

Supplementary Table S2. Genes and pseudogenes of '*Candidatus Desulfovibrio trichonymphae*' phylotype Rs-N31

Gene ID	type	strand	start	stop	length (nt)	length (aa)	gene name	abbrev.	EC number
RSDT_0001	CDS	+	1	1413	1413	470	chromosomal replication initiator protein DnaA	dnaA1	
RSDT_0002	CDS	-	2202	1423	780	259	prephenate dehydrogenase	tyrA	1.3.1.12
RSDT_0003	CDS	-	3590	2199	1392	463	3-phosphoshikimate 1-carboxyvinyltransferase	aroA	2.5.1.19
RSDT_0004	CDS	-	4807	3587	1221	406	chorismate mutase	pheA	5.4.99.5/ 4.2.1.51
RSDT_0005	CDS	-	5795	4812	984	327	3-dehydroquinate synthase II	aroB	1.4.1.24
RSDT_0006	CDS	-	6594	5797	798	265	phospho-2-dehydro-3-deoxyheptonate aldolase	fbaB	2.5.1.54
RSDT_pg_001	pseudogene	-	7060	6883	178 x		pseudogene of transposase		
RSDT_0007	CDS	-	8748	7279	1470	489	signal recognition particle protein	ffh	
RSDT_0008	CDS	-	9621	8974	648	215	molybdenum cofactor cytidyltransferase	ygfJ	2.7.7.76
RSDT_0009	CDS	-	10376	9588	789	262	YqeC-like putative molybdenum hydroxylase maturation protein	yqeC	
RSDT_tRNA_01	tRNA	-	11099	11024	76 xx		tRNA-Met		
RSDT_0010	CDS	+	11795	11986	192	63	conserved hypothetical protein		
RSDT_0011	CDS	+	11997	13547	1551	516	cobyrinic acid a,c-diamide synthase	cbiA2	6.3.5.11
RSDT_0012	CDS	+	13556	14209	654	217	cobalt-precorrin-8X methylmutase	cbiC	5.4.1.2
RSDT_pg_002	pseudogene	+	14417	15087	671 x		pseudogene of conserved hypothetical protein		
RSDT_pg_003	pseudogene	+	15270	15835	566 x		pseudogene of transposase		
RSDT_0013	CDS	-	16983	16228	756	251	type II DNA restriction-modification system methyltransferase subunit		
RSDT_pg_004	pseudogene	-	17824	16980	845 x		pseudogene of type II DNA restriction-modification system endonuclease subunit		3.1.21.4
RSDT_pg_005	pseudogene	-	19674	18906	769 x		pseudogene of DNA adenine methyltransferase	dam	2.1.1.72
RSDT_tRNA_02	tRNA	-	20018	19943	76 xx		tRNA-Ala		
RSDT_0014	CDS	-	21373	20246	1128	375	2-iminoacetate synthase	thiH	4.1.99.19
RSDT_tRNA_03	tRNA	+	21786	21871	86 xx		tRNA-Leu		
RSDT_pg_006	pseudogene	+	22034	22376	343 x		pseudogene of phage integrase		

RSDT_pg_007	pseudogene	+	22440	22652	213 x	pseudogene of uncharacterized transcriptional regulator		
RSDT_0015	CDS	-	23627	23385	243	80 conserved hypothetical protein		
RSDT_0016	CDS	-	23934	23770	165	54 conserved hypothetical protein		
RSDT_0017	CDS	-	25398	23962	1437	478 conserved hypothetical protein		
RSDT_0018	CDS	-	27166	25604	1563	520 conserved hypothetical protein		
RSDT_0019	CDS	-	27718	27443	276	91 DNA-binding protein HU-beta		hupB
RSDT_0020	CDS	-	28927	28085	843	280 glutamate racemase		murI 5.1.1.3
RSDT_0021	CDS	-	30004	29063	942	313 sulfite exporter TauE/SafE family protein		
RSDT_0022	CDS	+	30217	30855	639	212 imidazole glycerol phosphate synthase subunit hisH		hisH 2.4.2.-
RSDT_0023	CDS	+	30845	31624	780	259 imidazole glycerol phosphate synthase subunit hisF		hisF 4.1.3.-
RSDT_0024	CDS	+	31795	31908	114	37 conserved hypothetical protein		
RSDT_0025	CDS	+	32172	32609	438	145 FmdB family regulatory protein		
RSDT_0026	CDS	+	32606	33928	1323	440 adenylosuccinate lyase		purB 4.3.2.2
RSDT_0027	CDS	+	33921	34481	561	186 orotate phosphoribosyltransferase		pyrE 2.4.2.10
RSDT_pg_008	pseudogene	+	34617	36319	1703 x	pseudogene of pyridine nucleotide-disulfide oxidoreductase/CoA disulfide reductase		
RSDT_0028	CDS	+	36587	37201	615	204 ribosome maturation factor RimP		rimP
RSDT_0029	CDS	+	37294	38637	1344	447 transcription elongation factor NusA		nusA
RSDT_0030	CDS	+	38874	41834	2961	986 translation initiation factor IF-2		infB
RSDT_pg_009	pseudogene	+	41958	42187	230 x	pseudogene of conserved hypothetical protein		
RSDT_0031	CDS	+	42222	43262	1041	346 DHH family phosphoesterase		
RSDT_pg_010	pseudogene	-	45210	43264	1947 x	pseudogene of translation elongation factor G		fusA1
RSDT_0032	CDS	+	45711	46382	672	223 outermembrane Hek-like protein		
RSDT_0033	CDS	+	46493	47434	942	313 tRNA pseudouridine synthase B		truB 5.4.99.25
RSDT_0034	CDS	+	47460	47729	270	89 ribosomal protein S15		rpsO
RSDT_0035	CDS	+	47896	50130	2235	744 polyribonucleotide nucleotidyltransferase		pnp 2.7.7.8
RSDT_0036	CDS	+	50223	51176	954	317 conserved hypothetical protein		
RSDT_0037	CDS	-	52253	51186	1068	355 peptide chain release factor 1 (RF-1)		prfA

RSDT_0038	CDS	-	53191	52274	918	305 conserved hypothetical protein		
RSDT_0039	CDS	-	53507	53295	213	70 50S ribosomal protein L31	rpmE	
RSDT_0040	CDS	-	54718	53666	1053	350 conserved hypothetical protein		
RSDT_0041	CDS	-	56405	54987	1419	472 phosphomannomutase	manB	5.4.2.8
RSDT_0042	CDS	-	57103	56678	426	141 Ros/MucR family transcriptional regulator		
RSDT_pg_011	pseudogene	+	57371	58422	1052 x	pseudogene of outer membrane autotransporter		
RSDT_0043	CDS	-	59439	58693	747	248 6-phosphogluconolactonase	pgl	3.1.1.31
RSDT_0044	CDS	-	60015	59662	354	117 fumarate reductase subunit D	frdD	1.3.1.6
RSDT_0045	CDS	-	60386	60027	360	119 fumarate reductase subunit C	frdC	1.3.1.6
RSDT_0046	CDS	-	61137	60376	762	253 fumarate reductase subunit B	frdB	1.3.1.6
RSDT_0047	CDS	-	62926	61130	1797	598 fumarate reductase flavoprotein subunit A	frdA	1.3.1.6
RSDT_0048	CDS	-	64273	62960	1314	437 conserved hypothetical protein		
RSDT_0049	CDS	-	65779	64334	1446	481 putative sodium:sulfate symporter		
RSDT_0050	CDS	-	66370	65813	558	185 fumarate hydratase, beta subunit	fumB	4.2.1.2
RSDT_0051	CDS	-	67226	66381	846	281 fumarate hydratase, alpha subunit	fumA	4.2.1.2
RSDT_0052	CDS	-	70529	67380	3150	1049 cation efflux system protein CusA	cusA	
RSDT_0053	CDS	-	71815	70562	1254	417 cation efflux system protein CusB	cusB	
RSDT_0054	CDS	-	72265	71894	372	123 cation efflux system protein CusF	cusF	
RSDT_0055	CDS	-	73715	72303	1413	470 cation efflux system protein CusC	cusC	
RSDT_0056	CDS	-	74222	73845	378	125 hypothetical protein		
RSDT_0057	CDS	+	74797	77532	2736	911 DNA polymerase I	polA	2.7.7.7
RSDT_0058	CDS	-	79202	77790	1413	470 recombination protein RmuC	rmuC	
RSDT_0059	CDS	-	79885	79286	600	199 MarC family integral membrane protein		
RSDT_0060	CDS	+	80154	80888	735	244 cell division protein Fic	fic	
RSDT_0061	CDS	-	81443	81078	366	121 RNA polymerase-binding protein DksA	dksA	
RSDT_0062	CDS	-	82485	81613	873	290 UTP-glucose-1-phosphate uridylyltransferase	galU	2.7.7.9
RSDT_0063	CDS	-	83873	82920	954	317 conservative hypothetical protein		

RSDT_0064	CDS	+	84071	84880	810	269	5,10-methylenetetrahydrofolate reductase	metF	1.5.1.20
RSDT_tRNA_04	tRNA	-	85215	85140	76	xx	tRNA-Thr		
RSDT_0065	CDS	-	86496	85456	1041	346	Yceg-like uncharacterized protein		
RSDT_0066	CDS	-	86930	86493	438	145	putative Holliday junction resolvase YqgF	yqgF	3.1.22.4
RSDT_0067	CDS	-	87922	86936	987	328	tryptophanyl-tRNA synthetase	trpS	6.1.1.2
RSDT_0068	CDS	-	88691	88020	672	223	Zn-dependent M50 family peptidase		
RSDT_0069	CDS	+	88805	90424	1620	539	alpha-isopropylmalate/homocitrate synthase family transferase		
RSDT_0070	CDS	+	90693	91151	459	152	putative membrane protease regulator		
RSDT_0071	CDS	+	91153	92109	957	318	membrane-bound protease		
RSDT_pg_012	pseudogene	-	92666	92238	429	x	pseudogene of thioesterase family protein		
RSDT_0072	CDS	+	92661	93833	1173	390	membrane-bound lytic murein transglycosylase A		
RSDT_0073	CDS	-	94412	94023	390	129	cytochrome c class III	cytC3	
RSDT_0074	CDS	-	95279	94527	753	250	precorrin-3B C17-methyltransferase	cbiH	2.1.1.131
RSDT_0075	CDS	-	96424	95276	1149	382	cobalamin biosynthesis protein CbiG	cbiG	3.7.1.12
RSDT_0076	CDS	-	97698	96424	1275	424	glutamate-1-semialdehyde aminotransferase	hemL	5.4.3.8
RSDT_0077	CDS	+	98359	99420	1062	353	N-acetylneuraminate synthase	neuB	2.5.1.56
RSDT_0078	CDS	+	99428	101137	1710	569	conserved hypothetical protein		
RSDT_0079	CDS	+	101134	102183	1050	349	conserved hypothetical protein		
RSDT_0080	CDS	+	102303	102797	495	164	molybdenum cofactor biosynthesis protein MoaC	moaC	
RSDT_0081	CDS	+	102794	103570	777	258	prolipoprotein diacylglyceryl transferase	lgt	
RSDT_0082	CDS	-	106351	103604	2748	915	outer membrane protein assembly complex, YaeT protein	yaeT	
RSDT_0083	CDS	-	107063	106377	687	228	lipoprotein releasing system ATP-binding protein	lolD	
RSDT_0084	CDS	-	108292	107066	1227	408	lipoprotein releasing system transmembrane protein	lolC	
RSDT_0085	CDS	-	110015	108432	1584	527	lysyl-tRNA synthetase	lysS	6.1.1.6
RSDT_0086	CDS	+	110411	111292	882	293	pyridoxal biosynthesis lyase pdxS	pdxS	4.3.3.6
RSDT_0087	CDS	+	111431	112069	639	212	SNO glutamine amidotransferase	pdxT	4.3.3.6
RSDT_pg_013	pseudogene	+	112054	112582	529	x	pseudogene of NUDIX hydrolase		

RSDT_0088	CDS	+	112600	114438	1839	612	3-octaprenyl-4-hydroxybenzoate carboxy-lyase	ubiD	4.1.1.-
RSDT_0089	CDS	-	115078	114653	426	141	putative mannose-1-phosphate guanylyltransferase /mannose-6-phosphate isomerase		2.7.7.229/ 5.3.1.8
RSDT_pg_014	pseudogene	-	116163	115356	808	x	pseudogene of outer membrane autotransporter		
RSDT_pg_015	pseudogene	+	116979	117439	461	x	pseudogene of dTDP-4-dehydrorhamnose reductase	rfbD	1.1.1.133
RSDT_0090	CDS	+	117626	119470	1845	614	citrate (Re)-synthase		2.3.3.3
RSDT_0091	CDS	+	119493	120632	1140	379	NADP-dependent isocitrate dehydrogenase	icd	1.1.1.41
RSDT_0092	CDS	+	120654	122969	2316	771	aconitate hydratase A	acnA	4.2.1.3
RSDT_pg_016	pseudogene	+	122990	124171	1182	x	pseudogene of major facilitator superfamily protein		
RSDT_0093	CDS	+	124216	124830	615	204	NADPH:FMN oxidoreductases		
RSDT_0094	CDS	+	124964	126079	1116	371	YaeI-like metallophosphoesterase		
RSDT_0095	CDS	-	127531	126083	1449	482	glycine dehydrogenase subunit 2	gcvPB	1.4.4.2
RSDT_0096	CDS	-	128859	127528	1332	443	glycine dehydrogenase subunit 1	gcvPA	1.4.4.2
RSDT_0097	CDS	-	129259	128873	387	128	glycine cleavage system H protein	gcvH	
RSDT_0098	CDS	-	130372	129290	1083	360	glycine cleavage system T protein	gcvT	2.1.2.10
RSDT_0099	CDS	-	131390	130395	996	331	lipoyltransferase and lipoate-protein ligase	lplA	2.7.7.63
RSDT_0100	CDS	-	132270	131446	825	274	Mg-dependent DNase	tatD	
RSDT_0101	CDS	+	132438	133391	954	317	uncharacterized UDP-glucose epimerase	yticB	
RSDT_tRNA_05	tRNA	-	133653	133576	78	xx	tRNA-Pro		
RSDT_pg_017	pseudogene	-	135648	133845	1804	x	pseudogene of type I DNA restriction-modification system endonuclease subunit	hsdR	
RSDT_pg_018	pseudogene	-	136239	135655	585	x	pseudogene of type I DNA restriction-modification system methyltransferase subunit	hsdM	
RSDT_0102	CDS	-	138180	136489	1692	563	dihydroxy-acid dehydratase	ilvD	4.2.1.9
RSDT_0103	CDS	-	139923	138217	1707	568	glutaminyI-tRNA synthetase	glnS	6.1.1.18
RSDT_tRNA_06	tRNA	+	140139	140233	95	xx	tRNA-Ser		
RSDT_0104	CDS	-	142363	140789	1575	524	23S rRNA pseudouridine synthase D/dephospho-CoA kinase	rluD/ coaE	5.4.99.B4/ 2.7.1.24
RSDT_0105	CDS	-	143799	142360	1440	479	putative cell wall-associated hydrolases		
RSDT_pg_019	pseudogene	-	144259	143919	341	x	pseudogene of transposase		

RSDT_0106	CDS	+	144373	144657	285	94	(2R)-sulfolactate sulfo-lyase subunit alpha	suyA	4.4.1.24
RSDT_0107	CDS	+	144661	145821	1161	386	(2R)-sulfolactate sulfo-lyase subunit beta	suyB	4.4.1.24
RSDT_0108	CDS	+	146624	147571	948	315	tricarboxylate transporter receptor subunit	tctC	
RSDT_0109	CDS	+	147671	149659	1989	662	tricarboxylate transporter permease subunit	tctAB	
RSDT_pg_020	pseudogene	+	149699	150613	915	x	pseudogene of (2R)-3-sulfolactate dehydrogenase (NADP+)	comC	1.1.1.338
RSDT_pg_021	pseudogene	-	151539	150611	929	x	pseudogene of putative drug efflux pump		
RSDT_0110	CDS	-	152474	151890	585	194	conserved membrane protein		
RSDT_0111	CDS	-	153477	152515	963	320	ABC transporter substrate-binding protein		
RSDT_0112	CDS	-	154238	153474	765	254	ABC transporter ATP-binding protein		
RSDT_0113	CDS	-	155395	154241	1155	384	ABC transporter permease		
RSDT_tRNA_07	tRNA	-	155888	155813	76	xx	tRNA-Glu		
RSDT_0114	CDS	-	156206	155952	255	84	conserved hypothetical protein		
RSDT_0115	CDS	-	159049	156386	2664	887	putative Fe-S oxidoreductase		
RSDT_0116	CDS	-	159460	159122	339	112	conserved hypothetical protein		
RSDT_0117	CDS	+	159586	160371	786	261	ribonuclease III	rnc	3.1.26.3
RSDT_pg_022	pseudogene	-	160657	160442	216	x	pseudogene of flagellin	fliC	
RSDT_0118	CDS	-	163114	160682	2433	810	ATP-dependent Lon protease	lonP	3.4.21.53
RSDT_0119	CDS	-	164502	163225	1278	425	ATP-dependent Clp protease ATP-binding subunit	clpX	
RSDT_0120	CDS	-	165118	164507	612	203	ATP-dependent Clp protease proteolytic subunit	clpP	3.4.21.92
RSDT_0121	CDS	-	166527	165178	1350	449	trigger factor	tig	5.2.1.8
RSDT_0122	CDS	+	167271	168191	921	306	branched-chain amino acid aminotransferase	ilvE	2.6.1.42
RSDT_0123	CDS	+	168198	169886	1689	562	DNA polymerase III, subunits gamma and tau	dnaX	2.7.7.7
RSDT_0124	CDS	+	169930	170241	312	103	YbaB/EbfC family DNA-binding protein		
RSDT_0125	CDS	+	170243	170851	609	202	DNA repair/recombination protein RecR	recR	
RSDT_0126	CDS	-	171463	170990	474	157	putative cell wall-associated hydrolase		
RSDT_pg_023	pseudogene	+	171190	171582	393	x	pseudogene of transposase		
RSDT_0127	CDS	+	172439	173650	1212	403	tyrosyl-tRNA synthetase	tyrS	6.1.1.1

