

Additional file 1

Table S1. List of Open Reading Frames (ORFs) of SLY genome predicted to be protein coding genes, with putative annotation.

ORF	Gene	Protein Function
SLY001	<i>dnaA</i>	Chromosomal replication initiation protein
SLY002	<i>dnaN</i>	DNA polymerase III beta subunit
SLY003	-	Hypothetical Protein
SLY004	-	Hypothetical Protein
SLY005	<i>xorIIIM</i>	Modification methylase XorII (fragment)
SLY006	<i>xorIIIM</i>	Modification methylase XorII (fragment)
SLY007	<i>xorIIIM</i>	Modification methylase XorII (fragment)
SLY008	CHP	Conserved Hypothetical Protein associated with <i>xorIIIM</i>
SLY009	<i>yqkC</i>	Metallo-Beta-Lactamase Family Protein
SLY010	<i>degV</i>	DegV Family Protein
SLY011	<i>ybjI</i>	Hydrolase Haloacid Dehalogenase-Like Family (fragment)
SLY012	<i>ybjI</i>	Hydrolase Haloacid Dehalogenase-Like Family (fragment)
SLY013	<i>ybjI</i>	Hydrolase Haloacid Dehalogenase-Like Family
SLY014	<i>yqkC</i>	Metallo-Beta-Lactamase Family Protein
SLY015	<i>spxA</i>	Regulatory protein <i>spx</i>
SLY016	<i>artM</i>	ABC Transporter Permease Component (fragment)
SLY017	<i>yecS</i>	Inner membrane amino-acid ABC transporter permease protein <i>yecS</i>
SLY018	CHP	Conserved Hypothetical Protein
SLY019	-	Hypothetical Protein
SLY020	-	Hypothetical Protein
SLY021	-	Hypothetical Protein
SLY022	-	Hypothetical Protein
SLY023	<i>thrS</i>	Threonyl-tRNA synthetase
SLY024	CHP	Putative Exopolyphosphatase-related protein
SLY025	<i>trmE</i>	tRNA modification GTPase <i>trmE</i>
SLY026	CHP	Mgp-operon protein 1
SLY027	<i>MalE</i>	Putative maltose/maltodextrin-binding protein
SLY028	<i>ycjP</i>	Probable ABC transporter permease protein MG189
SLY029	<i>ugpA</i>	Probable ABC transporter permease protein MG188
SLY030	<i>fbpC</i>	Ferric cations import ATP-binding protein <i>fbpC</i>
SLY031	<i>asnS</i>	Asparaginyl-tRNA synthetase
SLY032	-	Hypothetical Protein
SLY033	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY034	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY035	-	Hypothetical Protein
SLY036	-	Hypothetical Protein
SLY037	CHP	Conserved Hypothetical Protein
SLY038	CHP	Conserved Hypothetical Protein
SLY039	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i> [Includes: Reverse-transcriptase]
SLY040	-	Hypothetical Protein
SLY041	CHP	Conserved Hypothetical protein - Paragroup CHP041
SLY042	<i>dnaC</i>	Replicative DNA helicase
SLY043	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY044	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY045	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)
SLY046	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)
SLY047	CHP	Conserved Hypothetical Protein
SLY048	CHP	Hypothetical protein -Paragroup CHP041
SLY049	-	Hypothetical Protein
SLY050	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150

ORF	Gene	Protein Function
SLY051	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i> [Includes: Reverse-transcriptase]
SLY052	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY053	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY054	CHP	Conserved Hypothetical Protein
SLY055	<i>dnaC</i>	Replicative DNA helicase
SLY056	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY057	<i>tmk</i>	Thymidylate kinase
SLY058	<i>llaDCHIA</i>	Modification methylase <i>llaDCHIA</i>
SLY059	CHP	Conserved Hypothetical Protein
SLY060	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY061	CHP	Conserved Hypothetical Protein (methylase)
SLY062	-	Hypothetical Protein
SLY063	-	Hypothetical Protein
SLY064	CHP	Conserved Hypothetical Protein
SLY065	-	Hypothetical Protein
SLY066	-	Hypothetical Protein
SLY067	CHP	Conserved Hypothetical Protein
SLY068	-	Hypothetical Protein
SLY069	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY070	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY071	-	Hypothetical Protein
SLY072	-	Hypothetical Protein
SLY073	-	Hypothetical Protein
SLY074	<i>nrdE</i>	Ribonucleoside-diphosphate reductase alpha subunit
SLY075	-	Hypothetical Protein
SLY076	-	Hypothetical Protein
SLY077	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY078	-	Phage-Associated Protein
SLY079	<i>eno</i>	Enolase
SLY080	-	Hypothetical Protein
SLY081	-	Hypothetical Protein
SLY082	-	Hypothetical Protein
SLY083	<i>gpml</i>	2,3-bisphosphoglycerate-independent phosphoglycerate mutase
SLY084	<i>pyk</i>	Pyruvate kinase
SLY085	-	Hypothetical Protein
SLY086	CHP	Conserved Hypothetical Protein
SLY087	-	Hypothetical Protein
SLY088	-	Hypothetical Protein
SLY089	CHP	Conserved Hypothetical Protein
SLY090	-	Hypothetical Protein
SLY091	-	Hypothetical Protein
SLY092	<i>thyA</i>	Thymidylate synthase
SLY093	<i>dfrA</i>	Dihydrofolate reductase
SLY094	-	Hypothetical Protein
SLY095	<i>plsC</i>	Probable 1-acyl-sn-glycerol-3-phosphate acyltransferase
SLY096	CHP	<i>OsmC/Ohr</i> Family Protein
SLY097	<i>rpsD</i>	30S ribosomal protein S4
SLY098	<i>mgtA</i>	Magnesium transporting ATPase, P-type 1
SLY099	CHP	Hypothetical protein MG105
SLY100	<i>degV</i>	degV Family Protein
SLY101	-	Hypothetical Protein
SLY102	-	Hypothetical Protein
SLY103	-	Hypothetical Protein
SLY104	<i>gcp</i>	Probable O-sialoglycoprotein endopeptidase
SLY105	-	Hypothetical Protein
SLY106	<i>dnaC</i>	Replicative DNA helicase
SLY107	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY108	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY109	-	Hypothetical Protein
SLY110	CHP	Conserved Hypothetical Protein
SLY111	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)

ORF	Gene	Protein Function
SLY112	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)
SLY113	<i>rad50</i>	DNA double-strand break repair rad50 ATPase
SLY114	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY115	-	Hypothetical Protein
SLY116	CHP	Conserved Hypothetical Protein
SLY117	-	Hypothetical Protein
SLY118	CHP	Conserved Hypothetical Protein
SLY119	CHP	Conserved Hypothetical Protein
SLY120	CHP	Conserved Hypothetical Protein
SLY121	-	Hypothetical Protein
SLY122	CHP	Conserved Hypothetical Protein (methylase)
SLY123	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY124	CHP	Conserved Hypothetical Protein
SLY125	CHP	Phage-Associated Protein
SLY126	<i>tmk</i>	Thymidylate kinase
SLY127	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY128	<i>dnaC</i>	Replicative DNA helicase
SLY129	CHP	Conserved Hypothetical Protein
SLY130	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY131	CHP	Hypothetical protein -Paragroup CHP041
SLY132	-	Hypothetical Protein
SLY133	CHP	Conserved Hypothetical Protein
SLY134	-	Hypothetical Protein
SLY135	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY136	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY137	-	Hypothetical Protein
SLY138	<i>ygiH</i>	Hypothetical UPF0078 membrane protein PAM436
SLY139	-	Hypothetical Protein
SLY140	<i>yqiY</i>	Probable amino-acid ABC transporter permease protein <i>yqiY</i>
SLY141	-	Hypothetical Protein
SLY142	<i>cadA</i>	Probable cadmium-transporting ATPase
SLY143	<i>spoVG</i>	Putative septation protein <i>spoVG</i>
SLY144	<i>ksgA</i>	Dimethyladenosine transferase
SLY145	<i>ywfO</i>	HD Domain Protein
SLY146	<i>pduL</i>	Propanediol Utilization Protein
SLY147	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY148	CHP	Conserved Hypothetical Protein
SLY149	CHP	Conserved Hypothetical Protein
SLY150	CHP	Hypothetical Protein
SLY151	CHP	Hypothetical protein -Paragroup CHP041
SLY152	CHP	Hypothetical Protein Paragroup CHP152
SLY153	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY154	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY155	CHP	Conserved Hypothetical Protein
SLY156	CHP	Conserved Hypothetical Protein
SLY157	CHP	Hypothetical protein -Paragroup CHP152
SLY158	CHP	Hypothetical protein -Paragroup CHP158
SLY159	CHP	Hypothetical protein -Paragroup CHP041
SLY160	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY161	-	Phage-Associated Protein
SLY162	-	Phage-Associated Protein
SLY163	<i>xorIIM</i>	Modification methylase <i>XorII</i>
SLY164	CHP	Hypothetical Protein associated with <i>xorIIM</i>
SLY165	-	Phage-Associated Protein
SLY166	CHP	Conserved Hypothetical Protein
SLY167	<i>dnaC</i>	Replicative DNA helicase

