

Supplementary Dataset S1 Swit Loci without reads in any of the libraries

Replicon	locus	COG	product
Chromosome	Swit_0001	COG0593L	chromosomal replication initiation protein
	Swit_0007	COG0337E	3-dehydroquinate synthase
	Swit_0008	COG0703E	shikimate kinase
	Swit_0022	COG0142H	farnesyl-diphosphate synthase
	Swit_0023	COG0669H	phosphopantetheine adenyltransferase
	Swit_0030	COG0105F	nucleoside diphosphate kinase
	Swit_0034	COG0150F	phosphoribosylaminoimidazole synthetase
	Swit_0036	COG0593L	DNA replication initiation ATPase
	Swit_0043	COG0173J	aspartyl-tRNA synthetase
	Swit_0047	COG1724N	hypothetical protein
	Swit_0050	COG2945R	alpha/beta fold family hydrolase-like protein
	Swit_0055	COG2812L	DNA polymerase III subunits gamma and tau
	Swit_0062	COG1310R	Mov34/MPN/PAD-1 family protein
	Swit_0066	COG0835NT	CheW protein
	Swit_0075	COG0009J	translation factor SUA5
	Swit_0076	COG1725K	GntR family transcriptional regulator
	Swit_0081	COG1109G	phosphoglucosamine mutase
	Swit_0082	COG0351H	phosphomethylpyrimidine kinase
	Swit_0084	COG0238J	30S ribosomal protein S18
	Swit_0086	COG0331I	[acyl-carrier-protein] S-malonyltransferase
	Swit_0087	COG1028IQR	3-oxoacyl-[acyl-carrier-protein] reductase
	Swit_0088	COG0236IQ	acyl carrier protein
	Swit_0091	NOG127839S	hypothetical protein
	Swit_0095	COG0002E	N-acetyl-gamma-glutamyl-phosphate reductase
	Swit_0102	COG0152F	phosphoribosylaminoimidazole-succinocarboxamide synthase
	Swit_0104	COG1018C	ferredoxin--NADP(+) reductase
	Swit_0107	COG0188L	DNA topoisomerase IV subunit A
	Swit_0120	COG0848U	biopolymer transport protein ExbD/TolR
	Swit_0121	COG0524G	ribokinase-like domain-containing protein
	Swit_0171	-	hypothetical protein
	Swit_0172	COG1396K	XRE family transcriptional regulator
	Swit_0194	NOG84843S	hypothetical protein
	Swit_0204	COG0289E	dihydrodipicolinate reductase
	Swit_0229	COG0215J	cysteinyl-tRNA synthetase
	Swit_0240	COG0288P	carbonate dehydratase
	Swit_0241	COG0320H	lipoyl synthase
	Swit_0244	COG1211I	bifunctional 2-C-methyl-D-erythritol 4-phosphate cytidyltransferase/2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase protein
	Swit_0250	COG2204T	two component sigma-54 specific Fis family transcriptional regulator
	Swit_0251	COG1923R	RNA-binding protein Hfq
	Swit_0388	COG3200E	3-deoxy-D-arabinoheptulosonate-7-phosphate synthase
	Swit_0398	COG2893G	PTS system fructose subfamily transporter subunit IIA
	Swit_0400	COG1493T	Hpr(Ser) kinase/phosphatase
	Swit_0402	COG0745TK	two component transcriptional regulator
	Swit_0405	COG0516F	inosine-5'-monophosphate dehydrogenase
	Swit_0409	COG1995H	4-hydroxythreonine-4-phosphate dehydrogenase
	Swit_0410	COG0760O	PpiC-type peptidyl-prolyl cis-trans isomerase
	Swit_0411	COG1452M	organic solvent tolerance protein
	Swit_0425	COG0047F	phosphoribosylformylglycinamide synthase I
	Swit_0426	COG1828F	phosphoribosylformylglycinamide synthase PurS
	Swit_0431	COG0568K	RNA polymerase sigma factor RpoD
	Swit_0435	COG0505EF	carbamoyl phosphate synthase small subunit
	Swit_0437	-	hypothetical protein
	Swit_0438	COG0458EF	carbamoyl phosphate synthase large subunit
	Swit_0441	NOG08170S	hypothetical protein
	Swit_0445	NOG77021S	hypothetical protein
	Swit_0447	COG0138F	bifunctional phosphoribosylaminoimidazolecarboxamide formyltransferase/IMP cyclohydrolase
	Swit_0451	COG1538MU	RND efflux system outer membrane lipoprotein
	Swit_0452	COG1566V	secretion protein HlyD family protein
	Swit_0453	COG2814G	hypothetical protein
	Swit_0458	COG0688I	phosphatidylserine decarboxylase
	Swit_0459	COG1183I	CDP-diacylglycerol--serine O-phosphatidyltransferase
