

Electronic Supplementary Material

Title: Transcriptomic Responses of *Synechocystis* sp. PCC 6803 Encapsulated in Silica Gel

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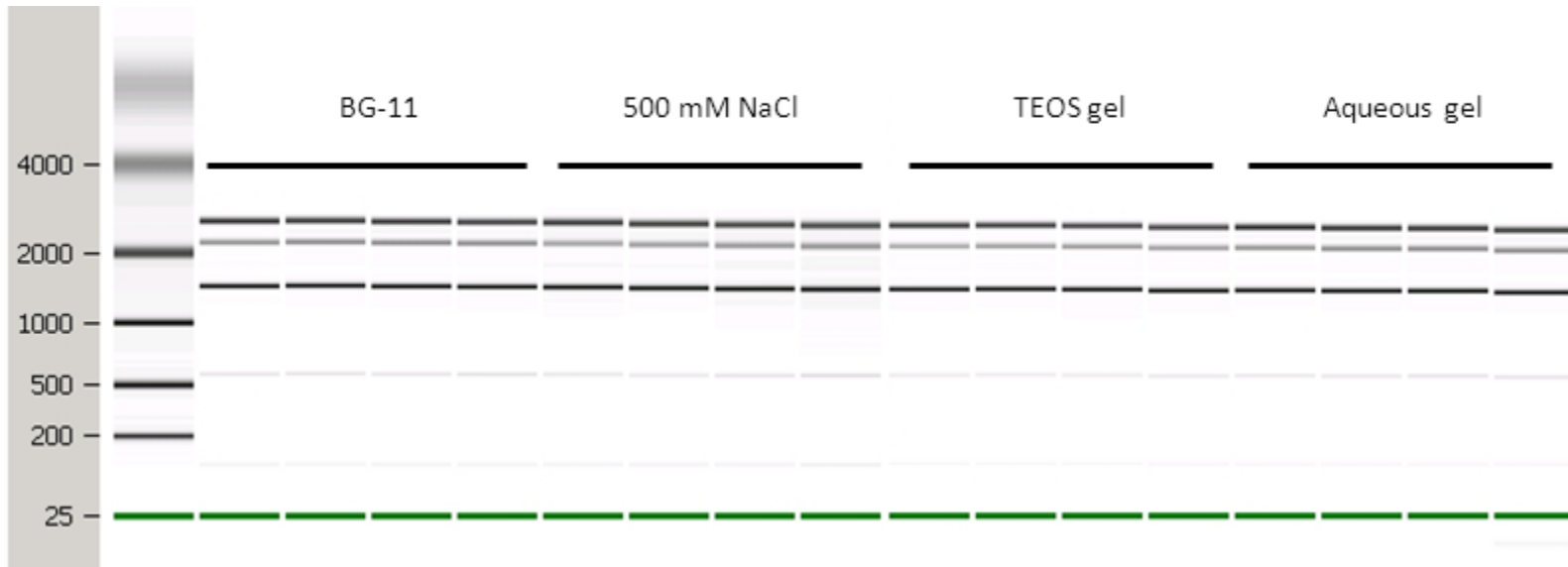
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Fig. S1



Bioanalyzer trace from concentrated, DNase-treated RNA samples. The five bands represent 23S (2.8 kb), 16S (1.5 kb), and 5S (0.12 kb) rRNAs as well as *in vivo* cleavage products of the 23S sequence (2.3 kb and 0.5 kb)

Table S1

Gene#	Function	Category	Fold Change
slr0899	cyanate lyase	Amino acid biosynthesis	2.41
slr1756	glutamate--ammonia ligase	Amino acid biosynthesis	2.33
slr0738	anthranilate synthetase alpha-subunit	Amino acid biosynthesis	-1.52
slr0898	ferredoxin--nitrite reductase	Amino acid biosynthesis	4.35
slr2088	acetohydroxy acid synthase	Amino acid biosynthesis	-1.57
slI1981	acetolactate synthase	Amino acid biosynthesis	-1.85
slr0186	2-isopropylmalate synthase	Amino acid biosynthesis	-1.78
slI0450	cytochrome b subunit of nitric oxide reductase	Amino acid biosynthesis	-1.70
slr0452	dihydroxyacid dehydratase	Amino acid biosynthesis	-1.52
slI0250	pantothenate metabolism flavoprotein	Biosynthesis of cofactors, prosthetic groups, and carriers	2.31
slr1254	phytoene dehydrogenase (phytoene desaturase)	Biosynthesis of cofactors, prosthetic groups, and carriers	2.62
slI1184	heme oxygenase	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.29
slI0383	cobalamin biosynthesis protein M	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.89
slr0749	light-independent protochlorophyllide reductase iron protein subunit ChL	Biosynthesis of cofactors, prosthetic groups, and carriers	-3.43
slr1238	glutathione synthetase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.81
slr1239	pyridine nucleotide transhydrogenase alpha subunit	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.79
slr1255	phytoene synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.88
slr1992	glutathione peroxidase-like NADPH peroxidase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.66
slr1269	gamma-glutamyltranspeptidase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.51
slI1091	geranylgeranyl hydrogenase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.98
slr0940	zeta-carotene desaturase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.70
slI1536	molybdopterin biosynthesis MoeB protein	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.73
slr0772	light-independent protochlorophyllide reductase subunit ChB	Biosynthesis of cofactors, prosthetic groups, and carriers	-6.42
slr0426	GTP cyclohydrolase I	Biosynthesis of cofactors, prosthetic groups, and carriers	1.64
slr0600	NADP-thioredoxin reductase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.65
slI1550	probable porin; major outer membrane protein	Cell envelope	2.31
slr0017	UDP-N-acetylglucosamine 1-carboxyvinyltransferase	Cell envelope	2.22
slr1615	perosamine synthetase	Cell envelope	-1.80
slr0993	putative peptidase	Cell envelope	1.50
slI0016	probable membrane-bound lytic transglycosylase A	Cell envelope	-1.65
slI0379	acyl-[acyl-carrier-protein]-UDP-N-acetylglucosamine o-acyltransferase	Cell envelope	1.58
slr1747	cell death suppressor protein Lls1 homolog	Cellular processes	2.59
slI1533	twitching mobility protein	Cellular processes	-3.13
slr0162	a part of pilC, pilin biogenesis protein, required for twitching motility	Cellular processes	-2.01
slr0163	a part of pilC, pilin biogenesis protein, required for twitching motility	Cellular processes	-2.02
slr1929	type 4 pilin-like protein	Cellular processes	-2.94
slr0079	probable general secretion pathway protein E	Cellular processes	-2.30

slI1694	pilin polypeptide PilA1	Cellular processes	-1.91
slr1516	superoxide dismutase	Cellular processes	1.84
slI1514	16.6 kDa small heat shock protein, molecular chaperone	Cellular processes	-4.19
slr0161	twitching motility protein PilT	Cellular processes	-1.93
slI0755	thioredoxin peroxidase	Cellular processes	-1.50
slr0228	cell division protein FtsH	Cellular processes	1.53
slr0063	pilus biogenesis protein homologous to general secretion pathway protein E	Cellular processes	-1.58
slI1695	pilin polypeptide PilA2	Cellular processes	-7.06
slI0430	HtpG, heat shock protein 90, molecular chaperone	Cellular processes	-1.78
slI1566	glucosylglycerolphosphate synthase (ggpS)	Central intermediary metabolism	2.41
slI1356	glycogen phosphorylase	Central intermediary metabolism	-3.25
slr1830	poly(3-hydroxyalkanoate) synthase	Central intermediary metabolism	-1.90
slr1857	isoamylase	Central intermediary metabolism	1.79
slr0897	probable endoglucanase	Central intermediary metabolism	-1.78
slr0518	similar to alpha-L-arabinofuranosidase B	Central intermediary metabolism	-1.64
slr1176	glucose-1-phosphate adenyltransferase	Central intermediary metabolism	1.69
slr1322	putative modulator of DNA gyrase; TldD	DNA replication, restriction, modification, recombination, and repair	1.59
slr0293	glycine dehydrogenase	Energy metabolism	2.20
slr1124	phosphoglycerate mutase	Energy metabolism	1.61
slr1793	transaldolase	Energy metabolism	-1.70
slI1189	glycolate oxidase subunit GlcE	Energy metabolism	1.65
slr0301	phosphoenolpyruvate synthase	Energy metabolism	-2.48
slI1070	transketolase	Energy metabolism	1.97
slr1233	succinate dehydrogenase flavoprotein subunit	Energy metabolism	-1.51
slI1234	adenosylhomocysteinase	Energy metabolism	1.72
slI0807	pentose-5-phosphate-3-epimerase	Energy metabolism	1.70
slI0422	asparaginase	Energy metabolism	1.53
slI0891	malate dehydrogenase	Energy metabolism	-1.73
slr1350	acyl-lipid desaturase (delta 12)	Fatty acid, phospholipid and sterol metabolism	2.47
slI1655	similar to biotin [acetyl-CoA-carboxylase] ligase	Fatty acid, phospholipid and sterol metabolism	-1.89
slI1069	3-oxoacyl-[acyl-carrier-protein] synthase II	Fatty acid, phospholipid and sterol metabolism	1.82
slr2089	squalene-hopene-cyclase	Fatty acid, phospholipid and sterol metabolism	1.64
slI0330	sepiapterine reductase	Fatty acid, phospholipid and sterol metabolism	-5.12
slr0384	sulfoquinovosyldiacylglycerol biosynthesis protein SqdX	Fatty acid, phospholipid and sterol metabolism	1.52
slr0574	cytochrome P450	Fatty acid, phospholipid and sterol metabolism	-1.50
slI1214	hypothetical protein YCF59	Hypothetical	-1.57
slr1114	hypothetical protein	Hypothetical	-1.55
slr1128	hypothetical protein	Hypothetical	-1.72
slr0244	hypothetical protein	Hypothetical	-1.92

slr0399	chaperon-like protein for quinone binding in photosystem II	Hypothetical	2.79
slr1593	hypothetical protein	Hypothetical	2.33
slr1919	hypothetical protein	Hypothetical	2.71
slr1100	hypothetical protein	Hypothetical	-1.68
slr1101	hypothetical protein	Hypothetical	-1.79
slr2006	hypothetical protein	Hypothetical	2.50
slI1911	hypothetical protein	Hypothetical	2.94
slI1193	hypothetical protein	Hypothetical	-1.54
slI0249	hypothetical protein	Hypothetical	54.62
slr0980	hypothetical protein	Hypothetical	-1.58
slr0981	hypothetical protein	Hypothetical	-1.94
slr1611	hypothetical protein	Hypothetical	-1.77
slr1081	hypothetical protein	Hypothetical	-1.65
slr1083	hypothetical protein	Hypothetical	-1.59
slI1021	hypothetical protein	Hypothetical	-1.80
slr0686	hypothetical protein	Hypothetical	-1.50
slr1600	hypothetical protein	Hypothetical	1.65
slr1603	hypothetical protein	Hypothetical	-1.62
slI1541	hypothetical protein	Hypothetical	2.30
slr1770	hypothetical protein	Hypothetical	-1.99
slI1938	hypothetical protein	Hypothetical	-1.57
slI1934	hypothetical protein	Hypothetical	-1.71
slr1915	hypothetical protein	Hypothetical	-1.84
slr1918	hypothetical protein	Hypothetical	-1.53
slr0320	hypothetical protein	Hypothetical	2.22
slI0997	hypothetical protein	Hypothetical	-1.99
slI0995	hypothetical protein	Hypothetical	-1.51
slr1034	hypothetical protein YCF41	Hypothetical	-1.69
slI0983	hypothetical protein	Hypothetical	-1.68
slI0157	hypothetical protein	Hypothetical	2.19
slI0685	hypothetical protein	Hypothetical	2.34
slr0642	hypothetical protein	Hypothetical	2.03
slr1704	hypothetical protein	Hypothetical	-1.57
slr0423	hypothetical protein	Hypothetical	2.31
slr0082	hypothetical protein	Hypothetical	2.48
slI1921	hypothetical protein	Hypothetical	-1.58
slr0787	hypothetical protein	Hypothetical	2.17
slI1071	hypothetical protein	Hypothetical	1.67
slI0529	hypothetical protein	Hypothetical	2.09
slI1736	hypothetical protein	Hypothetical	-1.57

slI1549	salt-enhanced periplasmic protein	Hypothetical	8.12
slr1236	hypothetical protein	Hypothetical	-1.51
slr1613	hypothetical protein	Hypothetical	-2.19
slr1614	hypothetical protein	Hypothetical	-2.09
slr0680	hypothetical protein	Hypothetical	-3.27
slr1851	hypothetical protein	Hypothetical	-2.85
slr2052	hypothetical protein	Hypothetical	-2.10
slr1442	hypothetical protein	Hypothetical	-1.60
slr1444	hypothetical protein	Hypothetical	-1.55
slr0885	hypothetical protein	Hypothetical	-1.62
slI1926	hypothetical protein	Hypothetical	-2.53
slr1752	hypothetical protein	Hypothetical	-2.15
ssr2062	hypothetical protein	Hypothetical	-2.35
slI1358	putative oxalate decarboxylase, periplasmic protein	Hypothetical	-3.61
slr1870	hypothetical protein	Hypothetical	-1.61
slI1769	hypothetical protein	Hypothetical	1.54
ssr3188	hypothetical protein	Hypothetical	-1.63
slr0889	hypothetical protein	Hypothetical	-2.54
slI1783	hypothetical protein	Hypothetical	-2.98
slr1811	hypothetical protein	Hypothetical	-2.14
slr1812	hypothetical protein	Hypothetical	-2.25
slr1814	hypothetical protein	Hypothetical	-2.35
slr1818	hypothetical protein	Hypothetical	-1.88
slI1693	hypothetical protein	Hypothetical	-3.50
slI0846	hypothetical protein	Hypothetical	-1.67
slI1160	hypothetical protein	Hypothetical	-1.71
slI1155	hypothetical protein	Hypothetical	-1.60
slI1692	hypothetical protein	Hypothetical	-2.28
slr1990	hypothetical protein	Hypothetical	1.50
slr1717	hypothetical protein	Hypothetical	-1.53
slI0253	hypothetical protein	Hypothetical	-2.24
ssr3571	hypothetical protein	Hypothetical	-3.11
slr2084	hypothetical protein	Hypothetical	-1.66
slr2125	hypothetical protein	Hypothetical	-2.26
slr1513	periplasmic protein, function unknown	Hypothetical	1.68
ssr1375	hypothetical protein	Hypothetical	-2.57
ssl0461	hypothetical protein	Hypothetical	4.32
slI1446	hypothetical protein	Hypothetical	-2.03
slI1222	hypothetical protein	Hypothetical	-1.67
slI0814	hypothetical protein	Hypothetical	1.98