RSDT_0128	CDS	+	173762	174859	1098	365 4Fe-4S ferredoxin		
RSDT_0129	CDS	+	174951	175847	897	298 conserved hypothetical protein		
RSDT_0130	CDS	-	176809	175844	966	321 oligopeptide/dipeptide ABC transporter ATP-binding protein	dppF	
RSDT_0131	CDS	-	177880	176813	1068	355 nicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferase	cobT	2.4.2.21
RSDT_0132	CDS	+	178026	179363	1338	445 periplasmic serine protease		
RSDT_0133	CDS	+	179488	179676	189	62 4Fe-4S ferredoxin		
RSDT_0134	CDS	+	179748	180416	669	222 conserved hypothetical protein		
RSDT_0135	CDS	+	180430	180822	393	130 conserved hypothetical protein		
RSDT_0136	CDS	+	180819	181445	627	208 conserved hypothetical protein		
RSDT_0137	CDS	+	181951	183525	1575	524 type II DNA DNA restriction-modification system methyltransferase subunit		
RSDT_pg_024	pseudogene	+	183535	184221	687 x	pseudogene of type II DNA restriction-modification system endonuclease subunit		
RSDT_0138	CDS	-	185344	184292	1053	350 ribosomal RNA large subunit methyltransferase N	rlmN	2.1.1.192
RSDT_0139	CDS	-	186429	185401	1029	342 DHH family phosphoesterase		
RSDT_0140	CDS	-	189709	186803	2907	968 Zn-dependent M16 family peptidase		
RSDT_0141	CDS	-	190876	189713	1164	387 nitronate monooxygenase	npd	1.13.12.16
RSDT_pg_025	pseudogene	-	191552	191090	463 x	pseudogene of conserved hypothetical protein		
RSDT_0142	CDS	-	192594	191788	807	268 conserved hypothetical protein		
RSDT_0143	CDS	-	193628	192600	1029	342 conserved hypothetical protein		
RSDT_pg_026	pseudogene	-	194119	193720	400 x	pseudogene of conserved hypothetical protein		
RSDT_0144	CDS	-	194989	194126	864	287 4-hydroxybenzoate polyprenyltransferase	ubiA	2.5.1.39
RSDT_0145	CDS	-	195804	195013	792	263 MogA/MoaB family molybdenum cofactor biosynthesis protein	moaB	
RSDT_0146	CDS	+	195969	196487	519	172 preQ1 synthase	queF	1.7.1.13
RSDT_0147	CDS	+	196658	197980	1323	440 signal recognition particle-docking protein FtsY	ftsY	
RSDT_pg_027	pseudogene	-	198140	197997	144 x	pseudogene of type III DNA restriction-modification system endonuclease subunit		
RSDT_0148	CDS	+	199519	199794	276	91 conserved hypothetical protein		
RSDT_0149	CDS	+	200109	200966	858	285 Zn-dependent membrane-bound peptidase HtpX	htpX	3.4.24.-

RSDT_0150	CDS	+	201005	201397	393	130	conserved hypothetical protein		
RSDT_0151	CDS	+	201411	202403	993	330	UDP-glucose 4-epimerase	galE	5.1.3.2
RSDT_tRNA_08	tRNA	+	202460	202536	77	xx	tRNA-Met		
RSDT_pg_028	pseudogene	+	202681	202978	298	x	pseudogene of conserved hypothetical protein		
RSDT_0152	CDS	+	204335	205786	1452	483	outer membrane efflux protein TolC	tolC1	
RSDT_0153	CDS	+	205783	207447	1665	554	ribonuclease J	rnj	3.1.27.2
RSDT_tRNA_09	tRNA	-	207801	207725	77	xx	tRNA-Pro		
RSDT_0154	CDS	+	208020	208598	579	192	conserved hypothetical protein		
RSDT_0155	CDS	-	209790	208738	1053	350	quinolinate synthetase	nadA	2.5.1.72
RSDT_0156	CDS	+	209904	210452	549	182	conserved hypothetical protein		
RSDT_0157	CDS	-	211604	210594	1011	336	cobalamin biosynthesis protein CbiB	cbiB	6.3.1.10
RSDT_0158	CDS	-	212094	211633	462	153	tRNA (cytidine34-2'-O)-methyltransferase	trmL	2.1.1.207
RSDT_0159	CDS	-	213876	212143	1734	577	putative dihydropyrimidinase		3.5.2.2
RSDT_0160	CDS	-	214728	214003	726	241	cytidylate kinase	cmk	2.7.4.14
RSDT_0161	CDS	-	215870	214725	1146	381	histidinol-phosphate aminotransferase	hisC	2.6.1.9
RSDT_0162	CDS	-	216418	215966	453	150	universal stress protein	usp	
RSDT_0163	CDS	-	219244	216536	2709	902	valyl-tRNA synthetase	valS	6.1.1.9
RSDT_0164	CDS	+	219368	220663	1296	431	conserved hypothetical protein		
RSDT_pg_029	pseudogene	+	220819	222107	1289	x	pseudogene of adenine-specific DNA methyltransferase		
RSDT_pg_030	pseudogene	+	222146	222523	378	x	pseudogene of nucleotide-binding protein		
RSDT_0165	CDS	+	222572	223108	537	178	shikimate kinase 2	aroL	2.7.1.71
RSDT_0166	CDS	+	223349	223768	420	139	FoF1 ATP synthase subunit B'	atpF1	3.6.3.14
RSDT_0167	CDS	+	223832	224410	579	192	FoF1 ATP synthase subunit B	atpF2	3.6.3.14
RSDT_0168	CDS	+	224407	224958	552	183	FoF1 ATP synthase subunit delta	atpH	3.6.3.14
RSDT_0169	CDS	+	224962	226470	1509	502	FoF1 ATP synthase subunit alpha	atpA	3.6.3.14
RSDT_0170	CDS	+	226495	227379	885	294	FoF1 ATP synthase subunit gamma	atpG	3.6.3.14
RSDT_0171	CDS	+	227390	228811	1422	473	FoF1 ATP synthase subunit beta	atpD	3.6.3.14

RSDT_0172	CDS	+	228844	229245	402	133	Fo1 ATP synthase subunit epsilon	atpC	3.6.3.14
RSDT_0173	CDS	-	230219	229482	738	245	3'-5' exonuclease		
RSDT_0174	CDS	-	231623	230226	1398	465	tRNA modification GTPase TrmE	trmE	
RSDT_0175	CDS	-	232594	231629	966	321	single-stranded DNA-binding protein		
RSDT_0176	CDS	-	234284	232632	1653	550	membrane protein insertase subunit YidC	yidC	
RSDT_0177	CDS	-	234556	234293	264	87	membrane protein insertion efficiency factor YidD	yidD	
RSDT_0178	CDS	-	234954	234553	402	133	ribonuclease P protein component	rnpA	3.1.26.5
RSDT_0179	CDS	-	235103	234969	135	44	50S ribosomal protein L34	rpmH	
RSDT_pg_031	pseudogene	+	235112	235507	396 x		pseudogene of urease accessory protein UreG	ureG	
RSDT_pg_032	pseudogene	+	235548	236363	816 x		pseudogene of conserved hypothetical protein		
RSDT_0180	CDS	+	236610	236849	240	79	DNA-directed RNA polymerase subunit omega	rpoZ	2.7.7.6
RSDT_0181	CDS	+	236874	237983	1110	369	chaperone protein DnaJ	dnaJ	
RSDT_0182	CDS	-	240348	237991	2358	785	copper-exporting ATPase	copA	3.6.3.54
RSDT_0183	CDS	+	240608	241324	717	238	conserved hypothetical protein		
RSDT_pg_033	pseudogene	+	241453	241705	253 x		pseudogene of pyruvate kinase	pyk	2.7.1.40
RSDT_0184	CDS	-	242840	241710	1131	376	carbamoyl phosphate synthase small subunit	carA	6.3.5.5
RSDT_0185	CDS	-	246110	242859	3252	1083	carbamoyl-phosphate synthase large subunit	carB	6.3.5.5
RSDT_tRNA_10	tRNA	-	246282	246206	77 xx		tRNA-Arg		
RSDT_0186	CDS	+	246744	247391	648	215	putative phosphoglycolate phosphatase	gph	3.1.3.18
RSDT_0187	CDS	+	247470	247772	303	100	conserved hypothetical protein		
RSDT_0188	CDS	+	247894	248124	231	76	conserved hypothetical protein		
RSDT_0189	CDS	+	248127	249818	1692	563	acetolactate synthase, large subunit	ilvI	2.2.1.6
RSDT_0190	CDS	+	249830	250309	480	159	acetolactate synthase, small subunit	ilvH	2.2.1.6
RSDT_0191	CDS	+	250394	251395	1002	333	ketol-acid reductoisomerase	ilvC	1.1.1.86
RSDT_0192	CDS	-	252200	251529	672	223	adenylate kinase	adk	2.7.4.3
RSDT_0193	CDS	+	252784	255855	3072	1023	outer membrane autotransporter		
RSDT_0194	CDS	+	255913	256833	921	306	conserved hypothetical protein		

RSDT_0195	CDS	+	256840	258555	1716	571 4Fe-4S ferredoxin		
RSDT_pg_034	pseudogene	-	259148	258754	395 x	pseudogene of conserved hypothetical protein		
RSDT_0196	CDS	-	260037	259171	867	288 Mn2+/Zn2+ ABC transporter permease	znuB	
RSDT_0197	CDS	-	260941	260030	912	303 Mn2+/Zn2+ ABC transporter ATP-binding protein	znuC	
RSDT_0198	CDS	-	261887	260928	960	319 Mn2+/Zn2+ ABC transporter substrate-binding protein	znuA	
RSDT_0199	CDS	-	262616	261942	675	224 tRNA threonylcarbamoyladenosine biosynthesis protein tsaC	tsaC	2.7.7.87
RSDT_pg_035	pseudogene	-	264907	262633	2275 x	pseudogene of conserved hypothetical protein		2.4.99.18
RSDT_0200	CDS	-	265566	264913	654	217 ribosomal RNA small subunit methyltransferase G	rsmG	2.1.1.170
RSDT_0201	CDS	+	265764	266708	945	314 malonyl CoA-acyl carrier protein transacylase	fabD	2.3.1.39
RSDT_0202	CDS	+	266730	268385	1656	551 arginyl-tRNA synthetase	argS	6.1.1.19
RSDT_0203	CDS	+	268400	269233	834	277 conserved hypothetical protein		
RSDT_0204	CDS	+	269241	270035	795	264 ABC exporter permease		
RSDT_0205	CDS	+	270044	270859	816	271 ABC exporter, ATP-binding protein		
RSDT_0206	CDS	+	271011	271460	450	149 ABC exporter, substrate-binding protein		
RSDT_0207	CDS	+	271457	272113	657	218 ABC exporter, auxiliary component		
RSDT_0208	CDS	+	272103	272948	846	281 VacJ family membrane protein		
RSDT_0209	CDS	+	272991	273950	960	319 oligopeptide/dipeptide ABC transporter ATP-binding protein	dppD	
RSDT_0210	CDS	+	273947	274603	657	218 conserved hypothetical protein		
RSDT_pg_036	pseudogene	-	275663	274588	1076 x	pseudogene of multidrug efflux transporter subunit MdtA	mdtA	
RSDT_0211	CDS	-	276375	275983	393	130 30S ribosomal protein S9	rpsI	
RSDT_0212	CDS	-	276854	276420	435	144 50S ribosomal protein L13	rplM	
RSDT_0213	CDS	-	277773	276985	789	262 dihydrodipicolinate reductase	dapB	1.3.1.26
RSDT_0214	CDS	-	279878	277797	2082	693 NAD-dependent DNA ligase	ligA	6.5.1.2
RSDT_0215	CDS	+	280109	280957	849	282 pantoate--beta-alanine ligase	panC	6.3.2.1
RSDT_0216	CDS	+	281002	282174	1173	390 S-adenosylmethionine synthase	metK	2.5.1.6
RSDT_0217	CDS	+	282222	283295	1074	357 chorismate synthase	aroC	4.2.3.5
RSDT_0218	CDS	+	283292	285568	2277	758 RecD-like DNA helicase		3.1.11.5

RSDT_pg_037	pseudogene	+	285717	287711	1995	x	pseudogene of CRISPR-associated helicase Cas3		
			287712	288998	1287		CRISPR region (remniscent)		
RSDT_0219	CDS	-	289903	289103	801	266	23S rRNA (guanosine2251-2'-O)-methyltransferase	rlmB	2.1.1.185
RSDT_0220	CDS	+	290193	292124	1932	643	conserved hypothetial protein		
RSDT_0221	CDS	+	292167	293417	1251	416	oxygen-independent coproporphyrinogen III oxidase	hemN	1.3.99.22
RSDT_pg_038	pseudogene	-	294343	293861	483	x	pseudogene of redox-sensing transcriptional repressor Rex	rex	
RSDT_0222	CDS	-	294680	294357	324	107	FoF1 ATP synthase subunit C	atpE	3.6.3.14
RSDT_0223	CDS	-	295448	294744	705	234	FoF1 ATP synthase subunit A	atpB	3.6.3.14
RSDT_0224	CDS	-	295964	295548	417	138	FoF1 ATP synthase subunit I'	atpI2	3.6.3.14
RSDT_0225	CDS	-	296238	295936	303	100	FoF1 ATP synthase subunit I	atpI1	3.6.3.14
RSDT_0226	CDS	-	297147	296581	567	188	H ⁺ -translocating [NiFe] hydrogenase complex, iron-sulfur subunit CooF	cooF	
RSDT_0227	CDS	-	297523	297152	372	123	H ⁺ -translocating [NiFe] hydrogenase complex, nickel insertion protein HypA	hypA1	
RSDT_0228	CDS	-	298616	297525	1092	363	H ⁺ -translocating [NiFe] hydrogenase complex, NiFe-containing large subunit CooH	cooH	1.2.99.2
RSDT_0229	CDS	-	299146	298613	534	177	H ⁺ -translocating [NiFe] hydrogenase complex, Nuo C-like subunit CooU	cooU	1.2.99.2
RSDT_0230	CDS	-	299742	299158	585	194	H ⁺ -translocating [NiFe] hydrogenase complex, iron-sulfur subunit CooX	cooX	1.2.99.2
RSDT_0231	CDS	-	300193	299744	450	149	H ⁺ -translocating [NiFe] hydrogenase complex, small subunit CooL	cooL	1.2.99.2
RSDT_0232	CDS	-	301175	300204	972	323	H ⁺ -translocating [NiFe] hydrogenase complex, transmembrane subunit CooK	cooK	1.2.99.2
RSDT_0233	CDS	-	304924	301172	3753	1250	H ⁺ -translocating [NiFe] hydrogenase complex, transmembrane subunit CooM	cooM	1.2.99.2
RSDT_0234	CDS	+	305684	306526	843	280	ferredoxin-NADP(+) reductase subunit beta	nfnB	1.18.1.2
RSDT_0235	CDS	+	306516	307946	1431	476	ferredoxin-NADP(+) reductase subunit alpha	nfnA	1.18.1.2
RSDT_tRNA_11	tRNA	+	308023	308107	85	xx	tRNA-Leu		
RSDT_0236	CDS	+	308613	309008	396	131	conserved hypothetical protein		
RSDT_pg_039	pseudogene	+	309476	309809	334	x	pseudogene of type III DNA restriction-modification system methyltransferase subunit		
RSDT_0237	CDS	+	309838	310764	927	308	D-3-phosphoglycerate dehydrogenase	serA	1.1.1.95

RSDT_pg_040	pseudogene	-	312279	310771	1509 x	pseudogene of magnesium chelatase family protein			
RSDT_0238	CDS	-	312986	312369	618	205	signal peptidase I	lspB	3.4.21.89
RSDT_0239	CDS	-	314263	313355	909	302	serine O-acetyltransferase	cysE	2.3.1.30
RSDT_0240	CDS	-	315427	314375	1053	350	N-acetyl-gamma-glutamyl-phosphate reductase	argC	1.2.1.38
RSDT_0241	CDS	-	315756	315424	333	110	conserved hypothetical protein		
RSDT_0242	CDS	-	317011	315827	1185	394	serine-glyoxylate transaminase		2.6.1.45
RSDT_0243	CDS	-	318664	317060	1605	534	L-aspartate oxidase	nadB	1.4.3.16
RSDT_0244	CDS	-	319717	318746	972	323	nicotinate-nucleotide pyrophosphorylase	nadC	2.4.2.19
RSDT_0245	CDS	+	319882	321276	1395	464	magnesium transporter	mgtE	
RSDT_0246	CDS	-	322354	321593	762	253	conserved hypothetical protein		
RSDT_0247	CDS	-	323577	322336	1242	413	phosphopantothenoylecysteine decarboxylase/phosphopantothenate-cysteine ligase	coaBC	4.1.1.36 /6.3.2.5
RSDT_0248	CDS	-	324164	323574	591	196	conserved hypothetical protein		
RSDT_0249	CDS	-	325372	324131	1242	413	conserved hypothetical protein		
RSDT_pg_041	pseudogene	-	325998	325633	366 x	pseudogene of HipA-like protein kinase			
RSDT_0250	CDS	-	326424	326083	342	113	conserved hypothetical protein		
RSDT_0251	CDS	+	326996	327619	624	207	NADPH-dependent FMN reductase		
RSDT_0252	CDS	+	327772	329373	1602	533	FeS-binding protein		
RSDT_0253	CDS	+	329374	330687	1314	437	conserved hypothetical protein		
RSDT_0254	CDS	+	330728	332986	2259	752	ribonucleotide-diphosphate reductase	nrdJ	1.17.4.1
RSDT_pg_042	pseudogene	+	333005	333590	586 x	pseudogene of inner membrane-bound hydrolase			
RSDT_pg_043	pseudogene	-	335100	333511	1590 x	pseudogene of putative peptidoglycan lipid II flippase		mviN	
RSDT_0255	CDS	-	335969	335265	705	234	FtsH-interacting inner membrane protein		
RSDT_0256	CDS	-	336917	336060	858	285	adenine nucleotide alpha hydrolases superfamily protein		
RSDT_0257	CDS	-	338057	336975	1083	360	tRNA-specific 2-thiouridylase MnmA	mnmA	2.8.1.-
RSDT_0258	CDS	+	338147	339328	1182	393	adenylyltransferase/sulfurtransferase MoeZ	moeZ	
RSDT_0259	CDS	-	340487	339531	957	318	cysteine synthase	cysK	2.5.1.47
RSDT_0260	CDS	-	341008	340568	441	146	Rrf2 family transcriptional regulator	rrf2	

RSDT_tRNA_12	tRNA	+	341329	341420	92	xx	tRNA-Ser		
RSDT_pg_044	pseudogene	+	341900	342049	150	x	pseudogene of putative endonuclease		
RSDT_tRNA_13	tRNA	-	342198	342123	76	xx	tRNA-Thr		
RSDT_0261	CDS	-	343231	342305	927	308	release factor glutamine methyltransferase	hemK	
RSDT_tRNA_14	tRNA	-	343296	343221	76	xx	tRNA-Lys		
RSDT_0262	CDS	+	343569	344183	615	204	conserved hypothetical protein		
RSDT_pg_045	pseudogene	-	345631	344272	1360	x	pseudogene of CRISPR-associated endonuclease Csm1	csm1	
RSDT_pg_046	pseudogene	-	345984	345720	265	x	pseudogene of YafQ-family endoribonuclease		
RSDT_pg_047	pseudogene	-	347357	346217	1141	x	pseudogene of putative CRISPR-associated protein		
RSDT_0263	CDS	-	347655	347347	309	102	CRISPR-associated protein Csx16	csx16	
RSDT_0264	CDS	-	348687	347728	960	319	16S rRNA (adenine1518-N6/adenine1519-N6)-dimethyltransferase	ksgA	2.1.1.182
RSDT_pg_048	pseudogene	-	349775	348695	1081	x	pseudogene of elongation factor G (EF-G)	fusA2	
RSDT_pg_049	pseudogene	-	351342	349780	1563	x	pseudogene of GTPase HflX	hflX	
RSDT_0265	CDS	-	351963	351373	591	196	IMP cyclohydrolase	purH	3.5.4.10
RSDT_0266	CDS	+	352196	353236	1041	346	GAF domain-containing protein		
RSDT_0267	CDS	+	353239	354264	1026	341	rod shape-determining protein MreB	mreB	
RSDT_0268	CDS	-	354860	354342	519	172	NUDIX hydrolase		
RSDT_0269	CDS	+	354919	355320	402	133	ribosomal-protein-alanine acetyltransferase	rimI	2.3.1.128
RSDT_0270	CDS	+	355343	356101	759	252	triose-phosphate isomerase	tpiA	5.3.1.1
RSDT_0271	CDS	+	356182	356547	366	121	preprotein translocase subunit SecG	secG	
RSDT_0272	CDS	+	356853	357476	624	207	Smr family protein		
RSDT_0273	CDS	-	357884	357516	369	122	conserved hypothetical protein		
RSDT_0274	CDS	-	360606	357865	2742	913	DNA mismatch repair protein MutS	mutS	
RSDT_0275	CDS	-	361155	360718	438	145	conserved hypothetical protein		
RSDT_0276	CDS	-	361736	361218	519	172	HIT family hydrolase		
RSDT_pg_050	pseudogene	+	362102	362383	282	x	pseudogene of addiction module antitoxin RelB	relB	
RSDT_pg_051	pseudogene	+	362385	362566	182	x	pseudogene of addiction module toxin RelE	relE	