ORF	Gene	Protein Function
SLY168	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY169	<i>tmk</i>	Thymidylate kinase
SLY170	CHP	Conserved Hypothetical Protein
SLY171	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>
SLY172	CHP	Phage-Associated Protein
SLY173	CHP	Phage-Associated Protein
SLY174	CHP	Conserved Hypothetical Protein
SLY175	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY176	CHP	Conserved Hypothetical Protein (methylase)
SLY177	-	Hypothetical Protein
SLY178	-	Hypothetical Protein
SLY179	CHP	Conserved Hypothetical Protein
SLY180	CHP	Conserved Hypothetical Protein
SLY181	<i>hflB</i>	Putative cell division cycle ATPase
SLY182	CHP	Hypothetical protein -Paragroup CHP152
SLY183	CHP	Polyprotein -Paragroups CHP041 and CHP158
SLY184	CHP	Conserved Hypothetical Protein
SLY185	CHP	Conserved Hypothetical Protein
SLY186	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)
SLY187	CHP	Conserved Hypothetical Protein
SLY188	CHP	Phage-Associated Protein
SLY189	-	Hypothetical Protein
SLY190	-	Hypothetical Protein
SLY191	CHP	Conserved Hypothetical Protein
SLY192	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY193	CHP	Hypothetical protein -Paragroup CHP041
SLY194	-	Hypothetical Protein
SLY195	<i>pacL</i>	Cation-transporting ATPase <i>pacL</i>
SLY196	-	Hypothetical Protein
SLY197	<i>ileS</i>	Isoleucyl-tRNA synthetase
SLY198	<i>engD</i>	GTP-dependent nucleic acid-binding protein <i>engD</i>
SLY199	<i>engC</i>	Probable GTPase <i>engC</i>
SLY200	-	Hypothetical Protein
SLY201	-	Hypothetical Protein
SLY202	-	Hypothetical Protein
SLY203	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY204	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY205	<i>hflB</i>	Putative cell division cycle ATPase
SLY206	CHP	Conserved Hypothetical Protein
SLY207	-	Hypothetical Protein
SLY208	CHP	Conserved Hypothetical Protein
SLY209	CHP	Conserved Hypothetical Protein
SLY210	-	Hypothetical Protein
SLY211	CHP	Conserved Hypothetical Protein (methylase)
SLY212	CHP	Conserved Hypothetical Protein (methylase)
SLY213	-	Hypothetical Protein
SLY214	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY215	CHP	Conserved Hypothetical Protein
SLY216	-	Hypothetical Protein
SLY217	CHP	Conserved Hypothetical Protein
SLY218	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>
SLY219	CHP	Conserved Hypothetical Protein
SLY220	<i>tmk</i>	Thymidylate kinase
SLY221	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY222	<i>dnaC</i>	Replicative DNA helicase
SLY223	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY224	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (frag)
SLY225	-	Hypothetical Protein
SLY226	-	Hypothetical Protein
SLY227	CHP	Conserved Hypothetical Protein
SLY228	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150

ORF	Gene	Protein Function
SLY229	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY230	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY231	CHP	Hypothetical Protein MCAP
SLY232	-	Hypothetical Protein
SLY233	<i>nfo</i>	Probable endonuclease IV
SLY234	<i>nfo</i>	Probable endonuclease IV
SLY235	<i>yqfR</i>	Probable ATP-dependent RNA helicase <i>yqfR</i>
SLY236	<i>ytmL</i>	Probable amino-acid ABC transporter permease protein ytmL
SLY237	<i>ribF</i>	Riboflavin biosynthesis protein ribF [Includes: Riboflavin kinase
SLY238	<i>uvrC</i>	UvrABC system protein C
SLY239	-	Hypothetical Protein
SLY240	-	Hypothetical Protein
SLY241	-	Hypothetical Protein
SLY242	<i>uvrB</i>	UvrABC system protein B
SLY243	CHP	Conserved Hypothetical Protein
SLY244	CHP	Conserved Hypothetical Protein
SLY245	<i>nifU</i>	<i>NifU</i> Homolog
SLY246	-	Hypothetical Protein
SLY247	CHP	Conserved Hypothetical Protein
SLY248	CHP	Conserved Hypothetical Protein
SLY249	CHP	Conserved Hypothetical Protein associated with tmk
SLY250	<i>dnaC</i>	Replicative DNA helicase
SLY251	<i>dnaC</i>	Replicative DNA helicase
SLY252	-	Hypothetical Protein
SLY253	CHP	Phage-Associated Protein
SLY254	CHP	Conserved Hypothetical Protein
SLY255	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY256	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY257	-	Hypothetical Protein
SLY258	CHP	Conserved Hypothetical Protein
SLY259	-	Hypothetical Protein
SLY260	-	Hypothetical Protein
SLY261	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY262	CHP	Conserved Hypothetical Protein
SLY263	-	Hypothetical Protein
SLY264	CHP	Conserved Hypothetical Protein
SLY265	-	Hypothetical Protein
SLY266	-	Hypothetical Protein
SLY267	<i>troA</i>	Periplasmic zinc-binding protein <i>troA</i> precursor
SLY268	<i>troB</i>	Zinc transport system ATP-binding protein <i>troB</i>
SLY269	<i>mntC</i>	Manganese transport system membrane protein <i>mntC</i>
SLY270	<i>troD</i>	Zinc transport system membrane protein <i>troD</i>
SLY271	<i>hisS</i>	Histidyl-tRNA synthetase
SLY272	<i>aspS</i>	Aspartyl-tRNA synthetase
SLY273	<i>tilS</i>	tRNA(Ile)-lysine synthase
SLY274	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY275	<i>rluD</i>	Ribosomal Large Subunit Pseudouridine Synthase D
SLY276	<i>metN</i>	Probable D-methionine transport ATP-binding protein metN
SLY277	<i>nplA</i>	ABC-Type Methionine Transport System Periplasmic Component
SLY278	<i>metI</i>	D-methionine transport system permease protein metI
SLY279	<i>yaaQ</i>	Hypothetical protein <i>yaaQ</i>
SLY280	<i>rpsO</i>	30S ribosomal protein S15
SLY281	<i>thiJ</i>	Protein thiJ
SLY282	<i>rplM</i>	50S ribosomal protein L13
SLY283	<i>rpsL</i>	30S ribosomal protein S9
SLY284	<i>gltX</i>	Glutamyl-tRNA synthetase
SLY285	<i>cysS</i>	Cysteinyl-tRNA synthetase
SLY286	<i>yodC</i>	Putative NAD(P)H nitroreductase 12C