slI0803	hypothetical protein	Hypothetical	-1.64
slI0802	hypothetical protein	Hypothetical	-1.61
slr1173	hypothetical protein	Hypothetical	-2.01
slr1686	hypothetical protein	Hypothetical	-2.77
slr1971	hypothetical protein	Hypothetical	-1.94
slI0051	hypothetical protein	Hypothetical	-2.51
slI1381	hypothetical protein	Hypothetical	-1.61
slr1273	hypothetical protein	Hypothetical	-1.58
ssr1256	hypothetical protein	Hypothetical	-2.07
ssr0756	hypothetical protein	Hypothetical	-1.63
ssr0761	hypothetical protein	Hypothetical	-1.54
slr0443	hypothetical protein	Hypothetical	1.61
slr0144	hypothetical protein	Hypothetical	-4.55
slr0400	hypothetical protein	Hypothetical	1.58
slI0355	hypothetical protein	Hypothetical	1.75
slr1152	hypothetical protein	Hypothetical	-4.89
slI0297	hypothetical protein	Hypothetical	-1.63
slr0380	hypothetical protein	Hypothetical	-1.54
slr0888	hypothetical protein	Hypothetical	-5.87
slr0770	hypothetical protein	Hypothetical	-1.83
slI0382	hypothetical protein	Hypothetical	-5.91
slI0763	hypothetical protein	Hypothetical	-1.55
slr0784	hypothetical protein	Hypothetical	1.64
slI0314	periplasmic protein, function unknown	Hypothetical	-1.95
slI0023	hypothetical protein	Hypothetical	-1.52
slr0217	hypothetical protein	Hypothetical	-1.55
slI0205	hypothetical protein	Hypothetical	-1.67
slr0480	hypothetical protein YCF46	Hypothetical	1.52
slI0617	plasma membrane protein essential for thylakoid formation	Hypothetical	-1.64
slI1696	hypothetical protein	Hypothetical	-6.18
slI0185	hypothetical protein	Hypothetical	1.51
ssl0353	hypothetical protein	Hypothetical	-1.56
slI0180	hypothetical protein	Hypothetical	-1.87
slI0888	hypothetical protein	Hypothetical	-1.64
slr0924	periplasmic protein, function unknown	Hypothetical	-1.50
slI0549	hypothetical protein	Hypothetical	1.62
slI0543	hypothetical protein	Hypothetical	-1.52
ssl1046	hypothetical protein	Hypothetical	-1.59
slr1957	hypothetical protein	Hypothetical	-7.50
slI0470	hypothetical protein	Hypothetical	-1.72

slI0381	hypothetical protein	Hypothetical	-10.03
slI0283	hypothetical protein	Hypothetical	-1.50
slI0788	hypothetical protein	Hypothetical	-1.60
slI0037	hypothetical protein	Hypothetical	-1.55
slI0498	hypothetical protein	Hypothetical	-1.95
ssr1562	hypothetical protein	Hypothetical	-1.51
slI0528	hypothetical protein	Hypothetical	-1.60
ssl1004	hypothetical protein	Hypothetical	-1.56
slr0455	hypothetical protein	Hypothetical	-1.53
slI0572	hypothetical protein	Hypothetical	-1.76
ssr5020	hypothetical protein	Hypothetical	1.50
slr5037	hypothetical protein	Hypothetical	1.73
ssl8008	hypothetical protein	Hypothetical	-1.86
slr6039	hypothetical protein	Hypothetical	-1.59
ssr1789	CAB/ELIP/HLIP-related protein HliD	Other categories	1.57
slI1298	putative carboxymethylenebutenolidase	Other categories	-1.53
ssl2542	high light-inducible polypeptide HliA, CAB/ELIP/HLIP superfamily	Other categories	3.39
slI1407	probable methyltransferase	Other categories	2.26
slr2135	hydrogenase accessory protein HupE	Other categories	1.52
slI1159	probable bacterioferritin comigratory protein	Other categories	-1.63
slI1223	diaphorase subunit of the bidirectional hydrogenase	Other categories	-1.57
slI1221	diaphorase subunit of the bidirectional hydrogenase	Other categories	-1.90
slI1220	putative diaphorase subunit of the bidirectional hydrogenase	Other categories	-1.67
slI1432	putative hydrogenase expression/formation protein HypB	Other categories	-2.06
slr1675	putative hydrogenase expression/formation protein HypA1	Other categories	-1.88
slI0947	light repressed protein A homolog	Other categories	-3.14
slr0381	lactoylglutathione lyase	Other categories	-2.18
slr1639	SsrA-binding protein	Other categories	-1.50
slr0309	probable methyltransferase	Other categories	-2.05
slI0686	probable cytochrome c-type biogenesis protein	Other categories	1.89
slI0395	phosphoglycerate mutase	Other categories	-1.58
slr1556	2-hydroxyacid dehydrogenase homolog	Other categories	-1.73
slI1108	stationary-phase survival protein SurE homolog	Other categories	1.58
slI5036	sulfide-quinone reductase	Other categories	1.51
slI0247	iron-stress chlorophyll-binding protein, homologous to psbC (CP43)	Photosynthesis and respiration	159.58
slI1327	ATP synthase gamma chain	Photosynthesis and respiration	1.99
slI1323	ATP synthase subunit b' of CF(0)	Photosynthesis and respiration	1.99
ssl2615	ATP synthase C chain of CF(0)	Photosynthesis and respiration	1.67
slI1322	ATP synthase A chain of CF(0)	Photosynthesis and respiration	1.76
slI0248	flavodoxin	Photosynthesis and respiration	74.15

slI0934	carboxysome formation protein CcmA	Photosynthesis and respiration	-1.61
ssl3093	phycobilisome small rod linker polypeptide	Photosynthesis and respiration	1.88
slI1580	phycobilisome rod linker polypeptide	Photosynthesis and respiration	1.63
slI1579	phycobilisome rod linker polypeptide	Photosynthesis and respiration	1.90
slI1578	phycocyanin alpha subunit	Photosynthesis and respiration	1.57
slI1796	cytochrome c553	Photosynthesis and respiration	1.63
slI1326	ATP synthase alpha chain	Photosynthesis and respiration	2.27
ssr3184	4Fe-4S type iron-sulfur protein	Photosynthesis and respiration	1.64
slI1324	ATP synthase B chain (subunit I) of CF(0)	Photosynthesis and respiration	2.15
slr1739	photosystem II 13 kDa protein homolog	Photosynthesis and respiration	-1.80
slI1325	ATP synthase delta chain of CF(1)	Photosynthesis and respiration	2.29
slr1291	NADH dehydrogenase subunit 4	Photosynthesis and respiration	4.38
slr2007	NADH dehydrogenase subunit 4	Photosynthesis and respiration	2.19
slI1471	phycobilisome rod-core linker polypeptide	Photosynthesis and respiration	3.64
ssl0453	phycobilisome degradation protein NbIA	Photosynthesis and respiration	-1.99
slr1329	ATP synthase beta subunit	Photosynthesis and respiration	1.60
slr1330	ATP synthase epsilon chain of CF(1)	Photosynthesis and respiration	1.77
slr0331	NADH dehydrogenase subunit 4 (involved in photosystem-1 cyclic electron flow)	Photosynthesis and respiration	-1.77
slI0027	NADH dehydrogenase subunit 4 (involved in constitutive, low affinity CO2 uptake)	Photosynthesis and respiration	1.52
slI0026	NADH dehydrogenase subunit 5 (involved in constitutive, low affinity CO2 uptake)	Photosynthesis and respiration	1.58
slr1459	phycobilisome core component	Photosynthesis and respiration	-1.68
slr1237	cytosine deaminase	Purines, pyrimidines, nucleosides, and nucleotides	1.53
slI1852	nucleoside diphosphate kinase	Purines, pyrimidines, nucleosides, and nucleotides	1.70
slI0578	phosphoribosylaminoimidazole carboxylase ATPase subunit	Purines, pyrimidines, nucleosides, and nucleotides	-1.70
slr1214	two-component response regulator PatA subfamily	Regulatory functions	-1.72
slI1771	protein serin-threonin phosphatase	Regulatory functions	-1.62
slI1626	LexA repressor	Regulatory functions	-1.57
slI1590	two-component sensor histidine kinase	Regulatory functions	-1.96
slI1594	ndhF3 operon transcriptional regulator, LysR family protein	Regulatory functions	2.36
slI1205	transcriptional regulator	Regulatory functions	2.02
slr1489	transcriptional regulator	Regulatory functions	3.09
slr0473	cyanobacterial phytochrome 1, two-component sensor histidine kinase	Regulatory functions	-4.80
slI2012	group2 RNA polymerase sigma factor SigD	Transcription	2.16
slr0083	RNA helicase Light	Transcription	2.29
slI0306	RNA polymerase group 2 sigma factor	Transcription	-2.08
slr0080	ribonuclease H	Transcription	1.82
slr1564	group 3 RNA polymerase sigma factor	Transcription	-1.52
slr1105	GTP-binding protein TypA/BipA homolog	Translation	1.98
slI0927	S-adenosylmethionine synthetase	Translation	1.77
ssl3432	30S ribosomal protein S19	Translation	1.67

slI1802	50S ribosomal protein L2	Translation	1.77
slI1801	50S ribosomal protein L23	Translation	1.61
slr1751	periplasmic carboxyl-terminal protease	Translation	-1.75
slr1228	peptide-chain-release factor 3	Translation	1.61
slI1362	isoleucyl-tRNA synthetase	Translation	1.56
slI2008	processing protease	Translation	1.60
slr1331	periplasmic processing protease	Translation	1.60
slI1198	tRNA (guanine-N1)-methyltransferase	Translation	3.54
slI0830	elongation factor EF-G	Translation	-2.14
slr0220	glycyl-tRNA synthetase beta chain	Translation	1.74
slr0713	tRNA-guanine transglycosylase	Translation	1.59
slr1316	ABC-type iron(III) dicitrate transport system permease protein	Transport and binding proteins	1.88
slr1319	iron(III) dicitrate transport system substrate-binding protein	Transport and binding proteins	1.58
slI1405	biopolymer transport ExbD protein homolog	Transport and binding proteins	9.95
slr0681	probable sodium/calcium exchanger protein	Transport and binding proteins	-1.84
slI1451	nitrate/nitrite transport system permease protein	Transport and binding proteins	9.20
slI1450	nitrate/nitrite transport system substrate-binding protein	Transport and binding proteins	9.12
slr1201	urea transport system permease protein	Transport and binding proteins	1.67
slI1404	biopolymer transport ExbB protein homolog	Transport and binding proteins	8.20
slI1452	nitrate/nitrite transport system ATP-binding protein	Transport and binding proteins	5.29
slI1762	periplasmic protein, putative polar amino acid transport system substrate-binding protein	Transport and binding proteins	-1.71
slr1881	ATP-binding subunit of the ABC-type Nat permease for neutral amino acids	Transport and binding proteins	1.67
slI1406	ferrichrome-iron receptor	Transport and binding proteins	5.28
slI0108	ammonium/methylammonium permease	Transport and binding proteins	4.75
slr1729	potassium-transporting P-type ATPase B chain	Transport and binding proteins	-1.72
slr2108	probable polysaccharide ABC transporter ATP binding subunit	Transport and binding proteins	-1.76
slr2131	RND multidrug efflux transporter	Transport and binding proteins	1.99
slr1317	ABC-type iron(III) dicitrate transport system permease protein	Transport and binding proteins	2.01
slr1728	potassium-transporting P-type ATPase A chain	Transport and binding proteins	-2.41
slr1336	H ⁺ /Ca ²⁺ exchanger	Transport and binding proteins	-2.25
slI0771	glucose transport protein	Transport and binding proteins	-2.73
slr0753	probable transport protein	Transport and binding proteins	-2.85
slr0324	probable oligopeptides ABC transporter permease protein	Transport and binding proteins	1.58
slI0759	ABC transporter ATP-binding protein	Transport and binding proteins	1.61
slr1392	ferrous iron transport protein B	Transport and binding proteins	3.15
slr1295	iron transport system substrate-binding protein	Transport and binding proteins	3.84
slr0513	iron transport system substrate-binding protein, periplasmic protein	Transport and binding proteins	2.29
slr1318	iron(III) dicitrate transport system ATP-binding protein	Transport and binding proteins	2.97
slr0415	Na ⁺ /H ⁺ antiporter	Transport and binding proteins	1.52

slI1878	iron(III)-transport ATP-binding protein	Transport and binding proteins	2.13
slI0834	low affinity sulfate transporter	Transport and binding proteins	2.27
slr1488	multidrug resistance family ABC transporter	Transport and binding proteins	2.50
slI0689	Na ⁺ /H ⁺ antiporter	Transport and binding proteins	2.26
slI1453	nitrate/nitrite transport system ATP-binding protein	Transport and binding proteins	3.32
slI0477	putative biopolymer transport ExbB-like protein	Transport and binding proteins	1.63
slr0447	periplasmic protein, ABC-type urea transport system substrate-binding protein	Transport and binding proteins	2.43
slr0544	ATP-binding protein of ABC transporter	Transport and binding proteins	-1.55
slr1200	urea transport system permease protein	Transport and binding proteins	3.25
slr0747	glucosylglycerol transport system ATP-binding protein	Transport and binding proteins	1.74
slr0454	RND multidrug efflux transporter	Transport and binding proteins	1.55
slI0575	probable lipopolysaccharide ABC transporter ATP binding subunit	Transport and binding proteins	1.94
slI0574	probable permease protein of lipopolysaccharide ABC transporter	Transport and binding proteins	1.62
slr5038	chromate transporter	Transport and binding proteins	1.79
slI1396	unknown protein	Unknown	-1.71
slI1040	unknown protein	Unknown	1.96
slI1665	unknown protein	Unknown	-1.65
ssr2153	unknown protein	Unknown	-1.77
slr1079	unknown protein	Unknown	-1.80
ssr1768	unknown protein	Unknown	-1.90
slr1082	unknown protein	Unknown	-1.56
slI0641	unknown protein	Unknown	1.51
slI1830	unknown protein	Unknown	-1.68
slI0982	unknown protein	Unknown	-1.88
slr1383	unknown protein	Unknown	-1.50
slr1397	unknown protein	Unknown	-1.73
slr2016	type 4 pilin-like protein, essential for motility	Unknown	-1.64
slr2017	type 4 pilin-like protein, essential for motility	Unknown	-1.71
slr2071	unknown protein	Unknown	-1.52
slr1232	unknown protein	Unknown	-1.95
slI1268	unknown protein	Unknown	-1.87
slI1267	unknown protein	Unknown	-1.54
slr1407	unknown protein	Unknown	-1.93
slI1765	unknown protein	Unknown	-1.78
slI0843	unknown protein	Unknown	-1.79
slr1253	unknown protein	Unknown	-1.54
slI1954	unknown protein	Unknown	-1.62
ssr2912	unknown protein	Unknown	-1.60
slI1225	unknown protein	Unknown	-1.57
slr1437	unknown protein	Unknown	-4.15