	Swit_0463	COG0233J	ribosome recycling factor
	Swit_0464	COG0020I	undecaprenyl pyrophosphate synthetase
	Swit_0465	COG0575I	phosphatidate cytidyltransferase
	Swit_0466	COG0743I	1-deoxy-D-xylulose 5-phosphate reductoisomerase
	Swit_0468	COG4775M	surface antigen (D15)
	Swit_0469	NOG76895S	outer membrane chaperone Skp
	Swit_0470	COG0764I	3-hydroxyacyl-[acyl-carrier-protein] dehydratase
	Swit_0471	COG0254J	50S ribosomal protein L31
	Swit_0479	COG0684H	dimethylmenaquinone methyltransferase
	Swit_0483	COG1686M	Serine-type D-Ala-D-Ala carboxypeptidase
	Swit_0484	COG0125F	thymidylate kinase
	Swit_0485	COG0470L	DNA polymerase III subunit delta'
	Swit_0486	COG0143J	methionyl-tRNA synthetase
	Swit_0492	COG1077D	rod shape-determining protein MreB
	Swit_0493	COG1792M	rod shape-determining protein MreC
	Swit_0494	NOG70780S	hypothetical protein
	Swit_0496	COG0772D	rod shape-determining protein RodA
	Swit_0512	COG0468L	recombinase A
	Swit_0517	COG0329EM	dihydrodipicolinate synthase
	Swit_0542	COG4232OC	cytochrome c biogenesis transmembrane protein
	Swit_0551	COG0350L	methylated-DNA--protein-cysteine methyltransferase
	Swit_0567	COG0689J	ribonuclease PH
	Swit_0573	COG0189HJ	glutathione synthetase
	Swit_0574	COG0586S	hypothetical protein
	Swit_0581	-	hypothetical protein
	Swit_0582	COG0302H	GTP cyclohydrolase
	Swit_0585	COG2824P	alkylphosphonate utilization operon protein PhnA
	Swit_0586	COG1897E	homoserine O-succinyltransferase
	Swit_0593	COG0740OU	ATP-dependent Clp protease proteolytic subunit
	Swit_0597	COG0064J	aspartyl/glutamyl-tRNA amidotransferase subunit B
	Swit_0598	COG0154J	aspartyl/glutamyl-tRNA amidotransferase subunit A

Swit_0599	COG0721J	aspartyl/glutamyl-tRNA amidotransferase subunit C
Swit_0602	COG0540F	aspartate carbamoyltransferase catalytic subunit
Swit_0603	COG0044F	dihydroorotase
Swit_0607	COG0560E	phosphoserine phosphatase
Swit_0608	COG0324J	tRNA delta(2)-isopentenylpyrophosphate transferase
Swit_0610	COG0440E	acetolactate synthase 3 regulatory subunit
Swit_0611	COG0059EH	ketol-acid reductoisomerase
Swit_0618	COG0825I	acetyl-CoA carboxylase carboxyltransferase subunit alpha
Swit_0620	COG0712C	F0F1 ATP synthase subunit delta
Swit_0621	COG0056C	F0F1 ATP synthase subunit alpha
Swit_0622	COG0224C	F0F1 ATP synthase subunit gamma
Swit_0623	COG0055C	F0F1 ATP synthase subunit beta
Swit_0624	COG0355C	F0F1 ATP synthase subunit epsilon
Swit_0626	COG3832S	activator of Hsp90 ATPase 1 family protein
Swit_0634	NOG123871S	hypothetical protein
Swit_0637	COG0172J	seryl-tRNA synthetase
Swit_0648	COG1024I	short chain enoyl-CoA hydratase
Swit_0659	COG0493ER	putative oxidoreductase
Swit_0666	COG0508C	biotin/lipoyl attachment domain-containing protein
Swit_0702	COG3564S	hypothetical protein
Swit_0755	COG3396S	phenylacetate-CoA oxygenase subunit Paal
Swit_0778	COG0115EH	branched-chain amino acid aminotransferase
Swit_0795	-	hypothetical protein
Swit_0823	COG0251J	endoribonuclease L-PSP
Swit_0845	-	hypothetical protein
Swit_0849	COG0670R	hypothetical protein
Swit_0859	COG0766M	UDP-N-acetylglucosamine 1-carboxyvinyltransferase
Swit_0863	COG3243I	poly(R)-hydroxyalkanoic acid synthase
Swit_0893	COG2146PR	Rieske (2Fe-2S) domain-containing protein
Swit_0910	COG0596R	alpha/beta hydrolase fold protein
Swit_0972	-	hypothetical protein
Swit_1089	COG0113H	delta-aminolevulinic acid dehydratase
Swit_1092	COG0525J	valyl-tRNA synthetase
Swit_1097	COG2518O	protein-L-isoaspartate(D-aspartate) O-methyltransferase
Swit_1102	COG0581P	phosphate ABC transporter inner membrane subunit PstA
Swit_1106	-	hypothetical protein
Swit_1122	-	hypothetical protein