RSDT_0277	CDS	-	363014	362661	354	117 hypothetical protein	
RSDT_0278	CDS	+	363051	364154	1104	367 multidrug efflux pump priplasmic subunit AcrA	acrA
RSDT_0279	CDS	+	364161	367367	3207	1068 multidrug efflux pump inner membrane subunit AcrB	acrB
RSDT_0280	CDS	+	367364	368866	1503	500 multidrug efflux pump outer membrane subunit TolC	tolC2
RSDT_0281	CDS	+	368863	369495	633	210 conserved hypothetical protein	
RSDT_0282	CDS	-	373892	369678	4215	1404 DNA-directed RNA polymerase subunit beta'	rpoC 2.7.7.6
RSDT_0283	CDS	-	378097	373961	4137	1378 DNA-directed RNA polymerase subunit beta	rpoB 2.7.7.6
RSDT_0284	CDS	-	378910	378521	390	129 50S ribosomal protein L7/L12	rplL
RSDT_0285	CDS	-	379492	378965	528	175 50S ribosomal protein L10	rplJ
RSDT_0286	CDS	-	380474	379767	708	235 50S ribosomal protein L1	rplA
RSDT_0287	CDS	-	381082	380660	423	140 50S ribosomal protein L11	rplK
RSDT_0288	CDS	-	381723	381151	573	190 transcription antitermination factor NusG	nusG
RSDT_0289	CDS	-	381972	381733	240	79 preprotein translocase subunit SecE	secE
RSDT_tRNA_15	tRNA	-	382069	381993	77 xx	tRNA-Trp	
RSDT_0290	CDS	-	382262	382113	150	49 50S ribosomal protein L33	rpmG
RSDT_0291	CDS	-	383462	382269	1194	397 translation elongation factor Tu	tuf
RSDT_tRNA_16	tRNA	-	383747	383672	76 xx	tRNA-Gly	
RSDT_tRNA_17	tRNA	-	383985	383900	86 xx	tRNA-Tyr	
RSDT_0292	CDS	-	385210	384317	894	297 putative cell wall-associated hydrolase	
RSDT_pg_052	pseudogene	-	385713	385304	410 x	pseudogene of flagellar basal body rod protein FlgC	flgC
RSDT_0293	CDS	-	386621	385812	810	269 GTP cyclohydrolase	folE 3.5.4.16
RSDT_0294	CDS	-	387040	386621	420	139 nickel-responsive transcriptional regulator NikR	nikR
RSDT_0295	CDS	+	387220	387708	489	162 colicin V production family protein	
RSDT_0296	CDS	+	387776	388573	798	265 nucleoside triphosphate pyrophosphohydrolase	mazG 3.6.1.8
RSDT_0297	CDS	+	388582	390744	2163	720 trehalose synthase-like protein	
RSDT_pg_053	pseudogene	+	391051	391243	193 x	pseudogene of integrase	
RSDT_0298	CDS	-	391698	391330	369	122 conserved hypothetical protein	

RSDT_0299	CDS	-	393006	391741	1266	421 PaaK-like carboxylate-CoA ligase		
RSDT_0300	CDS	-	394919	393087	1833	610 glutamine-fructose-6-phosphate transaminase (isomerizing)	glmS	2.6.1.16
RSDT_0301	CDS	-	396474	394963	1512	503 putative peptidyl-prolyl cis-trans isomerase D	ppiD	5.2.1.8
RSDT_pg_054	pseudogene	+	396477	396726	250 x	pseudogene of atypical 2-Cys peroxiredoxin	tpx	1.11.1.15
RSDT_0302	CDS	-	398051	396759	1293	430 transcription termination factor Rho	rho	
RSDT_0303	CDS	-	398736	398230	507	168 putative rRNA transcriptional regulator CarD	carD	
RSDT_0304	CDS	-	399571	398948	624	207 aminoacyl-tRNA hydrolase	pth	3.1.1.29
RSDT_0305	CDS	-	400448	399561	888	295 conserved hypothetical protein		
RSDT_0306	CDS	-	401127	400507	621	206 50S ribosomal protein L25	rplY	
RSDT_0307	CDS	-	402086	401139	948	315 ribose-phosphate pyrophosphokinase	prsA	2.7.6.1
RSDT_tRNA_18	tRNA	-	402191	402117	75 xx	tRNA-Gln		
RSDT_0308	CDS	-	403096	402197	900	299 4-diphosphocytidyl-2-C-methyl-D-erythritol kinase	ispE	2.7.1.148
RSDT_0309	CDS	-	403632	403096	537	178 ATP-dependent protease, peptidase subunit HslV	hslV	3.4.25.2
RSDT_0310	CDS	-	405041	403632	1410	469 M48 family peptidase		
RSDT_0311	CDS	-	406501	405050	1452	483 Zn-dependent M48 family peptidase		
RSDT_0312	CDS	-	406965	406525	441	146 cysteinyl-tRNA synthetase	cysS	6.1.1.16
RSDT_0313	CDS	-	407789	407001	789	262 ribose 5-phosphate isomerase B	rpiB	5.3.1.26
RSDT_0314	CDS	-	409561	407786	1776	591 conserved hypothetical protein		
RSDT_0315	CDS	-	410615	409563	1053	350 conserved hypothetical protein		
RSDT_0316	CDS	+	410751	413147	2397	798 vitamin B12-dependent methionine synthase	metH	2.1.1.13
RSDT_0317	CDS	+	413316	413831	516	171 amino-acid N-acetyltransferase	argA	2.3.1.1
RSDT_0318	CDS	+	414210	414917	708	235 conserved hypothetical protein		
RSDT_0319	CDS	-	415618	414938	681	226 outer membrane lipoprotein carrier protein LolA	lolA	
RSDT_0320	CDS	-	418046	415689	2358	785 chromosome segregation ATPase FtsK	ftsK	
RSDT_0321	CDS	-	418749	418192	558	185 translation elongation factor P	efp	
RSDT_0322	CDS	-	420472	419195	1278	425 divalent metal ions efflux pump		
RSDT_0323	CDS	-	421286	420555	732	243 outer membrane assembly lipoprotein BamD	bamD	

RSDT_0324	CDS	-	422199	421279	921	306 NADPH-dependent thioredoxin reductase	trxB	1.8.1.9
RSDT_0325	CDS	-	422525	422202	324	107 thioredoxin	trxA	
RSDT_0326	CDS	-	423731	422622	1110	369 tRNA threonylcarbamoyladenosine biosynthesis protein TsaD	tsaD	
RSDT_0327	CDS	-	424765	423728	1038	345 fructose-1,6-bisphosphatase class 1	fbp	3.1.3.11
RSDT_0328	CDS	-	425842	424826	1017	338 conserved hypothetical protein		
RSDT_0329	CDS	-	426830	425859	972	323 conserved hypothetical protein		
RSDT_0330	CDS	-	427137	426814	324	107 septum formation initiator FtsB	ftsB	
RSDT_0331	CDS	-	427394	427140	255	84 conserved hypothetical protein		
RSDT_0332	CDS	-	427942	427403	540	179 CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase	pgsA	2.7.8.5
RSDT_0333	CDS	-	428693	428004	690	229 protein-L-isoaspartate O-methyltransferase	pcm	2.1.1.77
RSDT_0334	CDS	+	428833	430155	1323	440 Zn-dependent M23 family peptidase		
RSDT_0335	CDS	-	430501	430208	294	97 conserved hypothetical protein		
RSDT_0336	CDS	-	431033	430515	519	172 2-amino-4-hydroxy-6-hydroxymethyldihydropteridine pyrophosphokinase	folK	2.7.6.3
RSDT_0337	CDS	-	432787	431192	1596	531 DNA repair/recombination protein RecN	recN	
RSDT_0338	CDS	-	433641	432808	834	277 oligopeptide/dipeptide ABC transporter permease protein DppC	dppC	
RSDT_0339	CDS	-	434669	433641	1029	342 oligopeptide/dipeptide ABC transporter permease protein DppB	dppB	
RSDT_pg_055	pseudogene	-	435167	434681	487 x	pseudogene of conserved hypothetical protein		
RSDT_pg_056	pseudogene	-	435720	435201	520 x	pseudogene of putative recombination-associated protein RdgC	rdgC	
RSDT_0340	CDS	+	435892	436641	750	249 23S rRNA pseudouridine synthase	rluB	5.4.99.22
RSDT_0341	CDS	-	438285	436645	1641	546 phosphoglucomutase	pgm	5.4.2.2
RSDT_0342	CDS	-	439757	438327	1431	476 periplasmic peptidase Do		3.4.21.107
RSDT_0343	CDS	-	440976	439993	984	327 site-specific tyrosine recombinase XerC	xerC	
RSDT_pg_057	pseudogene	-	442183	441028	1156 x	pseudogene of recombination-mediator protein	smf	
RSDT_0344	CDS	+	442609	443583	975	324 conserved hypothetical protein		
RSDT_pg_058	pseudogene	-	444888	443689	1200 x	pseudogene of conserved hypothetical protein		
RSDT_pg_059	pseudogene	-	445766	444900	867 x	pseudogene of conserved hypothetical protein		
RSDT_tRNA_19	tRNA	-	446205	446130	76 xx	tRNA-Val		

RSDT_0345	CDS	-	447552	446227	1326	441	cell division protein FtsZ	ftsZ	
RSDT_0346	CDS	-	448830	447595	1236	411	cell division protein FtsA	ftsA	
RSDT_0347	CDS	-	449750	448827	924	307	cell division protein FtsQ	ftsQ	
RSDT_0348	CDS	-	450625	449735	891	296	UDP-N-acetylmuramate dehydrogenase	murB	1.3.1.98
RSDT_0349	CDS	-	451991	450618	1374	457	UDP-N-acetylmuramate-L-alanine ligase	murC	6.3.2.8
RSDT_0350	CDS	-	453112	452036	1077	358	UDP-diphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase	murG	2.4.1.227
RSDT_0351	CDS	-	454272	453094	1179	392	cell division protein FtsW	ftsW	
RSDT_0352	CDS	-	455579	454269	1311	436	UDP-N-acetylmuramoyl-L-alanine-D-glutamate ligase	murD	6.3.2.9
RSDT_0353	CDS	-	456675	455599	1077	358	phospho-N-acetylmuramoyl-pentapeptide-transferase	mraY	2.7.8.13
RSDT_0354	CDS	-	458125	456665	1461	486	UDP-N-acetylmuramoyl-tripeptide-D-alanyl-D-alanine ligase	murF	6.3.2.10
RSDT_0355	CDS	-	459567	458116	1452	483	UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase	murE	6.3.2.13
RSDT_0356	CDS	-	461675	459570	2106	701	peptidoglycan glycosyltransferase FtsI	ftsI	2.4.1.129
RSDT_pg_060	pseudogene	-	462012	461710	303	x	pseudogene of conserved hypothetical protein		
RSDT_0357	CDS	-	462998	462009	990	329	16S rRNA (cytosine1402-N4)-methyltransferase	rsmH	2.1.1.199
RSDT_0358	CDS	-	463527	463075	453	150	cell division protein MraZ	mraZ	
RSDT_pg_061	pseudogene	-	463797	463606	192	x	pseudogene of transposase		
RSDT_0359	CDS	+	463873	464253	381	126	desulfoferrodoxin	dfx	1.15.1.2
RSDT_0360	CDS	+	464307	464444	138	45	rubredoxin	rdx	
RSDT_pg_062	pseudogene	+	464524	464618	95	x	pseudogene of rubredoxin-oxygen oxidoreductase	roo	
RSDT_pg_063	pseudogene	+	464621	464995	375	x	pseudogene of type I site-specific restriction-modification system, restriction subunit	hsdR	
RSDT_0361	CDS	-	465742	465035	708	235	conserved hypothetical protein		
RSDT_0362	CDS	-	466961	465780	1182	393	quinone-modifying oxidoreductase transmembrane subunit C	qmoC	
RSDT_0363	CDS	-	469224	466975	2250	749	quinone-modifying oxidoreductase subunit B	qmoB	
RSDT_0364	CDS	-	470467	469232	1236	411	quinone-modifying oxidoreductase subunit A	qmoA	
RSDT_0365	CDS	-	472576	470588	1989	662	adenylylsulfate reductase, subunit A	aprA	1.8.99.2
RSDT_0366	CDS	-	473102	472614	489	162	adenylylsulfate reductase, subunit B	aprB	1.8.99.2

RSDT_0367	CDS	+	473403	475088	1686	561	conserved hypothetical protein		
RSDT_0368	CDS	-	478885	475307	3579	1192	phosphoenolpyruvate synthase	pps1	2.7.9.2
RSDT_0369	CDS	-	482685	478984	3702	1233	pyruvate carboxylase	pyc	6.4.1.1
RSDT_0370	CDS	-	483517	482714	804	267	biotin-[acetyl-CoA-carboxylase] ligase	birA	6.3.4.15
RSDT_0371	CDS	-	483962	483531	432	143	YbeY-like metal-dependent hydrolase		
RSDT_0372	CDS	-	486330	484027	2304	767	membrane-associated HD superfamily hydrolase		
RSDT_pg_064	pseudogene	+	486807	487782	976	x	pseudogene of CRISPR-associated endonuclease Cas1 subtype I-F/YPEST	cas1	
RSDT_pg_065	pseudogene	+	487785	489160	1376	x	pseudogene of CRISPR-associated nuclease/helicase Cas3 subtype I-F/YPEST	cas3	
RSDT_0373	CDS	-	491683	489200	2484	827	ATP-dependent protease La	lon	3.4.21.53
RSDT_pg_066	pseudogene	-	492391	491698	694	x	pseudogene of uncharacterized protein RadC	radC	
RSDT_0374	CDS	-	493144	492587	558	185	conserved hypothetical protein		
RSDT_0375	CDS	-	494361	493216	1146	381	conserved hypothetical protein		
RSDT_0376	CDS	+	494480	495127	648	215	conserved hypothetical protein		
RSDT_0377	CDS	-	496590	495124	1467	488	putative Mo ²⁺ ABC transporter ATP-binding protein	modF	
RSDT_0378	CDS	-	497444	496608	837	278	histidinol-phosphatase	hisJ	3.1.3.15
RSDT_0379	CDS	-	497974	497441	534	177	bifunctional pyrimidine operon regulator PyrR/ uracil phosphoribosyltransferase	pyrR	2.4.2.9
RSDT_0380	CDS	-	499765	498527	1239	412	HD superfamily hydrolase		
RSDT_pg_067	pseudogene	+	499993	500357	365	x	pseudogene of diphosphate-fructose-6-phosphate 1-phosphotransferase	ppi-pfk	2.7.1.90
RSDT_0381	CDS	+	500415	503621	3207	1068	AddA-like putative DNA repair protein		
RSDT_0382	CDS	+	503625	506546	2922	973	AddB-like putative DNA repair protein		
RSDT_0383	CDS	-	508382	506670	1713	570	30S ribosomal protein S1	rpsA	
RSDT_0384	CDS	-	510635	508551	2085	694	glycyl-tRNA synthetase subunit beta	glyS	6.1.1.14
RSDT_0385	CDS	-	511517	510639	879	292	glycyl-tRNA synthetase subunit alpha	glyQ	6.1.1.14
RSDT_0386	CDS	-	512341	511589	753	250	DNA repair/recombination protein RecO	recO	
RSDT_0387	CDS	-	513209	512376	834	277	conserved hypothetical protein		
RSDT_0388	CDS	-	514175	513240	936	311	peptidyl-prolyl cis-trans isomerase	surA	5.2.1.8

RSDT_0389	CDS	-	517776	514324	3453	1150	transcription-repair coupling factor	mfd	
RSDT_0390	CDS	-	518257	517901	357	118	conserved hypothetical protein		
RSDT_0391	CDS	+	518601	519158	558	185	multiple promoter invertase	mpi	
RSDT_0392	CDS	+	519614	520309	696	231	siroheme synthase	cysG	1.3.1.76/ 4.99.1.4
RSDT_0393	CDS	+	520296	521123	828	275	cytochrome c assembly protein	ccsA	
RSDT_0394	CDS	+	521135	522409	1275	424	glutamyl-tRNA reductase	hemA	1.2.1.70
RSDT_0395	CDS	+	522499	523572	1074	357	tRNA(Ile)-lysidine synthetase	tilS	6.3.4.19
RSDT_pg_068	pseudogene	+	523697	524107	411 x		pseudogene of DNA adenine methyltransferase	dam	2.1.1.72
RSDT_0396	CDS	-	526601	524304	2298	765	glutamate synthase (NADPH-GOGAT) subunit 3	gltB3	1.4.1.13
RSDT_0397	CDS	-	528340	526709	1632	543	glutamate synthase (NADPH-GOGAT) subunit 2	gltB2	1.4.1.13
RSDT_0398	CDS	-	529398	528328	1071	356	glutamate synthase (NADPH-GOGAT) subunit 1	gltB1	1.4.1.13
RSDT_pg_069	pseudogene	-	529941	529627	315 x		pseudogene of UvrD-like DNA helicase		
RSDT_pg_070	pseudogene	-	530859	529941	919 x		pseudogene of DNA methyltransferase		
RSDT_0399	CDS	-	531848	531315	534	177	conserved hypothetical protein		
RSDT_0400	CDS	-	533260	532034	1227	408	LL-diaminopimelate aminotransferase	dapL	2.6.1.83
RSDT_0401	CDS	-	534135	533269	867	288	diaminopimelate epimerase	dapF	5.1.1.7
RSDT_0402	CDS	-	536574	534379	2196	731	glutamine synthetase	glnA	6.3.1.2
RSDT_pg_071	pseudogene	-	536817	536668	150 x		pseudogene of nitrogen regulatory protein P-II	glnB	
RSDT_pg_072	pseudogene	-	537273	536828	446 x		pseudogene of NtrC-like nitrogen regulatory protein	glnG	
RSDT_0403	CDS	+	537439	539400	1962	653	molecular chaperone Hsp90	htpG	
RSDT_0404	CDS	-	540012	539467	546	181	conserved hypothetical protein		
RSDT_0405	CDS	-	540996	540013	984	327	Fructose-1,6-bisphosphatase class 2	glpX	3.1.3.11
RSDT_0406	CDS	+	541301	541819	519	172	dUTP pyrophosphatase	dut	3.6.1.23
RSDT_0407	CDS	+	541894	543090	1197	398	acetylornithine aminotransferase	argD	2.6.1.11
RSDT_pg_073	pseudogene	-	545764	543306	2459 x		pseudogene of CRISPR-associated nuclease/helicase Cas3 type I	cas3	
RSDT_0408	CDS	+	546169	547368	1200	399	putative Fe ²⁺ permease transmembrane component		
RSDT_0409	CDS	+	547416	548000	585	194	putative Fe ²⁺ permease periplasmic component		