sl11892	unknown protein	Unknown	-1.51
sl11891	unknown protein	Unknown	-1.95
ssr3129	unknown protein	Unknown	-4.30
slr0442	unknown protein	Unknown	-4.55
slr1670	unknown protein	Unknown	1.61
sl11530	unknown protein	Unknown	1.53
sl11528	unknown protein	Unknown	1.61
ssr0759	unknown protein	Unknown	-1.61
sl0263	unknown protein	Unknown	1.63
slr1930	type 4 pilin-like protein	Unknown	-1.95
slr1931	type 4 pilin-like protein	Unknown	-1.52
sl11863	unknown protein	Unknown	1.91
sl11862	unknown protein	Unknown	1.91
ssr1853	unknown protein	Unknown	-2.76
sl11009	unknown protein	Unknown	-2.30
slr1768	unknown protein	Unknown	-2.92
ssr0536	unknown protein	Unknown	-1.64
slr1958	unknown protein	Unknown	-5.58
sl11583	unknown protein	Unknown	-2.64
slr1240	unknown protein	Unknown	-2.63
sl0762	unknown protein	Unknown	-1.69
sl0761	unknown protein	Unknown	-1.55
sl0756	unknown protein	Unknown	-1.61
sl11784	periplasmic protein, function unknown	Unknown	-2.10
slr1852	unknown protein	Unknown	-2.48
slr1258	unknown protein	Unknown	-2.16
slr0059	unknown protein	Unknown	-1.80
sl11426	unknown protein	Unknown	-2.05
ssr3570	unknown protein	Unknown	-2.67
sl0394	unknown protein	Unknown	-1.85
sl11882	unknown protein	Unknown	-3.04
slr0145	unknown protein	Unknown	-2.68
slr1928	type 4 pilin-like protein	Unknown	-2.46
slr0333	unknown protein	Unknown	-3.92
slr0334	unknown protein	Unknown	-3.84
sl0022	unknown protein	Unknown	-2.60
slr0841	periplasmic protein, function unknown	Unknown	-1.54
slr0226	unknown protein	Unknown	-2.03
sl0478	unknown protein	Unknown	1.58
slr0439	unknown protein	Unknown	-2.30

slr0112	unknown protein	Unknown	-1.59
slI0384	unknown protein	Unknown	-2.45
ssr0693	unknown protein	Unknown	-2.09
slr0581	unknown protein	Unknown	-2.23
slI0518	unknown protein	Unknown	1.53
slr0582	unknown protein	Unknown	-2.45
slI1365	unknown protein	Unknown	-1.72
slr1485	putative phosphatidylinositol phosphate kinase, salt-induced periplasmic protein	Unknown	2.93
ssr1038	unknown protein	Unknown	-3.09
slr0708	periplasmic protein, function unknown	Unknown	-2.73
slr1456	type 4 pilin-like protein, or general secretion pathway protein G	Unknown	-3.06
slr1484	unknown protein	Unknown	3.66
ssr2333	unknown protein	Unknown	3.40
slr1667	hypothetical protein (target gene of <i>sycrp1</i>)	Unknown	-3.85
slI0444	unknown protein	Unknown	-1.60
slI0441	unknown protein	Unknown	-1.71
slr0456	unknown protein	Unknown	-1.72
slr0587	unknown protein	Unknown	-2.82
slI8007	unknown protein	Unknown	-1.65

All genes significantly altered by encapsulation in aqueous-derived silica gel by at least 1.5-fold and a *P*-value < 0.01

Table S2

Gene#	Function	Category	Fold Change
slI0450	cytochrome b subunit of nitric oxide reductase	Amino acid biosynthesis	3.02
slI1444	3-isopropylmalate dehydratase small subunit	Amino acid biosynthesis	2.66
slr2081	prephenate dehydrogenase	Amino acid biosynthesis	2.54
slI0065	acetolactate synthase small subunit	Amino acid biosynthesis	2.50
slr0077	cysteine desulfurase	Amino acid biosynthesis	2.45
slr1665	diaminopimelate epimerase	Amino acid biosynthesis	2.12
slI0704	cysteine desulfurase	Amino acid biosynthesis	2.07
slr0055	anthranilate synthase component II	Amino acid biosynthesis	1.97
slr0661	pyrroline-5-carboxylate reductase	Amino acid biosynthesis	1.89
slI0006	putative aminotransferase	Amino acid biosynthesis	1.86
slr1848	histidinol dehydrogenase	Amino acid biosynthesis	1.82
slI0373	gamma-glutamyl phosphate reductase	Amino acid biosynthesis	1.80
slI1958	histidinol phosphate aminotransferase	Amino acid biosynthesis	1.77
slI1883	arginine biosynthesis bifunctional protein ArgJ	Amino acid biosynthesis	1.75
slI1662	probable prephenate dehydratase	Amino acid biosynthesis	1.65
slr1022	N-acetylornithine aminotransferase	Amino acid biosynthesis	1.63
slI0461	gamma-glutamyl phosphate reductase	Amino acid biosynthesis	1.59
slI1172	threonine synthase	Amino acid biosynthesis	1.58
slI1688	threonine synthase	Amino acid biosynthesis	1.56
slI1908	D-3-phosphoglycerate dehydrogenase	Amino acid biosynthesis	1.56
slI0601	nitrilase homolog	Amino acid biosynthesis	1.52
slI1112	3-dehydroquinate dehydratase	Amino acid biosynthesis	1.52
ssl2667	an assembly factor for iron-sulfur clusters	Amino acid biosynthesis	1.51
slr0395	nitrate assimilation transcriptional activator, LysR family protein	Amino acid biosynthesis	-1.58
slI1747	chorismate synthase	Amino acid biosynthesis	-1.59
slr0682	histidinol dehydrogenase	Amino acid biosynthesis	-1.67
slr0899	cyanate lyase	Amino acid biosynthesis	-1.70
slI0784	nitrilase	Amino acid biosynthesis	-1.71
slr0898	ferredoxin--nitrite reductase	Amino acid biosynthesis	-1.86
slr1139	thioredoxin	Biosynthesis of cofactors, prosthetic groups, and carriers	3.56
slr1238	glutathione synthetase	Biosynthesis of cofactors, prosthetic groups, and carriers	2.96
slI1282	riboflavin synthase beta subunit	Biosynthesis of cofactors, prosthetic groups, and carriers	2.65
slr1300	similar to 2-octaprenyl-6-methoxyphenol hydroxylase	Biosynthesis of cofactors, prosthetic groups, and carriers	2.50
ssr2061	glutaredoxin	Biosynthesis of cofactors, prosthetic groups, and carriers	2.35
slr1254	phytoene dehydrogenase (phytoene desaturase)	Biosynthesis of cofactors, prosthetic groups, and carriers	2.34
slI0067	glutathione S-transferase	Biosynthesis of cofactors, prosthetic groups, and carriers	2.26
slI1894	riboflavin biosynthesis protein RibA	Biosynthesis of cofactors, prosthetic groups, and carriers	2.11

slr0636	probable cobalamin [5'-phosphate] synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.16
slr0066	riboflavin biosynthesis protein RibD	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.20
slI0622	quinolinate synthetase	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.58
slI0383	cobalamin biosynthesis protein M	Biosynthesis of cofactors, prosthetic groups, and carriers	-2.98
slr0772	light-independent protochlorophyllide reductase subunit ChIB	Biosynthesis of cofactors, prosthetic groups, and carriers	-5.94
slr0749	light-independent protochlorophyllide reductase iron protein subunit ChL	Biosynthesis of cofactors, prosthetic groups, and carriers	-7.36
slr1846	hypothetical protein YCF64	Biosynthesis of cofactors, prosthetic groups, and carriers	1.96
slr0611	solaneyl diphosphate synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.84
slr1779	pyridoxal phosphate biosynthetic protein PdxJ	Biosynthesis of cofactors, prosthetic groups, and carriers	1.83
slr1255	phytoene synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.82
slr1887	porphobilinogen deaminase (hydroxymethylbilane synthase, preuroporphyrinogen synthase)	Biosynthesis of cofactors, prosthetic groups, and carriers	1.77
slI1185	coproporphyrinogen III oxidase, aerobic (oxygen-dependent)	Biosynthesis of cofactors, prosthetic groups, and carriers	1.73
slr0618	cobyric acid synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.67
slr0056	chlorophyll a synthase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.64
slr0239	precorrin-4 C11-methyltransferase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.60
slr0633	thiamine biosynthesis protein ThiG	Biosynthesis of cofactors, prosthetic groups, and carriers	1.55
slI1468	beta-carotene hydroxylase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.55
slr1364	biotin synthetase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.54
slr0536	uroporphyrinogen decarboxylase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.53
slr0940	zeta-carotene desaturase	Biosynthesis of cofactors, prosthetic groups, and carriers	1.51
slI1237	N(5)-glutamine methyltransferase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.52
slr1691	glutamine-dependent NAD(+) synthetase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.53
slr0118	thiamine biosynthesis protein ThiC	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.74
slI0378	uroporphyrin-III C-methyltransferase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.85
slI5080	non-heme chloroperoxidase	Biosynthesis of cofactors, prosthetic groups, and carriers	-1.93
slr0017	UDP-N-acetylglucosamine 1-carboxyvinyltransferase	Cell envelope	3.06
slr1351	UDP-N-acetylmuramoylalanyl-D-glutamyl-2 6-diaminopimelate--D-alanyl-D-alanine ligase	Cell envelope	2.34
slr1910	probable N-acetylmuramoyl-L-alanine amidase	Cell envelope	-2.01
slr0985	dTDP-4-dehydrorhamnose 3,5-epimerase	Cell envelope	-2.37
slI0016	probable membrane-bound lytic transglycosylase A	Cell envelope	-2.41
slr1615	perosamine synthetase	Cell envelope	-2.61
slr0983	glucose-1-phosphate cytidyltransferase	Cell envelope	-2.63
slr0984	CDP-glucose 4,6-dehydratase	Cell envelope	-4.03
slr0042	probable porin; major outer membrane protein	Cell envelope	-5.67
slI0379	acyl-[acyl-carrier-protein]-UDP-N-acetylglucosamine o-acyltransferase	Cell envelope	1.99
slr0993	putative peptidase	Cell envelope	1.90
slI1395	dTDP-6-deoxy-L-mannose-dehydrogenase	Cell envelope	1.79
slr0534	probable transglycosylase	Cell envelope	1.73
slr0624	UDP-N-acetylglucosamine 2-epimerase	Cell envelope	1.59

slI0899	UDP-N-acetylglucosamine pyrophosphorylase	Cell envelope	1.59
slI1187	prolipoprotein diacylglycerol transferase	Cell envelope	1.58
slr1656	UDP-N-acetylglucosamine--N-acetylmuramyl-(pentapeptide) pyrophosphoryl - undecaprenol N-acetylglucosamine transferase	Cell envelope	1.56
slr1271	probable UDP-N-acetyl-D-mannosaminuronic acid transferase	Cell envelope	1.55
slr0015	lipid A disaccharide synthase	Cell envelope	1.54
slr1072	GDP-D-mannose dehydratase	Cell envelope	-1.52
slI0772	probable porin; major outer membrane protein	Cell envelope	-1.53
slr1747	cell death suppressor protein Lls1 homolog	Cellular processes	3.08
slI0533	trigger factor	Cellular processes	2.59
slI0288	septum site-determining protein MinC	Cellular processes	2.56
slI0430	HtpG, heat shock protein 90, molecular chaperone	Cellular processes	2.23
slr1516	superoxide dismutase	Cellular processes	2.15
slI1514	16.6 kDa small heat shock protein, molecular chaperone	Cellular processes	2.03
slr1120	type 4 prepilin-like proteins leader peptide processing enzyme	Cellular processes	-2.34
slr0161	twitching motility protein PilT	Cellular processes	-2.44
slI1294	methyl-accepting chemotaxis protein	Cellular processes	-2.49
slI1933	DnaJ protein, heat shock protein 40, molecular chaperone	Cellular processes	-2.57
slr0162	a part of pilC, pilin biogenesis protein, required for twitching motility	Cellular processes	-2.61
slI1533	twitching mobility protein	Cellular processes	-2.65
slI1987	catalase peroxidase	Cellular processes	-2.80
slr1929	type 4 pilin-like protein	Cellular processes	-3.83
slI0040	positive phototaxis protein, homologous to chemotaxis protein CheW	Cellular processes	1.98
slr1604	cell division protein FtsH	Cellular processes	1.81
slI1980	thiol:disulfide interchange protein TrxA	Cellular processes	1.74
ssr3307	preprotein translocase SecE subunit	Cellular processes	1.60
slI0057	heat shock protein GrpE	Cellular processes	1.54
slI0897	DnaJ protein, heat shock protein 40, molecular chaperone	Cellular processes	1.51
slr0163	a part of pilC, pilin biogenesis protein, required for twitching motility	Cellular processes	-1.50
slI1695	pilin polypeptide PilA2	Cellular processes	-1.53
slI1633	cell division protein FtsZ	Cellular processes	-1.55
slI0058	DnaK protein 1, heat shock protein 70, molecular chaperone	Cellular processes	-1.58
slr0904	competence protein ComM homolog	Cellular processes	-1.85
slr1857	isoamylase	Central intermediary metabolism	4.88
slr0518	similar to alpha-L-arabinofuranosidase B	Central intermediary metabolism	2.03
slr0897	probable endoglucanase	Central intermediary metabolism	-3.41
slI1356	glycogen phosphorylase	Central intermediary metabolism	-4.24
slI1566	glucosylglycerolphosphate synthase	Central intermediary metabolism	-11.50
slr1256	urease gamma subunit	Central intermediary metabolism	1.89
slr1899	urease accessory protein F	Central intermediary metabolism	1.67

