYLYPLE

SLVILASLYVLYGIIRVLYTIIVSKFKIRNQE

>WP\_011989813.1 hypothetical protein [Campylobacter jejuni]

MYERKDLRVLKIIQKAREFGDGDLLNEALVKQLIDADFCEINEKEKEELVTLLNSLINAKDKALLSN

>WP\_011989800.1 hypothetical protein [Campylobacter jejuni]

MTKNKEKALRVKYLRNLEKFFNGAISALKKEDFDKTKFEERMLKNAKFFEKNPAVNLNSTYAKNLEFFVN

ACLDFSKEKSELLNLANALDKQKKQGEKKEKHKNYLKDYE

>WP\_011989603.1 50S ribosomal protein L35 [Campylobacter jejuni]

MPKMKSVKSAVKRFKVGKNKIKRGSAFRSHILTKKPAKRMRNLRTAKYVHSTNVKAVEKMLGI

>WP\_002934292.1 ribosome-binding factor A [Campylobacter jejuni]

MNPSEIKKLRTESILKELIPEALANLDDENLKNLCVVDVECKKGRYDAFVYLDKMFFNIHEQEKILSSLK

KASRALQNYCMSEQGWYRCPNFHFKFDDRLEYQNHMDALFEKIKKDKNES

>WP\_002927858.1 hypothetical protein [Campylobacter jejuni]

MKKSILFASALLTGSMLFADSLKLEGTIAQIYDNNKTLLIDSIYGGQMAIKVLPNTEIEMDDCGIFGTDK

DGTFKDLQVGNFLESKISYGAPATPNTQAIPVARKIEIQCYKKAY

>WP\_002922072.1 preprotein translocase subunit SecY [Campylobacter jejuni]

MNRALTNKILITLAFLFAYRVLAYVPVPGVNADVIAEFFNNNQNNALGLFNVFSGGAAERFSIISLGIMP

YITASIIMELLAATFPNIGKMKKERDSMQKYMQIIRYATIAITLVQSIGVAIGLQSLHGRGGAGAIMVED

LNMFIALCAISMLAGTMLLMWLGEQITQRGIGNGISLIIFAGIVSGIPRAISGTVGQINSGEMNFLTAFA

IFALILITIGVIIYVELGERRIPISYSRKVVMQNQNKRIMNYIPIKLNLSGVIPPIFASAILMFPTTILQ

TSTNPYLQAINDFLNPNGYLFHVLTFLFVIFFAYFYASIVFNAKDIAENLKKQGGFIPGIRPGEGTSNYL

NEVASRLTLSGSIYLGLVATLPWVLVKFMGVPFHFGGTSVLIVVQVALDTMRKIEAQIYMSKYQTLSAVG

L

>WP\_002873624.1 hypothetical protein [Campylobacter jejuni]

MAYEDEEDLNYDDYENEDEEYPQNHHKNYNYDDDDYEYDDDSNDDDFYEMEIKNEQNP

>WP\_002873464.1 transcription elongation factor GreA [Campylobacter jejuni]

MQKEPMSQFGYDKLAAELKDLKDNQRPAVVIEIDTARSHGDLKENAEYHAAREKQALIESRIVELSDLLA

RAQVIDPSSYEHDSVKFGSSVVIMDLDTEKESKYTLVGICEGDLDKGYISIASPIARAMLGKKEGDDFKV

RLPKGESEFEILSINYEPLKF

>BAK13119.1 argininosuccinate lyase 2 ArgH2 [Pantoea ananatis AJ13355]

MDKRYILILGGEFSLRERVLAGALRAAGGMQVLTMAKNRTNAAIKFFDGYLSGDVADENAVLDAVKAHEA

STGCKPAAAIPMNDFTVRAASLVAEHYQLHGNSRQTIHNCRDKFVMKQLLEKAGLPVPRFAAFSTLEELR

HHIRDIGLPVVIKPREMAGSLGVLKITREEEIEPSFARSVADVISLNGESYAPEDLFQVEEYVPSLQEVS

VEVINQGDYHKAIAVTDKYLGEEPHFVEVGHSVPSVHASNPQLRDIAERACHALGIHYGVAHFEARITPA

GEIKIIEVGARTGGDTIMDLVERSYGINPYELHVASHLNALKPLAEPLVPKGLSAVAFIKAPVGTIEKVT

LPASLPDHIVNMQITAKPLDTSKKLESWKTREGSVEFFWPSRKPETGFNEHLRTADDLATTLFTLRQA

>ADD78988.1 ArgH2 [Pantoea ananatis LMG 20103]