RSDT_0410	CDS	+	548105	549355	1251	416 conserved membrane protein		
RSDT_0411	CDS	+	549366	550664	1299	432 ABC efflux transporter permease		
RSDT_0412	CDS	+	550670	551806	1137	378 ABC efflux transporter permease		
RSDT_0413	CDS	+	551819	552493	675	224 ABC efflux transporter ATP-binding protein		
RSDT_0414	CDS	-	553424	552543	882	293 4-hydroxy-tetrahydrodipicolinate synthase	dapA	
RSDT_0415	CDS	-	553733	553455	279	92 integration host factor B	ihfB	
RSDT_0416	CDS	-	555115	554006	1110	369 peptide chain release factor 2 (RF-2)	prfB	
RSDT_0417	CDS	-	556663	555143	1521	506 apolipoprotein N-acyltransferase	Int	
RSDT_0418	CDS	-	557601	556720	882	293 Mg ²⁺ /Co ²⁺ efflux pump CorC	corC	
RSDT_0419	CDS	-	559788	557836	1953	650 tRNA uridine 5-carboxymethylaminomethyl modification protein	mnmG	
RSDT_pg_074	pseudogene	-	560592	559781	812 x	pseudogene of succinyl-diaminopimelate desuccinylase	dapE	3.5.1.18
RSDT_0420	CDS	-	560930	560667	264	87 conserved hypothetical protein		
RSDT_pg_075	pseudogene	-	562356	562001	356 x	pseudogene of DNA mismatch repair endonuclease	vsr	
RSDT_0421	CDS	-	563313	562609	705	234 metal-dependent hydrolase		
RSDT_0422	CDS	-	563936	563373	564	187 3-octaprenyl-4-hydroxybenzoate carboxy-lyase	ubiX	
RSDT_0423	CDS	-	565544	564096	1449	482 ABC efflux transporter ATP-binding protein		
RSDT_0424	CDS	-	566738	565548	1191	396 ABC efflux transporter permease		
RSDT_pg_076	pseudogene	-	567471	566893	579 x	pseudogene of conserved hypothetical protein		
RSDT_0425	CDS	+	568035	568928	894	297 periplasmic sirohydrochlorin cobaltochelate/ferrochelate	cbiKp	4.99.1.3
RSDT_0426	CDS	+	568929	570002	1074	357 Fe ³⁺ -complex ABC transporter permease	fhuB	
RSDT_0427	CDS	+	570002	570868	867	288 Fe ³⁺ -complex ABC transporter ATP-binding protein	fhuC	3.6.3.34
RSDT_0428	CDS	+	570921	571823	903	300 Fe ³⁺ -complex ABC transporter substrate-binding protein	fhuD	
RSDT_0429	CDS	+	571863	572597	735	244 cobalt-precorrin-2 C(20)-methyltransferase	cbiL	2.1.1.151
RSDT_pg_077	pseudogene	+	572744	573584	841 x	pseudogene of conserved hypothetical protein		
RSDT_pg_078	pseudogene	-	575763	574781	983 x	pseudogene of Putative signal peptide peptidase SppA (protease IV)	sppA	
RSDT_0430	CDS	-	577467	575791	1677	558 acyl-CoA synthetases (AMP-forming)		
RSDT_0431	CDS	-	578051	577482	570	189 PuvR-like transcriptional regulator		

RSDT_0432	CDS	+	578278	579555	1278	425	phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase	purH	2.1.2.3/ 3.5.4.10
RSDT_0433	CDS	+	579564	581084	1521	506	cobyrinic acid a,c-diamide synthase	cbiA1	6.3.5.11
RSDT_0434	CDS	+	581326	581697	372	123	conserved hypothetical protein		
RSDT_0435	CDS	-	582951	581902	1050	349	biotin synthase	bioB	2.8.1.6
RSDT_0436	CDS	-	583440	583036	405	134	ROS/MucR family transcriptional regulator		
RSDT_0437	CDS	-	584366	583626	741	246	conserved hypothetical protein		
RSDT_pg_079	pseudogene	-	584614	584426	189 x		pseudogene of ornithine carbamoyltransferase	argF2	2.1.3.3
RSDT_0438	CDS	-	585656	584925	732	243	rare lipoprotein A	rlpA1	
RSDT_0439	CDS	-	587339	585978	1362	453	methylenetetrahydrofolate-tRNA-(uracil54-C5)-methyltransferase	trmFO	2.1.1.74
RSDT_0440	CDS	+	587456	587764	309	102	50S ribosomal protein L21	rplU	
RSDT_0441	CDS	+	587792	588061	270	89	50S ribosomal protein L27	rpmA	
RSDT_0442	CDS	+	588391	589452	1062	353	uncharacterized glycosyltransferase		
RSDT_pg_080	pseudogene	-	590728	589662	1067 x		pseudogene of nitrate/sulfonate/bicarbonate ABC transporter substrate-binding protein		
RSDT_pg_081	pseudogene	-	590959	590753	207 x		pseudogene of nitrate/sulfonate/bicarbonate ABC transporter ATP-binding protein		
RSDT_0443	CDS	-	591938	591138	801	266	hydroxymethylpyrimidine/phosphomethylpyrimidine kinase	thiD	2.7.1.49 /2.7.4.7
RSDT_0444	CDS	-	594641	591999	2643	880	Zn-dependent M16 family peptidase		
RSDT_pg_082	pseudogene	-	595171	594961	211 x		pseudogene of branched-chain amino acid ABC transporter substrate-binding protein	LivK	
RSDT_pg_083	pseudogene	+	595664	596002	339 x		pseudogene of outer membrane autotransporter		
RSDT_tRNA_20	tRNA	-	596152	596078	75 xx		tRNA-Gly		
RSDT_tRNA_21	tRNA	+	596456	596532	77 xx		tRNA-Arg		
RSDT_pg_084	pseudogene	-	596842	596665	178 x		pseudogene of glycine cleavage system H protein	gcvH	
RSDT_0445	CDS	-	598467	597046	1422	473	glycine cleavage system L protein	gcvL	1.8.1.4
RSDT_pg_085	pseudogene	-	598922	598498	425 x		pseudogene of peroxiredoxin	OsmC	
RSDT_pg_086	pseudogene	+	599141	599671	531 x		pseudogene of putative metabolite:H ⁺ symporter	ydjE	
RSDT_pg_087	pseudogene	+	599769	600410	642 x		pseudogene of putative cAMP-activated global transcriptional regulator CRP	crp	

RSDT_0446	CDS	-	601938	600478	1461	486	glutamyl-tRNA(Gln) amidotransferase subunit A	gatA	6.3.5.7
RSDT_0447	CDS	-	602316	602023	294	97	glutamyl-tRNA(Gln) amidotransferase subunit C	gatC	6.3.5.7
RSDT_0448	CDS	-	604430	602520	1911	636	chaperone protein DnaK	dnaK	
RSDT_0449	CDS	+	604699	605700	1002	333	methionine ABC transporter ATP-binding protein	metN	
RSDT_0450	CDS	+	605669	606304	636	211	methionine ABC transporter permease	metI	
RSDT_0451	CDS	+	606326	607108	783	260	methionine ABC transporter substrate-binding protein	metQ	
RSDT_0452	CDS	-	607814	607128	687	228	metallophosphatase		
RSDT_0453	CDS	+	607890	608525	636	211	5-formyltetrahydrofolate cyclo-ligase	ygfA	6.3.3.2
RSDT_0454	CDS	+	608714	608896	183	60	conserved hypothetical protein		
RSDT_0455	CDS	+	608893	609603	711	236	demethylmenaquinone methyltransferase	menG	2.1.1.163
RSDT_0456	CDS	+	609615	610928	1314	437	UDP-N-acetyl-D-galactosamine dehydrogenase	wbpO	
RSDT_0457	CDS	+	611011	611730	720	239	putative fualosine nucleosidase	mqnB	3.2.2.26
RSDT_0458	CDS	+	611740	612705	966	321	octaprenyl-diphosphate synthase	ispB	2.5.1.90
RSDT_0459	CDS	+	612847	615846	3000	999	phosphoribosylformylglycinamide synthase synthetase subunit	purL	6.3.5.3
RSDT_0460	CDS	-	617218	615869	1350	449	UDP-N-acetylgalactosamine-undecaprenyl-phosphate N-acetylgalactosaminephosphotransferase	wecP	2.7.8.6 (2.7.8.40)
RSDT_0461	CDS	-	618345	617215	1131	376	N,N'-diacetylbacillosaminyl-diphospho-undecaprenol alpha-1,3-N-acetylgalactosaminyltransferase	pglA	2.4.1.290
RSDT_pg_088	pseudogene	+	618587	618718	132 x		pseudogene of rare lipoprotein A family protein	rplA	
RSDT_0462	CDS	-	619472	618837	636	211	chaperone protein GrpE	grpE	
RSDT_0463	CDS	+	619792	620562	771	256	Ni2+ ABC transporter Ni2+-binding protein NikK	nikK	
RSDT_0464	CDS	+	620668	621273	606	201	Ni2+ ABC transporter permease NikM	nikM	
RSDT_0465	CDS	+	621300	621896	597	198	Ni2+ ABC transporter small membrane-bound protein NikL	nikL	
RSDT_0466	CDS	+	621909	622667	759	252	Ni2+ ABC transporter permease NikQ	nikQ	
RSDT_0467	CDS	+	622660	623400	741	246	Ni2+ ABC transporter ATP-binding protein NikO	nikO	
RSDT_0468	CDS	+	624081	624347	267	88	30S ribosomal protein S20	rpsT	
RSDT_0469	CDS	-	625461	624466	996	331	holliday junction DNA helicase RuvB	ruvB	3.6.4.12

RSDT_0470	CDS	-	626072	625461	612	203 holliday junction DNA helicase RuvA	ruvA	3.6.4.12
RSDT_0471	CDS	-	627134	626133	1002	333 molybdenum cofactor biosynthesis protein MoaA	moaA	
RSDT_0472	CDS	+	627203	627481	279	92 conserved hypothetical protein		
RSDT_0473	CDS	-	628047	627478	570	189 conserved hypothetical protein		
RSDT_0474	CDS	+	628446	628811	366	121 conserved hypothetical protein		
RSDT_0475	CDS	+	628820	630169	1350	449 tRNA-i(6)A37 methylthiotransferase MiaB	miaB	
RSDT_0476	CDS	+	630310	631422	1113	370 uncharacterized glycosyltransferase		
RSDT_0477	CDS	-	633122	631572	1551	516 conserved hypothetical protein		
RSDT_0478	CDS	+	633316	633807	492	163 transcription elongation factor GreA	greA	
RSDT_0479	CDS	+	633804	634916	1113	370 conserved hypothetical protein		
RSDT_0480	CDS	+	634916	635737	822	273 D-Ala-D-Ala carboxypeptidase	dacC	3.4.16.4
RSDT_0481	CDS	-	638922	635851	3072	1023 outer membrane autotransporter		
RSDT_0482	CDS	+	639520	640284	765	254 glucose-1-phosphate cytidyltransferase	rfbF	2.7.7.33
RSDT_0483	CDS	+	640378	641490	1113	370 CDP-glucose 4,6-dehydratase	rfbG	4.2.1.45
RSDT_0484	CDS	+	641487	642002	516	171 dTDP-4-dehydrorhamnose 3,5-epimerase	rfbC	5.1.3.13
RSDT_0485	CDS	+	642095	643027	933	310 homoserine O-succinyltransferase	metA	2.3.1.46
RSDT_0486	CDS	+	643072	643908	837	278 Fe-S cluster assembly protein NifU	nifU	
RSDT_0487	CDS	+	643912	645066	1155	384 cysteine desulfurase NifS	nifS	2.8.1.7
RSDT_tRNA_22	tRNA	-	645279	645204	76 xx	tRNA-Lys		
RSDT_0488	CDS	-	645658	645512	147	48 High-molecular-weight cytochrome c subunit D	hmcD	
RSDT_0489	CDS	-	646891	645677	1215	404 High-molecular-weight cytochrome c subunit C	hmcC	
RSDT_0490	CDS	-	647983	646892	1092	363 High-molecular-weight cytochrome c subunit B	hmcB	
RSDT_0491	CDS	-	648981	647980	1002	333 High-molecular-weight cytochrome c subunit A	hmcA	
RSDT_0492	CDS	+	649508	650314	807	268 tRNA pseudouridine synthase A	truA	5.4.99.12
RSDT_0493	CDS	-	651087	650296	792	263 Undecaprenyl-diphosphatase	uppP	3.6.1.27
RSDT_pg_089	pseudogene	+	651162	651365	204 x	pseudogene of conserved hypothetical prtotein		
RSDT_0494	CDS	-	652915	651371	1545	514 methionyl-tRNA synthetase	metG	6.1.1.10

RSDT_0495	CDS	-	653888	652938	951	316 conserved hypothetical protein		
RSDT_0496	CDS	+	654157	655389	1233	410 argininosuccinate synthase	argG	6.3.4.5
RSDT_0497	CDS	+	655382	656827	1446	481 argininosuccinate lyase	argH	4.3.2.1
RSDT_0498	CDS	+	656814	657689	876	291 conserved hypothetical protein		
RSDT_0499	CDS	+	657989	658192	204	67 30S ribosomal protein S21	rpsU	
RSDT_0500	CDS	+	658308	658760	453	150 conserved hypothetical protein		
RSDT_pg_090	pseudogene	+	658784	659125	342 x	pseudogene of Smr family protein		
RSDT_0501	CDS	+	659166	660905	1740	579 DNA primase	dnaG	
RSDT_0502	CDS	+	660898	662667	1770	589 RNA polymerase sigma factor RpoD	rpoD	
RSDT_0503	CDS	+	662778	663425	648	215 putative endonuclease		
RSDT_tRNA_23	tRNA	+	663546	663632	87 xx	tRNA-Leu		
RSDT_0504	CDS	+	664033	664410	378	125 conserved hypothetical protein		
RSDT_0505	CDS	-	665362	664430	933	310 conserved hypothetical protein		
RSDT_0506	CDS	+	665786	669349	3564	1187 putative FAD-dependent oxidoreductase		
RSDT_0507	CDS	-	669777	669379	399	132 Peroxide-responsive repressor PerR	perR	
RSDT_0508	CDS	-	670726	669902	825	274 1-acyl-sn-glycerol-3-phosphate acyltransferase	plsC	2.3.1.51
RSDT_0509	CDS	-	671952	670723	1230	409 replication-associated recombination protein A	rarA	
RSDT_0510	CDS	-	672707	671949	759	252 16S rRNA (uracil1498-N3)-methyltransferase	rsmE	2.1.1.193
RSDT_0511	CDS	-	674434	672725	1710	569 conserved hypothetical protein		
RSDT_pg_091	pseudogene	+	674978	675651	674 x	pseudogene of conserved hypothetical protein		
RSDT_0512	CDS	-	677662	675722	1941	646 1-deoxy-D-xylulose-5-phosphate synthase	dxs	2.2.1.7
RSDT_0513	CDS	-	678558	677662	897	298 farnesyl-diphosphate synthase	ispA	2.5.1.10
RSDT_0514	CDS	-	678806	678561	246	81 exodeoxyribonuclease VII small subunit	xseB	3.1.11.6
RSDT_0515	CDS	-	680314	678851	1464	487 exodeoxyribonuclease VII large subunit	xseA	3.1.11.6
RSDT_0516	CDS	-	682091	680355	1737	578 prolyl-tRNA synthetase	proS	6.1.1.15
RSDT_0517	CDS	-	683166	682081	1086	361 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase	ispG	1.17.7.1
RSDT_0518	CDS	+	683349	684449	1101	366 ribosome-binding ATPase YchF	ychF	

RSDT_0519	CDS	-	685241	684474	768	255	tryptophan synthase subunit alpha	trpA	4.2.1.20
RSDT_0520	CDS	-	686418	685228	1191	396	tryptophan synthase subunit beta	trpB	4.2.1.20
RSDT_0521	CDS	-	687050	686415	636	211	N-(5'-phosphoribosyl)anthranilate isomerase	trpF	5.3.1.24
RSDT_0522	CDS	-	687876	687040	837	278	indole-3-glycerol phosphate synthase	trpC	4.1.1.48
RSDT_0523	CDS	-	689458	687866	1593	530	anthranilate synthase subunit beta/anthranilate phosphoribosyltransferase	trpGD	4.1.3.27/ 2.4.2.18
RSDT_0524	CDS	-	690893	689439	1455	484	anthranilate synthase subunit alpha	trpE	4.1.3.27
RSDT_0525	CDS	-	692187	691378	810	269	exodeoxyribonuclease III	xthA	3.1.11.2
RSDT_0526	CDS	-	692654	692235	420	139	conserved hypothetical protein		
RSDT_0527	CDS	-	693199	692651	549	182	conserved hypothetical protein		
RSDT_0528	CDS	-	693658	693209	450	149	conserved hypothetical protein		
RSDT_0529	CDS	+	694276	695775	1500	499	M17 family cytosolic leucyl aminopeptidase	pepA	3.4.11.1
RSDT_0530	CDS	+	695836	697356	1521	506	uroporphyrinogen III methyltransferase / synthase	hemD/c obA	4.2.1.75/ 2.1.1.107
RSDT_0531	CDS	+	697450	698124	675	224	phosphoribosylglycinamide formyltransferase	purN	2.1.2.2
RSDT_0532	CDS	-	699603	698224	1380	459	NtrC/AtoC/ZraR-like transcriptional regulator		
RSDT_0533	CDS	-	700168	699926	243	80	conserved hypothetical protein		
RSDT_0534	CDS	-	701768	700245	1524	507	phosphoglyceromutase	gpmI	5.4.2.1
RSDT_0535	CDS	-	702133	701765	369	122	putative ribosome-silencing factor RsfS	rsfS	
RSDT_0536	CDS	+	702581	703879	1299	432	diaminopimelate decarboxylase	lysA	4.1.1.20
RSDT_0537	CDS	+	703866	705251	1386	461	MATE family efflux pump		
RSDT_0538	CDS	-	705660	705238	423	140	FKBP-type peptidyl-prolyl cis-trans isomerase SlyD	slyD	5.2.1.8
RSDT_0539	CDS	-	706812	705697	1116	371	cyclic dehypoxanthine futasine synthase	mqnC	1.21.99.2
RSDT_0540	CDS	-	707948	706809	1140	379	aminodeoxyfutasine synthase	mqnE	2.5.1.120
RSDT_0541	CDS	+	708035	708880	846	281	1,4-dihydroxy-6-naphtoate synthase	mqnD	1.14.-.-
RSDT_pg_092	pseudogene	+	709230	709627	398	x	pseudogene of transposase		
RSDT_0542	CDS	+	709725	711137	1413	470	aspartate ammonia-lyase	aspA	4.3.1.1
RSDT_0543	CDS	+	711137	712441	1305	434	anaerobic C4-dicarboxylate transporter DcuA	dcuA	