sll0220	L-glutamine:D-fructose-6-P amidotransferase	Central intermediary metabolism	1.59
slr0820	probable glycosyltransferase	Central intermediary metabolism	-1.53
slr1334	phosphoglucomutase/phosphomannomutase	Central intermediary metabolism	-1.57
sll1540	dolichyl-phosphate-mannose synthase	Central intermediary metabolism	-1.71
sll0729	probable DNA methyltransferase	DNA replication, restriction, modification, recombination, and repair	2.19
slr1134	mutator MutT homolog	DNA replication, restriction, modification, recombination, and repair	-2.01
sll5123	SOS mutagenesis and repair, UmuD protein homolog	DNA replication, restriction, modification, recombination, and repair	-2.06
sll5122	SOS mutagenesis and repair, UmuC protein homolog	DNA replication, restriction, modification, recombination, and repair	-2.61
slr6096	type I restriction-modification system, M subunit (fragment)	DNA replication, restriction, modification, recombination, and repair	-3.03
slr6095	type I restriction-modification system, M subunit (fragment)	DNA replication, restriction, modification, recombination, and repair	-3.23
slr0965	DNA polymerase III beta subunit	DNA replication, restriction, modification, recombination, and repair	1.95
sll1537	similar to mutator MutT protein	DNA replication, restriction, modification, recombination, and repair	1.82
sll1143	ATP-dependent helicase PcrA	DNA replication, restriction, modification, recombination, and repair	1.50
sll1209	DNA ligase	DNA replication, restriction, modification, recombination, and repair	-1.56
sll1941	DNA gyrase A subunit	DNA replication, restriction, modification, recombination, and repair	-1.60
sll0865	excinuclease ABC subunit C	DNA replication, restriction, modification, recombination, and repair	-1.62
slr6025	probable antirestriction protein	DNA replication, restriction, modification, recombination, and repair	-1.62
sll0887	putative modulator of DNA gyrase; PmbA homolog	DNA replication, restriction, modification, recombination, and repair	-1.63
slr0925	single-stranded DNA-binding protein	DNA replication, restriction, modification, recombination, and repair	-1.63
sll1520	DNA repair protein RecN	DNA replication, restriction, modification, recombination, and repair	-1.67
slr6084	probable antirestriction protein	DNA replication, restriction, modification, recombination, and repair	-1.70
sll8009	type I restriction-modification system, M subunit	DNA replication, restriction, modification, recombination, and repair	-1.82
slr0915	putative endonuclease [encoded in trnFM-intron: 2791054 - 2791708]	DNA replication, restriction, modification,	-1.97

		recombination, and repair	
slr0194	ribose 5-phosphate isomerase	Energy metabolism	2.18
slr1078	similar to UDP-glucose 4-epimerase	Energy metabolism	-2.10
sll0542	acetyl-coenzyme A synthetase	Energy metabolism	-2.44
sll1721	pyruvate dehydrogenase E1 component, beta subunit	Energy metabolism	1.70
sll1178	probable carbamoyl transferase	Energy metabolism	1.67
slr0943	fructose-bisphosphate aldolase, class I	Energy metabolism	1.67
slr0657	aspartate kinase	Energy metabolism	1.66
sll1070	transketolase	Energy metabolism	1.64
sll1561	proline oxidase	Energy metabolism	1.63
slr1312	arginine decarboxylase	Energy metabolism	1.62
slr0952	fructose-1,6-bisphosphatase	Energy metabolism	1.62
sll0807	pentose-5-phosphate-3-epimerase	Energy metabolism	1.59
sll1831	glycolate oxidase subunit, (Fe-S)protein	Energy metabolism	1.53
slr1705	aspartoacylase	Energy metabolism	1.52
slr2074	similar to mannose-1-phosphate guanylyltransferase	Energy metabolism	1.51
sll1538	similar to beta-hexosaminidase a precursor	Energy metabolism	-1.53
slr1067	UDP-glucose 4-epimerase	Energy metabolism	-1.58
sll1212	GDP-mannose 4,6-dehydratase	Energy metabolism	-1.62
sll0045	sucrose phosphate synthase	Energy metabolism	-1.68
sll1077	agmatinase	Energy metabolism	-1.70
sll1196	phosphofructokinase	Energy metabolism	-1.89
sll1682	alanine dehydrogenase	Energy metabolism	-1.90
sll0018	fructose-bisphosphate aldolase, class II	Energy metabolism	-2.00
slr1350	acyl-lipid desaturase (delta 12)	Fatty acid, phospholipid and sterol metabolism	3.89
slr2089	squalene-hopene-cyclase	Fatty acid, phospholipid and sterol metabolism	2.60
sll0541	acyl-lipid desaturase (delta 9)	Fatty acid, phospholipid and sterol metabolism	2.33
sll1069	3-oxoacyl-[acyl-carrier-protein] synthase II	Fatty acid, phospholipid and sterol metabolism	2.20
slr2023	malonyl coenzyme A-acyl carrier protein transacylase	Fatty acid, phospholipid and sterol metabolism	2.13
sll1522	CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase	Fatty acid, phospholipid and sterol metabolism	2.12
sll1085	glycerol-3-phosphate dehydrogenase	Fatty acid, phospholipid and sterol metabolism	-2.41
slr1672	glycerol kinase	Fatty acid, phospholipid and sterol metabolism	-2.60
sll0336	acetyl-CoA carboxylase beta subunit	Fatty acid, phospholipid and sterol metabolism	1.96
slr0054	diacylglycerol kinase	Fatty acid, phospholipid and sterol metabolism	1.94
sll1655	similar to biotin [acetyl-CoA-carboxylase] ligase	Fatty acid, phospholipid and sterol metabolism	1.62
sll1605	(3R)-hydroxymyristol acyl carrier protein dehydrase	Fatty acid, phospholipid and sterol metabolism	1.61
sll0053	biotin carboxylase	Fatty acid, phospholipid and sterol metabolism	1.58
slr1755	NAD+ dependent glycerol-3-phosphate dehydrogenase	Fatty acid, phospholipid and sterol metabolism	-1.64
sll0728	acetyl-CoA carboxylase alpha subunit	Fatty acid, phospholipid and sterol metabolism	-1.79
slr0364	hypothetical protein	Hypothetical	11.06

sll0296	hypothetical protein	Hypothetical	5.56
slr1915	hypothetical protein	Hypothetical	4.51
slr0423	hypothetical protein	Hypothetical	4.24
sll1158	hypothetical protein	Hypothetical	4.01
sll1541	hypothetical protein	Hypothetical	3.89
slr1260	hypothetical protein	Hypothetical	3.49
sll0157	hypothetical protein	Hypothetical	3.46
ssl3446	hypothetical protein	Hypothetical	3.46
sll1160	hypothetical protein	Hypothetical	3.34
slr1413	hypothetical protein	Hypothetical	3.32
slr1119	hypothetical protein	Hypothetical	3.24
sll1911	hypothetical protein	Hypothetical	3.22
slr0284	hypothetical protein	Hypothetical	3.15
slr1262	hypothetical protein	Hypothetical	3.12
slr0399	chaperon-like protein for quinone binding in photosystem II	Hypothetical	3.04
ssl1378	hypothetical protein	Hypothetical	3.02
sll0325	hypothetical protein	Hypothetical	2.90
sll1473	a part of phytochrome-like sensor histidine kinase gene (disrupted by insertion of IS)	Hypothetical	2.79
slr1919	hypothetical protein	Hypothetical	2.78
slr1160	periplasmic protein, function unknown	Hypothetical	2.74
sll1399	hypothetical protein	Hypothetical	2.73
slr1261	hypothetical protein	Hypothetical	2.70
sll0528	hypothetical protein	Hypothetical	2.63
sll2013	hypothetical protein	Hypothetical	2.63
slr1259	hypothetical protein	Hypothetical	2.62
slr0964	hypothetical protein	Hypothetical	2.57
slr0241	hypothetical protein	Hypothetical	2.54
ssr0349	hypothetical protein	Hypothetical	2.48
slr0852	hypothetical protein	Hypothetical	2.45
slr1327	hypothetical protein	Hypothetical	2.45
slr1702	hypothetical protein	Hypothetical	2.43
slr1677	hypothetical protein	Hypothetical	2.41
slr0779	hypothetical protein	Hypothetical	2.40
sll0549	hypothetical protein	Hypothetical	2.35
sll1281	photosystem II PsbZ protein	Hypothetical	2.35
slr0959	hypothetical protein	Hypothetical	2.33
slr1495	hypothetical protein	Hypothetical	2.32
slr1649	hypothetical protein	Hypothetical	2.29
slr0883	hypothetical protein	Hypothetical	2.21
ssl0483	hypothetical protein	Hypothetical	2.21

ssl7007	hypothetical protein	Hypothetical	2.20
sll1071	hypothetical protein	Hypothetical	2.19
slr1676	hypothetical protein	Hypothetical	2.19
slr2080	hypothetical protein	Hypothetical	2.17
ssr2067	hypothetical protein	Hypothetical	2.15
ssl2717	hypothetical protein	Hypothetical	2.15
sll1447	hypothetical protein	Hypothetical	2.14
sll1738	hypothetical protein	Hypothetical	2.14
sgl0002	hypothetical protein	Hypothetical	2.12
slr0642	hypothetical protein	Hypothetical	2.12
slr1394	hypothetical protein	Hypothetical	2.11
sll1797	hypothetical protein YCF21	Hypothetical	2.09
slr0689	hypothetical protein	Hypothetical	2.08
slr0351	hypothetical protein	Hypothetical	2.08
sll0812	hypothetical protein	Hypothetical	2.07
slr1780	hypothetical protein YCF54	Hypothetical	2.05
ssr2611	hypothetical protein	Hypothetical	2.05
sll1866	hypothetical protein	Hypothetical	2.05
slr2060	hypothetical protein	Hypothetical	2.05
slr7059	hypothetical protein	Hypothetical	2.04
sll1880	hypothetical protein	Hypothetical	2.04
slr7097	hypothetical protein	Hypothetical	2.03
slr0592	hypothetical protein	Hypothetical	2.01
sll1433	hypothetical protein	Hypothetical	2.00
sll0354	hypothetical protein	Hypothetical	-2.04
slr1652	hypothetical protein	Hypothetical	-2.05
sll0272	hypothetical protein	Hypothetical	-2.06
ssr2711	hypothetical protein	Hypothetical	-2.06
slr1236	hypothetical protein	Hypothetical	-2.06
sll7047	hypothetical protein	Hypothetical	-2.06
ssl5027	hypothetical protein	Hypothetical	-2.06
slr6039	hypothetical protein	Hypothetical	-2.07
sll0832	hypothetical protein	Hypothetical	-2.10
slr0453	hypothetical protein	Hypothetical	-2.10
slr8021	hypothetical protein	Hypothetical	-2.11
ssr3410	hypothetical protein	Hypothetical	-2.11
sll1485	hypothetical protein	Hypothetical	-2.13
sll0310	hypothetical protein	Hypothetical	-2.14
sll8018	hypothetical protein	Hypothetical	-2.14
slr0144	hypothetical protein	Hypothetical	-2.15

slr1661	hypothetical protein	Hypothetical	-2.17
slr0376	hypothetical protein	Hypothetical	-2.19
slr2073	hypothetical protein YCF50	Hypothetical	-2.21
slr6094	hypothetical protein	Hypothetical	-2.23
sll1734	protein involved in low CO ₂ -inducible, high affinity CO ₂ uptake	Hypothetical	-2.24
sll1080	ABC transport system substrate-binding protein	Hypothetical	-2.26
sll0141	hypothetical protein	Hypothetical	-2.28
sll1921	hypothetical protein	Hypothetical	-2.29
slr0976	hypothetical protein	Hypothetical	-2.29
slr1614	hypothetical protein	Hypothetical	-2.30
sll0788	hypothetical protein	Hypothetical	-2.30
sll8027	hypothetical protein	Hypothetical	-2.30
slr1613	hypothetical protein	Hypothetical	-2.32
sll1652	hypothetical protein	Hypothetical	-2.33
sll0691	hypothetical protein	Hypothetical	-2.35
slr8022	hypothetical protein	Hypothetical	-2.36
slr1608	putative glucose dehydrogenase-B, periplasmic protein	Hypothetical	-2.43
ssl8005	hypothetical protein	Hypothetical	-2.49
sll0180	hypothetical protein	Hypothetical	-2.52
slr0980	hypothetical protein	Hypothetical	-2.54
sll1252	hypothetical protein	Hypothetical	-2.55
sll0822	hypothetical protein	Hypothetical	-2.55
sll1675	hypothetical protein	Hypothetical	-2.58
slr1612	hypothetical protein	Hypothetical	-2.67
slr0121	hypothetical protein	Hypothetical	-2.69
slr2008	hypothetical protein	Hypothetical	-2.77
sll0685	hypothetical protein	Hypothetical	-2.78
sll0096	hypothetical protein	Hypothetical	-2.86
ssr6046	hypothetical protein	Hypothetical	-2.90
slr1619	hypothetical protein	Hypothetical	-2.90
ssr5092	hypothetical protein	Hypothetical	-2.91
slr1173	hypothetical protein	Hypothetical	-2.94
sll6098	hypothetical protein	Hypothetical	-2.96
slr1971	hypothetical protein	Hypothetical	-2.97
slr1704	hypothetical protein	Hypothetical	-3.05
slr1770	hypothetical protein	Hypothetical	-3.08
slr6100	hypothetical protein	Hypothetical	-3.08
sll0218	hypothetical protein	Hypothetical	-3.16
sll0319	periplasmic protein, function unknown	Hypothetical	-3.18
slr1593	hypothetical protein	Hypothetical	-3.20