Swit_1130	COG0698G	ribose-5-phosphate isomerase
Swit_1131	COG0112E	serine hydroxymethyltransferase
Swit_1140	COG0522J	30S ribosomal protein S4
Swit_1157	COG0788F	formyltetrahydrofolate deformylase
Swit_1184	-	hypothetical protein
Swit_1196	COG0583K	LysR family transcriptional regulator
Swit_1198	COG0626E	cystathionine gamma-synthase
Swit_1203	COG2957E	agmatine deiminase
Swit_1214	COG3514S	hypothetical protein
Swit_1230	COG1565S	hypothetical protein
Swit_1231	COG0682M	prolipoprotein diacylglycerol transferase
Swit_1237	COG1366T	anti-sigma-factor antagonist
Swit_1240	-	hypothetical protein
Swit_1243	COG2070R	2-nitropropane dioxygenase
Swit_1250	COG0443O	molecular chaperone DnaK
Swit_1253	COG0576O	GrpE protein HSP-70 cofactor
Swit_1254	COG0156H	8-amino-7-oxononanoate synthase
Swit_1255	COG0132H	dithiobiotin synthetase
Swit_1256	COG0161H	adenosylmethionine-8-amino-7-oxononanoate aminotransferase
Swit_1276	-	hypothetical protein
Swit_1297	COG0508C	2-oxoglutarate dehydrogenase E2 component
Swit_1298	COG0567C	2-oxoglutarate dehydrogenase E1 component
Swit_1299	COG0074C	succinyl-CoA synthetase subunit alpha
Swit_1300	COG0039C	malate dehydrogenase
Swit_1304	COG0479C	succinate dehydrogenase iron-sulfur subunit
Swit_1310	COG1053C	succinate dehydrogenase flavoprotein subunit
Swit_1311	COG2142C	succinate dehydrogenase subunit D
Swit_1312	COG2009C	succinate dehydrogenase subunit C
Swit_1321	COG0519F	GMP synthase
Swit_1326	COG0202K	DNA-directed RNA polymerase subunit alpha
Swit_1327	COG0100J	30S ribosomal protein S11
Swit_1328	COG0099J	30S ribosomal protein S13
Swit_1331	-	hypothetical protein
Swit_1333	COG0201U	preprotein translocase subunit SecY
Swit_1334	COG0200J	50S ribosomal protein L15
Swit_1335	COG1841J	50S ribosomal protein L30
Swit_1336	COG0098J	30S ribosomal protein S5
Swit_1337	COG0256J	50S ribosomal protein L18
Swit_1338	COG0097J	50S ribosomal protein L6
Swit_1339	COG0096J	30S ribosomal protein S8
Swit_1340	COG0199J	30S ribosomal protein S14
Swit_1341	COG0094J	50S ribosomal protein L5
Swit_1342	COG0198J	50S ribosomal protein L24
Swit_1343	COG0093J	50S ribosomal protein L14
Swit_1344	COG0186J	30S ribosomal protein S17
Swit_1345	COG0255J	50S ribosomal protein L29
Swit_1346	COG0197J	50S ribosomal protein L16
Swit_1347	COG0092J	30S ribosomal protein S3
Swit_1348	COG0091J	50S ribosomal protein L22
Swit_1349	COG0185J	30S ribosomal protein S19
Swit_1350	COG0090J	50S ribosomal protein L2
Swit_1351	COG0089J	50S ribosomal protein L23
Swit_1352	COG0088J	50S ribosomal protein L4
Swit_1353	COG0087J	50S ribosomal protein L3
Swit_1354	COG0051J	30S ribosomal protein S10
Swit_1356	COG0480J	elongation factor G
Swit_1357	COG0049J	30S ribosomal protein S7

Swit_1358	COG0048J	30S ribosomal protein S12
Swit_1378	COG0193J	peptidyl-tRNA hydrolase
Swit_1398	COG0408H	coproporphyrinogen III oxidase
Swit_1408	COG0078E	ornithine carbamoyltransferase
Swit_1409	COG4992E	acetylornithine transaminase protein
Swit_1413	COG0498E	threonine synthase
Swit_1420	COG3824S	hypothetical protein
Swit_1421	COG4133O	heme exporter protein CcmA
Swit_1452	COG1862U	protein translocase subunit yajC
Swit_1453	COG0342U	preprotein translocase subunit SecD
Swit_1454	COG0341U	protein translocase subunit secF
Swit_1461	COG1154HI	1-deoxy-D-xylulose-5-phosphate synthase
Swit_1493	COG2172T	putative anti-sigma regulatory factor
Swit_1504	COG0209F	ribonucleotide-diphosphate reductase subunit alpha
Swit_1505	-	hypothetical protein
Swit_1513	COG0162J	tyrosyl-tRNA synthetase
Swit_1517	COG2938S	hypothetical protein
Swit_1520	COG2896H	GTP cyclohydrolase subunit MoaA