RSDT_0544	CDS	-	714827	712479	2349	782	primosomal protein N'	priA	3.6.4.-
RSDT_0545	CDS	+	714913	715932	1020	339	ornithine carbamoyltransferase	argF1	2.1.3.3
RSDT_0546	CDS	+	716229	717185	957	318	aspartate carbamoyltransferase	pyrB	2.1.3.2
RSDT_0547	CDS	+	717230	718492	1263	420	dihydroorotase	pyrC	3.5.2.3
RSDT_0548	CDS	-	719722	718538	1185	394	aspartate aminotransferase	aspB	2.6.1.1
RSDT_0549	CDS	-	721069	719750	1320	439	homoserine dehydrogenase	hom	1.1.1.3
RSDT_0550	CDS	-	722297	721122	1176	391	glutamate-pyruvate aminotransferase	alaC	2.6.1.-
RSDT_0551	CDS	-	725684	722613	3072	1023	outer membrane autotransporter		
RSDT_tRNA_24	tRNA	+	726204	726278	75	xx	tRNA-Gly		
RSDT_tRNA_25	tRNA	+	726297	726370	74	xx	tRNA-Cys		
RSDT_tRNA_26	tRNA	+	726404	726475	72	xx	tRNA-Gly		
RSDT_0552	CDS	+	726731	727225	495	164	hydrogenase maturation protease	hyaD	3.4.23.-
RSDT_0553	CDS	-	728634	727297	1338	445	UDP-glucose 6-dehydrogenase	ugd	1.1.1.22
RSDT_0554	CDS	-	729342	728752	591	196	conserved hypothetical protein		
RSDT_0555	CDS	+	729535	730806	1272	423	seryl-tRNA synthase	serS	6.1.1.11
RSDT_0556	CDS	-	732032	730857	1176	391	branched-chain amino acid ABC transporter substrate-binding protein	livK	
RSDT_rRNA_1	rRNA	-	732312	732200	113	xx	5S rRNA		
RSDT_rRNA_2	rRNA	-	735283	732357	2927	xx	23S rRNA		
RSDT_tRNA_27	tRNA	-	735421	735346	76	xx	tRNA-Ala		
RSDT_tRNA_28	tRNA	-	735503	735427	77	xx	tRNA-Ile		
RSDT_rRNA_3	rRNA	-	737127	735579	1549	xx	16S rRNA		
RSDT_0557	CDS	+	737627	739654	2028	675	putative K ⁺ /H ⁺ antiporter	kefB	
RSDT_0558	CDS	+	739686	743171	3486	1161	DNA polymerase III subunit alpha	dnaE	2.7.7.7
RSDT_0559	CDS	+	743191	743358	168	55	conserved hypothetical protein		
RSDT_0560	CDS	+	743358	743801	444	147	6-pyruvoyltetrahydropterin/6-carboxytetrahydropterin synthase	queD	4.2.3.12 4.1.2.50
RSDT_0561	CDS	-	744262	743834	429	142	conserved hypothetical protein		

RSDT_0562	CDS	+	744471	745664	1194	397 aspartate aminotransferase	yhdR	2.6.1.1
RSDT_0563	CDS	+	746094	747032	939	312 shikimate dehydrogenase	aroE	1.1.1.25
RSDT_0564	CDS	+	747020	747469	450	149 3-dehydroquinate dehydratase	aroQ	4.2.1.10
RSDT_0565	CDS	+	747700	748284	585	194 heterodisulfide reductase subunit C	hdrC	1.8.98.1
RSDT_0566	CDS	+	748281	749165	885	294 heterodisulfide reductase subunit B	hdrB	1.8.98.1
RSDT_0567	CDS	+	749162	751123	1962	653 heterodisulfide reductase subunit A	hdrA	1.8.98.1
RSDT_0568	CDS	+	751111	752559	1449	482 NAD(P)H dehydrogenase subunit CD	flxCD	
RSDT_0569	CDS	+	752556	753617	1062	353 NAD(P)H dehydrogenase subunit B	flxB	
RSDT_0570	CDS	+	753661	754575	915	304 NAD(P)H dehydrogenase subunit A	flxA	
RSDT_0571	CDS	+	754592	755110	519	172 conserved hypothetical protein		
RSDT_0572	CDS	-	756010	755156	855	284 Sel1 family tetratricopeptide repeat protein		
RSDT_0573	CDS	-	756601	756212	390	129 conserved hypothetical protein		
RSDT_0574	CDS	-	758895	756733	2163	720 (p)ppGpp synthase	relA	2.7.6.5
RSDT_pg_093	pseudogene	-	759388	759195	194 x	pseudogene of transposase		
RSDT_0575	CDS	-	760002	759442	561	186 ribosome recycling factor	fr	
RSDT_0576	CDS	-	760740	760024	717	238 uridylate kinase	pyrH	2.7.4.22
RSDT_pg_094	pseudogene	+	761121	761282	162 x	pseudogene of transposase		
RSDT_0577	CDS	-	763206	761290	1917	638 arginine decarboxylase	speA	4.1.1.19
RSDT_pg_095	pseudogene	+	763415	763736	322 x	pseudogene of transposase		
RSDT_0578	CDS	-	764115	763879	237	78 dissimilatory sulfite reductase D	dsrD	
RSDT_0579	CDS	-	765318	764173	1146	381 dissimilatory sulfite reductase subunit beta	dsrB	1.8.99.3
RSDT_0580	CDS	-	766650	765337	1314	437 dissimilatory sulfite reductase subunit alpha	dsrA	1.8.99.3
RSDT_0581	CDS	-	767595	766948	648	215 conserved hypothetical protein		
RSDT_0582	CDS	-	768608	767604	1005	334 low-affinity inorganic phosphate transporter	pit	
RSDT_0583	CDS	-	769230	768601	630	209 putative Pit accesorry protein	pitX	
RSDT_0584	CDS	+	769832	771163	1332	443 histidinol dehydrogenase	hisD	1.1.1.23
RSDT_0585	CDS	+	771166	772128	963	320 phosphoribosylaminoimidazole-succinocarboxamide synthase	purC	6.3.2.6

RSDT_0586	CDS	+	772079	772843	765	254	NADH-dependent enoyl-[acyl-carrier-protein] reductase	fabI	1.3.1.9
RSDT_0587	CDS	+	772852	772998	147	48	conserved hypothetical protein		
RSDT_tRNA_29	tRNA	+	773289	773380	92	xx	tRNA-Ser		
RSDT_pg_096	pseudogene	+	773556	774092	537	x	pseudogene of phage integrase		
RSDT_pg_097	pseudogene	-	774587	774093	495	x	pseudogene of conserved hypothetical protein		
RSDT_0588	CDS	-	775423	774863	561	186	putative NAD(P)H-dependent FMN reductase		
RSDT_0589	CDS	+	775660	776172	513	170	putative NAD(P)H-dependent FMN reductase		1.5.1.39
RSDT_0590	CDS	+	776224	777015	792	263	putative 2-dehydro-3-deoxyglucarate aldolase	garL	4.1.2.20
RSDT_0591	CDS	+	777019	777933	915	304	NAD-dependent UDP-glucose 4-epimerase	galE	5.1.3.2
RSDT_0592	CDS	+	778073	778843	771	256	3-deoxy-manno-octulosonate cytidyltransferase	kdsB	2.7.7.38
RSDT_0593	CDS	+	778852	779451	600	199	putative LPS biosynthesis O-acetyl transferase WbbJ	wbbJ	
RSDT_0594	CDS	+	779460	780095	636	211	uncharacterized phosphatase		
RSDT_0595	CDS	+	780095	781063	969	322	conserved hypothetical protein		
RSDT_pg_098	pseudogene	+	781642	782269	628	x	pseudogene of carbon starvation protein CstA	cstA	
RSDT_pg_099	pseudogene	-	783442	782381	1062	x	pseudogene of putative type I DNA restriction-modification system endonuclease subunit	hsdR	
RSDT_0596	CDS	-	784816	783773	1044	347	molybdopterin binding domain-containing protein		
RSDT_0597	CDS	-	787192	785324	1869	622	excinuclease ABC subunit C	uvrC	
RSDT_0598	CDS	-	787512	787228	285	94	conserved hypothetical protein		
RSDT_pg_100	pseudogene	+	787858	788616	759	x	pseudogene of conserved hypothetical protein		
RSDT_0599	CDS	+	788929	789189	261	86	uncharacterized transcriptional regulator		
RSDT_0600	CDS	+	789179	790276	1098	365	HipA-like protein kinase		2.7.11.1
RSDT_pg_101	pseudogene	+	790425	790780	356	x	pseudogene of conserved hypothetical protein		
RSDT_pg_102	pseudogene	+	791348	791512	165	x	pseudogene of DNA restriction-modification system cytosine-specific methylase subunit	dcm	2.1.1.37
RSDT_pg_103	pseudogene	-	792430	791516	915	x	pseudogene of DNA restriction-modification system endonuclease subunit		
RSDT_0601	CDS	-	792852	792430	423	140	DNA mismatch repair endonuclease	vsr	
RSDT_0602	CDS	-	793614	793405	210	69	AlpA-like phage transcriptional regulator		

RSDT_pg_104	pseudogene	-	794175	793801	375	x	pseudogene of integrase		
RSDT_tRNA_30	tRNA	-	794492	794416	77	xx	tRNA-Glu		
RSDT_0603	CDS	+	794675	795415	741	246	rare lipoprotein A	rlpA2	
RSDT_tRNA_31	tRNA	-	795716	795640	77	xx	tRNA-Glu		
RSDT_tRNA_32	tRNA	-	795796	795722	75	xx	tRNA-Gln		
RSDT_0604	CDS	-	796933	796094	840	279	hydroxymethylbutenyl pyrophosphate reductase	ispH	1.17.1.2
RSDT_0605	CDS	-	797960	796914	1047	348	tRNA-dihydrouridine synthase	dusB	
RSDT_0606	CDS	-	799456	798143	1314	437	ATP-dependent protease ATPase/chaperone subunit HslU	hslU	
RSDT_pg_105	pseudogene	+	799593	799792	200	x	pseudogene of conserved hypothetical protein		
RSDT_0607	CDS	-	800762	799845	918	305	inorganic pyrophosphatase	ppaC	3.6.1.1
RSDT_0608	CDS	+	800962	802644	1683	560	uncharacterized ABC transporter ATP-binding protein		
RSDT_0609	CDS	-	803152	802706	447	148	putative PTS sugar transporter subunit IIA		
RSDT_0610	CDS	-	804094	803177	918	305	uncharacterized ATPase		
RSDT_0611	CDS	-	804643	804104	540	179	ribosomal subunit interface protein	yhbH	
RSDT_0612	CDS	-	806099	804672	1428	475	RNA polymerase sigma 54 subunit RpoN	rpoN	
RSDT_0613	CDS	-	807679	806240	1440	479	glutamyl-tRNA(Gln) amidotransferase subunit B	gatB	6.3.5.6/ 6.3.5.7
RSDT_0614	CDS	-	808626	807754	873	290	NAD+ kinase	ppnK	2.7.1.23
RSDT_0615	CDS	+	809021	809266	246	81	FmdB family regulatory protein		
RSDT_0616	CDS	+	809320	810246	927	308	porphobilinogen deaminase	hemC	2.5.1.61
RSDT_0617	CDS	+	810256	812715	2460	819	ATP-dependent protease La homolog		
RSDT_0618	CDS	-	813298	812768	531	176	methylated-DNA-[protein]-cysteine S-methyltransferase	ogt	2.1.1.63
RSDT_0619	CDS	-	815975	813285	2691	896	tRNA nucleotidyltransferase/poly(A) polymerase		2.7.7.72/ 2.7.7.19
RSDT_0620	CDS	-	816904	815984	921	306	site-specific tyrosine recombinase XerD	xerD	
RSDT_pg_106	pseudogene	-	817641	816928	714	x	pseudogene of DNA restriction-modification system adenine-specific methyltransferase subunit		
RSDT_pg_107	pseudogene	-	820509	817622	2888	x	pseudogene of putative DNA restriction-modification system endonuclease subunit		
RSDT_0621	CDS	+	820987	821478	492	163	putative Fe2+/Zn2+ uptake regulator	fur	

RSDT_0622	CDS	+	821501	821950	450	149	MOSC domain-containing molybdenum cofactor biosynthesis protein		
RSDT_0623	CDS	-	824973	822010	2964	987	excinuclease ABC subunit A	uvrA	
RSDT_0624	CDS	+	825124	825477	354	117	hydrogenase nickel incorporation protein HypA	hypA2	
RSDT_0625	CDS	+	825543	826202	660	219	hydrogenase nickel incorporation protein HypB	hypB	
RSDT_0626	CDS	+	826199	826858	660	219	conserved hypothetical protein		
RSDT_0627	CDS	+	826902	828323	1422	473	mannose-1-phosphate guanylyltransferase/ mannose-6-phosphate isomerase	manC	2.7.7.13/ 5.3.1.8
RSDT_0628	CDS	-	829356	828340	1017	338	glyceraldehyde-3-phosphate dehydrogenase	gap1	1.2.1.12
RSDT_0629	CDS	-	830537	829431	1107	368	rod shape-determining protein RodA	mrdB	
RSDT_0630	CDS	-	832470	830575	1896	631	peptidoglycan glycosyltransferase MrdA	mrdA	
RSDT_0631	CDS	-	832927	832451	477	158	conserved hypothetical protein		
RSDT_0632	CDS	-	833820	832924	897	298	rod shape-determining protein MreC	mreC	
RSDT_0633	CDS	-	834860	833820	1041	346	rod shape-determining protein MreB	mreB	
RSDT_pg_108	pseudogene	+	834959	835080	122	x	pseudogene of transposase		
RSDT_0634	CDS	+	835135	835920	786	261	uncharacterized metal-dependent phosphohydrolases		
RSDT_0635	CDS	-	836713	835949	765	254	5'-nucleotidase	surE	3.1.3.5
RSDT_0636	CDS	+	836773	837804	1032	343	3'-5' exoribonuclease	yhaM	3.1.-.-
RSDT_0637	CDS	+	837780	838433	654	217	thymidylate kinase	tmk	2.7.4.9
RSDT_0638	CDS	+	838492	839823	1332	443	histone deacetylase-like amidohydrolase	hdaH	
RSDT_0639	CDS	+	839823	841025	1203	400	carboxynorspermidine synthase		1.5.1.43
RSDT_0640	CDS	+	841029	842243	1215	404	carboxynorspermidine/carboxyspermidine decarboxylase	nspC	4.1.1.96
RSDT_pg_109	pseudogene	-	843257	842274	984	x	pseudogene of polysaccharide deacetylase		
RSDT_pg_110	pseudogene	-	843737	843473	265	x	pseudogene of conserved hypothetical protein		
RSDT_pg_111	pseudogene	-	843997	843740	258	x	pseudogene of conserved hypothetical protein		
RSDT_0641	CDS	-	845032	844121	912	303	conserved hypothetical protein		
RSDT_pg_112	pseudogene	-	846999	845091	1909	x	pseudogene of type I DNA restriction-modification system endonuclease subunit	hsdR	3.1.21.3
RSDT_pg_113	pseudogene	-	847494	847208	287	x	pseudogene of phage integrase		

RSDT_tRNA_33	tRNA	-	847773	847687	87	xx	tRNA-Leu		
RSDT_0642	CDS	-	848750	848031	720	239	uncharacterized methyltransferase		
RSDT_tRNA_34	tRNA	+	849438	849514	77	xx	tRNA-Met		
RSDT_pg_114	pseudogene	+	850103	850304	202	x	pseudogene fo signal receiver protein		
RSDT_0643	CDS	+	850393	851193	801	266	putative protein disulfide oxidoreductase		
RSDT_0644	CDS	-	851980	851378	603	200	DNA-3-methyladenine glycosylase 1	tag	3.2.2.20
RSDT_tRNA_35	tRNA	-	853086	853010	77	xx	tRNA-Arg		
RSDT_0645	CDS	+	853505	854368	864	287	uncharacterized metal-dependent phosphoesterase		
RSDT_0646	CDS	-	855701	854382	1320	439	O-antigen ligase	rfaL	
RSDT_pg_115	pseudogene	-	855925	855758	168	x	pseudogene of conserved hypothetical protein		
RSDT_0647	CDS	-	857007	856114	894	297	ATP phosphoribosyltransferase	hisG	2.4.2.17
RSDT_0648	CDS	-	857429	857034	396	131	phosphoribosyl-AMP cyclohydrolase	hisI	3.5.4.19
RSDT_0649	CDS	+	857744	858367	624	207	dITP/XTP pyrophosphatase	rdgB	3.6.1.19
RSDT_0650	CDS	-	859206	858550	657	218	puative phosphoglycolate phosphatase	gph	3.1.3.18
RSDT_0651	CDS	-	859856	859221	636	211	conserved hypothetical protein		
RSDT_pg_116	pseudogene	+	860172	860386	215	x	pseudogene of transposase		
RSDT_0652	CDS	+	860631	862889	2259	752	DNA topoisomerase I	topA	5.99.1.2
RSDT_0653	CDS	-	864055	863192	864	287	translation elongation factor Ts	tsf	
RSDT_0654	CDS	-	864929	864108	822	273	30S ribosomal protein S2	rpsB	
RSDT_0655	CDS	-	865945	865121	825	274	3-methyl-2-oxobutanoate hydroxymethyltransferase	panB	2.1.2.11
RSDT_0656	CDS	-	866814	865942	873	290	agmatinase	speB	3.5.3.11
RSDT_0657	CDS	+	867317	868033	717	238	endonuclease III	nth	4.2.99.18
RSDT_0658	CDS	-	869566	868379	1188	395	bifunctional ornithine acetyltransferase/N-acetylglutamate synthase	argJ	2.3.1.1
RSDT_0659	CDS	-	871748	869670	2079	692	translation elongation factor G	fusA3	
RSDT_0660	CDS	-	872357	871887	471	156	30S ribosomal protein S7	rpsG	
RSDT_0661	CDS	-	872884	872513	372	123	30S ribosomal protein S12	rpsL	
RSDT_0662	CDS	+	873237	873764	528	175	conserved hypothetical protein		

RSDT_pg_117	pseudogene	-	874079	873806	274	x	pseudogene of RelB family antitoxin		
RSDT_0663	CDS	-	874523	874032	492	163	conserved hypothetical protein		
RSDT_pg_118	pseudogene	-	875215	874611	605	x	pseudogene of amino acid efflux pump		
RSDT_0664	CDS	-	875496	875209	288	95	putative endonuclease		
RSDT_0665	CDS	-	877257	875539	1719	572	single-stranded-DNA-specific exonuclease RecJ	recJ	
RSDT_0666	CDS	-	878214	877531	684	227	orotidine 5'-phosphate decarboxylase	pyrF	4.1.1.23
RSDT_0667	CDS	-	878847	878239	609	202	guanylate kinase	gmk	2.7.4.8
RSDT_0668	CDS	-	879169	878837	333	110	conserved hypothetical protein		
RSDT_0669	CDS	-	880131	879253	879	292	conserved hypothetical protein		
RSDT_0670	CDS	-	880555	880295	261	86	FmdB family regulatory protein		
RSDT_0671	CDS	-	882280	880640	1641	546	glutamine-dependent NAD ⁺ synthetase	nadE	6.3.5.1
RSDT_rRNA_4	rRNA	-	882575	882463	113	xx	5S rRNA		
RSDT_rRNA_5	rRNA	-	885546	882620	2927	xx	23S rRNA		
RSDT_tRNA_36	tRNA	-	885684	885609	76	xx	tRNA-Ala		
RSDT_tRNA_37	tRNA	-	885766	885690	77	xx	tRNA-Ile		
RSDT_rRNA_6	rRNA	-	887390	885842	1549	xx	16S rRNA		
RSDT_0672	CDS	-	889358	887799	1560	519	ribonuclease Y	my	3.1.-.-
RSDT_0673	CDS	+	889386	889793	408	135	hypothetical protein		
RSDT_0674	CDS	-	890019	889756	264	87	conserved hypothetical protein		
RSDT_0675	CDS	-	890271	890026	246	81	conserved hypothetical protein		
RSDT_0676	CDS	-	891772	890417	1356	451	bifunctional UDP-N-acetylglucosamine pyrophosphorylase / Glucosamine-1-phosphate N-acetyltransferase	glmU	2.7.7.23 / 2.3.1.157
RSDT_0677	CDS	-	894506	891906	2601	866	ATP-dependent chaperone protein ClpB	clpB	
RSDT_0678	CDS	-	895465	894521	945	314	curved DNA-binding protein	cbpA	
RSDT_pg_119	pseudogene	+	895906	896216	311	x	pseudogene of conserved hypothetical protein		
RSDT_0679	CDS	+	896619	897794	1176	391	multidrug efflux pump subunit MdtA	mdtA	
RSDT_0680	CDS	+	897791	900892	3102	1033	multidrug efflux pump subunit MdtB	mdtB	
RSDT_0681	CDS	+	900885	904127	3243	1080	multidrug efflux pump subunit MdtC	mdtC	