ORF	Gene	Protein Function
SLY287	CHP	Conserved Hypothetical Protein
SLY288	CHP	Hypothetical UPF0154 protein MYPE400
SLY289	<i>yhhF</i>	Putative methylase HI0767
SLY290	<i>yqeK</i>	Protein <i>yqeK</i>
SLY291	<i>yqeG</i>	Hypothetical protein <i>yqeG</i>
SLY292	<i>greA</i>	Transcription elongation factor <i>greA</i>
SLY293	<i>smtA</i>	O-Methyltransferase Family Protein
SLY294	<i>ruvX</i>	Putative Holliday junction resolvase
SLY295	<i>alaS</i>	Alanyl-tRNA synthetase
SLY296	-	Hypothetical Protein
SLY297	<i>gap</i>	Glyceraldehyde-3-phosphate dehydrogenase
SLY298	<i>pgk</i>	Phosphoglycerate kinase
SLY299	<i>fba</i>	Fructose-bisphosphate aldolase
SLY300	<i>yidA</i>	Peptidyl-Prolyl Cis-Trans Isomerase
SLY301	<i>tpiA</i>	Triosephosphate isomerase
SLY302	-	Hypothetical Protein
SLY303	-	Hypothetical Protein
SLY304	<i>cdsA</i>	Phosphatidate cytidyltransferase
SLY305	<i>frr</i>	Ribosome recycling factor
SLY306	<i>pyrH</i>	Uridylate kinase
SLY307	<i>tsf</i>	Elongation factor Ts
SLY308	<i>rpsB</i>	30S ribosomal protein S2
SLY309	<i>dut</i>	Deoxyuridine 5'-triphosphate nucleotidohydrolase
SLY310	<i>ung</i>	Uracil-DNA glycosylase
SLY311	CHP	Conserved Hypothetical Protein
SLY312	-	Hypothetical Protein
SLY313	<i>pan</i>	Proteasome-activating nucleotidase
SLY314	-	Hypothetical Protein
SLY315	CHP	Conserved Hypothetical Protein
SLY316	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY317	-	Hypothetical Protein
SLY318	-	Hypothetical Protein
SLY319	-	Hypothetical Protein
SLY320	-	Hypothetical Protein
SLY321	-	Hypothetical Protein
SLY322	-	Hypothetical Protein
SLY323	<i>lolD</i>	ABC transporter ATP-binding protein MJ0796
SLY324	<i>pheT</i>	Phenylalanyl-tRNA synthetase beta chain
SLY325	<i>pheS</i>	Phenylalanyl-tRNA synthetase alpha chain
SLY326	CHP	Conserved Hypothetical Protein
SLY327	<i>ybjI</i>	Hydrolase Haloacid Dehalogenase-Like Family (fragment)
SLY328	<i>ybjI</i>	Hydrolase Haloacid Dehalogenase-Like Family (fragment)
SLY329	<i>dnaE</i>	DNA polymerase III alpha subunit
SLY330	<i>lysS</i>	Lysyl-tRNA synthetase
SLY331	<i>lplA</i>	Probable lipoate-protein ligase A
SLY332	CHP	Conserved Hypothetical Protein
SLY333	<i>ftsH</i>	Cell division protein ftsH homolog
SLY334	<i>argS2</i>	Arginyl-tRNA synthetase 2
SLY335	<i>polC</i>	DNA polymerase III <i>polC</i> -type
SLY336	-	Hypothetical protein
SLY337	<i>trpS</i>	Tryptophanyl-tRNA synthetase
SLY338	-	Hypothetical Protein
SLY339	-	Hypothetical Protein
SLY340	-	Hypothetical Protein
SLY341	-	Hypothetical Protein
SLY342	<i>nifU</i>	NifU-like protein
SLY343	<i>csd</i>	Probable cysteine desulfurase
SLY344	<i>tyrS</i>	Tyrosyl-tRNA synthetase
SLY345	<i>rplS</i>	50S ribosomal protein L19
SLY346	<i>trmD</i>	tRNA (Guanine-1) methyltransferase
SLY347	<i>rpsP</i>	30S ribosomal protein S16
SLY348	<i>prfB</i>	Peptide chain release factor 2
SLY349	<i>secA</i>	Preprotein translocase <i>secA</i> subunit
SLY350	CHP	Conserved Hypothetical Protein
SLY351	-	Hypothetical Protein
SLY352	CHP	Conserved Hypothetical Protein (methylase)

ORF	Gene	Protein Function
SLY353	-	Hypothetical Protein
SLY354	<i>dnaJ</i>	Chaperone protein <i>dnaJ</i>
SLY355	<i>dnaK</i>	Chaperone protein <i>dnaK</i>
SLY356	<i>grpE</i>	Protein <i>grpE</i>
SLY357	<i>hrcA</i>	Heat-inducible transcription repressor <i>hrcA</i>
SLY358	-	Hypothetical Protein
SLY359	-	Hypothetical Protein
SLY360	<i>rplQ</i>	50S ribosomal protein L17
SLY361	<i>rpoA</i>	DNA-directed RNA polymerase alpha chain
SLY362	<i>rpsK</i>	30S ribosomal protein S11
SLY363	<i>rpsM</i>	30S ribosomal protein S13
SLY364	<i>rpmJ</i>	50S ribosomal protein L36
SLY365	<i>infA</i>	Translation initiation factor IF-1
SLY366	<i>map</i>	Methionine aminopeptidase
SLY367	<i>adk</i>	Adenylate kinase
SLY368	<i>secY</i>	Preprotein translocase <i>secY</i> subunit
SLY369	<i>rplO</i>	50S ribosomal protein L15
SLY370	<i>rpmD</i>	50S ribosomal protein L30
SLY371	<i>rpsE</i>	30S ribosomal protein S5
SLY372	<i>rplR</i>	50S ribosomal protein L18
SLY373	<i>rplF</i>	50S ribosomal protein L6
SLY374	<i>rpsH</i>	30S ribosomal protein S8
SLY375	<i>rpsN2</i>	30S ribosomal protein S14-2
SLY376	<i>rplE</i>	50S ribosomal protein L5
SLY377	<i>rplX</i>	50S ribosomal protein L24
SLY378	<i>rplN</i>	50S ribosomal protein L14
SLY379	<i>rpsQ</i>	30S ribosomal protein S17
SLY380	<i>rpmC</i>	50S ribosomal protein L29
SLY381	<i>rplP</i>	50S ribosomal protein L16
SLY382	<i>rpsC</i>	30S ribosomal protein S3
SLY383	<i>rplV</i>	50S ribosomal protein L22
SLY384	<i>rpsS</i>	30S ribosomal protein S19
SLY385	<i>rplB</i>	50S ribosomal protein L2
SLY386	<i>rplW</i>	50S ribosomal protein L23
SLY387	<i>rplD</i>	50S ribosomal protein L4
SLY388	<i>rplC</i>	50S ribosomal protein L3
SLY389	<i>rpsJ</i>	30S ribosomal protein S10
SLY390	<i>rpmF</i>	50S ribosomal protein L32
SLY391	-	Hypothetical Protein
SLY392	<i>obg</i>	Spo0B-associated GTP-binding protein
SLY393	<i>rpmA</i>	50S ribosomal protein L27
SLY394	CHP	Conserved Hypothetical Protein
SLY395	<i>rplU</i>	50S ribosomal protein L21
SLY396	<i>yceA</i>	Rhodanese-Like
SLY397	<i>serS</i>	Seryl-tRNA synthetase
SLY398	-	Hypothetical Protein
SLY399	-	Hypothetical Protein
SLY400	<i>rpsT</i>	30S ribosomal protein S20
SLY401	-	Hypothetical Protein
SLY402	-	Hypothetical Protein
SLY403	<i>NUF1</i>	Protein NUF1
SLY404	-	Hypothetical Protein
SLY405	<i>thil</i>	Probable thiamine biosynthesis protein <i>thil</i>
SLY406	<i>ppa</i>	Inorganic pyrophosphatase
SLY407	<i>smpB</i>	SsrA-binding protein
SLY408	-	Hypothetical Protein
SLY409	-	Hypothetical Protein
SLY410	-	Hypothetical Protein
SLY411	CHP	Hypothetical Protein Pcar
SLY412	<i>nusA</i>	Transcription elongation protein <i>nusA</i>
SLY413	CHP	Conserved Hypothetical Protein
SLY414	<i>infB</i>	Translation initiation factor IF-2
SLY415	<i>rbfA</i>	Ribosome-binding factor A
SLY416	<i>pth</i>	Peptidyl-tRNA hydrolase
SLY417	<i>yhdP</i>	Hemolysin
SLY418	CHP	Hypothetical Protein MSC
SLY419	<i>sigA</i>	RNA polymerase sigma factor <i>rpoD</i>
SLY420	<i>dnaG</i>	DNA primase
SLY421	<i>glyQS</i>	Glycyl-tRNA synthetase
SLY422	<i>era</i>	GTP-binding protein <i>era</i> homolog