Swit_1521	COG0061G	inorganic polyphosphate/ATP-NAD kinase
Swit_1574	COG1476K	XRE family transcriptional regulator
Swit_1589	-	hypothetical protein
Swit_1694	-	hypothetical protein
Swit_1791	NOG77607C	hypothetical protein
Swit_1905	COG5470S	hypothetical protein
Swit_1922	COG4391S	hypothetical protein
Swit_1923	NOG133193L	hypothetical protein
Swit_1927	COG0029H	L-aspartate oxidase
Swit_1928	COG3004P	Na ⁺ /H ⁺ antiporter NhaA
Swit_1932	COG0240C	NAD(P)H-dependent glycerol-3-phosphate dehydrogenase
Swit_1937	COG1587H	uroporphyrinogen III synthase HEM4
Swit_1941	COG0036G	ribulose-5-phosphate 3-epimerase
Swit_1984	-	hypothetical protein
Swit_2040	-	hypothetical protein
Swit_2135	COG0848U	biopolymer transport protein TolR
Swit_2184	COG3093R	XRE family plasmid maintenance system antidote protein
Swit_2210	-	hypothetical protein
Swit_2251	COG2146PR	Rieske (2Fe-2S) domain-containing protein
Swit_2292	COG0346E	glyoxalase/bleomycin resistance protein/dioxygenase
Swit_2296	-	hypothetical protein
Swit_2320	COG0776L	histone family protein DNA-binding protein
Swit_2326	COG0227J	50S ribosomal protein L28
Swit_2334	-	hypothetical protein
Swit_2337	COG0014E	gamma-glutamyl phosphate reductase
Swit_2340	COG0587L	DNA polymerase III subunit alpha
Swit_2347	COG0442J	prolyl-tRNA synthetase
Swit_2351	COG0760O	hypothetical protein
Swit_2352	COG0147EH	anthranilate synthase
Swit_2357	COG0489D	chromosome partitioning ATPase
Swit_2364	COG3572H	glutamate--cysteine ligase
Swit_2380	COG0694O	scaffold protein Nfu/NifU-like protein
Swit_2382	COG1214O	peptidase M22
Swit_2385	COG0735P	ferric uptake regulator family protein
Swit_2404	-	hypothetical protein
Swit_2425	COG3093R	XRE family plasmid maintenance system antidote protein
Swit_2428	COG0072J	phenylalanyl-tRNA synthetase subunit beta
Swit_2429	COG0016J	phenylalanyl-tRNA synthetase subunit alpha
Swit_2432	COG0291J	50S ribosomal protein L35
Swit_2434	COG0483G	histidinol-phosphate phosphatase
Swit_2436	COG5528S	hypothetical protein
Swit_2439	COG0008J	glutamyl-tRNA synthetase
Swit_2443	COG0117H	diaminohydroxyphosphoribosylaminopyrimidine deaminase / 5-amino-6-(5-phosphoribosylamino)uracil reductase
Swit_2446	COG0054H	6,7-dimethyl-8-ribityllumazine synthase
Swit_2450	COG1918P	FeoA family protein
Swit_2451	COG0370P	ferrous iron transport protein B
Swit_2452	COG0629L	single-strand binding protein
Swit_2462	COG0270L	DNA-cytosine methyltransferase
Swit_2535	COG0270L	DNA-cytosine methyltransferase
Swit_2541	COG2834M	outer membrane lipoprotein carrier protein LolA
Swit_2549	COG2941H	ubiquinone biosynthesis protein COQ7
Swit_2555	COG3761C	NADH dehydrogenase
Swit_2559	COG0318IQ	acyl-CoA synthetase
Swit_2561	COG0690U	protein translocase subunit secE/sec61 gamma
Swit_2562	COG0250K	transcription antitermination protein nusG
Swit_2563	COG0080J	50S ribosomal protein L11
Swit_2564	COG0081J	50S ribosomal protein L1
Swit_2565	COG0140E	phosphoribosyl-ATP pyrophosphatase
Swit_2595	COG0171H	NAD synthetase
Swit_2598	COG0212H	5-formyltetrahydrofolate cyclo-ligase
Swit_2601	COG0021G	transketolase
Swit_2602	COG0057G	glyceraldehyde-3-phosphate dehydrogenase
Swit_2632	NOG82017S	hypothetical protein
Swit_2656	COG0541U	signal recognition particle subunit FFH/SRP54 (srp54)
Swit_2658	COG0806J	16S rRNA processing protein RimM
Swit_2663	COG0335J	50S ribosomal protein L19
Swit_2674	COG0499H	S-adenosyl-L-homocysteine hydrolase
Swit_2685	COG1364E	bifunctional ornithine acetyltransferase/N-acetylglutamate synthase
Swit_2691	COG2334R	homoserine kinase
Swit_2692	COG0761IM	4-hydroxy-3-methylbut-2-enyl diphosphate reductase