slI0858	hypothetical protein	Hypothetical	-3.37
slr1583	hypothetical protein	Hypothetical	-3.41
ssr6032	hypothetical protein	Hypothetical	-3.56
slr1634	hypothetical protein	Hypothetical	-3.58
slr6107	hypothetical protein	Hypothetical	-3.61
slI0470	hypothetical protein	Hypothetical	-3.62
slI8025	hypothetical protein	Hypothetical	-3.68
slI0051	hypothetical protein	Hypothetical	-3.68
slr6058	hypothetical protein	Hypothetical	-3.73
slr0680	hypothetical protein	Hypothetical	-3.90
slr2052	hypothetical protein	Hypothetical	-3.97
slr1851	hypothetical protein	Hypothetical	-4.22
slI8035	hypothetical protein	Hypothetical	-4.72
slI1247	hypothetical protein	Hypothetical	-4.76
slr1513	periplasmic protein, function unknown	Hypothetical	-4.83
slr6088	hypothetical protein	Hypothetical	-5.91
slI0381	hypothetical protein	Hypothetical	-6.19
slr6029	hypothetical protein	Hypothetical	-6.23
slI0382	hypothetical protein	Hypothetical	-6.43
slr1957	hypothetical protein	Hypothetical	-6.53
slr1512	sodium-dependent bicarbonate transporter	Hypothetical	-6.85
slr0888	hypothetical protein	Hypothetical	-7.31
slI1722	hypothetical protein	Hypothetical	-8.27
slr1152	hypothetical protein	Hypothetical	-15.12
slr0064	hypothetical protein	Hypothetical	2.00
slr1990	hypothetical protein	Hypothetical	1.99
slr0957	hypothetical protein	Hypothetical	1.99
slr1599	hypothetical protein	Hypothetical	1.99
slI1446	hypothetical protein	Hypothetical	1.98
slI0639	hypothetical protein	Hypothetical	1.98
slI0442	hypothetical protein	Hypothetical	1.96
slr1978	hypothetical protein	Hypothetical	1.95
slr1964	hypothetical protein	Hypothetical	1.95
slI1512	hypothetical protein	Hypothetical	1.94
slI1162	hypothetical protein	Hypothetical	1.92
ssr0102	hypothetical protein YCF40	Hypothetical	1.91
slr0445	hypothetical protein	Hypothetical	1.88
slI1898	hypothetical protein	Hypothetical	1.88
slr0598	hypothetical protein	Hypothetical	1.88
slr1999	hypothetical protein	Hypothetical	1.88

slr0971	hypothetical protein	Hypothetical	1.87
sll0063	hypothetical protein	Hypothetical	1.87
slr1116	hypothetical protein	Hypothetical	1.87
ssr2998	hypothetical protein	Hypothetical	1.86
ssr0692	hypothetical protein	Hypothetical	1.84
sll1956	hypothetical protein	Hypothetical	1.83
ssl1498	hypothetical protein	Hypothetical	1.83
slr1949	hypothetical protein	Hypothetical	1.83
sll0005	hypothetical protein	Hypothetical	1.82
sll1884	hypothetical protein	Hypothetical	1.82
sll0814	hypothetical protein	Hypothetical	1.78
sll0529	hypothetical protein	Hypothetical	1.77
ssr2142	hypothetical protein YCF19	Hypothetical	1.77
slr1674	hypothetical protein	Hypothetical	1.76
sll1737	hypothetical protein YCF60	Hypothetical	1.76
sll1979	hypothetical protein	Hypothetical	1.75
slr1820	hypothetical protein	Hypothetical	1.75
slr0082	hypothetical protein	Hypothetical	1.74
sll0933	hypothetical protein	Hypothetical	1.74
sll0413	hypothetical protein	Hypothetical	1.73
slr1117	hypothetical protein	Hypothetical	1.73
slr5058	hypothetical protein	Hypothetical	1.73
ssl1417	hypothetical protein YCF33	Hypothetical	1.72
sll1526	hypothetical protein	Hypothetical	1.72
sll1895	hypothetical protein	Hypothetical	1.72
ssr2781	hypothetical protein	Hypothetical	1.71
sll0924	hypothetical protein	Hypothetical	1.71
slr1097	hypothetical protein	Hypothetical	1.71
sll0931	hypothetical protein	Hypothetical	1.70
slr1353	hypothetical protein	Hypothetical	1.70
slr1098	hypothetical protein	Hypothetical	1.70
slr0238	hypothetical protein	Hypothetical	1.69
slr0483	hypothetical protein	Hypothetical	1.68
slr1365	hypothetical protein	Hypothetical	1.68
sll0585	hypothetical protein	Hypothetical	1.68
slr1906	hypothetical protein	Hypothetical	1.67
ssr2439	hypothetical protein	Hypothetical	1.67
slr1648	hypothetical protein	Hypothetical	1.67
sll1166	hypothetical protein	Hypothetical	1.67
slr5018	hypothetical protein	Hypothetical	1.67

slr1718	hypothetical protein	Hypothetical	1.66
slr7096	hypothetical protein	Hypothetical	1.66
ssr1155	hypothetical protein	Hypothetical	1.65
ssl5025	hypothetical protein	Hypothetical	1.64
slr0734	hypothetical protein	Hypothetical	1.63
slr0479	hypothetical protein	Hypothetical	1.63
sll0062	hypothetical protein	Hypothetical	1.62
slr0688	hypothetical protein	Hypothetical	1.62
slr0692	hypothetical protein YCF45	Hypothetical	1.62
sll1606	hypothetical protein	Hypothetical	1.62
sll1628	hypothetical protein	Hypothetical	1.62
slr0440	hypothetical protein	Hypothetical	1.61
slr1659	hypothetical protein	Hypothetical	1.61
sll2007	hypothetical protein	Hypothetical	1.61
slr0172	hypothetical protein	Hypothetical	1.61
slr0299	hypothetical protein	Hypothetical	1.60
slr1306	hypothetical protein	Hypothetical	1.60
sll0297	hypothetical protein	Hypothetical	1.60
sll1022	hypothetical protein	Hypothetical	1.60
sll0860	hypothetical protein	Hypothetical	1.60
slr0038	hypothetical protein	Hypothetical	1.59
slr1847	hypothetical protein	Hypothetical	1.59
sll1336	hypothetical protein	Hypothetical	1.59
slr1220	hypothetical protein	Hypothetical	1.59
sll1188	hypothetical protein	Hypothetical	1.58
sll1142	hypothetical protein	Hypothetical	1.58
sll1915	hypothetical protein	Hypothetical	1.58
sll0544	hypothetical protein	Hypothetical	1.57
slr0845	hypothetical protein	Hypothetical	1.57
ssl3364	CP12 polypeptide	Hypothetical	1.57
sll0456	hypothetical protein	Hypothetical	1.57
sll0294	hypothetical protein	Hypothetical	1.57
slr1449	hypothetical protein	Hypothetical	1.56
ssr3304	hypothetical protein	Hypothetical	1.56
sll1376	hypothetical protein	Hypothetical	1.56
sll0505	hypothetical protein	Hypothetical	1.55
ssr0332	hypothetical protein	Hypothetical	1.55
ssl1004	hypothetical protein	Hypothetical	1.55
slr1376	hypothetical protein	Hypothetical	1.55
slr1464	hypothetical protein	Hypothetical	1.54

slr1122	hypothetical protein	Hypothetical	1.53
sll0658	hypothetical protein	Hypothetical	1.53
ssr0761	hypothetical protein	Hypothetical	1.53
sll0839	hypothetical protein	Hypothetical	1.53
slr1819	hypothetical protein	Hypothetical	1.53
slr1263	hypothetical protein	Hypothetical	1.52
sll1025	hypothetical protein	Hypothetical	1.52
ssl2823	hypothetical protein	Hypothetical	1.52
sll0350	hypothetical protein	Hypothetical	1.52
slr0806	hypothetical protein	Hypothetical	1.52
sll0742	hypothetical protein	Hypothetical	1.52
slr0818	hypothetical protein	Hypothetical	1.52
slr1946	hypothetical protein	Hypothetical	1.52
sll1571	hypothetical protein	Hypothetical	1.51
slr0217	hypothetical protein	Hypothetical	1.51
slr1188	hypothetical protein	Hypothetical	1.51
slr0181	hypothetical protein	Hypothetical	1.51
sll1095	hypothetical protein	Hypothetical	1.50
slr1923	hypothetical protein	Hypothetical	1.50
slr1515	putative membrane protein required for bicarbonate uptake	Hypothetical	-1.50
sll1618	hypothetical protein	Hypothetical	-1.50
ssl7048	hypothetical protein	Hypothetical	-1.51
slr1767	hypothetical protein	Hypothetical	-1.51
ssl1923	hypothetical protein	Hypothetical	-1.51
sll0499	hypothetical protein	Hypothetical	-1.51
slr1644	hypothetical protein	Hypothetical	-1.51
slr0516	hypothetical protein	Hypothetical	-1.51
slr6044	hypothetical protein	Hypothetical	-1.52
sll0997	hypothetical protein	Hypothetical	-1.53
sll1442	hypothetical protein	Hypothetical	-1.53
slr5082	hypothetical protein	Hypothetical	-1.54
sll0995	hypothetical protein	Hypothetical	-1.54
sll0284	hypothetical protein	Hypothetical	-1.54
slr0011	possible Rubisco chaperonin	Hypothetical	-1.55
slr0637	hypothetical protein	Hypothetical	-1.55
sll0751	hypothetical protein YCF22	Hypothetical	-1.56
slr0263	hypothetical protein	Hypothetical	-1.56
ssl3451	hypothetical protein	Hypothetical	-1.57
slr0383	hypothetical protein	Hypothetical	-1.57
sll1201	hypothetical protein	Hypothetical	-1.57

slr1223	hypothetical protein	Hypothetical	-1.57
sll1262	hypothetical protein	Hypothetical	-1.58
sll0983	hypothetical protein	Hypothetical	-1.58
slr0455	hypothetical protein	Hypothetical	-1.59
sll1680	hypothetical protein	Hypothetical	-1.60
slr0199	hypothetical protein	Hypothetical	-1.60
slr0605	hypothetical protein	Hypothetical	-1.61
slr0882	hypothetical protein YCF84	Hypothetical	-1.61
ssr2554	hypothetical protein	Hypothetical	-1.61
slr1623	hypothetical protein	Hypothetical	-1.61
slr1474	hypothetical protein	Hypothetical	-1.61
sll0023	hypothetical protein	Hypothetical	-1.62
ssr2802	hypothetical protein	Hypothetical	-1.62
sll1938	hypothetical protein	Hypothetical	-1.62
slr7037	hypothetical protein	Hypothetical	-1.62
ssl0242	hypothetical protein	Hypothetical	-1.63
slr0709	hypothetical protein	Hypothetical	-1.63
sll0586	hypothetical protein	Hypothetical	-1.63
slr0551	hypothetical protein	Hypothetical	-1.63
sll0596	hypothetical protein	Hypothetical	-1.64
sll8019	hypothetical protein	Hypothetical	-1.64
sll1486	hypothetical protein	Hypothetical	-1.65
sll0939	hypothetical protein	Hypothetical	-1.66
sll1913	hypothetical protein	Hypothetical	-1.66
slr0770	hypothetical protein	Hypothetical	-1.67
slr6047	hypothetical protein	Hypothetical	-1.67
slr5077	hypothetical protein	Hypothetical	-1.67
sll5004	hypothetical protein	Hypothetical	-1.67
sll1119	hypothetical protein	Hypothetical	-1.68
sll1726	hypothetical protein	Hypothetical	-1.68
slr1601	hypothetical protein	Hypothetical	-1.68
sll0862	hypothetical protein	Hypothetical	-1.68
sll8002	hypothetical protein	Hypothetical	-1.69
ssr2962	hypothetical protein	Hypothetical	-1.69
sll5076	hypothetical protein	Hypothetical	-1.70
slr1753	hypothetical protein	Hypothetical	-1.70
slr0317	hypothetical protein	Hypothetical	-1.70
slr0769	hypothetical protein	Hypothetical	-1.71
slr2006	hypothetical protein	Hypothetical	-1.71
sll1735	hypothetical protein	Hypothetical	-1.72

slI0037	hypothetical protein	Hypothetical	-1.72
slr2012	hypothetical protein	Hypothetical	-1.73
slr1178	hypothetical protein	Hypothetical	-1.74
slI1250	hypothetical protein	Hypothetical	-1.74
slI1774	hypothetical protein	Hypothetical	-1.75
slr1083	hypothetical protein	Hypothetical	-1.75
ssr5117	hypothetical protein	Hypothetical	-1.77
slr8030	hypothetical protein	Hypothetical	-1.77
slr1406	periplasmic protein, function unknown	Hypothetical	-1.77
slI1169	hypothetical protein	Hypothetical	-1.77
slr1638	hypothetical protein	Hypothetical	-1.79
slr1712	hypothetical protein	Hypothetical	-1.80
slI5072	hypothetical protein	Hypothetical	-1.81
slr0748	hypothetical protein	Hypothetical	-1.82
slr0723	hypothetical protein	Hypothetical	-1.83
slr1911	hypothetical protein	Hypothetical	-1.83
slr1218	hypothetical protein YCF39	Hypothetical	-1.84
slr7076	hypothetical protein	Hypothetical	-1.84
slI1549	salt-enhanced periplasmic protein	Hypothetical	-1.85
ssl1807	hypothetical protein	Hypothetical	-1.85
slI1021	hypothetical protein	Hypothetical	-1.86
slr0981	hypothetical protein	Hypothetical	-1.86
slr0787	hypothetical protein	Hypothetical	-1.87
slr5037	hypothetical protein	Hypothetical	-1.87
slI0827	hypothetical protein	Hypothetical	-1.88
slr1161	hypothetical protein	Hypothetical	-1.90
slr1442	hypothetical protein	Hypothetical	-1.90
slr0374	hypothetical protein	Hypothetical	-1.90
slr2011	hypothetical protein	Hypothetical	-1.92
slI1934	hypothetical protein	Hypothetical	-1.92
slr2127	hypothetical protein	Hypothetical	-1.92
slr7091	hypothetical protein	Hypothetical	-1.92
slr0801	hypothetical protein	Hypothetical	-1.93
slr0670	hypothetical protein	Hypothetical	-1.93
slI0553	hypothetical protein	Hypothetical	-1.94
slr1087	hypothetical protein	Hypothetical	-1.95
slr1081	hypothetical protein	Hypothetical	-1.97
slr1493	hypothetical protein	Hypothetical	-1.99
ssr3409	hypothetical protein	Hypothetical	-2.00
slr0244	hypothetical protein	Hypothetical	-2.00