ORF	Gene	Protein Function
SLY423	<i>ybeY</i>	Hypothetical UPF0054 protein
SLY424	-	Hypothetical protein
SLY425	<i>rpsU</i>	30S ribosomal protein S21
SLY426	-	Hypothetical Protein
SLY427	CHP	Conserved Hypothetical Protein
SLY428	CHP	Conserved Hypothetical Protein
SLY429	-	Hypothetical Protein
SLY430	-	Hypothetical Protein
SLY431	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i>
SLY432	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i>
SLY433	<i>dnaX</i>	DNA polymerase III gamma/tau subunit
SLY434	CHP	Conserved Hypothetical Protein
SLY435	CHP	Conserved Hypothetical Protein
SLY436	<i>pssA</i>	CDP-diacylglycerol--serine O-phosphatidyltransferase
SLY437	<i>psd2</i>	Phosphatidylserine decarboxylase proenzyme 2
SLY438	<i>pyrG</i>	CTP synthase
SLY439	CHP	Hypothetical Protein
SLY440	<i>dnaD</i>	DNA Replication Protein <i>DnaD</i>
SLY441	<i>rnc</i>	Ribonuclease III
SLY442	<i>plsX</i>	Fatty acid/phospholipid synthesis protein <i>plsX</i>
SLY443	-	Hypothetical Protein
SLY444	<i>norM</i>	Na+-Driven Multidrug Efflux Pump
SLY445	-	Hypothetical Protein
SLY446	<i>topA</i>	DNA topoisomerase I
SLY447	CHP	GTPase
SLY448	CHP	Conserved Hypothetical Protein
SLY449	<i>efp</i>	Elongation factor P
SLY450	<i>miaA</i>	tRNA delta(2)-isopentenylpyrophosphate transferase
SLY451	CHP	Hypothetical protein MG246
SLY452	CHP	Metal Dependent Phosphohydrolase
SLY453	CHP	Conserved Hypothetical Protein
SLY454	<i>yigN</i>	RmuC Family Protein
SLY455	CHP	Conserved Hypothetical Protein
SLY456	<i>gidA</i>	tRNA uridine 5-carboxymethylaminomethyl modification enzyme <i>gidA</i>
SLY457	<i>gidB</i>	Methyltransferase <i>gidB</i>
SLY458	<i>hflB</i>	Cell division protein <i>ftsH</i> homolog 4
SLY459	CHP	Conserved Hypothetical Protein
SLY460	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY461	CHP	Conserved Hypothetical Protein
SLY462	CHP	Phage-Associated Protein
SLY463	-	Hypothetical Protein
SLY464	<i>dnaC</i>	Replicative DNA helicase
SLY465	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY466	<i>tmk</i>	Thymidylate kinase
SLY467	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY468	CHP	Conserved Hypothetical Protein
SLY469	<i>tuf</i>	Elongation factor Tu
SLY470	<i>fusA</i>	Elongation factor G
SLY471	<i>rpsG</i>	30S ribosomal protein S7
SLY472	<i>rpsL</i>	30S ribosomal protein S12
SLY473	<i>rpoC</i>	DNA-directed RNA polymerase beta' chain
SLY474	<i>rpoB</i>	DNA-directed RNA polymerase beta chain
SLY475	<i>rplL</i>	50S ribosomal protein L7/L12
SLY476	<i>rplJ</i>	50S ribosomal protein L10
SLY477	<i>rplA</i>	50S ribosomal protein L1
SLY478	<i>rplK</i>	50S ribosomal protein L11
SLY479	-	Hypothetical Protein
SLY480	<i>nusG</i>	Transcription antitermination protein <i>nusG</i>
SLY481	<i>secE</i>	Preprotein Translocase Subunit <i>SecE</i>
SLY482	<i>yacO</i>	TRNA/RRNA Methyltransferase
SLY483	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY484	<i>exp7</i>	Probable cation-transporting ATPase <i>exp7</i>
SLY485	<i>pnpA</i>	Polyribonucleotide nucleotidyltransferase
SLY486	CHP	Conserved Hypothetical Protein (occurs within rRNA)
SLY487	-	Hypothetical Protein
SLY488	<i>oxaA2</i>	Membrane protein <i>oxaA2</i> precursor
SLY489	<i>rnpA</i>	Ribonuclease P protein component
SLY490	<i>rpmH</i>	50S ribosomal protein L34
SLY491	<i>proS</i>	Prolyl-tRNA synthetase
SLY492	-	Hypothetical Protein
SLY493	<i>pepP</i>	Xaa-Pro aminopeptidase
SLY494	<i>rpmG</i>	50S ribosomal protein L33
SLY495	CHP	Conserved Hypothetical Protein
SLY496	CHP	Conserved Hypothetical Protein
SLY497	-	Hypothetical Protein
SLY498	<i>hup</i>	DNA-binding protein HU
SLY499	<i>gpsA</i>	Glycerol-3-phosphate dehydrogenase
SLY500	-	Hypothetical Protein
SLY501	CHP	Conserved Hypothetical Protein
SLY502	-	Hypothetical Protein
SLY503	-	Hypothetical Protein
SLY504	<i>dnaB</i>	Replicative DNA helicase (fragment)
SLY505	-	Hypothetical Protein
SLY506	-	Hypothetical Protein
SLY507	<i>hpaIM</i>	Modification methylase <i>HpaI</i>
SLY508	-	Hypothetical Protein
SLY509	<i>pdhA</i>	Pyruvate dehydrogenase E1 component, alpha subunit
SLY510	<i>pdhB</i>	Pyruvate dehydrogenase E1 component, beta subunit
SLY511	<i>pdhC</i>	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex
SLY512	<i>pdhD</i>	Dihydrolipoyl dehydrogenase
SLY513	<i>yabD</i>	Putative deoxyribonuclease <i>yabD</i>
SLY514	-	Hypothetical Protein
SLY515	-	Hypothetical Protein
SLY516	-	Hypothetical Protein
SLY517	CHP	Conserved Hypothetical Protein
SLY518	CHP	Conserved Hypothetical Protein
SLY519	<i>pcrA</i>	ATP-dependent DNA helicase <i>pcrA</i>
SLY520	<i>glnS</i>	Glutamyl-tRNA synthetase
SLY521	-	Hypothetical Protein
SLY522	CHP	Conserved Hypothetical Protein
SLY523	-	Hypothetical Protein
SLY524	-	Hypothetical Protein
SLY525	-	Hypothetical Protein
SLY526	-	Hypothetical Protein
SLY527	-	Hypothetical Protein
SLY528	<i>uvrA</i>	UvrABC system protein A
SLY529	<i>tig</i>	Trigger factor
SLY530	<i>lon</i>	ATP-dependent protease La
SLY531	-	Hypothetical Protein
SLY532	<i>pmbA</i>	Protein <i>pmbA</i> homolog
SLY533	<i>tldD</i>	Protein <i>tldD</i>
SLY534	-	Hypothetical Protein
SLY535	-	Hypothetical Protein
SLY536	CHP	Conserved Hypothetical Protein
SLY537	<i>hit</i>	Protein hit
SLY538	CHP	Conserved Hypothetical Protein
SLY539	-	Hypothetical Protein
SLY540	-	Hypothetical Protein
SLY541	<i>rnhC</i>	Ribonuclease HIII
SLY542	<i>yhaM</i>	3'-5' exoribonuclease <i>yhaM</i>
SLY543	<i>cca</i>	CCA-adding enzyme
SLY544	<i>yaaJ</i>	Cytidine/Deoxycytidylate Deaminase Family Protein
SLY545	<i>tdk</i>	Thymidine kinase
SLY546	<i>rpmE</i>	50S ribosomal protein L31
SLY547	<i>rpmB</i>	50S ribosomal protein L28
SLY548	-	Hypothetical Protein
SLY549	-	Hypothetical Protein
SLY550	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY551	CHP	Probable <i>Hsp20</i> -family chaperone
SLY552	<i>oppF</i>	Oligopeptide transport ATP-binding protein <i>oppF</i>
SLY553	-	Hypothetical Protein
SLY554	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY555	CHP	Conserved Hypothetical Protein
SLY556	<i>hpaIM</i>	Modification methylase <i>HpaI</i> (frag)
SLY557	-	Hypothetical Protein
SLY558	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY559	<i>ssb</i>	Single-strand binding protein (fragment)
SLY560	CHP	Conserved Hypothetical Protein
SLY561	CHP	Conserved Hypothetical Protein
SLY562	-	Hypothetical Protein
SLY563	-	Hypothetical Protein
SLY564	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY565	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY566	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY567	<i>dnaC</i>	Replicative DNA helicase
SLY568	<i>dnaB</i>	Replicative DNA helicase
SLY569	CHP	Phage-Associated Protein
SLY570	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY571	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY572	CHP	Phage-Associated Protein
SLY573	CHP	Phage-Associated Protein
SLY574	<i>xorIIM</i>	Modification methylase <i>XorII</i>
SLY575	CHP	Hypothetical Protein associated with <i>xorIIM</i>
SLY576	-	Phage-Associated Protein
SLY577	-	Hypothetical Protein
SLY578	<i>dnaC</i>	Replicative DNA helicase
SLY579	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY580	<i>tmk</i>	Thymidylate kinase
SLY581	-	Hypothetical Protein
SLY582	<i>IlaDCHIA</i>	Modification methylase <i>IlaDCHIA</i>
SLY583	CHP	Phage-Associated Protein
SLY584	CHP	Phage-Associated Protein
SLY585	-	Hypothetical Protein
SLY586	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY587	CHP	Conserved Hypothetical Protein (methylase)
SLY588	-	Hypothetical Protein
SLY589	-	Hypothetical Protein
SLY590	CHP	Conserved Hypothetical Protein
SLY591	CHP	Conserved Hypothetical Protein
SLY592	<i>hflB</i>	Putative cell division cycle ATPase
SLY593	CHP	Polyprotein -Paragroups CHP041 and CHP152
SLY594	CHP	Conserved Hypothetical Protein
SLY595	CHP	Conserved Hypothetical Protein
SLY596	<i>yibP</i>	Hypothetical Protein <i>yibP</i> (fragment)
SLY597	CHP	Conserved Hypothetical Protein
SLY598	CHP	Phage-Associated Protein
SLY599	-	Hypothetical Protein
SLY600	-	Hypothetical Protein
SLY601	CHP	Conserved Hypothetical Protein
SLY602	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY603	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY604	-	Hypothetical Protein
SLY605	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY606	CHP	Conserved Hypothetical Protein
SLY607	-	Phage-Associated Protein
SLY608	-	Hypothetical Protein
SLY609	-	Hypothetical Protein
SLY610	-	Hypothetical Protein
SLY611	-	Hypothetical Protein
SLY612	<i>yibP</i>	Hypothetical Protein <i>yibP</i>