Swit_2704	COG0742L	putative methyltransferase
Swit_2714	COG0194F	guanylate kinase
Swit_2717	COG0131E	imidazoleglycerol-phosphate dehydratase
Swit_2718	COG0118E	imidazole glycerol phosphate synthase subunit HisH
Swit_2719	COG0106E	1-(5-phosphoribosyl)-5-[(5-phosphoribosylamino)methylideneamino] imidazole-4-carboxamide isomerase
Swit_2720	COG0107E	imidazole glycerol phosphate synthase subunit HisF

Swit_2725	COG0135E	N-(5'-phosphoribosyl)anthranilate isomerase
Swit_2726	COG0133E	tryptophan synthase subunit beta
Swit_2728	COG0777I	acetyl-coenzyme A carboxylase carboxyl transferase subunit alpha
Swit_2747	COG0290J	translation initiation factor IF-3
Swit_2775	COG0781K	NusB antitermination factor
Swit_2776	COG0141E	histidinol dehydrogenase
Swit_2777	COG0040E	ATP phosphoribosyltransferase catalytic subunit
Swit_2780	COG0267J	50S ribosomal protein L33
Swit_2788	COG0414H	pantothenate synthetase
Swit_2795	COG0592L	DNA polymerase III subunit beta
Swit_2802	COG0187L	DNA gyrase subunit B
Swit_2825	COG2050Q	thioesterase superfamily protein
Swit_2829	COG0237H	dephospho-CoA kinase
Swit_2830	COG0169E	shikimate dehydrogenase
Swit_2833	COG0407H	uroporphyrinogen decarboxylase
Swit_2834	COG1981S	hypothetical protein
Swit_2844	NOG43767S	hypothetical protein
Swit_2848	COG1192D	chromosome segregation ATPase
Swit_2849	COG1475K	chromosome segregation DNA-binding protein
Swit_2851	NOG86502R	secreted (periplasmic)-like protein
Swit_2852	COG0495J	leucyl-tRNA synthetase
Swit_2855	COG0352H	thiamine monophosphate synthase
Swit_2861	COG1210M	UDP-glucose pyrophosphorylase
Swit_2862	COG0019E	diaminopimelate decarboxylase
Swit_2863	NOG80977S	hypothetical protein
Swit_2864	COG0165E	argininosuccinate lyase
Swit_2865	COG0526OC	redoxin domain-containing protein
Swit_2871	COG1872S	hypothetical protein
Swit_2901	COG1278K	cold-shock DNA-binding protein family protein
Swit_2903	COG0349J	3'-5' exonuclease
Swit_2904	COG5375S	hypothetical protein
Swit_2906	COG1137R	ABC transporter-like protein
Swit_2910	COG0548E	acetylglutamate kinase
Swit_2911	COG2171E	2,3,4,5-tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase
Swit_2914	COG2151R	FeS assembly SUF system protein
Swit_2915	COG0520E	cysteine desulfurase
Swit_2916	COG0719O	SufBD protein
Swit_2917	COG0396O	FeS assembly ATPase SufC
Swit_2919	COG1959K	BadM/Rrf2 family transcriptional regulator
Swit_2928	COG0253E	diaminopimelate epimerase
Swit_2930	COG0552U	signal recognition particle-docking protein FtsY
Swit_2956	COG1846K	MarR family transcriptional regulator
Swit_2967	COG1309K	TetR family transcriptional regulator
Swit_2970	COG0137E	argininosuccinate synthase
Swit_2974	COG3279KT	LytTR family two component transcriptional regulator
Swit_2983	COG0377C	NADH dehydrogenase subunit B
Swit_2985	COG0649C	NADH dehydrogenase subunit D
Swit_2986	COG1905C	NADH-quinone oxidoreductase subunit E
Swit_2987	-	hypothetical protein
Swit_2989	-	hypothetical protein
Swit_2991	COG1034C	NADH dehydrogenase subunit G
Swit_2993	COG1143C	NADH dehydrogenase subunit I
Swit_2994	COG0839C	NADH-ubiquinone/plastoquinone oxidoreductase subunit 6
Swit_2995	COG0713C	NADH-ubiquinone oxidoreductase subunit 4L
Swit_2996	COG1009CP	NADH dehydrogenase subunit L
Swit_2997	COG1008C	proton-translocating NADH-quinone oxidoreductase subunit M
Swit_2999	COG0340H	biotin--acetyl-CoA-carboxylase ligase
Swit_3006	COG0079E	histidinol-phosphate aminotransferase
Swit_3016	NOG86334S	hypothetical protein
Swit_3028	-	hypothetical protein
Swit_3031	COG1522K	AsnC family transcriptional regulator
Swit_3049	-	hypothetical protein
Swit_3051	-	hypothetical protein