sll5057	probable glycosyltransferase	Other categories	198.46
slr5055	similar to UDP-N-acetyl-D-mannosaminuronic acid transferase	Other categories	175.04
sll5042	probable sulfotransferase	Other categories	33.34
sll5043	probable glycosyltransferase	Other categories	25.89
slr5056	probable glycosyltransferase	Other categories	23.79
sll1159	probable bacterioferritin comigratory protein	Other categories	5.78
slr1853	carboxymuconolactone decarboxylase	Other categories	4.05
sll1300	putative methyltransferase	Other categories	1.95
sll0222	putative purple acid phosphatase	Other categories	1.89
sll0034	putative carboxypeptidase	Other categories	1.82
slr0945	arsenical resistance protein ArsH homolog	Other categories	1.80
sll1786	putative deoxyribonuclease, tatD homolog	Other categories	1.78
slr1115	probable methyltransferase	Other categories	1.72
sll1369	putative peptidase	Other categories	1.69
sll0818	tetrapyrrole methylase family protein	Other categories	1.65
slr2136	GcpE protein homolog	Other categories	1.65
slr0462	putative transposase [ISY352g: 3511668 - 3512290, join 3513238 - 3514051]	Other categories	1.64
slr0099	putative transposase [ISY352f(partial copy): 2968019 - 2969383]	Other categories	1.64
sll0667	putative transposase [ISY352e: 2921301 - 2921595, join 3108631 - 3109754]	Other categories	1.62
sll1559	soluble hydrogenase 42 kD subunit	Other categories	1.61
sll1664	probable glycosyl transferase	Other categories	1.59
slr1522	putative transposase [ISY352d: 1614422 - 1615835]	Other categories	1.59
slr1302	protein involved in constitutive low affinity CO2 uptake	Other categories	1.58
slr1942	circadian clock protein KaiC homolog	Other categories	1.56
sll1432	putative hydrogenase expression/formation protein HypB	Other categories	1.56
sll1459	stationary-phase survival protein SurE homolog	Other categories	1.54
slr0201	heterodisulfide reductase subunit B	Other categories	1.54
sll1226	hydrogenase subunit of the bidirectional hydrogenase	Other categories	1.54
sll0711	isopentenyl monophosphate kinase	Other categories	1.51
slr1763	probable methyltransferase	Other categories	1.50
sll0651	putative transposase [ISY100j: 421739 - 422684]	Other categories	-1.50
sll1257	putative transposase [ISY100p: 1725405 - 1726350]	Other categories	-1.50
slr0862	probable sugar kinase	Other categories	-1.51
slr1106	prohibitin	Other categories	-1.51
sll1930	putative transposase [ISY100k: 605515 - 606460]	Other categories	-1.53
ssr2078	putative transposase [ISY802b(partial copy): 1384736 - 1385513]	Other categories	-1.53
sll0201	putative transposase [ISY100s: 2524547 - 2525492]	Other categories	-1.53
slr8016	plasmid partitioning protein, ParB	Other categories	-1.53
slr8046	putative transposase [ISY100x: 40984 - 41929]	Other categories	-1.54
sll1437	putative transposase [ISY100q: 1901359 - 1902304]	Other categories	-1.54

sll8034	2-nitropropane dioxygenase	Other categories	-1.54
slr1019	phenazine biosynthetic protein PhzF homolog	Other categories	-1.55
slr2113	putative transposase [ISY100o: 1626093 - 1627038]	Other categories	-1.55
slr0800	putative transposase [ISY802c: 3066278 - 3067184]	Other categories	-1.55
slr1716	putative transposase [ISY100m: 1463383 - 1464328]	Other categories	-1.55
sll8042	putative transposase [ISY100y: 38542 - 39487]	Other categories	-1.56
slr1937	putative transposase [ISY100r: 2235489 - 2236434]	Other categories	-1.56
sll1791	putative transposase [ISY802a: 852462 - 853369]	Other categories	-1.59
sll1397	putative transposase [ISY100a: 52234 - 53180]	Other categories	-1.61
slr8037	probable acetyltransferase	Other categories	-1.61
sll5079	probable short chain dehydrogenase	Other categories	-1.62
slr1520	oxidoreductase, aldo/keto reductase family	Other categories	-1.63
sll1283	similar to stage II sporulation protein D	Other categories	-1.63
sll1157	putative transposase [ISY120b: 1385747 - 1386548]	Other categories	-1.64
slr5010	integrase/recombinase	Other categories	-1.65
sll1636	ferripyochelin binding protein	Other categories	-1.65
ssr2699	putative transposase [ISY523k(partial copy): 473025 - 473752]	Other categories	-1.65
slr1556	2-hydroxyacid dehydrogenase homolog	Other categories	-1.67
sll1792	putative transposase [ISY802a: 852462 - 853369]	Other categories	-1.68
slr0799	putative transposase [ISY802c: 3066278 - 3067184]	Other categories	-1.69
slr8029	resolvase	Other categories	-1.70
slr0700	probable amino acid permease	Other categories	-1.74
slr0378	similar to 7-beta-(4-carboxybutanamido)cephalosporanic acid acylase	Other categories	-1.76
sll6093	chromosome partitioning protein, ParA family	Other categories	-1.76
slr1109	similar to ankyrin	Other categories	-1.78
slr5105	plasmid partitioning protein, ParA family	Other categories	-1.87
sll1491	periplasmic WD-repeat protein	Other categories	-1.88
sll0217	flavoprotein	Other categories	-1.92
slr2097	cyanoglobin	Other categories	-1.96
sll1079	putative hydrogenase expression/formation protein HypB	Other categories	-1.96
sll1595	circadian clock protein KaiC homolog	Other categories	-1.99
sll1154	putative antibiotic efflux protein	Other categories	3.66
slr5054	probable glycosyltransferase	Other categories	3.50
slr1140	DegT/DnrJ/EryC1/StrS family protein	Other categories	3.11
ssl3580	putative hydrogenase expression/formation protein HypC	Other categories	2.76
sll1900	acetyltransferase	Other categories	2.28
sll1305	probable hydrolase	Other categories	2.05
slr1675	putative hydrogenase expression/formation protein HypA1	Other categories	2.03
sll7003	plasmid stability protein	Other categories	-2.03
ssl1920	putative transposase [ISY523l(partial copy): 520871 - 521420]	Other categories	-2.05

slr1639	SsrA-binding protein	Other categories	-2.05
slr8036	probable acetyltransferase	Other categories	-2.06
sll1723	probable glycosyltransferase	Other categories	-2.06
sll6059	putative integrase/recombinase	Other categories	-2.13
sll1653	2-phytyl-1,4-benzoquinone methyltransferase	Other categories	-2.17
slr0309	probable methyltransferase	Other categories	-2.20
slr1903	putative transposase [ISY120a: 851653 - 852454]	Other categories	-2.23
slr1085	probable glycosyltransferase	Other categories	-2.29
ssr0256	putative transposase [ISY523n: 2210271 - 2211142]	Other categories	-2.32
slr1077	probable glycosyltransferase	Other categories	-2.32
slr6070	probable nuclease	Other categories	-2.34
slr0788	similar to pre-B cell enhancing factor	Other categories	-2.36
ssl0296	putative transposase [ISY523p: 2328180 - 2329050]	Other categories	-2.38
ssl7004	probable plasmid stability protein	Other categories	-2.40
ssr2227	putative transposase	Other categories	-2.41
slr1076	probable glycosyltransferase	Other categories	-2.44
sll5084	probable plasmid partitioning protein, ParB	Other categories	-2.54
slr6011	probable nuclease	Other categories	-2.55
slr0265	putative transposase [ISY523c: 1513158 - 1514023]	Other categories	-2.61
sll0686	probable cytochrome c-type biogenesis protein	Other categories	-2.72
sll0665	putative transposase [ISY523r: 3109761 - 3110626]	Other categories	-2.76
slr7049	resolvase	Other categories	-2.90
sll1710	putative transposase [ISY523b: 1275354 - 1276224]	Other categories	-2.97
sll1716	putative transposase [ISY523a: 967549 - 968419]	Other categories	-2.99
sll5066	probable plasmid partitioning protein, ParA family	Other categories	-3.01
slr5040	putative transposase [ISY523u: 38789 - 39659]	Other categories	-3.04
slr0511	putative transposase [ISY523g: 2921593 - 2922457]	Other categories	-3.07
slr0350	putative transposase [ISY523e: 2441031 - 2441901]	Other categories	-3.22
sll0012	putative transposase [ISY523f: 2482725 - 2483595]	Other categories	-3.23
sll0677	putative transposase [ISY523h: 3093889 - 3094759]	Other categories	-3.32
sll1860	putative transposase [ISY523d: 2226601 - 2227471]	Other categories	-3.37
slr0703	putative transposase [ISY523i: 3096320 - 3097190]	Other categories	-3.40
sll6036	chromosome partitioning protein, ParA family	Other categories	-3.53
slr1610	putative C-3 methyl transferase	Other categories	-4.38
slr0007	probable sugar-phosphate nucleotidyltransferase	Other categories	-5.88
sll5036	sulfide-quinone reductase	Other categories	-5.93
sll0219	flavoprotein	Other categories	-7.09
ssr3184	4Fe-4S type iron-sulfur protein	Photosynthesis and respiration	1.94
ssl2598	photosystem II PsbH protein	Photosynthesis and respiration	1.93
slr2034	putative homolog of plant HCF136, which is essential for stability or assembly of	Photosynthesis and respiration	1.89

	photosystem II		
smr0006	cytochrome b559 b subunit	Photosynthesis and respiration	1.82
ssr2831	photosystem I subunit IV	Photosynthesis and respiration	1.80
sll0027	NADH dehydrogenase subunit 4 (involved in constitutive, low affinity CO2 uptake)	Photosynthesis and respiration	1.80
slr0171	photosystem I assembly related protein Ycf37	Photosynthesis and respiration	1.79
sll1579	phycobilisome rod linker polypeptide	Photosynthesis and respiration	1.76
ssr3451	cytochrome b559 alpha subunit	Photosynthesis and respiration	1.76
slr1828	ferredoxin, petF-like protein	Photosynthesis and respiration	1.74
slr1743	type 2 NADH dehydrogenase NdbB	Photosynthesis and respiration	1.73
slr1136	cytochrome c oxidase subunit II	Photosynthesis and respiration	1.72
sll1245	cytochrome cM	Photosynthesis and respiration	1.70
sll0629	alternative photosystem I reaction center subunit X	Photosynthesis and respiration	1.68
sll1580	phycobilisome rod linker polypeptide	Photosynthesis and respiration	1.65
slr0335	phycobilisome core-membrane linker polypeptide	Photosynthesis and respiration	1.62
slr0906	photosystem II core light harvesting protein	Photosynthesis and respiration	1.62
sll0741	pyruvate flavodoxin oxidoreductase	Photosynthesis and respiration	1.59
sll1326	ATP synthase alpha chain	Photosynthesis and respiration	1.57
sll1325	ATP synthase delta chain of CF(1)	Photosynthesis and respiration	1.54
sll0928	allophycocyanin-B	Photosynthesis and respiration	1.54
sll0813	cytochrome c oxidase subunit II	Photosynthesis and respiration	1.53
sll1316	cytochrome b6-f complex iron-sulfur subunit (Rieske iron sulfur protein)	Photosynthesis and respiration	1.52
slr2007	NADH dehydrogenase subunit 4	Photosynthesis and respiration	-1.69
sll1484	type 2 NADH dehydrogenase	Photosynthesis and respiration	-1.69
slr2009	NADH dehydrogenase subunit 4	Photosynthesis and respiration	-1.79
slr0261	NADH dehydrogenase subunit 7	Photosynthesis and respiration	-1.81
slr1181	photosystem II D1 protein	Photosynthesis and respiration	-1.92
sll1471	phycobilisome rod-core linker polypeptide (cpcG2)	Photosynthesis and respiration	53.44
slr1291	NADH dehydrogenase subunit 4	Photosynthesis and respiration	6.53
slr1138	cytochrome c oxidase subunit III	Photosynthesis and respiration	4.34
sml0007	photosystem II protein Y	Photosynthesis and respiration	3.52
sml0001	photosystem II reaction center Psbl protein	Photosynthesis and respiration	3.21
smr0003	cytochrome b6-f complex subunit PetM	Photosynthesis and respiration	3.16
ssl3044	probable ferredoxin	Photosynthesis and respiration	3.10
slr1137	cytochrome c oxidase subunit I	Photosynthesis and respiration	2.87
sml0003	photosystem II reaction center M protein	Photosynthesis and respiration	2.80
slr1330	ATP synthase epsilon chain of CF(1)	Photosynthesis and respiration	2.80
ssr3383	phycobilisome small core linker polypeptide	Photosynthesis and respiration	2.78
smr0004	photosystem I subunit VIII	Photosynthesis and respiration	2.43
sll1327	ATP synthase gamma chain	Photosynthesis and respiration	2.40
sll1194	photosystem II 12 kDa extrinsic protein	Photosynthesis and respiration	2.40