ORF	Gene	Protein Function
SLY613	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY614	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY615	CHP	Conserved Hypothetical Protein
SLY616	-	Hypothetical Protein
SLY617	-	Hypothetical Protein
SLY618	CHP	Conserved Hypothetical Protein
SLY619	-	Hypothetical Protein
SLY620	-	Hypothetical Protein
SLY621	CHP	Conserved Hypothetical Protein (methylase)
SLY622	-	Hypothetical Protein
SLY623	CHP	Conserved Hypothetical Protein
SLY624	CHP	Conserved Hypothetical Protein
SLY625	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY626	CHP	Conserved Hypothetical Protein
SLY627	-	Hypothetical Protein
SLY628	CHP	Phage-Associated Protein
SLY629	<i>tmk</i>	Thymidylate kinase
SLY630	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY631	<i>dnaC</i>	Replicative DNA helicase
SLY632	-	Hypothetical Protein
SLY633	CHP	Phage-Associated Protein
SLY634	<i>xorIIM</i>	Modification methylase <i>XorII</i>
SLY635	-	Hypothetical Protein
SLY636	-	Phage-Associated Protein
SLY637	-	Hypothetical Protein
SLY638	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY639	CHP	Conserved Hypothetical Protein
SLY640	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY641	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY642	<i>tmk</i>	Thymidylate kinase
SLY643	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY644	<i>dnaC</i>	Replicative DNA helicase
SLY645	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY646	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY647	CHP	Conserved Hypothetical Protein
SLY648	-	Hypothetical Protein
SLY649	<i>hmw2</i>	Cytadherence high molecular weight protein 2
SLY650	-	Hypothetical Protein
SLY651	-	Hypothetical Protein
SLY652	<i>oppF</i>	Oligopeptide transport ATP-binding protein <i>oppF</i>
SLY653	<i>oppD</i>	Oligopeptide transport ATP-binding protein <i>oppD</i>
SLY654	-	Hypothetical Protein
SLY655	<i>appA</i>	Oligopeptide-binding protein <i>appA</i> precursor
SLY656	<i>dppA</i>	Periplasmic dipeptide transport protein precursor
SLY657	-	Hypothetical Protein
SLY658	<i>oppB</i>	Oligopeptide transport system permease protein <i>oppB</i>
SLY659	<i>yliD</i>	Oligopeptide ABC Transporter Permease Protein
SLY660	<i>potA</i>	Spermidine/putrescine import ATP-binding protein <i>potA</i> (fragment)
SLY661	-	Hypothetical Protein
SLY662	<i>groS</i>	10 kDa chaperonin
SLY663	<i>groL</i>	60 kDa chaperonin
SLY664	<i>amp</i>	Antigenic membrane protein precursor
SLY665	<i>nadE</i>	Glutamine-dependent NAD(+) synthetase
SLY666	-	Hypothetical Protein
SLY667	-	Hypothetical Protein
SLY668	CHP	Conserved Hypothetical Protein
SLY669	<i>trmU</i>	Probable tRNA
SLY670	-	Hypothetical Protein
SLY671	<i>relA</i>	GTP pyrophosphokinase