Swit_3115	-	50S ribosomal protein L36
Swit_3117	-	hypothetical protein
Swit_3122	COG3750S	hypothetical protein
Swit_3123	COG0413H	3-methyl-2-oxobutanoate hydroxymethyltransferase
Swit_3125	COG1520S	pyrrolo-quinoline quinone
Swit_3126	COG1160R	GTP-binding protein EngA
Swit_3131	COG0026F	phosphoribosylaminoimidazole carboxylase ATPase
Swit_3132	COG0041F	phosphoribosylaminoimidazole carboxylase catalytic subunit
Swit_3133	COG0588G	phosphoglyceromutase
Swit_3137	COG2227H	type 11 methyltransferase
Swit_3138	COG2906P	hypothetical protein
Swit_3150	COG3743S	hypothetical protein
Swit_3155	NOG129164	hypothetical protein
Swit_3161	-	hypothetical protein
Swit_3165	-	hypothetical protein
Swit_3179	NOG83742S	hypothetical protein
Swit_3180	NOG137860S	hypothetical protein
Swit_3193	-	hypothetical protein
Swit_3195	COG2025C	electron transfer flavoprotein subunit alpha-like protein
Swit_3197	COG0045C	succinyl-CoA synthetase subunit beta
Swit_3212	COG0372C	citrate synthase
Swit_3213	COG0008J	glutamyl-tRNA synthetase
Swit_3219	COG0134E	indole-3-glycerol-phosphate synthase
Swit_3226	COG0547E	anthranilate phosphoribosyltransferase
Swit_3227	COG0512EH	anthranilate synthase, component II
Swit_3276	NOG73488S	hypothetical protein
Swit_3340	NOG149209K	regulatory protein LuxR
Swit_3341	COG0175EH	sulfate adenylyltransferase subunit 2
Swit_3346	NOG112943S	hypothetical protein
Swit_3365	COG0451MG	NAD-dependent epimerase/dehydratase
Swit_3373	COG0192H	S-adenosylmethionine synthetase

Swit_3375	COG0234O	chaperonin Cpn10
Swit_3444	COG0745TK	two component transcriptional regulator
Swit_3447	COG1605E	chorismate mutase
Swit_3468	COG0085K	DNA-directed RNA polymerase subunit beta
Swit_3476	COG0222J	50S ribosomal protein L7/L12
Swit_3477	COG0244J	50S ribosomal protein L10
Swit_3508	-	hypothetical protein
Swit_3528	COG1758K	DNA-directed RNA polymerase subunit omega
Swit_3537	COG1329K	CarD family transcriptional regulator
Swit_3538	COG1146C	4Fe-4S ferredoxin
Swit_3551	COG0436E	aminotransferase
Swit_3554	COG0333J	50S ribosomal protein L32
Swit_3555	COG0416I	putative glycerol-3-phosphate acyltransferase PlsX
Swit_3556	COG0332I	3-oxoacyl-ACP synthase
Swit_3564	-	hypothetical protein
Swit_3566	COG1384J	lysyl-tRNA synthetase
Swit_3570	COG0147EH	aminodeoxychorismate synthase subunit I
Swit_3573	-	hypothetical protein
Swit_3585	COG1045E	Serine O-acetyltransferase
Swit_3594	COG0558I	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase
Swit_3615	COG0594J	ribonuclease P protein
Swit_3618	COG0218R	ribosome biogenesis GTP-binding protein YsxC
Swit_3620	COG0624E	succinyl-diaminopimelate desuccinylase
Swit_3635	COG2030I	dehydratase
Swit_3661	NOG68030S	hypothetical protein
Swit_3663	COG1674D	DNA translocase FtsK
Swit_3665	COG2835S	hypothetical protein
Swit_3671	COG1223R	ATPase central domain-containing protein
Swit_3680	NOG43372S	hypothetical protein
Swit_3701	COG5639S	hypothetical protein
Swit_3702	NOG133413S	hypothetical protein
Swit_3723	COG0607P	rhodanese domain-containing protein
Swit_3741	COG0450O	1-Cys peroxiredoxin
Swit_3777	-	hypothetical protein
Swit_3784	COG0060J	isoleucyl-tRNA synthetase
Swit_3785	COG0196H	FMN adenyltransferase / riboflavin kinase
Swit_3786	COG0262H	dihydrofolate reductase
Swit_3787	COG0207F	thymidylate synthase
Swit_3789	COG0807H	GTP cyclohydrolase II
Swit_3816	COG0532J	translation initiation factor IF-2
Swit_3817	COG2740K	hypothetical protein
Swit_3818	COG1942R	4-oxalocrotonate tautomerase
Swit_3820	COG0779S	hypothetical protein
Swit_3823	COG0156H	5-aminolevulinate synthase
Swit_3824	COG0796M	glutamate racemase