RSDT_0682	CDS	+	904124	904786	663	220 FAD-dependent thymidylate synthase	thyX	2.1.1.148
RSDT_0683	CDS	-	906268	905273	996	331 NAD(P)H-dependent glycerol-3-phosphate dehydrogenase	gpsA	1.1.1.94
RSDT_0684	CDS	-	906643	906446	198	65 copper chaperon	copZ	
RSDT_pg_120	pseudogene	-	907303	906923	381 x	pseudogene of type I DNA restriction-modification system adenine-specific methylase subunit	hsdM	
RSDT_tRNA_38	tRNA	-	908043	907957	87 xx	tRNA-Leu		
RSDT_0685	CDS	-	910146	908296	1851	616 DNA mismatch repair protein MutL	MutL	
RSDT_0686	CDS	-	910505	910215	291	96 riboflavin kinase	ribC	2.7.1.26
RSDT_0687	CDS	-	911142	910507	636	211 FAD synthase	ribF	2.7.7.2
RSDT_0688	CDS	-	911684	911211	474	157 conserved hypothetical protein		
RSDT_0689	CDS	-	913209	911710	1500	499 ATP-dependent RNA helicase DbpA	dbpA	3.6.4.13
RSDT_0690	CDS	-	914357	913299	1059	352 uncharacterized lipoprotein		
RSDT_0691	CDS	-	916206	914377	1830	609 uncharacterized GTPase TypA/BipA	typA	
RSDT_0692	CDS	+	916434	917846	1413	470 acetyl-CoA carboxylase biotin carboxylase subunit	accC/ fabG	6.4.1.2/ 6.3.4.14
RSDT_0693	CDS	+	917920	920169	2250	749 acetyl-CoA carboxylase carboxyltransferase subunit alpha/beta	accAD	6.4.1.2
RSDT_0694	CDS	+	920175	920825	651	216 biotin-carboxy-carrier-protein	accB	6.4.1.2
RSDT_0695	CDS	+	920825	921163	339	112 conserved hypothetical protein		
RSDT_0696	CDS	+	921197	921700	504	167 single-strand DNA-binding protein	ssb	
RSDT_0697	CDS	+	921881	923152	1272	423 sulfate adenylyltransferase	sat	2.7.7.4
RSDT_0698	CDS	+	923291	924268	978	325 conserved hypothetical protein		
RSDT_0699	CDS	+	924616	927687	3072	1023 outer membrane autotransporter		
RSDT_0700	CDS	-	930788	927804	2985	994 uncharacterized AsmA family protein		
RSDT_0701	CDS	-	931331	931023	309	102 conserved hypothetical protein		
RSDT_pg_121	pseudogene	+	931463	932658	1196 x	pseudogene of radical SAM domain protein		
RSDT_0702	CDS	-	934277	932640	1638	545 oligopeptide/dipeptide ABC transporter substrate-binding protein DppA	dppA	
RSDT_0703	CDS	+	934330	937584	3255	1084 SNF2/helicase domain-containing protein		
RSDT_0704	CDS	-	939984	937603	2382	793 diguanylate cyclase domain-containing protein		

RSDT_0705	CDS	-	943679	940350	3330	1109 UvrD/Rep family helicase-like protein		
RSDT_0706	CDS	-	945794	943707	2088	695 U32 family peptidase		
RSDT_0707	CDS	-	946810	945791	1020	339 putative UDP-glucuronate 5'-epimerase	lspL	5.1.3.12
RSDT_0708	CDS	-	947483	947079	405	134 hypothetical protein		
RSDT_0709	CDS	-	948799	947582	1218	405 aspartate kinase	lysC	2.7.2.4
RSDT_0710	CDS	-	950172	949093	1080	359 Xaa-Pro dipeptidase	pepQ	3.4.13.9
RSDT_0711	CDS	-	952708	950189	2520	839 preprotein translocase subunit SecA	secA	
RSDT_pg_122	pseudogene	-	953023	952726	298 x	pseudogene of Fis family sigma54-specific transcriptional regulator		
RSDT_pg_123	pseudogene	+	953411	953572	162 x	pseudogene of conserved hypothetical protein		
RSDT_pg_124	pseudogene	+	953572	953828	257 x	pseudogene of conserved hypothetical protein		
RSDT_0712	CDS	+	953852	955966	2115	704 putative exoribonuclease II	rnb	3.1.13.1
RSDT_0713	CDS	+	956023	956640	618	205 glycerol-3-phosphate acyltransferase	plsY	2.3.1.15
RSDT_0714	CDS	+	956657	958105	1449	482 threonine synthase	thrC	4.2.3.1
RSDT_0715	CDS	-	959912	958287	1626	541 conserved hypothetical protein		
RSDT_tRNA_39	tRNA	+	960264	960356	93 xx	tRNA-Ser		
RSDT_pg_125	pseudogene	-	961739	960470	1270 x	pseudogene of phage integrase		
RSDT_tRNA_40	tRNA	-	961999	961924	76 xx	tRNA-Asn		
RSDT_0716	CDS	-	962657	962061	597	198 conserved hypothetical protein		
RSDT_0717	CDS	-	963944	962841	1104	367 preprotein translocase subunit SecF	secF	
RSDT_0718	CDS	-	965543	963960	1584	527 preprotein translocase subunit SecD	secD	
RSDT_0719	CDS	-	965934	965578	357	118 preprotein translocase subunit YajC	yajC	
RSDT_0720	CDS	-	968524	966329	2196	731 ribonuclease E-like protein	rne	
RSDT_0721	CDS	+	968896	970821	1926	641 ATP-dependent zinc metalloprotease FtsH	ftsH	3.4.24.-
RSDT_0722	CDS	+	970866	971774	909	302 dihydropteroate synthase	folP	2.5.1.15
RSDT_0723	CDS	+	971767	972501	735	244 putative cyclic-di-AMP synthase	dacA	2.7.7.85
RSDT_0724	CDS	+	972488	973471	984	327 conserved hypothetical protein		
RSDT_0725	CDS	+	973474	974826	1353	450 phosphoglucosamine mutase	glmM	5.4.2.10

RSDT_0726	CDS	+	975107	975547	441	146	MerR family transcriptional regulator		
RSDT_pg_126	pseudogene	+	975548	977580	2033	x	pseudogene of VIT-vWA domains-containing uncharacterized protein		
RSDT_0727	CDS	+	978549	979175	627	208	uncharacterized metallo-hydrolase		
RSDT_0728	CDS	+	979172	979780	609	202	uncharacterized iron-sulfur flavoprotein		
RSDT_pg_127	pseudogene	+	979799	980544	746	x	pseudogene of ComF/GntX family protein		
RSDT_0729	CDS	+	980618	981655	1038	345	conserved hypothetical protein		
RSDT_0730	CDS	+	981829	982740	912	303	conserved hypothetical protein		
RSDT_0731	CDS	+	982753	983148	396	131	thioesterase superfamily protein		
RSDT_0732	CDS	-	984104	983289	816	271	selenium-dependent molybdenum hydroxylase accessory protein YqeB	yqeB	
RSDT_pg_128	pseudogene	-	985768	984251	1518	x	pseudogene of conserved hypothetical protien		
RSDT_0733	CDS	-	988359	985789	2571	856	putative aldehyde oxidoreductase	mop	1.2.99.7
RSDT_0734	CDS	-	989847	988390	1458	485	putative nucleobase : H+ symporter	ygfO	
RSDT_0735	CDS	-	992543	989874	2670	889	putative selenate reductase	ygfK	1.97.1.9
RSDT_0736	CDS	-	993860	992574	1287	428	uncharacterized amidohydrolase SsnA	ssnA	
RSDT_0737	CDS	-	995274	993883	1392	463	phenylhydantoinase/dihydropyrimidinase-like protein YgeZ	ygeZ	3.5.2.2
RSDT_0738	CDS	-	996543	995347	1197	398	putative oxamate carbamoyltransferas YgeW	ygeW	2.1.3.5
RSDT_0739	CDS	-	998112	997147	966	321	carbamate kinase	arcC	2.7.2.2
RSDT_0740	CDS	-	999335	998124	1212	403	M20A peptidase family aminohydrolase YgeY	ygeY	
RSDT_0741	CDS	-	1000587	999367	1221	406	diaminopropionate ammonia-lyase YgeX	ygeX	4.3.1.15/ 4.3.1.19
RSDT_0742	CDS	+	1000884	1001264	381	126	putative enamine/imine deaminase	yjgF	3.5.4.-
RSDT_0743	CDS	-	1002491	1001355	1137	378	conserved hypothetical protein		
RSDT_0744	CDS	+	1002703	1002921	219	72	conserved hypothetical protein		
RSDT_0745	CDS	+	1002905	1003567	663	220	putative septum formation protein Maf	maf	
RSDT_tRNA_41	tRNA	+	1003649	1003724	76	xx	tRNA-Phe		
RSDT_pg_129	pseudogene	+	1003792	1004370	579	x	pseudogene of phage integrase		
RSDT_pg_130	pseudogene	+	1004287	1004842	556	x	pseudogene of conserved hypothetical gene		

RSDT_0746	CDS	-	1006397	1005117	1281	426 bifunctional folylpolyglutamate synthase/ dihydrofolate synthase	folC	6.3.2.17/ 6.3.2.12
RSDT_0747	CDS	-	1006951	1006457	495	164 tRNA threonylcarbamoyladenosine biosynthesis protein TsaE	tsaE	
RSDT_0748	CDS	-	1008552	1006939	1614	537 bifunctional NAD(P)H-hydrate repair enzyme Nnr	nnr	4.2.1.136/ 5.1.99.6
RSDT_0749	CDS	-	1008923	1008552	372	123 4'-phosphopantetheinyl transferase	acpS	2.7.8.7
RSDT_pg_131	pseudogene	+	1009259	1010000	742 x	pseudogene of transposase		
RSDT_0750	CDS	+	1010134	1011081	948	315 periplasmic [NiFe] hydrogenase small subunit	hynA	1.12.2.1
RSDT_0751	CDS	+	1011097	1012782	1686	561 periplasmic [NiFe] hydrogenase large subunit	hynB	1.12.2.1
RSDT_0752	CDS	-	1013558	1013055	504	167 rubrerythrin (NADH peroxidase)	rbr	1.11.1.1
RSDT_0753	CDS	-	1015502	1013667	1836	611 putative ABC-type lipidA/LPS exporter ATP-binding/permease protein	msbA	
RSDT_0754	CDS	-	1016919	1015738	1182	393 putative glycosyltransferase involved in cell wall biogenesis		
RSDT_0755	CDS	-	1017388	1016960	429	142 conserved hypothetical protein		
RSDT_0756	CDS	-	1018481	1017375	1107	368 putative glycosyltransferase involved in cell wall biogenesis		
RSDT_0757	CDS	-	1019697	1018570	1128	375 membrane-bound metal-dependent hydrolase		
RSDT_0758	CDS	+	1020185	1020826	642	213 phosphatidylserine decarboxylase	psd	4.1.1.65
RSDT_0759	CDS	+	1020839	1021594	756	251 CDP-diacylglycerol/serine O-phosphatidyltransferase	pssA	2.7.8.8
RSDT_0760	CDS	+	1021728	1023278	1551	516 2-isopropylmalate synthase	leuA	2.3.3.13
RSDT_0761	CDS	+	1023367	1024635	1269	422 3-isopropylmalate dehydratase large subunit	leuC	4.2.1.33/ 4.2.1.35
RSDT_0762	CDS	+	1024706	1025203	498	165 3-isopropylmalate dehydratase small subunit	leuD	4.2.1.33/ 4.2.1.35
RSDT_0763	CDS	+	1025214	1026299	1086	361 3-isopropylmalate dehydrogenase	leuB	1.1.1.85
RSDT_0764	CDS	-	1027200	1026445	756	251 conserved hypothetical protein		
RSDT_0765	CDS	-	1028399	1027230	1170	389 phosphoglycerate kinase	pgk	2.7.2.3
RSDT_0766	CDS	-	1030445	1028418	2028	675 transketolase	tkt	2.2.1.1
RSDT_0767	CDS	-	1031179	1030460	720	239 ribulose-phosphate 3-epimerase	rpe	5.1.3.1
RSDT_0768	CDS	-	1031536	1031192	345	114 MerR family transcriptional regulator		
RSDT_0769	CDS	-	1034014	1031597	2418	805 phenylalanyl-tRNA synthetase subunit beta	pheT	6.1.1.20

RSDT_0770	CDS	-	1034403	1034041	363	120 conserved hypothetical protein		
RSDT_0771	CDS	-	1035439	1034405	1035	344 phenylalanyl-tRNA synthetase subunit alpha	pheS	6.1.1.20
RSDT_0772	CDS	-	1035885	1035532	354	117 50S ribosomal protein L20	rplT	
RSDT_0773	CDS	-	1036143	1035946	198	65 50S ribosomal protein L35	rpmI	
RSDT_0774	CDS	-	1036802	1036290	513	170 translation initiation factor IF-3	infC	
RSDT_0775	CDS	-	1038765	1036822	1944	647 threonyl-tRNA synthetase	thrS	6.1.1.3
RSDT_tRNA_42	tRNA	-	1038913	1038837	77	xx tRNA-Val		
RSDT_0776	CDS	+	1039093	1039395	303	100 conserved hypothetical protein		
RSDT_0777	CDS	-	1040289	1039507	783	260 cobalamin-5-phosphate synthase	cobS	2.7.8.26
RSDT_pg_132	pseudogene	+	1041074	1041627	554	x pseudogene of phage integrase		
RSDT_pg_133	pseudogene	+	1041629	1043726	2098	x pseudogene of DNA methyltransferase		
RSDT_0778	CDS	+	1043836	1044360	525	174 putative anti-sigma-factor		
RSDT_0779	CDS	+	1044492	1045511	1020	339 Hdr-like menaquinol oxidoreductase, transmembrane cytochrome b subunit DsrM	dsrM	
RSDT_0780	CDS	+	1045524	1047182	1659	552 Hdr-like menaquinol oxidoreductase, cytoplasmic iron-sulfur binding subunit DsrK	dsrK	
RSDT_0781	CDS	+	1047175	1047555	381	126 Hdr-like menaquinol oxidoreductase, membrane bound triheme cytochrome c subunit DsrJ	dsrJ	
RSDT_0782	CDS	+	1047555	1048346	792	263 Hdr-like menaquinol oxidoreductase, membrane bound triheme iron-sulfur binding subunit DsrO	dsrO	
RSDT_0783	CDS	+	1048359	1049528	1170	389 Hdr-like menaquinol oxidoreductase, integral transmembrane subunit DsrP	dsrP	
RSDT_pg_134	pseudogene	-	1051516	1049567	1950	x pseudogene of heavy metal-translocating P-type ATPase		
RSDT_0784	CDS	-	1051868	1051488	381	126 heavy metal-resistance transcriptional regulator		
RSDT_0785	CDS	+	1052059	1053432	1374	457 multifunctional CCA protein	cca	2.7.7.72
RSDT_0786	CDS	-	1054248	1053472	777	258 16S/23S rRNA (cytidine-2'-O)-methyltransferase	tlyA	2.1.1.226/ 2.1.1.227
RSDT_0787	CDS	+	1054501	1054914	414	137 cytochrome c-type biogenesis protein, heme chaperon CcmE	ccmE	
RSDT_0788	CDS	+	1054999	1056909	1911	636 cytochrome c-type biogenesis protein, assembly protein CcmF	ccmF	
RSDT_0789	CDS	+	1056925	1057590	666	221 cytochrome c-type biogenesis protein, heme ABC exporter ATP-binding protein CcmA	ccmA	3.6.3.41

RSDT_0790	CDS	+	1057578	1058255	678	225	cytochrome c-type biogenesis protein, heme ABC exporter transmembrane protein CcmB	ccmB	
RSDT_0791	CDS	+	1058256	1058939	684	227	cytochrome c-type biogenesis protein, heme ABC exporter transmembrane protein CcmC	ccmC	
RSDT_0792	CDS	+	1058983	1059123	141	46	conserved hypothetical protein		
RSDT_0793	CDS	+	1059116	1060198	1083	360	hypothetical protein		
RSDT_0794	CDS	+	1060337	1063828	3492	1163	putative signal transduction histidine kinase		
RSDT_0795	CDS	+	1063851	1065263	1413	470	cardiolipin synthase	cls	2.7.8.-
RSDT_pg_135	pseudogene	+	1065351	1065516	166	x	pseudogene of transposase		
RSDT_0796	CDS	-	1067092	1065542	1551	516	polysaccharide export protein		
RSDT_0797	CDS	-	1067448	1067089	360	119	putative membrane-bound lipoprotein		
RSDT_0798	CDS	+	1068114	1069439	1326	441	carboxy-terminal-processing protease	ctpA	3.4.21.102
RSDT_0799	CDS	+	1069491	1070294	804	267	pyrroline-5-carboxylate reductase	proC	1.5.1.2
RSDT_0800	CDS	-	1071010	1070297	714	237	conserved hypothetical protein		
RSDT_0801	CDS	+	1071502	1072209	708	235	outer membrane chaperone Skp	skp	
RSDT_0802	CDS	+	1072591	1074267	1677	558	conserved hypothetical protein		
RSDT_0803	CDS	+	1074282	1075574	1293	430	phosphoribosylamine-glycine ligase	purD	6.3.4.13
RSDT_0804	CDS	+	1075584	1076084	501	166	5-(carboxyamino)imidazole ribonucleotide mutase	purE	5.4.99.18
RSDT_0805	CDS	-	1077101	1076139	963	320	uncharacterized glycosyltransferase		
RSDT_0806	CDS	-	1077526	1077101	426	141	uncharacterized glycosyltransferase		
RSDT_0807	CDS	-	1078717	1077566	1152	383	uncharacterized aminotransferase		
RSDT_pg_136	pseudogene	-	1079098	1078769	330	x	pseudogene of chemotaxis signal transduction protein CheW	cheW	
RSDT_0808	CDS	-	1079735	1079100	636	211	thiamine-phosphate pyrophosphorylase	thiE	2.5.1.3
RSDT_0809	CDS	+	1079885	1082470	2586	861	small-conductance mechanosensitive ion channel MscS	mcsS	
RSDT_0810	CDS	-	1083358	1082489	870	289	tRNA (adenine(57)-N(1)/adenine(58)-N(1))-methyltransferase	trmI	2.1.1.219
RSDT_0811	CDS	-	1085871	1083430	2442	813	peptidoglycan transglycosylase/DD-transpeptidase	mrcA	2.4.2.-/ 3.4.-.-
RSDT_0812	CDS	-	1086306	1085989	318	105	dissimilatory sulfite reductase subunit gamma	dsrC	1.8.99.3
RSDT_pg_137	pseudogene	-	1086626	1086492	135	x	pseudogene of transposase		