ORF	Gene	Protein Function
SLY672	-	Hypothetical Protein
SLY673	-	Hypothetical Protein
SLY674	<i>citP</i>	Citrate-sodium symport
SLY675	<i>ytsJ</i>	Probable NAD-dependent malic enzyme 4
SLY676	-	Hypothetical Protein
SLY677	<i>ligA</i>	DNA ligase
SLY678	CHP	Hypothetical protein MG103 homolog
SLY679	-	Hypothetical Protein
SLY680	-	Hypothetical Protein
SLY681	-	Hypothetical Protein
SLY682	-	Hypothetical Protein
SLY683	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY684	-	Hypothetical Protein
SLY685	CHP	Phage-Associated Protein
SLY686	-	Hypothetical Protein
SLY687	<i>xorIIM</i>	Modification methylase <i>XorII</i>
SLY688	CHP	Phage-Associated Protein
SLY689	-	Hypothetical Protein
SLY690	<i>dnaC</i>	Replicative DNA helicase
SLY691	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY692	<i>tmk</i>	Thymidylate kinase
SLY693	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>
SLY694	CHP	Phage-Associated Protein
SLY695	CHP	Phage-Associated Protein
SLY696	CHP	Conserved Hypothetical Protein
SLY697	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY698	-	Hypothetical Protein
SLY699	-	Hypothetical Protein
SLY700	CHP	Conserved Hypothetical Protein (methylase)
SLY701	-	Hypothetical Protein
SLY702	-	Hypothetical Protein
SLY703	CHP	Conserved Hypothetical Protein
SLY704	CHP	Conserved Hypothetical Protein
SLY705	CHP	Conserved Hypothetical Protein
SLY706	CHP	Hypothetical Protein possibly <i>ftsH</i> -associated
SLY707	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY708	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY709	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY710	CHP	Phage-Associated Protein
SLY711	-	Hypothetical Protein
SLY712	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY713	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY714	<i>dnaC</i>	Replicative DNA helicase
SLY715	-	Hypothetical Protein
SLY716	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY717	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY718	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY719	-	Hypothetical Protein
SLY720	CHP	Hypothetical Protein possibly <i>ftsH</i> -associated
SLY721	-	Hypothetical Protein
SLY722	-	Hypothetical Protein
SLY723	CHP	Conserved Hypothetical Protein
SLY724	-	Hypothetical Protein
SLY725	-	Hypothetical Protein
SLY726	CHP	Conserved Hypothetical Protein (methylase)
SLY727	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY728	-	Hypothetical Protein
SLY729	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>
SLY730	<i>tmk</i>	Thymidylate kinase
SLY731	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY732	<i>dnaC</i>	Replicative DNA helicase
SLY733	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY734	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY735	<i>glyA</i>	Serine hydroxymethyltransferase
SLY736	<i>cbiQ</i>	ABC Transporter Permease Protein
SLY737	<i>cbiO2</i>	Cobalt import ATP-binding protein <i>cbiO2</i>
SLY738	<i>cbiO2</i>	Putative cobalt import ATP-binding protein <i>cbiO2</i>
SLY739	<i>yjbG</i>	Oligoendopeptidase F homolog
SLY740	-	Hypothetical Protein
SLY741	CHP	Conserved Hypothetical Protein
SLY742	CHP	Conserved Hypothetical Protein
SLY743	-	Hypothetical Protein
SLY744	-	Hypothetical Protein
SLY745	-	Hypothetical Protein
SLY746	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i> [Includes: Reverse-transcriptase]
SLY747	<i>gyrB</i>	DNA gyrase subunit B
SLY748	<i>gyrA</i>	DNA gyrase subunit A
SLY749	<i>yjeE</i>	Hypothetical UPF0079 protein <i>yjeE</i>
SLY750	<i>yeaZ</i>	Probable M22 peptidase homolog HI0388
SLY751	-	Hypothetical Protein
SLY752	-	Hypothetical Protein
SLY753	-	Hypothetical Protein
SLY754	-	Hypothetical Protein
SLY755	CHP	Conserved Hypothetical Protein
SLY756	-	Hypothetical Protein
SLY757	<i>ycjM</i>	Sucrose phosphorylase
SLY758	<i>lepA</i>	GTP-binding protein <i>lepA</i>
SLY759	-	Hypothetical Protein
SLY760	-	Hypothetical Protein
SLY761	-	Hypothetical Protein
SLY762	-	Hypothetical Protein
SLY763	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY764	CHP	Conserved Hypothetical Protein
SLY765	CHP	Hypothetical protein -Paragroup CHP041
SLY766	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY767	-	Hypothetical Protein
SLY768	-	Hypothetical Protein
SLY769	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY770	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY771	<i>ftsH</i>	Cell division protein ftsH homolog
SLY772	-	Hypothetical Protein
SLY773	CHP	Hypothetical Protein possibly ftsH-associated
SLY774	-	Hypothetical Protein
SLY775	-	Hypothetical Protein
SLY776	CHP	Conserved Hypothetical Protein
SLY777	-	Hypothetical Protein
SLY778	-	Hypothetical Protein
SLY779	CHP	Conserved Hypothetical Protein (methylase)
SLY780	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY781	CHP	Conserved Hypothetical Protein
SLY782	CHP	Phage-Associated Protein
SLY783	<i>tmk</i>	Thymidylate kinase
SLY784	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY785	<i>dnaC</i>	Replicative DNA helicase
SLY786	-	Hypothetical Protein
SLY787	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY788	<i>infC</i>	Translation initiation factor IF-3
SLY789	<i>rpml</i>	50S ribosomal protein L35
SLY790	<i>rplT</i>	50S ribosomal protein L20
SLY791	CHP	Conserved Hypothetical Protein
SLY792	<i>acpP</i>	Acyl carrier protein
SLY793	<i>ltrA</i>	Retron-Type Reverse Transcriptase
SLY794	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i> [Includes: Reverse-transcriptase]
SLY795	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY796	<i>leuS</i>	Leucyl-tRNA synthetase
SLY797	<i>gmk</i>	Guanylate kinase
SLY798	<i>rpoZ</i>	DNA-Directed RNA Polymerase Subunit K/Omega
SLY799	<i>mraW</i>	S-adenosyl-methyltransferase <i>mraW</i>
SLY800	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY801	CHP	Conserved Hypothetical Protein
SLY802	<i>yeeO</i>	Na ⁺ Driven Multidrug Efflux Pump
SLY803	CHP	Conserved Hypothetical Protein
SLY804	-	Hypothetical Protein
SLY805	CHP	Conserved Hypothetical Protein
SLY806	<i>nrdF</i>	Ribonucleoside-diphosphate reductase beta subunit
SLY807	<i>mscL</i>	Large-conductance mechanosensitive channel
SLY808	-	Hypothetical Protein
SLY809	<i>yfiB</i>	ABC Transporter
SLY810	<i>msbA</i>	ABC Transporter
SLY811	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY812	-	Hypothetical Protein
SLY813	-	Hypothetical Protein
SLY814	<i>ltrA</i>	Group II intron-encoded protein <i>ltrA</i> [Includes: Reverse-transcriptase]
SLY815	-	Hypothetical Protein
SLY816	CHP	Hypothetical protein -Paragroup CHP041
SLY817	CHP	Hypothetical protein -Paragroup CHP158
SLY818	-	Hypothetical Protein
SLY819	<i>hflB</i>	Putative cell division cycle ATPase
SLY820	-	Hypothetical Protein
SLY821	CHP	Conserved Hypothetical Protein
SLY822	-	Hypothetical Protein
SLY823	-	Hypothetical Protein
SLY824	CHP	Conserved Hypothetical Protein (methylase)
SLY825	<i>hupB</i>	Hypothetical Protein <i>hupB</i>
SLY826	-	Hypothetical Protein
SLY827	-	Hypothetical Protein
SLY828	-	Hypothetical Protein
SLY829	IlaDCHIA	Modification methylase IlaDCHIA
SLY830	CHP	Conserved Hypothetical Protein
SLY831	-	Hypothetical Protein
SLY832	<i>tmk</i>	Thymidylate kinase
SLY833	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY834	<i>dnaC</i>	Replicative DNA helicase
SLY835	-	Hypothetical Protein
SLY836	-	Hypothetical Protein
SLY837	-	Hypothetical Protein
SLY838	-	Hypothetical Protein
SLY839	<i>yplQ</i>	Hemolysin III homolog
SLY840	<i>ackA</i>	Acetate kinase
SLY841	-	Hypothetical Protein
SLY842	-	Hypothetical Protein
SLY843	<i>priA</i>	Primosomal protein N'
SLY844	-	Hypothetical Protein
SLY845	-	Hypothetical Protein
SLY846	CHP	Conserved Hypothetical Protein
SLY847	CHP	Conserved Hypothetical Protein
SLY848	-	Hypothetical Protein
SLY849	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY850	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY851	IlaDCHIA	Modification methylase IlaDCHIA
SLY852	<i>tmk</i>	Thymidylate kinase
SLY853	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY854	<i>dnaC</i>	Replicative DNA helicase
SLY855	-	Hypothetical Protein
SLY856	CHP	Phage-Associated Protein
SLY857	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY858	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY859	<i>metG</i>	Methionyl-tRNA synthetase
SLY860	-	Hypothetical Protein
SLY861	<i>pepA</i>	Probable cytosol aminopeptidase
SLY862	-	Hypothetical Protein
SLY863	-	Hypothetical Protein
SLY864	-	Hypothetical Protein
SLY865	-	Hypothetical Protein
SLY866	<i>potD</i>	Spermidine/putrescine-binding periplasmic protein precursor
SLY867	<i>potC</i>	Spermidine/putrescine transport system permease protein <i>potC</i>
SLY868	<i>potB</i>	Spermidine/putrescine transport system permease protein <i>potB</i>
SLY869	<i>potA</i>	Spermidine/putrescine import ATP-binding protein <i>potA</i>
SLY870	-	Hypothetical Protein
SLY871	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY872	-	Hypothetical Protein
SLY873	-	Hypothetical Protein
SLY874	CHP	Conserved Hypothetical Protein
SLY875	<i>cbiQ</i>	ABC-type cobalt transporter, permease component
SLY876	<i>cbiO1</i>	Putative cobalt import ATP-binding protein <i>cbiO1</i>
SLY877	CHP	Integral Membrane Protein
SLY878	-	Hypothetical Protein
SLY879	-	Hypothetical Protein
SLY880	-	Hypothetical Protein
SLY881	-	Hypothetical Protein
SLY882	<i>valS</i>	Valyl-tRNA synthetase
SLY883	<i>engB</i>	Probable GTP-binding protein <i>engB</i>
SLY884	-	Hypothetical Protein
SLY885	<i>yqeN</i>	Hypothetical protein <i>yqeN</i>
SLY886	<i>yciO</i>	Translation Factor
SLY887	<i>prfA</i>	Peptide chain release factor 1
SLY888	<i>dnaC</i>	Replicative DNA helicase
SLY889	<i>rplI</i>	50S Ribosomal Protein L9
SLY890	<i>rpsR</i>	30S ribosomal protein S18
SLY891	<i>ssb1</i>	Single-strand binding protein 1
SLY892	<i>rpsF</i>	30S ribosomal protein S6
SLY893	-	Hypothetical Protein
SLY894	-	Hypothetical Protein
SLY895	-	Hypothetical Protein
SLY896	-	Hypothetical Protein
SLY897	-	Hypothetical Protein
SLY898	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY899	-	Hypothetical Protein
SLY900	<i>srmB</i>	Probable ATP-dependent RNA helicase <i>srmB</i>
SLY901	-	Hypothetical Protein
SLY902	-	Hypothetical Protein
SLY903	-	Hypothetical Protein
SLY904	-	Hypothetical Protein
SLY905	-	Hypothetical Protein
SLY906	-	Hypothetical Protein
SLY907	-	Hypothetical Protein
SLY908	CHP	Conserved Hypothetical Protein
SLY909	-	Hypothetical Protein
SLY910	-	Hypothetical Protein
SLY911	<i>pfkA</i>	6-phosphofructokinase
SLY912	CHP	Conserved Hypothetical Protein
SLY913	<i>norM</i>	Na ⁺ -Driven Multidrug Efflux Pump
SLY914	<i>pgi</i>	Glucose-6-phosphate isomerase
SLY915	-	Hypothetical Protein
SLY916	<i>yraL</i>	Tetraphyrrole Methylase Family Protein
SLY917	<i>holB</i>	DNA polymerase III delta' subunit
SLY918	<i>tmk</i>	Thymidylate kinase (<i>tmk-b</i>)
SLY919	<i>truA</i>	tRNA pseudouridine synthase A
SLY920	<i>norM</i>	Na ⁺ -Driven Multidrug Efflux Pump
SLY921	-	Hypothetical Protein
SLY922	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150

