



Figure S1. Alignment of MazF-lp with other MazF homologues from *L. fallonii* (MazF-lf), *L. oakridgensis* (MazF-lo) and *L. hackeliae* (MazF-lh). Identical amino acid residues are shown in black shades and conservative substitutions in gray shades.

Table S1. AACU sequence in genome DNA of *L. pneumophila*.

locus_tag	Location	Length (bp)	Length (aa)	name	#AACT
LPO_2255	chromosome	11343	3780	polyketide synthase, type I	54
LPO_0723	chromosome	12951	4316	Structural toxin protein RtxA	45
LPO_2680	chromosome	3885	1294	effector protein B, substrate of the Dot/Icm secretion system	33
LPO_2186	chromosome	4446	1481	SdeC protein, substrate of the Dot/Icm system	32
LPO_0433	chromosome	4290	1429	substrate of the Dot/Icm secretion system	31
LPO_2219	chromosome	5763	1920	substrates of the Legionella pneumophila Dot/Icm system SdeB	31
LPO_0273	chromosome	4488	1495	substrate of the Dot/Icm secretion system	29
LPO_2221	chromosome	4503	1500	substrate of the Dot/Icm secretion system	29
LPO_2249	chromosome	4320	1439	putative Methionyl-tRNA formyltransferase	28
LPO_1700	chromosome	5604	1867	Predicted large extracellular alpha-helical protein	27
LPO_0372	chromosome	4107	1368	RNA polymerase, beta subunit	26
LPO_1038	chromosome	3462	1153	transcription-repair coupling factor	25
LPO_2216	chromosome	4608	1535	SdeC protein, substrate of the Dot/Icm system	25
LPO_3123	chromosome	6669	2222	substrate of the Dot/Icm secretion system	25
LPO_0285	chromosome	3363	1120	NAD-glutamate dehydrogenase	23
LPO_0415	chromosome	2691	896	substrate of the Dot/Icm secretion system	23
LPO_1064	chromosome	3387	1128	Protein of unknown function	23
LPO_2220	chromosome	3852	1283	SdeC protein, substrate of the Dot/Icm system	23
LPO_2311	chromosome	3852	1283	conserved protein of unknown function	23
LPO_2777	chromosome	3978	1325	protein of unknown function	23
LPO_0373	chromosome	4248	1415	RNA polymerase, beta prime subunit	22
LPO_0706	chromosome	3510	1169	putative type-4 fimbrial biogenesis pilY1-related protein	22
LPO_1025	chromosome	3126	1041	conserved protein of unknown function	22
LPO_1488	chromosome	2622	873	substrate of the Dot/Icm secretion system	22
LPO_1601	chromosome	4878	1625	NAD-glutamate dehydrogenase	22
LPO_2190	chromosome	3081	1026	conserved protein of unknown function	22
LPO_0148	chromosome	5598	1865	SdhB protein, substrate of the Dot/Icm system	21
LPO_2370	chromosome	2877	958	RNA polymerase-associated helicase protein (ATPase and RNA polymerase recycling factor)	21
LPO_3083	chromosome	3360	1119	effector protein A, substrate of the Dot/Icm secretion system	21
LPO_p0132	plasmid	5835	1944	putative conjugative transfer relaxase protein Tral	21
LPO_1423	chromosome	2652	883	protein with patatin domain	20
LPO_1664	chromosome	3009	1002	putative conserved FAD-linked oxidoreductase	20
LPO_1819	chromosome	2829	942	Ribonucleoside-diphosphate reductase alpha subunit (Ribonucleotide reductase)	20
LPO_1858	chromosome	2541	846	periplasmic protein	20
LPO_2000	chromosome	2793	930	conserved protein of unknown function	20
LPO_2896	chromosome	3495	1164	chromosome segregation SMC protein	20
LPO_0119	chromosome	3222	1073	conserved protein of unknown function	19
LPO_1322	chromosome	1626	541	putative Flagellar hook-associated protein 2	19
LPO_2053	chromosome	2934	977	substrate of the Dot/Icm secretion system	19
LPO_2218	chromosome	2622	873	substrate of the Dot/Icm secretion system	19
LPO_0773	chromosome	4284	1427	LigA, interaptin	18
LPO_1132	chromosome	3432	1143	conserved membrane protein of unknown function	18
LPO_1139	chromosome	2229	742	protein of unknown function	18
LPO_1478	chromosome	1782	593	aspartyl-tRNA synthetase	18
LPO_1856	chromosome	2541	846	methyl-directed mismatch repair protein	18
LPO_1970	chromosome	1992	663	transglutaminase domain protein	18