RSDT_pg_138	pseudogene	-	1087579	1086694	886	x	pseudogene of dye-decolorishing (DyP) peroxidase family protein	1.11.1.-
RSDT_0813	CDS	-	1088392	1087607	786	261	cobalt-precorrin-4 C(11)-methyltransferase	cbiF 2.1.1.271
RSDT_0814	CDS	-	1089815	1088442	1374	457	precorrin-6Y C5,15-methyltransferase (decarboxylating)	cbiET 2.1.1.132
RSDT_0815	CDS	-	1090996	1089803	1194	397	cobalt-precorrin-5B (C1)-methyltransferase	cbiD 2.1.1.195
RSDT_pg_139	pseudogene	-	1091346	1090993	354		pseudogene of conserved hypothetical protein	
RSDT_pg_140	pseudogene	-	1092316	1091575	742	x	pseudogene of transposase	
RSDT_0816	CDS	+	1092585	1093883	1299	432	O-acetylhomoserine/O-acetylserine sulfhydrylase	metY 2.5.1.49
RSDT_pg_141	pseudogene	+	1093926	1094414	489	x	pseudogene of chemotaxis protein CheV	cheV
RSDT_0817	CDS	-	1095197	1094415	783	260	molybdate ABC transporter ATP-binding protein	modC 3.6.3.29
RSDT_0818	CDS	-	1095897	1095208	690	229	molybdate ABC transporter permease	modB
RSDT_0819	CDS	-	1096667	1095903	765	254	molybdate ABC transporter substrate-binding protein	modA
RSDT_0820	CDS	+	1096808	1097938	1131	376	molybdate transport system regulatory protein	modE
RSDT_0821	CDS	+	1097949	1100303	2355	784	[NiFe] hydrogenase maturation protein HypF	hypF
RSDT_0822	CDS	+	1100505	1101887	1383	460	GTPase EngA	engA
RSDT_pg_142	pseudogene	-	1103500	1102287	1214	x	pseudogene of major facilitator family protein	
RSDT_0823	CDS	-	1104497	1103547	951	316	PfkB family kinase	
RSDT_0824	CDS	-	1104897	1104565	333	110	divalent ion tolerance protein CutA	cutA
RSDT_0825	CDS	-	1106875	1105301	1575	524	cobyric acid synthase	cbiP 6.3.5.10
RSDT_0826	CDS	+	1107140	1108480	1341	446	DNA repair protein RadA/Sms	radA
RSDT_0827	CDS	+	1108528	1109157	630	209	adenylate cyclase class 2	cyaB 4.6.1.1
RSDT_0828	CDS	+	1109144	1109458	315	104	ATP-dependent Clp protease adaptor protein ClpS	clpS
RSDT_0829	CDS	+	1109505	1111766	2262	753	ATP-dependent Clp protease ATP-binding protein ClpA	clpA
RSDT_0830	CDS	+	1111777	1113795	2019	672	excinuclease ABC subunit B	uvrB
RSDT_pg_143	pseudogene	-	1114734	1114000	735	x	pseudogene of phage protein Gp37/68	
RSDT_0831	CDS	-	1116234	1114822	1413	470	aromatic amino acid permease AroP	aroP
RSDT_0832	CDS	-	1117026	1116307	720	239	putative racemase	
RSDT_0833	CDS	-	1117990	1117073	918	305	GTPase Era	era

RSDT_0834	CDS	-	1119184	1118162	1023	340 DNA polymerase III delta	holA	
RSDT_0835	CDS	-	1121786	1119270	2517	838 leucyl-tRNA synthetase	leuS	6.1.1.4
RSDT_0836	CDS	-	1122365	1121892	474	157 transcription antitermination factor NusB	nusB	
RSDT_0837	CDS	-	1122845	1122369	477	158 6,7-dimethyl-8-ribityllumazine synthase	ribH	2.5.1.78
RSDT_0838	CDS	-	1123850	1123197	654	217 riboflavin synthase	ribE	2.5.1.9
RSDT_0839	CDS	-	1125014	1123881	1134	377 riboflavin biosynthesis protein RibD	ribD	3.5.4.26/ 1.1.1.193
RSDT_0840	CDS	-	1125486	1125007	480	159 CMP/dCMP deaminase	comEB	3.5.4.12
RSDT_0841	CDS	-	1126740	1125502	1239	412 serine hydroxymethyltransferase	glyA	2.1.2.1
RSDT_0842	CDS	-	1128108	1126861	1248	415 3-oxoacyl-[acyl-carrier-protein] synthase 2	fabF	2.3.1.179
RSDT_0843	CDS	-	1128457	1128221	237	78 acyl carrier protein	acpP	
RSDT_0844	CDS	-	1129282	1128512	771	256 3-oxoacyl-[acyl-carrier-protein] reductase	fabG	1.1.1.100
RSDT_0845	CDS	-	1130378	1129392	987	328 3-oxoacyl-[acyl-carrier-protein] synthase 3	fabH	2.3.1.180
RSDT_0846	CDS	-	1131428	1130394	1035	344 Acyl-[acyl-carrier-protein]-phosphate acyltransferase	PlsX	2.3.1.-
RSDT_0847	CDS	-	1131610	1131428	183	60 50S ribosomal protein L32	rpmF	
RSDT_0848	CDS	+	1132051	1132845	795	264 TauE/SafE family permease		
RSDT_0849	CDS	+	1132927	1134126	1200	399 amidohydrolase family protein		
RSDT_tRNA_43	tRNA	+	1134218	1134294	77 xx	tRNA-Asp		
RSDT_pg_144	pseudogene	+	1134660	1134951	292 x	pseudogene of conserved hypothetical protein		
RSDT_tRNA_44	tRNA	-	1135406	1135331	76 xx	tRNA-Val		
RSDT_0850	CDS	+	1135946	1136887	942	313 putative High-molecular-weight cytochrome c subunit E	hmcE	
RSDT_0851	CDS	+	1136902	1138497	1596	531 High-molecular-weight cytochrome c subunit F	hmcF	
RSDT_0852	CDS	+	1139202	1140104	903	300 hydroxy monocarboxylic acid anion dehydrogenase family protein		
RSDT_tRNA_45	tRNA	+	1140248	1140324	77 xx	tRNA-Pro		
RSDT_pg_145	pseudogene	-	1141165	1140614	552 x	pseudogene of uncharacterized radical SAM protein		
RSDT_pg_146	pseudogene	+	1141168	1141593	426 x	pseudogene of catalase	catA	1.11.1.6
RSDT_0853	CDS	+	1141858	1142964	1107	368 GTPase Obg	obg	
RSDT_0854	CDS	+	1142970	1144190	1221	406 glutamate 5-kinase	proB	2.7.2.11

RSDT_0855	CDS	-	1144726	1144187	540	179	2-oxoglutarate synthase subunit gamma	korC	1.2.7.3
RSDT_0856	CDS	-	1145522	1144719	804	267	2-oxoglutarate synthase subunit beta	korB	1.2.7.3
RSDT_0857	CDS	-	1146613	1145522	1092	363	2-oxoglutarate synthase subunit alpha	korA	1.2.7.3
RSDT_0858	CDS	-	1146834	1146610	225	74	2-oxoglutarate synthase subunit delta	korD	1.2.7.3
RSDT_0859	CDS	-	1148020	1146914	1107	368	S-adenosylmethionine-tRNA ribosyltransferase-isomerase	queA	2.4.99.17
RSDT_pg_147	pseudogene	-	1149448	1148562	887	x	pseudogene of rhomboid-like membrane bound protease		
RSDT_0860	CDS	-	1149721	1149512	210	69	50S ribosomal protein L28	rpmB	
RSDT_0861	CDS	-	1151256	1150381	876	291	H ⁺ -translocating [NiFe] hydrogenase complex, iron-sulfur subunit EchF	echF	
RSDT_0862	CDS	-	1152719	1151274	1446	481	H ⁺ -translocating [NiFe] hydrogenase complex, large subunit EchE	echE	
RSDT_pg_148	pseudogene	-	1152822	1151275	1548	x	pseudogene (N-terminal) of H ⁺ -translocating [NiFe] hydrogenase complex, large subunit EchE		
RSDT_0863	CDS	-	1154379	1152913	1467	488	H ⁺ -translocating [NiFe] hydrogenase complex, transmembrane subunit EchD	echD	
RSDT_0864	CDS	-	1155064	1154402	663	220	H ⁺ -translocating [NiFe] hydrogenase complex, small subunit EchC	echC	
RSDT_0865	CDS	-	1156023	1155061	963	320	H ⁺ -translocating [NiFe] hydrogenase complex, transmembrane subunit EchB	echB	
RSDT_0866	CDS	-	1158095	1156032	2064	687	H ⁺ -translocating [NiFe] hydrogenase complex, transmembrane subunit EchA	echA	
RSDT_pg_149	pseudogene	-	1158345	1158070	276	x	pseudogene of phenylacetate-coenzyme A ligase	paaK	6.2.1.30
RSDT_pg_150	pseudogene	+	1158456	1158665	210	x	pseudogene of transposase		
RSDT_0867	CDS	+	1158740	1160041	1302	433	8-amino-7-oxononanoate synthase	bioF	2.3.1.47
RSDT_0868	CDS	+	1160028	1161314	1287	428	putative colanic acid biosynthesis glycosyltransferase WcaL	wcaL	
RSDT_0869	CDS	+	1161280	1162299	1020	339	putative uncharacterized LPS biosynthesis protein WalW	walW	
RSDT_0870	CDS	+	1162296	1163594	1299	432	group 1 glycosyl transferase		
RSDT_0871	CDS	+	1163582	1165489	1908	635	Asparagine synthase (glutamine-hydrolysing)	asnB	6.3.5.4
RSDT_pg_151	pseudogene	+	1165716	1167837	2122	x	pseudogene of multidrug transporter subunit MdtC	mdtC	
RSDT_0872	CDS	+	1168024	1169238	1215	404	bifunctional riboflavin biosynthesis protein RibBA	ribBA	4.1.99.12/ 3.5.4.25
RSDT_pg_152	pseudogene	+	1169333	1169601	269	x	pseudogene of putative lactate utilization protein A	lutA	
RSDT_pg_153	pseudogene	+	1169619	1170213	595	x	pseudogene of putative lactate utilization protein C	lutC	

RSDT_pg_154	pseudogene	+	1170218	1170935	718 x	pseudogene of putative lactate utilization protein B	lutB
RSDT_pg_155	pseudogene	+	1170976	1171166	191 x	pseudogene of L-lactate permease	lctP
RSDT_pg_156	pseudogene	-	1173927	1171383	2545 x	pseudogene of DNA internalization-related competence protein ComEC/Rec2	comEC
RSDT_0873	CDS	-	1174388	1173933	456	151 SsrA-binding protein	smpB
RSDT_0874	CDS	-	1175261	1174425	837	278 16S rRNA (cytidine1402-2'-O)-methyltransferase	rsmI 2.1.1.198
RSDT_0875	CDS	-	1175645	1175310	336	111 conserved hypothetical protein	yraN
RSDT_0876	CDS	-	1176217	1175639	579	192 ribonuclease HII	rnhB 3.1.26.4
RSDT_0877	CDS	-	1176618	1176271	348	115 50S ribosomal protein L19	rplS
RSDT_0878	CDS	-	1178042	1176747	1296	431 putative tRNA (guanine37-N1)-methyltransferase	trmD 2.1.1.228
RSDT_0879	CDS	-	1178962	1178174	789	262 conserved hypothetical protein	
RSDT_0880	CDS	-	1179728	1179039	690	229 nicotinate-nucleotide adenylyltransferase	nadD 2.7.7.18
RSDT_0881	CDS	-	1181009	1179729	1281	426 gamma-glutamyl phosphate reductase	proA 1.2.1.41
RSDT_0882	CDS	+	1181080	1181775	696	231 conserved hypothetical protein	
RSDT_pg_157	pseudogene	+	1181836	1182053	218 x	pseudogene of indolepyruvate ferredoxin oxidoreductase subunit alpha	IorA 1.2.7.8
RSDT_0883	CDS	-	1182656	1182144	513	170 conserved hypothetical protein	
RSDT_0884	CDS	+	1182800	1184224	1425	474 adenosylhomocysteinase	ahcY 3.3.1.1
RSDT_0885	CDS	+	1184331	1184900	570	189 ribonuclease H	rnhA 3.1.26.4
RSDT_pg_158	pseudogene	+	1184936	1185704	769 x	pseudogene of conserved hypothetical protein	
RSDT_pg_159	pseudogene	+	1185715	1185962	248 x	pseudogene of sulfite exporter TauE/SafE family protein	yfcA
RSDT_0886	CDS	-	1186830	1186084	747	248 conserved hypothetical protein	
RSDT_0887	CDS	-	1188103	1186886	1218	405 electrochemical potential-driven transporter	yrbG
RSDT_0888	CDS	+	1188685	1189704	1020	339 conserved hypothetical protein	
RSDT_0889	CDS	-	1190343	1189849	495	164 conserved hypothetical protein	
RSDT_0890	CDS	-	1191710	1190400	1311	436 putative threonylcarbamoyladenine tRNA methylthiotransferase MtaB	mtaB
RSDT_0891	CDS	+	1192202	1192834	633	210 hypothetical protein	
RSDT_0892	CDS	+	1193899	1194216	318	105 30S ribosomal protein S10	rpsJ

RSDT_0893	CDS	+	1194228	1194857	630	209	50S ribosomal protein L3	rplC	
RSDT_0894	CDS	+	1194870	1195502	633	210	50S ribosomal protein L4	rplD	
RSDT_0895	CDS	+	1195504	1195794	291	96	50S ribosomal protein L23	rplW	
RSDT_0896	CDS	+	1195797	1196627	831	276	50S ribosomal protein L2	rplB	
RSDT_0897	CDS	+	1196637	1196924	288	95	30S ribosomal protein S19	rpsS	
RSDT_0898	CDS	+	1196934	1197272	339	112	50S ribosomal protein L22	rplV	
RSDT_0899	CDS	+	1197275	1197916	642	213	30S ribosomal protein S3	rpsC	
RSDT_0900	CDS	+	1197916	1198329	414	137	50S ribosomal protein L16	rplP	
RSDT_0901	CDS	+	1198330	1198560	231	76	50S ribosomal protein L29	rpmC	
RSDT_0902	CDS	+	1198557	1198826	270	89	30S ribosomal protein S17	rpsQ	
RSDT_0903	CDS	+	1198836	1199204	369	122	50S ribosomal protein L14	rplN	
RSDT_0904	CDS	+	1199213	1199545	333	110	50S ribosomal protein L24	rplX	
RSDT_0905	CDS	+	1199555	1200094	540	179	50S ribosomal protein L5	rplE	
RSDT_0906	CDS	+	1200136	1200321	186	61	30S ribosomal protein S14	rpsN	
RSDT_0907	CDS	+	1200349	1200729	381	126	30S ribosomal protein S8	rpsH	
RSDT_0908	CDS	+	1200740	1201279	540	179	50S ribosomal protein L6	rplF	
RSDT_0909	CDS	+	1201288	1201647	360	119	50S ribosomal protein L18	rplR	
RSDT_0910	CDS	+	1201649	1202161	513	170	30S ribosomal protein S5	rpsE	
RSDT_0911	CDS	+	1202164	1202340	177	58	50S ribosomal protein L30	rpmD	
RSDT_0912	CDS	+	1202363	1202827	465	154	50S ribosomal protein L15	rplO	
RSDT_0913	CDS	+	1202872	1204179	1308	435	preprotein translocase subunit SecY	secY	
RSDT_0914	CDS	+	1204204	1204998	795	264	methionine aminopeptidase	map	3.4.11.18
RSDT_0915	CDS	+	1205082	1205195	114	37	50S ribosomal protein L36	rpmJ	
RSDT_0916	CDS	+	1205211	1205579	369	122	30S ribosomal protein S13	rpsM	
RSDT_0917	CDS	+	1205621	1206010	390	129	30S ribosomal protein S11	rpsK	
RSDT_0918	CDS	+	1206060	1206686	627	208	30S ribosomal protein S4	rpsD	
RSDT_0919	CDS	+	1206698	1207741	1044	347	DNA-directed RNA polymerase subunit alpha	rpoA	2.7.7.6

RSDT_0920	CDS	+	1207731	1208156	426	141	50S ribosomal protein L17	rplQ	
RSDT_0921	CDS	+	1208241	1209296	1056	351	selenophosphate synthase	selD	2.7.9.3
RSDT_0922	CDS	-	1210197	1209742	456	151	hypothetical protein		
RSDT_0923	CDS	+	1210280	1210774	495	164	putative transmembrane phospholipid methyltransferase		
RSDT_tRNA_46	tRNA	-	1211055	1210980	76	xx	tRNA-Ala		
RSDT_0924	CDS	+	1211993	1213075	1083	360	glutamin-(asparagin-)ase	ansB	3.5.1.38
RSDT_0925	CDS	+	1213430	1213669	240	79	30S ribosomal protein S16	rpsP	
RSDT_0926	CDS	+	1213736	1213966	231	76	uncharacterized RNA-binding protein		
RSDT_0927	CDS	+	1213982	1214503	522	173	16S rRNA processing protein RimM	rimM	
RSDT_0928	CDS	+	1214598	1217915	3318	1105	uncharacterized membrane-bound acyl transferase		
RSDT_0929	CDS	+	1217920	1219386	1467	488	uncharacterized outer membrane efflux protein		
RSDT_0930	CDS	+	1219386	1220300	915	304	uncharacterized outer membrane efflux protein		
RSDT_0931	CDS	+	1220310	1221716	1407	468	polysaccharide efflux protein RfbX	rfbX	
RSDT_pg_160	pseudogene	-	1223669	1221777	1893	x	pseudogene of putative glycosyltransferase involved in cell wall biogenesis		
RSDT_0932	CDS	-	1225746	1224598	1149	382	putative glycosyltransferase involved in cell wall biogenesis		
RSDT_0933	CDS	-	1226889	1226056	834	277	chorismate dehydratase	mqnA	4.2.1.151
RSDT_pg_161	pseudogene	-	1227065	1226886	180	x	pseudogene of glucokinase	glk	2.7.1.2
RSDT_0934	CDS	-	1228003	1227062	942	313	tRNA dimethylallyltransferase	miaA	2.5.1.75
RSDT_0935	CDS	-	1228539	1228000	540	179	pantetheine-phosphate adenylyltransferase	coaD	2.7.7.3
RSDT_0936	CDS	-	1229087	1228536	552	183	16S rRNA m2G966 methyltransferase	rsmD	2.1.1.171
RSDT_0937	CDS	+	1229244	1229954	711	236	conserved hypothetical protein		
RSDT_0938	CDS	+	1229976	1230494	519	172	tRNA(adenine34) deaminase	tadA	3.5.4.33
RSDT_0939	CDS	+	1230585	1231403	819	272	dihydroorotate dehydrogenase B electron transfer subunit	pyrK	1.3.1.14
RSDT_0940	CDS	+	1231409	1232368	960	319	dihydroorotate dehydrogenase B catalytic subunit	pyrD	1.3.1.14
RSDT_0941	CDS	+	1232365	1233492	1128	375	conserved hypothetical protein	yghO	
RSDT_0942	CDS	+	1233526	1234569	1044	347	NAD dependent epimerase/dehydratase family protein		
RSDT_0943	CDS	+	1234566	1236524	1959	652	uncharacterized ABC transporter ATP-binding protein		