MDKRYILILGGEFSLRERVLAGALRAAGGMQVLTMAKNRTSAAIKFFDGYLSGDVADENAVLDAVKAHEA

STGCKPAAAIPMNDFTVRAASLVAEHYQLHGNSRQTIHNCRDKFVMKQLLEKAGLPVPRFAAFSTLEELR

HHIRDIGLPVVIKPREMAGSLGVLKITREEEIEPSFARSVADVISLNGESYAPEDLFQVEEYIPSLQEVS

VEVINQGDYHKAIAVTDKYLGEEPHFVEVGHSVPSVHASNPQLRDIAERACHALGIHYGVAHFEARITPA

GEIKIIEVGARTGGDTIMDLVERSYGINPYELHVASHLNALKPLAEPLVPKGLSAVAFIKAPVGTIEKVT

LPASLPDHIVNMQITAKPLDTSKKLESWKTREGSVEFFWPSRKPETGFNEHLRTADDLATTLFTLRQA

>EIA29374.1 hypothetical protein SFB4\_072G2, partial [Candidatus Arthromitus sp. SFB-4]

FNLNQTMSKKVSIREVIKNKQKKKQDKKEMQEKLFFETLDERIEQFKNFKENSIDSQGVLNAINMDLNKI

NSSIKVEFNNLNKRRNVRSKDGSYKKTLNSKDDKFSLQNLLEEIYEEKGEEAKGLDTNELDIDAIKKDLS

NNENTKQIVN

>ADZ76200.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni]

MELMHNLNFSHPFLNKLIAYKDLNCLVYKDKTYSYLELLLEVEKYIGQLNNLKGIIGILGDYNLKSIALL

LACIEKRLIVAPFLKLKNQDFKELEDKIYEGQIDYLYDEGRFIPYQSKQLKHNLIYTLQNHSSSGLILFS

SGSTGKPKAMVHNLDVILNVYQGKKPKVMNIVLFLMFDHIGGLNTLFNVLGMGACGIALEDRKNIEALAQ

NIQKYQVSLLPASPSLLNLILMSGVKEKYDLNSLKLITYGTEKMSDSLLNRLKLEFPKVRFHQTFGTSEV

GIAQTKTKDNMIKLEGMAYKIINNELYLKSKTQSLGYLNADNSVFDEEGYFATGDLVELYKENGEEYIKI

IGRSKELINVGGEKVVPQEVEGVILELDYIQDCLVYAKANTITGQSVCVEVLLKPNIEFTNLELKKQLRM

YCKDKLANYKIPTQVEIVDGLELSQRFKKVRKG

>ADZ76199.1 NAD dependent epimerase/dehydratase family protein [Campylobacter jejuni subsp. jejuni]

MQKVILITGTRKGIGKQLSEHYLSLGHTVCGCSRGASSINHINYRHFELDVSDEEKVVSMVRAVRKEFSR

IDVLLNNAGIASMNHILTTPYKSVNNIFNTNVFGTFLFTREVAKVMGNIYKKNYKNTKTMPFRIVNFTTV

ATPLRLEGEAIYAASKAALVNLTQVCAKELSEFGITVNAVGPTPVPTDLIKNVPQNKLDRFIKSASH

>ADZ76198.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni]

MEEKIISIILNVLKNSADDYEIEELKSANKDTKLYSGLGGLLDSLALVSLITDLEESLATELNIEITLAD

EKMMSLRNSPFKDVQTLAQYIASQIKA

>ADZ76177.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni]

MELMHNLNFSHPFLNKLIAYKDLNCLVYKDKTYSYLELLLEVEKYIGQLNNLKGIIGILGDYNLKSIALL

LACIEKRLIVAPFLKLKNQDFKELEDKIYEGQIDYLYDEGRFIPYQSKQLKHNLIYTLQNHSSSGLILFS

SGSTGKPKAMVHNLDVILNVYQGKKPKVMNIVLFLMFDHIGGLNTLFNVLGMGACGIALEDRKNIEALAQ

NIQKYQVSLLPASPSLLNLILMSGVKEKYDLNSLKLITYGTEKMSDSLLNRLKLEFPKVRFHQTFGTSEV

GIAQTKTKDNMIKLEGMAYKIINNELYLKSKTQSLGYLNADNSVFDEEGYFATGDLVELYKENGEEYIKI

IGRSKELINVGGEKVVPQEVEGVILELDYIQDCLVYAKANTITGQSVCVEVLLKPNIEFTNLELKKQLRM

YCKDKLANYKIPTQVEIVDGLELSQRFKKVRKG

>ADZ76176.1 NAD dependent epimerase/dehydratase family protein [Campylobacter jejuni subsp. jejuni]

MQKVILITGTRKGIGKQLSEHYLSLGHTVCGCSRGASSINHINYRHFELDVSDEEKVVSMVRAVRKEFSR

IDVLLNNAGIASMNHILTTPYKSVNNIFNTNVFGTFLFTREVAKVMGNIYKKNYKNTKTMPFRIVNFTTV

ATPLRLEGEAIYAASKAALVNLTQVCAKELSEFGITVNAVGPTPVPTDLIKNVPQNKLDRFIKSASH

>ADZ76175.1 putative sugar transferase [Campylobacter jejuni subsp. jejuni]

MEEKIISIILNVLKNSADDYEIEELKSANKDTKLYSGLGGLLDSLALVSLITDLEESLATELNIEITLAD

EKMMSLRNSPFKDVQTLAQYIASQIKA