slr1329	ATP synthase beta subunit	Photosynthesis and respiration	2.32
sml0004	cytochrome b6-f complex subunit VIII	Photosynthesis and respiration	2.26
sll1663	phycocyanin alpha phycocyanobilin lyase related protein	Photosynthesis and respiration	2.17
sml0005	photosystem II PsbK protein	Photosynthesis and respiration	2.16
sll0026	NADH dehydrogenase subunit 5 (involved in constitutive, low affinity CO2 uptake)	Photosynthesis and respiration	2.13
ssl3093	phycobilisome small rod linker polypeptide	Photosynthesis and respiration	2.12
sll1899	cytochrome c oxidase folding protein	Photosynthesis and respiration	2.10
slr1655	photosystem I subunit XI	Photosynthesis and respiration	2.09
sll0258	cytochrome c550	Photosynthesis and respiration	2.06
sll0634	photosystem I biogenesis protein BtpA	Photosynthesis and respiration	2.03
slr1739	photosystem II 13 kDa protein homolog	Photosynthesis and respiration	2.03
sll1732	NADH dehydrogenase subunit 5 (involved in low CO2-inducible, high affinity CO2 uptake)	Photosynthesis and respiration	-2.24
sll1733	NADH dehydrogenase subunit 4 (involved in low CO2-inducible, high affinity CO2 uptake)	Photosynthesis and respiration	-2.50
slr0009	ribulose biphosphate carboxylase large subunit	Photosynthesis and respiration	-2.53
ssl0020	ferredoxin I, essential for growth	Photosynthesis and respiration	-2.76
slr0012	ribulose biphosphate carboxylase small subunit	Photosynthesis and respiration	-4.11
sll1056	phosphoribosylformyl glycinamide synthetase II	Purines, pyrimidines, nucleosides, and nucleotides	1.83
sll1258	dCTP deaminase	Purines, pyrimidines, nucleosides, and nucleotides	1.82
sll0070	phosphoribosylglycinamide formyltransferase	Purines, pyrimidines, nucleosides, and nucleotides	1.78
slr0213	GMP synthetase	Purines, pyrimidines, nucleosides, and nucleotides	1.77
sll0838	orotidine 5' monophosphate decarboxylase	Purines, pyrimidines, nucleosides, and nucleotides	1.65
sll1035	uracil phosphoribosyltransferase	Purines, pyrimidines, nucleosides, and nucleotides	1.63
slr0520	phosphoribosyl formylglycinamide synthase	Purines, pyrimidines, nucleosides, and nucleotides	1.58
slr1159	glycinamide ribonucleotide synthetase	Purines, pyrimidines, nucleosides, and nucleotides	1.51
slr1123	guanylate kinase	Purines, pyrimidines, nucleosides, and nucleotides	-1.73
slr1164	ribonucleotide reductase subunit alpha	Purines, pyrimidines, nucleosides, and nucleotides	-1.80
sll1852	nucleoside diphosphate kinase	Purines, pyrimidines, nucleosides, and nucleotides	3.03
slr1237	cytosine deaminase	Purines, pyrimidines, nucleosides, and nucleotides	2.06
slr6034	cytidine deaminase	Purines, pyrimidines, nucleosides, and nucleotides	-5.21
sll5107	cytidine deaminase	Purines, pyrimidines, nucleosides, and nucleotides	-5.65
sll1879	two-component response regulator	Regulatory functions	1.87
sll1590	two-component sensor histidine kinase	Regulatory functions	1.86
slr1969	two-component sensor histidine kinase	Regulatory functions	1.85
slr2024	two-component response regulator CheY subfamily	Regulatory functions	1.84
sll1229	two-component hybrid sensor and regulator	Regulatory functions	1.82
slr1666	pleiotropic regulatory protein homolog	Regulatory functions	1.82
sll0649	two-component response regulator OmpR subfamily	Regulatory functions	1.82
slr1738	transcription regulator Fur family	Regulatory functions	1.77
sll1555	two-component hybrid sensor and regulator	Regulatory functions	1.74
sll1423	global nitrogen regulator	Regulatory functions	1.67

sll1905	two-component hybrid sensor and regulator	Regulatory functions	1.65
slr0599	serine/threonine kinase	Regulatory functions	1.65
sll1672	two-component hybrid sensor and regulator	Regulatory functions	1.62
slr1414	two-component sensor histidine kinase	Regulatory functions	1.60
slr0701	transcriptional regulator	Regulatory functions	1.58
sll0750	two-component sensor histidine kinase, KaiC-interacting protein, involved in circadian rhythm	Regulatory functions	1.56
sll0038	positive phototaxis protein, two-component response regulator PatA subfamily	Regulatory functions	1.51
slr1324	two-component hybrid sensor and regulator	Regulatory functions	1.51
sll1387	serine/threonine protein phosphatase PppA	Regulatory functions	1.50
slr6041	two-component sensor histidine kinase	Regulatory functions	-1.56
sll1334	two-component sensor histidine kinase	Regulatory functions	-1.57
slr1325	GTP pyrophosphokinase	Regulatory functions	-1.58
sll1544	two-component response regulator NarL subfamily	Regulatory functions	-1.59
slr6001	two-component hybrid sensor and regulator	Regulatory functions	-1.60
slr0835	MoxR protein homolog	Regulatory functions	-1.60
sll0646	guanylyl cyclase	Regulatory functions	-1.60
sll1296	two-component hybrid sensor and regulator	Regulatory functions	-1.62
sll0798	Ni(II)-sensor and/or redox sensor, two-component sensor histidine kinase	Regulatory functions	-1.67
slr1489	transcriptional regulator	Regulatory functions	-1.69
slr1759	two-component hybrid sensor and regulator	Regulatory functions	-1.69
slr1871	transcriptional regulator	Regulatory functions	-1.77
slr1594	two-component response regulator PatA subfamily	Regulatory functions	-1.83
slr0640	two-component sensor histidine kinase	Regulatory functions	-1.88
sll1771	protein serin-threonin phosphatase	Regulatory functions	-1.94
sll1292	two-component response regulator CheY subfamily	Regulatory functions	-1.98
slr1285	two-component sensor histidine kinase	Regulatory functions	3.09
ssl0564	transcriptional regulator	Regulatory functions	2.83
sll1383	probable myo-inositol-1(or 4)-monophosphatase	Regulatory functions	2.77
slr0240	transcriptional regulator	Regulatory functions	2.71
sll2014	sugar fermentation stimulation protein	Regulatory functions	2.59
sll1161	probable adenylate cyclase	Regulatory functions	2.41
slr1860	carbon metabolisms regulatory protein IcfG	Regulatory functions	2.16
sll5035	transcriptional regulatory protein ArsR family	Regulatory functions	-2.02
sll1005	MazG protein homolog	Regulatory functions	-2.13
sll0792	Zinc-responsive repressor ZiaR	Regulatory functions	-2.14
sll0789	two-component response regulator OmpR subfamily	Regulatory functions	-2.20
sll1957	transcriptional regulator	Regulatory functions	-2.25
slr1760	two-component response regulator	Regulatory functions	-2.39
slr1214	two-component response regulator PatA subfamily	Regulatory functions	-2.41

slr6040	two-component response regulator	Regulatory functions	-2.47
sll0998	LysR family transcriptional regulator	Regulatory functions	-2.71
sll0790	two-component sensor histidine kinase	Regulatory functions	-3.17
sll1626	LexA repressor	Regulatory functions	-4.16
sll1787	RNA polymerase beta subunit	Transcription	1.88
slr1861	probable sigma regulatory factor	Transcription	1.83
sll0306	RNA polymerase group 2 sigma factor	Transcription	1.80
sll1043	polyribonucleotide nucleotidyltransferase	Transcription	1.69
slr0080	ribonuclease H	Transcription	1.65
slr1129	ribonuclease E	Transcription	1.63
slr1130	ribonuclease HII	Transcription	1.61
slr1646	ribonuclease III	Transcription	1.59
sll0687	RNA polymerase ECF-type (group 3) sigma factor	Transcription	-1.51
sll0320	probable ribonuclease D	Transcription	-1.93
slr1859	anti-sigma f factor antagonist	Transcription	5.96
slr1856	phosphoprotein substrate of icfG gene cluster	Transcription	5.15
slr0346	ribonuclease III	Transcription	4.10
sll1689	group2 RNA polymerase sigma factor SigE	Transcription	2.21
sll2012	group2 RNA polymerase sigma factor SigD	Transcription	2.09
sll0856	RNA polymerase ECF-type (group 3) sigma-E factor	Transcription	-2.41
slr1564	group 3 RNA polymerase sigma factor	Transcription	-2.65
slr1912	putative PP2C-type protein phosphatase	Transcription	-3.40
slr0021	protease	Translation	1.98
sll1553	phenylalanyl-tRNA synthetase	Translation	1.96
sll1198	tRNA (guanine-N1)-methyltransferase	Translation	1.92
sll1813	50S ribosomal protein L15	Translation	1.90
sll1808	50S ribosomal protein L5	Translation	1.85
sll1819	50S ribosomal protein L17	Translation	1.80
slr1331	periplasmic processing protease	Translation	1.78
slr0220	glycyl-tRNA synthetase beta chain	Translation	1.76
slr0649	methionyl-tRNA synthetase	Translation	1.72
sll1746	50S ribosomal protein L12	Translation	1.72
sll1805	50S ribosomal protein L16	Translation	1.71
ssl3436	50S ribosomal protein L29	Translation	1.69
sll1812	30S ribosomal protein S5	Translation	1.69
slr0612	probable pseudouridine synthase	Translation	1.67
sll1101	30S ribosomal protein S10	Translation	1.67
sll2009	processing protease	Translation	1.67
slr0628	30S ribosomal protein S14	Translation	1.65
slr0955	probable tRNA/rRNA methyltransferase	Translation	1.65

sml0006	50S ribosomal protein L36	Translation	1.64
sll1098	elongation factor EF-G	Translation	1.64
sll1806	50S ribosomal protein L14	Translation	1.58
smr0011	50S ribosomal protein L34	Translation	1.58
sll0179	glutamyl-tRNA synthetase	Translation	1.57
sll1817	30S ribosomal protein S11	Translation	1.57
sll0454	phenylalanyl-tRNA synthetase alpha chain	Translation	1.56
sll1816	30S ribosomal protein S13	Translation	1.55
slr0958	cysteinyl-tRNA synthetase	Translation	1.54
slr0557	valyl-tRNA synthetase	Translation	1.54
slr0434	elongation factor P	Translation	1.53
ssl1426	50S ribosomal protein L35	Translation	1.52
sll1261	elongation factor TS	Translation	1.51
ssr0482	30S ribosomal protein S16	Translation	1.50
sll1120	chromosome segregation protein SMC1	Translation	-1.52
slr1751	periplasmic carboxyl-terminal protease	Translation	-1.52
sll1679	periplasmic protease HhoA	Translation	-1.53
sll0546	probable translation initiation factor	Translation	-1.55
sll1712	DNA binding protein HU	Translation	-1.59
slr1808	transfer RNA-Gln reductase	Translation	-1.63
slr0786	methionine aminopeptidase	Translation	-1.92
sll1811	50S ribosomal protein L18	Translation	3.89
sll1809	30S ribosomal protein S8	Translation	3.88
sll1799	50S ribosomal protein L3	Translation	3.36
slr1251	peptidyl-prolyl cis-trans isomerase	Translation	2.70
slr1703	seryl-tRNA synthetase	Translation	2.63
ssl3445	50S ribosomal protein L31	Translation	2.62
sll1810	50S ribosomal protein L6	Translation	2.61
slr1641	ClpB protein	Translation	2.46
sll1800	50S ribosomal protein L4	Translation	2.37
sll1801	50S ribosomal protein L23	Translation	2.34
sll1804	30S ribosomal protein S3	Translation	2.33
sll1802	50S ribosomal protein L2	Translation	2.31
ssr1480	putative RNA-binding protein	Translation	2.29
sll1909	probable methyltransferase	Translation	2.29
ssl3432	30S ribosomal protein S19	Translation	2.15
sll2008	processing protease	Translation	2.11
sll0927	S-adenosylmethionine synthetase	Translation	2.11
sll1074	leucyl-tRNA synthetase	Translation	2.10
slr0713	tRNA-guanine transglycosylase	Translation	2.09

slr1550	lysyl-tRNA synthetase	Translation	2.07
sll1803	50S ribosomal protein L22	Translation	2.06
sll1394	peptide methionine sulfoxide reductase	Translation	2.04
sll0830	elongation factor EF-G	Translation	-2.18
slr0992	probable tRNA/rRNA methyltransferase	Translation	-2.38
sll0834	low affinity sulfate transporter	Transport and binding proteins	1.86
sll0540	phosphate-binding protein PstS homolog	Transport and binding proteins	1.79
slr1295	iron transport system substrate-binding protein	Transport and binding proteins	1.78
slr1488	multidrug resistance family ABC transporter	Transport and binding proteins	1.72
slr1901	ATP-binding protein of ABC transporter	Transport and binding proteins	1.69
sll1180	toxin secretion ABC transporter ATP-binding protein	Transport and binding proteins	1.66
slr1730	potassium-transporting P-type ATPase C chain	Transport and binding proteins	1.66
slr1247	phosphate-binding periplasmic protein precursor (PBP)	Transport and binding proteins	1.64
sll0855	putative channel transporter	Transport and binding proteins	1.63
slr1950	copper-transporting P-type ATPase CtaA	Transport and binding proteins	1.63
sll1481	ABC-transporter membrane fusion protein	Transport and binding proteins	1.62
slr1113	ATP-binding protein of ABC transporter	Transport and binding proteins	1.60
slr1224	ATP-binding protein of sugar ABC transporter	Transport and binding proteins	1.59
slr1318	iron(III) dicitrate transport system ATP-binding protein	Transport and binding proteins	1.57
slr0354	ATP-binding protein of ABC transporter	Transport and binding proteins	1.54
slr1794	probable anion transporting ATPase	Transport and binding proteins	1.54
slr1455	sulfate transport system ATP-binding protein	Transport and binding proteins	1.54
sll1406	ferrichrome-iron receptor	Transport and binding proteins	1.54
slr1596	a protein in the cytoplasmic membrane involved in light-induced proton extrusion.	Transport and binding proteins	1.52
sll1206	ferric aerobactin receptor, FhuA homolog	Transport and binding proteins	-1.50
sll0273	Na ⁺ /H ⁺ antiporter	Transport and binding proteins	-1.52
sll0477	putative biopolymer transport ExbB-like protein	Transport and binding proteins	-1.52
slr1723	permease protein of sugar ABC transporter	Transport and binding proteins	-1.52
slr1216	Mg ²⁺ transport protein	Transport and binding proteins	-1.54
slr1491	iron(III) dicitrate transport system substrate-binding protein	Transport and binding proteins	-1.54
sll0739	ATP-binding protein of molybdate ABC transporter	Transport and binding proteins	-1.54
slr1509	membrane subunit of a Ktr-like ion transport system	Transport and binding proteins	-1.55
sll0672	cation-transporting p-type ATPase PacL	Transport and binding proteins	-1.55
sll1017	ammonium/methylammonium permease	Transport and binding proteins	-1.59
slr0529	glucosylglycerol transport system substrate-binding protein	Transport and binding proteins	-1.64
slr1492	iron(III) dicitrate transport system substrate-binding protein	Transport and binding proteins	-1.65
slr1776	high affinity sulfate transporter	Transport and binding proteins	-1.66
sll1614	cation-transporting P-type ATPase	Transport and binding proteins	-1.68
slr0864	ATP-binding protein of ABC transporter	Transport and binding proteins	-1.68
sll0312	probable oligopeptides ABC transporter permease protein	Transport and binding proteins	-1.69