RSDT_0944	CDS	-	1237230	1236493	738	245	SpsF-like glycosyltransferase putatively involved in cell wall biogenesis		
RSDT_0945	CDS	-	1238885	1237263	1623	540	SpsG-like glycosyltransferase putatively involved in cell wall biogenesis		
RSDT_0946	CDS	-	1240157	1238958	1200	399	SpsC-like aminotransferase putatively involved in cell wall biogenesis		
RSDT_0947	CDS	-	1241322	1240240	1083	360	uncharacterized metal-containing alcohol dehydrogenase family protein		
RSDT_0948	CDS	-	1242188	1241334	855	284	bifunctional methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate cyclohydrolase	folD	1.5.1.5/ 3.5.4.9
RSDT_0949	CDS	-	1243501	1242185	1317	438	enolase	eno	4.2.1.11
RSDT_0950	CDS	-	1244361	1243561	801	266	type III pantothenate kinase	coaX	2.7.1.33
RSDT_pg_162	pseudogene	+	1244720	1244881	162	x	pseudogene of transposase		
RSDT_pg_163	pseudogene	+	1245933	1246134	202	x	pseudogene of transposase		
RSDT_0951	CDS	-	1247580	1246150	1431	476	ZraS/AtoS/NtrY family regulatory prtotein		
RSDT_0952	CDS	-	1248999	1247659	1341	446	glucose-6-phosphate isomerase	pgi	5.3.1.9
RSDT_0953	CDS	-	1249885	1249055	831	276	conserved hypothetical protein		
RSDT_0954	CDS	-	1250301	1249993	309	102	conserved hypothetical protein		
RSDT_0955	CDS	-	1250968	1250390	579	192	conserved hypothetical protein		
RSDT_0956	CDS	-	1252043	1250982	1062	353	conserved hypothetical protein		
RSDT_0957	CDS	-	1252367	1252065	303	100	conserved hypothetical protein		
RSDT_0958	CDS	+	1252534	1255059	2526	841	sigma 54 interacting domain-containing transmembrane protein		
RSDT_0959	CDS	+	1255056	1257626	2571	856	putative pyruvate phosphate dikinase	pps2	2.7.9.2
RSDT_0960	CDS	+	1257659	1258924	1266	421	major facilitator superfamily protein		
RSDT_0961	CDS	-	1259596	1258931	666	221	conserved hypothetical protein		
RSDT_0962	CDS	-	1260150	1259590	561	186	bifunctional adenosylcobinamide kinase/ adenosylcobinamide-phosphate guanylyltransferase	cobU	2.7.1.156/ 2.7.7.62
RSDT_0963	CDS	-	1261373	1260147	1227	408	conserved hypothetical protein		
RSDT_pg_164	pseudogene	-	1261810	1261512	299	x	pseudogene of transposase		
RSDT_0964	CDS	-	1262916	1262422	495	164	alternative heme biosynthesis protein AhbA	ahbA	
RSDT_0965	CDS	-	1264075	1262969	1107	368	alternative heme biosynthesis protein AhbD	ahbD	

RSDT_0966	CDS	-	1265064	1264075	990	329 porphobilinogen synthase	hemB	4.2.1.24
RSDT_0967	CDS	-	1266294	1265119	1176	391 alternative heme biosynthesis protein AhbC	ahbC	
RSDT_0968	CDS	-	1269140	1266450	2691	896 alanyl-tRNA synthetase	alaS	6.1.1.7
RSDT_0969	CDS	-	1270244	1269156	1089	362 DNA recombinase RecA	recA	3.6.3.8
RSDT_0970	CDS	+	1270467	1271252	786	261 chromosome partitioning protein ParA	parA	
RSDT_0971	CDS	+	1271289	1272257	969	322 chromosome partitioning protein ParB	parB	
RSDT_0972	CDS	-	1273213	1272227	987	328 methionyl-tRNA formyltransferase	fmt	2.1.2.9
RSDT_0973	CDS	-	1273704	1273186	519	172 peptide deformylase	def	3.5.1.88
RSDT_0974	CDS	-	1275542	1273701	1842	613 aspartyl-tRNA synthase	aspS	6.1.1.12
RSDT_0975	CDS	-	1276794	1275535	1260	419 histidyl-tRNA synthetase	hisS	6.1.1.21
RSDT_0976	CDS	-	1278233	1276827	1407	468 amidophosphoribosyltransferase	purF	2.4.2.14
RSDT_0977	CDS	-	1280968	1278461	2508	835 DNA gyrase subunit A	gyrA	5.99.1.3
RSDT_0978	CDS	-	1283430	1281022	2409	802 DNA gyrase subunit B	gyrB	5.99.1.3
RSDT_0979	CDS	-	1284581	1283430	1152	383 DNA polymerase III subunit beta	dnaN	2.7.7.7
RSDT_0980	CDS	-	1285745	1284726	1020	339 chromosomal replication initiator DnaA domain-containing protein	dnaA2	
RSDT_0981	CDS	+	1285920	1287338	1419	472 M23 family peptidase		
RSDT_0982	CDS	-	1288407	1287622	786	261 PurE-related protein		
RSDT_0983	CDS	+	1288964	1289515	552	183 shikimate kinase	aroK	2.7.1.71
RSDT_0984	CDS	-	1290061	1289540	522	173 conserved hypothetical protein		
RSDT_0985	CDS	-	1291085	1290090	996	331 OmpA family protein		
RSDT_0986	CDS	+	1291961	1293418	1458	485 inosine-5'-monophosphate dehydrogenase	guaB	1.1.1.205
RSDT_0987	CDS	+	1293520	1295064	1545	514 GMP synthase	guaA	6.3.5.2
RSDT_0988	CDS	+	1295071	1295385	315	104 Sec-independent protein translocase protein TatB	tatB	
RSDT_0989	CDS	+	1295382	1296473	1092	363 Sec-independent protein translocase protein TatC	tatC	
RSDT_0990	CDS	+	1296515	1297114	600	199 imidazoleglycerol-phosphate dehydratase	hisB	4.2.1.19
RSDT_0991	CDS	+	1297114	1297767	654	217 conserved hypothetical protein		
RSDT_0992	CDS	+	1297764	1298582	819	272 phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase	hisA	5.3.1.16

RSDT_0993	CDS	-	1299888	1298686	1203	400	bifunctional 2-C-methyl-D-erythritol 4-phosphate cytidyltransferase/ 2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase	ispDF	2.7.7.60/ 4.6.1.12
RSDT_RNA_1	RNA	-	1300342	1299978	365	x	ribonuclease P RNA component	rnpB	
RSDT_0994	CDS	-	1301136	1300357	780	259	conserved hypothetical protein		
RSDT_0995	CDS	-	1301947	1301153	795	264	conserved hypothetical protein		
RSDT_0996	CDS	-	1302811	1302002	810	269	phosphoribosylformylglycinamidase synthase glutamine amidotransferase subunit	purQ	6.3.5.3
RSDT_0997	CDS	+	1303241	1304881	1641	546	CTP synthetase	pyrG	6.3.4.2
RSDT_tRNA_47	tRNA	+	1305079	1305154	76	xx	tRNA-Thr		
RSDT_pg_165	pseudogene	-	1305748	1305523	226	x	pseudogene of integrase		
RSDT_0998	CDS	+	1305950	1307752	1803	600	elongation factor 4	lepA	
RSDT_RNA_2	RNA	-	1308134	1308057	78	x	signal recognition particle RNA component	ffs	
RSDT_pg_166	pseudogene	-	1308668	1308250	419	x	pseudogene of phage-related protein		
RSDT_pg_167	pseudogene	+	1308592	1308983	392	x	pseudogene of transposase		
RSDT_0999	CDS	+	1309013	1309930	918	305	branched-chain amino acid ABC transporter permease LivH	livH	
RSDT_1000	CDS	+	1309943	1311019	1077	358	branched-chain amino acid ABC transporter permease LivM	livM	
RSDT_1001	CDS	+	1311040	1311807	768	255	branched-chain amino acid ABC transporter ATP-binding protein LivG	livG	
RSDT_1002	CDS	+	1311807	1312526	720	239	branched-chain amino acid ABC transporter ATP-binding protein LivF	livF	
RSDT_1003	CDS	+	1312806	1313276	471	156	phosphatidylglycerophosphatase A	pgpA	3.1.3.27
RSDT_1004	CDS	-	1313551	1313333	219	72	translation initiation factor IF-1	infA	
RSDT_pg_168	pseudogene	+	1313713	1313992	280	x	pseudogene of transposase		
RSDT_1005	CDS	+	1314145	1316994	2850	949	isoleucyl-tRNA synthetase	ileS	6.1.1.5
RSDT_1006	CDS	+	1316978	1317484	507	168	signal peptidase II (lipoprotein signal peptidase)	lspA	3.4.23.36
RSDT_1007	CDS	+	1317481	1317657	177	58	conserved hypothetical protein		
RSDT_1008	CDS	+	1317686	1318591	906	301	conserved hypothetical protein		
RSDT_1009	CDS	-	1320123	1318915	1209	402	A/G-specific adenine glycosylase	mutY	3.2.2.-
RSDT_1010	CDS	+	1320246	1320755	510	169	peptidyl-prolyl cis-trans isomerase B (cyclophilin B)	ppiB	5.2.1.8

RSDT_1011	CDS	-	1322218	1321007	1212	403	acetate kinase	ackA	2.7.2.1
RSDT_1012	CDS	-	1324388	1322280	2109	702	phosphate acetyltransferase	pta	2.3.1.8
RSDT_1013	CDS	-	1327995	1324465	3531	1176	pyruvate flavodoxin oxidoreductase	nifJ	1.2.7.-
RSDT_1014	CDS	+	1328437	1329363	927	308	fructose-1,6-bisphosphate aldolase	fbaA	4.1.2.13
RSDT_1015	CDS	+	1329509	1331611	2103	700	anaerobic ribonucleoside-triphosphate reductase	nrdD	1.17.4.2
RSDT_1016	CDS	+	1331647	1332336	690	229	anaerobic ribonucleoside-triphosphate reductase activating protein		
RSDT_pg_169	pseudogene	-	1333138	1332373	766	x	pseudogene of conserved hypothetical protein		
RSDT_1017	CDS	-	1333918	1333142	777	258	sirohydrochlorin cobaltochelataze	cbiKc	4.99.1.3
RSDT_tRNA_48	tRNA	+	1334013	1334089	77	xx	tRNA-Arg		
RSDT_pg_170	pseudogene	+	1335081	1335359	279	x	pseudogene of DNA restriction-modification system methyltransferase subunit		
RSDT_pg_171	pseudogene	+	1335359	1336045	687	x	pseudogene of DNA restriction-modification system endonuclease subunit		
RSDT_1018	CDS	+	1336784	1337206	423	140	conserved hypothetical protein		
RSDT_1019	CDS	-	1338394	1337342	1053	350	phosphoribosyl-aminoimidazole synthetase	purM	6.3.3.1
RSDT_1020	CDS	+	1338734	1339237	504	167	cob(I)alamin adenosyltransferase	cobA	2.5.1.17
RSDT_pg_172	pseudogene	+	1339243	1339752	510	x	pseudogene of conserved hypothetical protein		
RSDT_1021	CDS	-	1340302	1339754	549	182	uncharacterized BON-domain containing protein		
RSDT_1022	CDS	-	1341558	1340308	1251	416	UDP-N-acetylglucosamine 1-carboxyvinyltransferase	murA	2.5.1.7
RSDT_tRNA_49	tRNA	+	1341706	1341781	76	xx	tRNA-His		
RSDT_1023	CDS	+	1342570	1342899	330	109	conserved hypothetical protein		
RSDT_1024	CDS	+	1342963	1344261	1299	432	adenylosuccinate synthetase	purA	6.3.4.4
RSDT_1025	CDS	+	1344254	1345237	984	327	DNA polymerase III subunit delta'	holB	2.7.7.7
RSDT_1026	CDS	-	1345665	1345153	513	170	conserved hypothetical protein		
RSDT_1027	CDS	-	1347116	1345719	1398	465	undecaprenyl-phosphate galactose phosphotransferase	wbaP	2.7.8.6
RSDT_1028	CDS	-	1348466	1347243	1224	407	conserved hypothetical protein		
RSDT_1029	CDS	-	1349989	1348496	1494	497	membrane bound O-acyl transferase MBOAT family protein		
RSDT_1030	CDS	-	1350417	1350130	288	95	integration host factor A	ihfA	

RSDT_1031	CDS	+	1350603	1351613	1011	336	radical SAM domain-containing protein		
RSDT_pg_173	pseudogene	-	1352072	1351757	316	x	pseudogene of conserved hypothetical protein		
RSDT_1032	CDS	-	1352899	1352120	780	259	acetylglutamate kinase	argB	2.7.2.8
RSDT_1033	CDS	+	1353251	1354639	1389	462	glutamyl-tRNA synthetase	gltX	6.1.1.17
RSDT_1034	CDS	-	1355803	1355126	678	225	conserved hypothetical protein		
RSDT_pg_174	pseudogene	-	1356046	1355818	229	x	pseudogene of putative tRNA methyltransferase		
RSDT_1035	CDS	-	1357453	1356407	1047	348	aspartate-semialdehyde dehydrogenase	asd	1.2.1.11
RSDT_1036	CDS	-	1358926	1357562	1365	454	asparaginyl-tRNA synthetase	asnC	6.1.1.22
RSDT_1037	CDS	-	1359609	1359151	459	152	3-hydroxyacyl-[acyl-carrier-protein] dehydratase	fabZ	4.2.1.59
RSDT_1038	CDS	-	1360245	1359685	561	186	outer membrane chaperone Skp	skp	
RSDT_pg_175	pseudogene	+	1360403	1360928	526	x	pseudogene of D-alanyl-D-alanine dipeptidase	vanX	3.4.13.22
RSDT_1039	CDS	-	1361937	1361026	912	303	D-alanine-D-alanine ligase	ddl	6.3.2.4
RSDT_1040	CDS	-	1362583	1361894	690	229	uncharacterized metal dependent phosphohydrolase		
RSDT_pg_176	pseudogene	-	1363122	1362817	306	x	pseudogene of type III restriction-modification system methyltransferase subunit		
RSDT_1041	CDS	+	1363660	1364127	468	155	ammonia-forming cytochrome c nitrite reductase small subunit	nrfH	1.7.2.2
RSDT_1042	CDS	+	1364120	1365700	1581	526	ammonia-forming cytochrome c nitrite reductase large subunit	nrfA	1.7.2.2
RSDT_1043	CDS	-	1366396	1365779	618	205	uncharacterized selenium metabolism protein YedF	yedF	
RSDT_pg_177	pseudogene	-	1366696	1366446	251	x	pseudogene of lesion-bypass DNA polymerase V subunit UmuD	umuD	3.4.21.-
RSDT_pg_178	pseudogene	+	1366907	1367074	168	x	pseudogene of glyceraldehyde-3-phosphate dehydrogenase	gap2	1.2.1.12
RSDT_pg_179	pseudogene	+	1367453	1367669	217	x	pseudogene of transposase		
RSDT_1044	CDS	+	1367728	1368012	285	94	conserved hypothetical protein		
RSDT_1045	CDS	-	1369519	1368089	1431	476	ArsB/NhaD family permease		
RSDT_1046	CDS	+	1369671	1370276	606	201	tRNA (guanosine-2'-O-)-methyltransferase	trmH	2.1.1.34
RSDT_1047	CDS	+	1370475	1372016	1542	513	RfbX-like uncharacterized exporter involved in cell wall biogenesis		
RSDT_pg_180	pseudogene	+	1372067	1372382	316	x	pseudogene of conserved hypothetical protein		
RSDT_1048	CDS	-	1372877	1372404	474	157	alternative heme biosynthesis protein AhbB	ahbB	
RSDT_pg_181	pseudogene	-	1373427	1372971	457	x	pseudogene of conserved hypothetical protein		

RSDT_1049	CDS	-	1373854	1373588	267	88 uncharacterized RNA-binding protein		
RSDT_1050	CDS	-	1375389	1374022	1368	455 replicative DNA helicase	dnaB	3.6.4.12
RSDT_1051	CDS	-	1375970	1375446	525	174 50S ribosomal protein L9	rplI	
RSDT_1052	CDS	-	1376247	1375984	264	87 30S ribosomal protein S18	rpsR	
RSDT_1053	CDS	-	1376557	1376249	309	102 30S ribosomal protein S6	rpsF	
RSDT_pg_182	pseudogene	-	1377884	1377197	688 x	pseudogene of putative glycerate dehydrogenase	hprA	1.1.1.29
RSDT_1054	CDS	-	1378485	1378021	465	154 peptidoglycan-associated lipoprotein Pal	pal	
RSDT_1055	CDS	-	1380069	1378765	1305	434 Tol-Pal system periplasmic component TolB	tolB	
RSDT_1056	CDS	-	1381318	1380407	912	303 Tol-Pal system inner membrane component TolA	tolA	
RSDT_1057	CDS	-	1381768	1381325	444	147 Tol-Pal system inner membrane component TolR	tolR	
RSDT_1058	CDS	-	1382465	1381773	693	230 Tol-Pal system inner membrane component TolQ	tolQ	
RSDT_1059	CDS	-	1383515	1382670	846	281 protein HflC	hflC	
RSDT_1060	CDS	-	1384681	1383515	1167	388 protein HflK	hflK	
RSDT_1061	CDS	-	1386179	1385403	777	258 thiazole synthase	thiG	2.8.1.10
RSDT_1062	CDS	-	1386382	1386182	201	66 sulfur carrier protein ThiS	thiS	
RSDT_pg_183	pseudogene	+	1386447	1386620	174 x	pseudogene of transposase		
RSDT_pg_184	pseudogene	+	1386715	1387111	397 x	pseudogene of TonB system biopolymer transporter ExbD	exbD	
RSDT_1063	CDS	-	1388598	1387462	1137	378 queuine tRNA-ribosyltransferase	tgt	2.4.2.29
RSDT_1064	CDS	+	1388705	1389835	1131	376 alanine racemase	alr	5.1.1.1
RSDT_1065	CDS	+	1389972	1390181	210	69 Sec-independent protein translocase protein TatA	tatA	
RSDT_pg_185	pseudogene	+	1390333	1390764	432 x	pseudogene of amino acid-binding ACT domain protein		
RSDT_1066	CDS	+	1390988	1391275	288	95 chaperonin GroES	groS	
RSDT_1067	CDS	+	1391318	1392958	1641	546 chaperonin GroEL	groL	
RSDT_1068	CDS	-	1394151	1393141	1011	336 thiamine-monophosphate kinase	thiL	2.7.4.16
RSDT_1069	CDS	-	1396303	1394153	2151	716 DNA helicase II UvrD	uvrD	3.6.4.12
RSDT_1070	CDS	-	1396619	1396365	255	84 [NiFe] hydrogenase maturation protein HypC	hypC	
RSDT_1071	CDS	-	1397648	1396641	1008	335 [NiFe] hydrogenase maturation protein HypE	hypE	

RSDT_1072	CDS	-	1398751	1397648	1104	367 [NiFe] hydrogenase maturation protein HypD	hypD
RSDT_1073	CDS	-	1399788	1398766	1023	340 UDP-N-acetylglucosamine 4-epimerase	wbpP 5.1.3.7
RSDT_1074	CDS	-	1400737	1399931	807	268 tRNA threonylcarbamoyladenosine biosynthesis protein TsaB	tsaB
RSDT_1075	CDS	-	1401867	1400746	1122	373 putative membrane-associated zinc metalloprotease	
RSDT_1076	CDS	-	1403177	1401864	1314	437 1-deoxy-D-xylulose 5-phosphate reductoisomerase	dxr 1.1.1.267
RSDT_1077	CDS	-	1404017	1403199	819	272 phosphatidate cytidyltransferase	cdsA 2.7.7.41
RSDT_1078	CDS	-	1404758	1404048	711	236 undecaprenyl diphosphate synthase	uppS 2.5.1.31
RSDT_pg_186	pseudogene	-	1405076	1404851	226 x	pseudogene of transposase	
RSDT_1079	CDS	-	1406302	1405259	1044	347 putative molybdoprotein maturation protien	
RSDT_pg_187	pseudogene	+	1406542	1406940	399 x	pseudogene of uncharacterized glycosyl transferase	
RSDT_1080	CDS	-	1407517	1406999	519	172 Holliday junction resolvase RuvC	ruvC 3.1.22.4
RSDT_1081	CDS	-	1408305	1407568	738	245 uncharacterized transcriptional regulator	
RSDT_1082	CDS	-	1408928	1408329	600	199 23S rRNA Um2552 methyltransferase	rlmE 2.1.1.166
RSDT_pg_188	pseudogene	-	1409348	1409012	337 x	pseudogene of transposase	