ORF	Gene	Protein Function
SLY923	-	Hypothetical Protein
SLY924	-	Hypothetical Protein
SLY925	-	Hypothetical Protein
SLY926	CHP	Phage-Associated Protein
SLY927	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY928	CHP	Conserved Hypothetical Protein
SLY929	CHP	Hypothetical protein -Paragroup CHP041
SLY930	CHP	Hypothetical protein -Paragroup CHP152
SLY931	<i>hflB</i>	Putative cell division cycle ATPase
SLY932	CHP	Conserved Hypothetical Protein (methylase)
SLY933	CHP	Phage-Associated Protein
SLY934	-	Hypothetical Protein
SLY935	-	Hypothetical Protein
SLY936	CHP	Conserved Hypothetical Protein
SLY937	-	Hypothetical Protein
SLY938	-	Hypothetical Protein
SLY939	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY940	CHP	Conserved Hypothetical Protein
SLY941	-	Hypothetical Protein
SLY942	-	Hypothetical Protein
SLY943	-	Hypothetical Protein
SLY944	CHP	Phage-Associated Protein
SLY945	-	Hypothetical Protein
SLY946	<i>tmk</i>	Thymidylate kinase
SLY947	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY948	<i>dnaB</i>	Replicative DNA helicase (fragment)
SLY949	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY950	CHP	Conserved Hypothetical Protein
SLY951	CHP	Phage-Associated Protein
SLY952	-	Hypothetical Protein
SLY953	<i>xorIIM</i>	Modification methylase <i>XorII</i>
SLY954	CHP	Phage-Associated Protein
SLY955	-	Hypothetical Protein
SLY956	<i>dnaC</i>	Replicative DNA helicase
SLY957	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY958	<i>tmk</i>	Thymidylate kinase
SLY959	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>
SLY960	CHP	Phage-Associated Protein
SLY961	CHP	Phage-Associated Protein
SLY962	CHP	Conserved Hypothetical Protein
SLY963	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY964	-	Hypothetical Protein
SLY965	-	Hypothetical Protein
SLY966	CHP	Conserved Hypothetical Protein (methylase)
SLY967	-	Hypothetical Protein
SLY968	-	Hypothetical Protein
SLY969	CHP	Conserved Hypothetical Protein
SLY970	-	Hypothetical Protein
SLY971	-	Hypothetical Protein
SLY972	CHP	Hypothetical Protein possibly <i>ftsH</i> -associated
SLY973	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY974	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY975	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY976	CHP	Conserved Hypothetical Protein
SLY977	CHP	Phage-Associated Protein
SLY978	-	Hypothetical Protein
SLY979	-	Hypothetical Protein
SLY980	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY981	CHP	Conserved Hypothetical Protein
SLY982	<i>dnaC</i>	Replicative DNA helicase
SLY983	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY984	<i>tmk</i>	Thymidylate kinase
SLY985	<i>llaDCHIA</i>	Modification methylase <i>LlaDCHIA</i>