Swit_3827	COG0180J	tryptophanyl-tRNA synthetase
Swit_3830	COG4395S	import inner membrane translocase subunit Tim44
Swit_3844	COG3153R	N-acetyltransferase GCN5
Swit_3845	COG1186J	peptide chain release factor 2
Swit_3849	COG4783R	peptidase M48, Ste24p
Swit_3869	COG0828J	30S ribosomal protein S21
Swit_3870	COG0545O	FKBP-type peptidylprolyl isomerase
Swit_3872	COG0736I	4'-phosphopantetheinyl transferase
Swit_3873	COG0854H	pyridoxine 5'-phosphate synthase
Swit_3874	COG0461F	orotate phosphoribosyltransferase
Swit_3878	-	hypothetical protein
Swit_3890	COG3785S	hemimethylated DNA binding protein
Swit_3891	COG0261J	50S ribosomal protein L21
Swit_3892	COG0211J	50S ribosomal protein L27
Swit_3895	COG0536R	GTPase ObgE
Swit_3896	COG0263E	gamma-glutamyl kinase
Swit_3898	NOG78488S	hypothetical protein
Swit_3899	COG0236IQ	hypothetical protein
Swit_3900	COG0156H	serine palmitoyltransferase
Swit_3902	NOG71517S	hypothetical protein
Swit_3903	COG1597IR	diacylglycerol kinase catalytic subunit
Swit_3905	COG0795R	YjgP/YjgQ family permease
Swit_3907	COG3000I	fatty acid hydroxylase
Swit_3908	NOG10641S	hypothetical protein
Swit_3912	COG0316S	iron-sulfur cluster assembly accessory protein
Swit_3928	COG0805U	Sec-independent protein translocase TatC
Swit_3929	COG1826U	twin-arginine translocation protein subunit TatB
Swit_3930	COG1826U	twin arginine translocase protein A
Swit_3935	COG0018J	arginyl-tRNA synthetase
Swit_3940	COG0206D	cell division protein FtsZ
Swit_3941	COG0849D	cell division protein FtsA
Swit_3942	COG1589M	polypeptide-transport-associated domain-containing protein
Swit_3943	COG1181M	D-alanine--D-alanine ligase
Swit_3944	COG0812M	UDP-N-acetylenolpyruvoylglucosamine reductase
Swit_3945	-	hypothetical protein
Swit_3946	COG0773M	UDP-N-acetylmuramate--L-alanine ligase
Swit_3948	COG0772D	cell cycle protein
Swit_3950	COG0472M	phospho-N-acetylmuramoyl-pentapeptide- transferase
Swit_3951	COG0770M	UDP-N-acetylmuramoyl-tripeptide--D-alanyl-D- alanine ligase
Swit_3952	COG0769M	UDP-N-acetylmuramoylalanyl-D-glutamate--2,6-diaminopimelate ligase
Swit_3970	COG0046F	phosphoribosylformylglycinamide synthase II
Swit_3972	COG1595K	ECF subfamily RNA polymerase sigma-24 factor
Swit_4028	NOG72183S	hypothetical protein
Swit_4042	COG0223J	methionyl-tRNA formyltransferase
Swit_4045	COG0242J	peptide deformylase
Swit_4047	COG0810M	TonB family protein
Swit_4051	COG0295F	cytidine deaminase
Swit_4055	COG0305L	replicative DNA helicase
Swit_4056	COG0175EH	phosphoadenosine phosphosulfate reductase

	Swit_4057	COG3749S	hypothetical protein
	Swit_4058	COG0155P	sulfite reductase
	Swit_4059	NOG81200S	hypothetical protein
	Swit_4063	NOG67770S	hypothetical protein
	Swit_4072	-	hypothetical protein
	Swit_4078	COG1846K	MarR family transcriptional regulator
	Swit_4089	COG0284F	orotidine-5'-phosphate decarboxylase
	Swit_4106	COG1947I	4-diphosphocytidyl-2-C-methyl-D-erythritol kinase
	Swit_4122	COG2514R	hypothetical protein
	Swit_4240	-	hypothetical protein
	Swit_4397	NOG86355S	hypothetical protein
	Swit_4423	-	hypothetical protein
	Swit_4455	-	hypothetical protein
	Swit_4470	NOG122730S	hypothetical protein
	Swit_4474	COG0015F	adenylosuccinate lyase
	Swit_4482	COG5336S	hypothetical protein
	Swit_4484	NOG114353C	H+-transporting two-sector ATPase C
	Swit_4485	NOG123659C	H+-transporting two-sector ATPase subunit B/B'
	Swit_4486	NOG121109C	H+-transporting two-sector ATPase subunit B/B'
	Swit_4487	-	hypothetical protein
	Swit_4494	COG0473CE	3-isopropylmalate dehydrogenase
	Swit_4502	COG2227H	3-demethylubiquinone-9 3-methyltransferase
	Swit_4503	COG0527E	aspartate kinase