slI1599	manganese transport system ATP-binding protein MntA	Transport and binding proteins	-1.71
slr1317	ABC-type iron(III) dicitrate transport system permease protein	Transport and binding proteins	-1.74
slr0796	nickel permease involved in nickel and cobalt tolerance	Transport and binding proteins	-1.76
slI0536	probable potassium channel protein	Transport and binding proteins	-1.78
slI1725	ATP-binding protein of ABC transporter	Transport and binding proteins	-1.78
slI1598	Mn transporter MntC	Transport and binding proteins	-1.78
slr0896	multi-drug efflux transporter	Transport and binding proteins	-1.80
slr0639	mechanosensitive ion channel homolog	Transport and binding proteins	-1.80
slr0797	cobalt-transporting P-type ATPase (cobalt efflux pump) involved in cobalt tolerance	Transport and binding proteins	-1.81
slr2019	ATP-binding protein of ABC transporter	Transport and binding proteins	-1.82
slr1316	ABC-type iron(III) dicitrate transport system permease protein	Transport and binding proteins	-1.85
slI0556	Na ⁺ /H ⁺ antiporter	Transport and binding proteins	-1.87
slr0747	glucosylglycerol transport system ATP-binding protein	Transport and binding proteins	-1.91
slr1490	ferrichrome-iron receptor	Transport and binding proteins	-1.98
slI0537	ammonium/methylammonium permease	Transport and binding proteins	-1.98
slI0680	phosphate-binding periplasmic protein precursor (PBP)	Transport and binding proteins	8.95
slI0683	phosphate transport ATP-binding protein PstB homolog	Transport and binding proteins	6.26
slI0681	phosphate transport system permease protein PstC homolog	Transport and binding proteins	5.83
slI0682	phosphate transport system permease protein PstA homolog	Transport and binding proteins	4.64
slr0242	bacterioferritin comigratory protein homolog	Transport and binding proteins	3.61
slI0684	phosphate transport ATP-binding protein PstB homolog	Transport and binding proteins	2.70
slI1405	biopolymer transport ExbD protein homolog	Transport and binding proteins	2.70
slI0759	ABC transporter ATP-binding protein	Transport and binding proteins	2.53
slr0944	multidrug-efflux transporter	Transport and binding proteins	2.39
slr1881	ATP-binding subunit of the ABC-type Nat permease for neutral amino acids	Transport and binding proteins	2.21
slI1404	biopolymer transport ExbB protein homolog	Transport and binding proteins	2.11
slr1200	urea transport system permease protein	Transport and binding proteins	-2.04
slr0530	glucosylglycerol transport system permease protein	Transport and binding proteins	-2.07
slr0531	glucosylglycerol transport system permease protein	Transport and binding proteins	-2.10
slr2107	probable polysaccharide ABC transporter permease protein	Transport and binding proteins	-2.19
slI0108	ammonium/methylammonium permease	Transport and binding proteins	-2.30
slr5038	chromate transporter	Transport and binding proteins	-2.32
slr5078	similar to potassium channel protein	Transport and binding proteins	-2.33
slr0798	zinc-transporting P-type ATPase (zinc efflux pump) involved in zinc tolerance	Transport and binding proteins	-2.43
slr0794	cation efflux system protein involved in nickel and cobalt tolerance	Transport and binding proteins	-2.44
slr2044	zinc transport system ATP-binding protein	Transport and binding proteins	-2.77
slI1762	periplasmic protein, putative polar amino acid transport system substrate-binding protein	Transport and binding proteins	-3.13
slr0982	probable polysaccharide ABC transporter ATP binding subunit	Transport and binding proteins	-3.17
slr0043	bicarbonate transport system ATP-binding protein	Transport and binding proteins	-3.22
slr0977	ABC transporter, permease component	Transport and binding proteins	-3.24

slr0681	probable sodium/calcium exchanger protein	Transport and binding proteins	-3.27
slr6042	probable cation efflux system protein, czcB homolog	Transport and binding proteins	-3.59
slr6043	probable cation efflux system protein, czcA homolog	Transport and binding proteins	-3.68
sll0771	glucose transport protein	Transport and binding proteins	-3.69
sll0142	probable cation efflux system protein	Transport and binding proteins	-3.90
slr0044	bicarbonate transport system ATP-binding protein	Transport and binding proteins	-4.53
slr0040	bicarbonate transport system substrate-binding protein	Transport and binding proteins	-4.88
slr0041	bicarbonate transport system permease protein	Transport and binding proteins	-4.92
sll0156	unknown protein	Unknown	1.98
sll0630	unknown protein	Unknown	1.96
slr1658	unknown protein	Unknown	1.95
sll1873	unknown protein	Unknown	1.93
slr0960	unknown protein	Unknown	1.91
slr1189	unknown protein	Unknown	1.90
ssr0759	unknown protein	Unknown	1.88
slr1391	unknown protein	Unknown	1.87
sll1225	unknown protein	Unknown	1.86
ssl2420	unknown protein	Unknown	1.85
ssl1533	unknown protein	Unknown	1.84
slr0334	unknown protein	Unknown	1.81
sll1730	unknown protein	Unknown	1.79
sll1315	unknown protein	Unknown	1.77
slr2048	periplasmic protein, function unknown	Unknown	1.77
slr7061	unknown protein	Unknown	1.75
sll0243	unknown protein	Unknown	1.75
slr0333	unknown protein	Unknown	1.75
ssr2060	unknown protein	Unknown	1.74
sll1062	unknown protein	Unknown	1.74
slr0482	unknown protein	Unknown	1.65
sll0068	unknown protein	Unknown	1.64
sll1530	unknown protein	Unknown	1.63
sll0843	unknown protein	Unknown	1.60
slr0345	unknown protein	Unknown	1.57
sll0647	unknown protein	Unknown	1.56
sll0048	unknown protein	Unknown	1.55
sll1528	unknown protein	Unknown	1.54
slr2119	unknown protein	Unknown	1.54
sll0590	unknown protein	Unknown	1.53
slr1552	unknown protein	Unknown	1.53
slr1340	unknown protein	Unknown	1.52

slr2004	periplasmic protein, function unknown	Unknown	-1.50
slr1397	unknown protein	Unknown	-1.51
slr1258	unknown protein	Unknown	-1.51
slr0157	unknown protein	Unknown	-1.51
slr1084	unknown protein	Unknown	-1.52
slr1070	unknown protein	Unknown	-1.54
ssl6092	unknown protein	Unknown	-1.55
ssr6003	unknown protein	Unknown	-1.55
slr0108	unknown protein	Unknown	-1.55
slr2017	type 4 pilin-like protein, essential for motility	Unknown	-1.57
sll1293	unknown protein	Unknown	-1.58
slr6091	unknown protein	Unknown	-1.59
sll0445	unknown protein	Unknown	-1.59
sll0982	unknown protein	Unknown	-1.59
sll7067	unknown protein	Unknown	-1.59
ssl5065	unknown protein	Unknown	-1.60
slr1082	unknown protein	Unknown	-1.61
slr6012	unknown protein	Unknown	-1.61
ssr6083	unknown protein	Unknown	-1.61
ssl8003	unknown protein	Unknown	-1.61
sll5069	unknown protein	Unknown	-1.61
slr1616	unknown protein	Unknown	-1.62
ssr1768	unknown protein	Unknown	-1.63
sll7064	unknown protein	Unknown	-1.63
slr2027	unknown protein	Unknown	-1.63
slr1668	periplasmic protein, function unknown (target gene of sycrp1)	Unknown	-1.63
sll0785	unknown protein	Unknown	-1.64
slr1636	unknown protein	Unknown	-1.65
sll0623	unknown protein	Unknown	-1.67
slr1930	type 4 pilin-like protein	Unknown	-1.68
slr1774	unknown protein	Unknown	-1.68
ssl6018	unknown protein	Unknown	-1.70
slr1931	type 4 pilin-like protein	Unknown	-1.70
sll0267	unknown protein	Unknown	-1.72
ssl6077	unknown protein	Unknown	-1.72
sll0309	unknown protein	Unknown	-1.73
slr1403	unknown protein	Unknown	-1.73
sll5063	unknown protein	Unknown	-1.75
sll5128	unknown protein	Unknown	-1.77
sll7086	unknown protein	Unknown	-1.77

slI0786	unknown protein	Unknown	-1.79
slr0416	unknown protein	Unknown	-1.79
slI0328	unknown protein	Unknown	-1.80
ssl0467	unknown protein	Unknown	-1.80
slI0280	unknown protein	Unknown	-1.80
slr2046	unknown protein	Unknown	-1.81
slr5071	unknown protein	Unknown	-1.81
slI0327	unknown protein	Unknown	-1.81
slr6033	unknown protein	Unknown	-1.82
slr0386	unknown protein	Unknown	-1.83
ssr6024	unknown protein	Unknown	-1.83
slI1892	unknown protein	Unknown	-1.90
slr0616	unknown protein	Unknown	-1.93
slr0109	unknown protein	Unknown	-1.96
slr6031	unknown protein	Unknown	-1.97
slr0841	periplasmic protein, function unknown	Unknown	-1.97
slI5046	unknown protein	Unknown	92.79
slI5044	unknown protein	Unknown	74.24
ssl5045	unknown protein	Unknown	45.94
slr5053	unknown protein	Unknown	29.72
slI1472	unknown protein	Unknown	11.84
slr0366	unknown protein	Unknown	6.39
slI1515	glutamine synthetase inactivating factor IF17	Unknown	3.88
slr1484	unknown protein	Unknown	3.69
slI1009	unknown protein	Unknown	3.53
ssl2501	unknown protein	Unknown	3.41
slI1853	unknown protein	Unknown	3.39
slr1854	unknown protein	Unknown	3.01
slr1852	unknown protein	Unknown	2.81
ssr3532	unknown protein	Unknown	2.79
ssl0787	unknown protein	Unknown	2.70
ssl1520	unknown protein	Unknown	2.67
slr1485	putative phosphatidylinositol phosphate kinase, salt-induced periplasmic protein	Unknown	2.64
slr1855	unknown protein	Unknown	2.48
slI0441	unknown protein	Unknown	2.45
slI1304	unknown protein	Unknown	2.43
ssr7036	unknown protein	Unknown	2.41
slI0263	unknown protein	Unknown	2.36
ssr2912	unknown protein	Unknown	2.35
slI1456	unknown protein	Unknown	2.31

ssr2201	unknown protein	Unknown	2.27
slr0271	unknown protein	Unknown	2.24
slr1450	unknown protein	Unknown	2.19
ssl3769	unknown protein	Unknown	2.18
sll0237	unknown protein	Unknown	2.17
sll1613	unknown protein	Unknown	2.15
sll0930	unknown protein	Unknown	2.15
slr1798	unknown protein	Unknown	2.12
sll0723	unknown protein	Unknown	2.05
sll0066	unknown protein	Unknown	2.05
slr0377	unknown protein	Unknown	-2.01
sll1006	unknown protein	Unknown	-2.01
ssr5120	unknown protein	Unknown	-2.01
ssr2194	unknown protein	Unknown	-2.01
sll1267	unknown protein	Unknown	-2.05
ssl1552	unknown protein	Unknown	-2.05
slr2071	unknown protein	Unknown	-2.06
slr1771	unknown protein	Unknown	-2.07
ssl7021	unknown protein	Unknown	-2.10
sll1135	unknown protein	Unknown	-2.10
sll1837	periplasmic protein, function unknown	Unknown	-2.12
sll1763	unknown protein	Unknown	-2.13
slr0069	unknown protein	Unknown	-2.15
ssl7020	unknown protein	Unknown	-2.17
ssl8024	unknown protein	Unknown	-2.19
sll5090	unknown protein	Unknown	-2.21
slr0793	cation efflux system protein involved in nickel and cobalt tolerance	Unknown	-2.22
slr1028	unknown protein	Unknown	-2.22
sll5089	unknown protein	Unknown	-2.23
ssl7019	unknown protein	Unknown	-2.23
sll8033	unknown protein	Unknown	-2.26
slr1768	unknown protein	Unknown	-2.29
sll0444	unknown protein	Unknown	-2.29
sll0645	unknown protein	Unknown	-2.30
sll5006	unknown protein	Unknown	-2.38
slr1062	unknown protein	Unknown	-2.39
sll1236	unknown protein	Unknown	-2.54
slr6009	unknown protein	Unknown	-2.55
sll7087	unknown protein	Unknown	-2.56
slr6081	unknown protein	Unknown	-2.58

slr1618	unknown protein	Unknown	-2.59
slr6063	unknown protein	Unknown	-2.67
slr1670	unknown protein	Unknown	-2.69
sll0922	unknown protein	Unknown	-2.70
slr6022	unknown protein	Unknown	-2.74
slr1681	unknown protein	Unknown	-2.78
slr0439	unknown protein	Unknown	-2.80
sll0857	unknown protein	Unknown	-2.88
sll1882	unknown protein	Unknown	-2.90
ssr7018	unknown protein	Unknown	-2.90
slr6028	unknown protein	Unknown	-2.90
slr6068	unknown protein	Unknown	-3.00
slr0581	unknown protein	Unknown	-3.03
slr6004	unknown protein	Unknown	-3.04
sll1583	unknown protein	Unknown	-3.14
sll1891	unknown protein	Unknown	-3.16
ssl5068	unknown protein	Unknown	-3.22
slr1958	unknown protein	Unknown	-3.22
slr6087	unknown protein	Unknown	-3.23
sll0923	unknown protein	Unknown	-3.27
ssl7045	unknown protein	Unknown	-3.28
sll0022	unknown protein	Unknown	-3.33
slr1928	type 4 pilin-like protein	Unknown	-3.35
slr6005	unknown protein	Unknown	-3.37
ssr1038	unknown protein	Unknown	-3.48
slr6064	unknown protein	Unknown	-3.52
ssl5108	unknown protein	Unknown	-3.55
sll1426	unknown protein	Unknown	-3.55
sll0384	unknown protein	Unknown	-3.67
slr6065	unknown protein	Unknown	-3.67
slr6008	unknown protein	Unknown	-3.73
ssr3129	unknown protein	Unknown	-3.77
slr6006	unknown protein	Unknown	-3.83
slr6067	unknown protein	Unknown	-3.85
slr0006	unknown protein	Unknown	-4.04
slr6007	unknown protein	Unknown	-4.05
slr6066	unknown protein	Unknown	-4.18
ssr3465	unknown protein	Unknown	-4.33
slr0226	unknown protein	Unknown	-5.27
ssr1853	unknown protein	Unknown	-5.94

slr1667	hypothetical protein (target gene of <i>sycrp1</i>)	Unknown	-6.18
sll1862	unknown protein	Unknown	-6.70
ssr2153	unknown protein	Unknown	-7.33
sll1863	unknown protein	Unknown	-9.03
ssr6026	unknown protein	Unknown	-9.41
ssr6085	unknown protein	Unknown	-9.49
pCB2.4 ORF1	hypothetical protein	Unknown	-2.25
pCB2.4 ORF3	hypothetical protein	Unknown	-12.16

All genes significantly altered by encapsulation in alkoxide-derived silica gel by at least 1.5-fold and a *P*-value < 0.01