ORF	Gene	Protein Function
SLY986	-	Hypothetical Protein
SLY987	-	Hypothetical Protein
SLY988	<i>ihfA</i>	Hypothetical Protein <i>ihfA</i>
SLY989	CHP	Conserved Hypothetical Protein (methylase)
SLY990	-	Hypothetical Protein
SLY991	CHP	Phage-Associated Protein
SLY992	CHP	Phage-Associated Protein
SLY993	CHP	Phage-Associated Protein
SLY994	-	Hypothetical Protein
SLY995	CHP	Conserved Hypothetical Protein
SLY996	CHP	Conserved Hypothetical Protein
SLY997	CHP	Conserved Hypothetical Protein
SLY998	-	Hypothetical Protein
SLY999	<i>vat</i>	VCP-like ATPase
SLY1000	CHP	Hypothetical protein -Paragroup CHP152
SLY1001	CHP	Hypothetical protein -Paragroup CHP041
SLY1002	-	Hypothetical Protein
SLY1003	-	Hypothetical Protein
SLY1004	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY1005	-	Hypothetical Protein
SLY1006	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY1007	CHP	Conserved Hypothetical Protein MSC
SLY1008	-	Hypothetical Protein
SLY1009	<i>yqiZ</i>	Probable amino-acid ABC transporter ATP-binding protein <i>yqiZ</i>
SLY1010	<i>mutT</i>	MutT/Nudix Family Protein
SLY1011	-	Hypothetical Protein
SLY1012	CHP	Conserved Hypothetical Protein (methylase)
SLY1013	<i>pacL</i>	Cation-transporting ATPase <i>pacL</i>
SLY1014	<i>engA</i>	GTP-binding protein <i>engA</i>
SLY1015	<i>cmk</i>	Cytidylate kinase
SLY1016	<i>rluB</i>	Ribosomal large subunit pseudouridine synthase B
SLY1017	<i>truB</i>	tRNA pseudouridine synthase B
SLY1018	<i>trxA</i>	Thioredoxin
SLY1019	CHP	Conserved Hypothetical Protein
SLY1020	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY1021	CHP	Conserved Hypothetical Protein
SLY1022	<i>dnaC</i>	Replicative DNA helicase
SLY1023	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY1024	<i>tmk</i>	Thymidylate kinase
SLY1025	-	Hypothetical Protein
SLY1026	<i>llaDCHIA</i>	Modification methylase <i>llaDCHIA</i>
SLY1027	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY1028	<i>ssb</i>	Single-strand binding protein
SLY1029	-	Hypothetical Protein
SLY1030	CHP	Conserved Hypothetical Protein
SLY1031	<i>ssb</i>	Single-strand binding protein
SLY1032	-	Hypothetical Protein
SLY1033	-	Hypothetical Protein
SLY1034	-	Hypothetical Protein
SLY1035	-	Hypothetical Protein
SLY1036	-	Hypothetical Protein
SLY1037	-	Phage-Associated Protein
SLY1038	-	Hypothetical Protein
SLY1039	-	Hypothetical Protein
SLY1040	<i>xorIIM</i>	Modification methylase <i>XorII</i> (fragment)
SLY1041	<i>xorIIM</i>	Modification methylase <i>XorII</i> (fragment)
SLY1042	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY1043	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY1044	-	Hypothetical Protein
SLY1045	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY1046	<i>recA</i>	Protein <i>recA</i> (fragment)
SLY1047	<i>recA</i>	Protein <i>recA</i> (fragment)
SLY1048	<i>recA</i>	Protein <i>recA</i> (fragment)
SLY1049	CHP	Conserved Hypothetical Protein
SLY1050	-	Hypothetical Protein
SLY1051	-	Hypothetical Protein
SLY1052	<i>pgsA</i>	CDP-diacylglycerol--glycerol-3-phosphate 3-phosphatidyltransferase
SLY1053	-	Hypothetical Protein
SLY1054	-	Hypothetical Protein
SLY1055	-	Hypothetical Protein
SLY1056	-	Hypothetical Protein
SLY1057	-	Hypothetical Protein
SLY1058	CHP	Conserved Hypothetical Protein
SLY1059	<i>Rock2</i>	Rho-associated protein kinase 2
SLY1060	CHP	DAK2 Domain Protein
SLY1061	<i>csp</i>	Cold shock protein 1
SLY1062	CHP	Conserved Hypothetical Protein
SLY1063	<i>dnaI</i>	Primosomal protein <i>dnaI</i>
SLY1064	<i>dnaB</i>	Replication initiation and membrane attachment protein
SLY1065	<i>mutM</i>	Formamidopyrimidine-DNA glycosylase
SLY1066	-	Hypothetical Protein
SLY1067	<i>polA</i>	DNA polymerase I
SLY1068	<i>ffh</i>	<i>ffh</i> frag
SLY1069	<i>ffh</i>	<i>ffh</i> frag
SLY1070	<i>ffh</i>	Signal recognition particle protein
SLY1071	<i>ftsY</i>	Cell division protein <i>ftsY</i> homolog
SLY1072	-	Hypothetical Protein
SLY1073	<i>rpoD</i>	DNA-Directed RNA Polymerase Sigma Subunit
SLY1074	-	Hypothetical Protein
SLY1075	CHP	Phage-Associated Protein
SLY1076	<i>dnaC</i>	Replicative DNA helicase
SLY1077	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY1078	<i>tmk</i>	Thymidylate kinase
SLY1079	<i>llaDCHIA</i>	Modification methylase <i>llaDCHIA</i>
SLY1080	CHP	Phage-Associated Protein
SLY1081	<i>dnaC</i>	Replicative DNA helicase
SLY1082	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY1083	<i>tmk</i>	Thymidylate kinase
SLY1084	<i>dnaC</i>	Replicative DNA helicase
SLY1085	CHP	Conserved Hypothetical Protein associated with <i>tmk</i>
SLY1086	<i>tmk</i>	Thymidylate kinase
SLY1087	-	Hypothetical Protein
SLY1088	<i>llaDCHIA</i>	Modification methylase <i>llaDCHIA</i>
SLY1089	-	Hypothetical Protein
SLY1090	<i>hupB</i>	Hypothetical Protein <i>hupB</i> / <i>ihfA</i>
SLY1091	-	Hypothetical Protein
SLY1092	CHP	Conserved Hypothetical Protein
SLY1093	CHP	Conserved Hypothetical Protein
SLY1094	-	Hypothetical Protein
SLY1095	-	Hypothetical Protein
SLY1096	-	Hypothetical Protein possibly <i>ftsH</i> -associated
SLY1097	-	Hypothetical Protein
SLY1098	<i>ftsH</i>	Cell division protein <i>ftsH</i> homolog
SLY1099	<i>rad50</i>	DNA double-strand break repair <i>rad50</i> ATPase
SLY1100	<i>yibP</i>	Hypothetical Protein <i>yibP</i>
SLY1101	-	Hypothetical Protein
SLY1102	-	Hypothetical Protein
SLY1103	-	Hypothetical Protein
SLY1104	<i>tra5</i>	Transposase
SLY1105	<i>tra5</i>	Putative transposase <i>tra5</i> for insertion sequence element IS150
SLY1106	CHP	Conserved Hypothetical Protein (occurs in rRNA region)
SLY1107	-	Hypothetical Protein
SLY1108	-	Hypothetical Protein
SLY1109	-	Hypothetical Protein

ORF	Gene	Protein Function
SLY1110	-	Hypothetical Protein
SLY1111	-	Hypothetical Protein
SLY1112	<i>fic</i>	Fic Family Protein
SLY1113	-	Hypothetical Protein
SLY1114	-	Hypothetical Protein
SLY1115	-	Hypothetical Protein
SLY1116	-	Hypothetical Protein
SLY1117	-	Hypothetical Protein
SLY1118	-	Hypothetical Protein
SLY1119	-	Hypothetical Protein
SLY1120	-	Hypothetical Protein
SLY1121	<i>nusB</i>	N utilization substance protein B homolog
SLY1122	<i>sodA</i>	Superoxide dismutase [Mn]
SLY1123	<i>nox</i>	NADH oxidase
SLY1124	-	Hypothetical Protein
SLY1125	<i>acpS</i>	Holo-[acyl-carrier-protein] synthase
SLY1126	-	Hypothetical Protein