	Swit_4510	COG1846K	MarR family transcriptional regulator
	Swit_4546	NOG118786S	hypothetical protein
	Swit_4553	COG0449M	glucosamine--fructose-6-phosphate aminotransferase
	Swit_4563	COG0188L	DNA gyrase subunit A
	Swit_4578	COG0187L	DNA topoisomerase IV subunit B
	Swit_4595	COG0102I	50S ribosomal protein L13
	Swit_4599	COG1028IQR	3-oxoacyl-ACP reductase
	Swit_4627	COG3947T	response regulator receiver protein
	Swit_4645	COG0361J	translation initiation factor IF-1
	Swit_4647	-	hypothetical protein
	Swit_4656	COG0129EG	dihydroxy-acid dehydratase
	Swit_4664	COG0019E	Orn/DAP/Arg decarboxylase 2
	Swit_4668	COG3742S	PilT domain-containing protein
	Swit_4672	COG1951C	fumarase
	Swit_4682	COG0104F	adenylosuccinate synthetase
	Swit_4683	COG3705E	tRNA synthetase
	Swit_4686	COG1932HE	phosphoserine aminotransferase
	Swit_4688	COG0077E	prephenate dehydratase
	Swit_4699	COG0511I	biotin carboxyl carrier protein
	Swit_4700	COG0757E	3-dehydroquinate dehydratase
	Swit_4707	COG0065E	isopropylmalate isomerase large subunit
	Swit_4709	COG0066E	isopropylmalate isomerase small subunit
	Swit_4712	COG0278O	glutaredoxin-like protein
	Swit_4715	COG0379H	quinolinate synthetase
	Swit_4716	COG0157H	nicotinate-nucleotide pyrophosphorylase
	Swit_4722	COG0625O	glutathione S-transferase domain-containing protein
	Swit_4727	COG0272L	NAD-dependent DNA ligase
	Swit_4731	COG0460E	homoserine dehydrogenase
	Swit_4732	COG1494G	fructose 1,6-bisphosphatase II
	Swit_4761	-	hypothetical protein
	Swit_4769	COG0623I	enoyl-(acyl carrier protein) reductase
	Swit_4770	COG0082E	chorismate synthase
	Swit_4785	COG1539H	dihydroneopterin aldolase
	Swit_4786	COG0620E	5- methyltetrahydropteroyltriglutamate/homocysteine S-methyltransferase
	Swit_4824	COG2932K	putative phage repressor
	Swit_4831	COG0174E	L-glutamine synthetase
	Swit_4832	COG0347E	nitrogen regulatory protein P-II
	Swit_4857	COG0752J	glycyl-tRNA synthetase subunit alpha
	Swit_4858	COG0751J	glycine--tRNA ligase
	Swit_4865	COG4965U	type II secretion system protein
	Swit_4878	COG0476H	UBA/THIF-type NAD/FAD binding protein
	Swit_4880	COG0452H	bifunctional phosphopantothenoilcysteine decarboxylase/phosphopantothenate synthase
	Swit_4884	COG2226H	ubiquinone/menaquinone biosynthesis methyltransferase
	Swit_4886	COG0268J	30S ribosomal protein S20
pSWIT02	Swit_5015	COG3293L	IS4 family transposase
pSWIT01	Swit_5118	COG3077L	addiction module antitoxin
	Swit_5187	-	hypothetical protein
	Swit_5202	COG3615P	hypothetical protein
	Swit_5217	NOG40646K	hypothetical protein
	Swit_5276	COG5527L	initiator RepB protein
	Swit_5277	-	hypothetical protein
	Swit_5325	-	XRE family transcriptional regulator
	Swit_5326	COG1104E	class V aminotransferase
	Swit_5327	NOG86980S	hypothetical protein
	Swit_5328	NOG41395S	hypothetical protein
	Swit_5329	COG0175EH	phosphoadenosine phosphosulfate reductase
rRNA	Swit_R0002	-	SRP RNA; RNA component of signal recognition particle
	Swit_R0004	-	tRNA-Val
	Swit_R0005	-	tRNA-Arg
	Swit_R0010	-	tRNA-Gly
	Swit_R0011	-	tRNA-Arg
	Swit_R0012	-	tRNA-Leu
	Swit_R0013	-	tRNA-Leu
	Swit_R0014	-	tRNA-Gln
	Swit_R0015	-	tRNA-Thr
	Swit_R0017	-	tRNA-Cys
	Swit_R0018	-	tRNA-Lys
	Swit_R0019	-	tRNA-Arg
	Swit_R0020	-	tRNA-Pro
	Swit_R0021	-	tRNA-Asn
	Swit_R0022	-	tRNA-Met

Swit_R0023	-	tRNA-Gly
Swit_R0024	-	tRNA-Tyr
Swit_R0025	-	tRNA-Ala
Swit_R0032	-	tRNA-Pro
Swit_R0033	-	tRNA-Pro
Swit_R0034	-	tRNA-Trp
Swit_R0035	-	tRNA-Leu
Swit_R0036	-	tRNA-Pro
Swit_R0039	-	tRNA-Asp
Swit_R0046	-	tRNA-Gly
Swit_R0047	-	tRNA-Ser
Swit_R0048	-	tRNA-His
Swit_R0049	-	tRNA-Leu
Swit_R0052	-	tRNA-Met
Swit_R0054	-	tRNA-Gln
Swit_R0055	-	tRNA-Glu
Swit_R0056	-	tRNA-Ser