LPO_2714	chromosome	2718	905 substrate of the Dot/Icm secretion system	18
LPO_0134	chromosome	3309	1102 substrate of the Dot/Icm secretion system	17
LPO_2080	chromosome	2811	936 conserved protein of unknown function	17
LPO_2317	chromosome	2901	966 conserved protein of unknown function	17
LPO_2472	chromosome	2187	728 DNA primase traC	17
LPO_p0065	plasmid	3117	1038 Beta-lactamase	17
LPO_0098	chromosome	3975	1324 conserved protein of unknown function	16
LPO_23S_2	chromosome	2861	ribosomal RNA 23S	16
LPO_23S_3	chromosome	2861	ribosomal RNA 23S	16
LPO_0737	chromosome	5208	1735 conserved protein of unknown function	16
LPO_1114	chromosome	2328	775 sensory box protein	16
LPO_1448	chromosome	2613	870 conserved protein of unknown function	16
LPO_1575	chromosome	2505	834 protein of unknown function	16
LPO_1695	chromosome	1482	493 substrate of the Dot/Icm secretion system	16
LPO_1795	chromosome	2577	858 protein disaggregation chaperone	16
LPO_2250	chromosome	2487	828 putative Sensor protein	16
LPO_2702	chromosome	2829	942 conserved protein of unknown function	16
LPO_23S_1	chromosome	2861	ribosomal RNA 23S	16
LPO_3310	chromosome	2616	871 conserved protein of unknown function	16
LPO_p0045	plasmid	1815	604 conserved protein of unknown function [ankyrin domain]	16
LPO_p0121	plasmid	2499	832 DEAD-like helicases-like protein	16
LPO_0698	chromosome	1425	474 SidA protein, substrate of the Dot/Icm transport system	15
LPO_0775	chromosome	2838	945 substrate of the Dot/Icm secretion system	15
LPO_0801	chromosome	3048	1015 Putative multidrug efflux transporter	15
LPO_1067	chromosome	1911	636 conserved protein of unknown function	15
LPO_1183	chromosome	2268	755 sensory box protein	15
LPO_1863	chromosome	3231	1076 putative UvrD/REP helicase family protein	15
LPO_2344	chromosome	2547	848 conserved protein of unknown function	15
LPO_2386	chromosome	3501	1166 conserved protein of unknown function	15
LPO_2920	chromosome	2508	835 sensory box/GGDEF family protein	15
LPO_3049	chromosome	1998	665 putative Sulfatase	15
LPO_3090	chromosome	1728	575 FrgA protein	15
LPO_p0087	plasmid	3258	1085 transposase	15
LPO_0023	chromosome	2124	707 putative conserved AdoMet-dependent methyltransferase with RNA interaction domain	14
LPO_0107	chromosome	2691	896 fused DNA polymerase I 5'->3' exonuclease ; 3'->5' polymerase ; 3'->5' exonuclease	14
LPO_0269	chromosome	2130	709 Diguanylate kinase	14
LPO_0517	chromosome	3147	1048 Component of the Dot/Icm secretion system. Major component of a channel	14
LPO_1024	chromosome	2190	729 LidA protein, substrate of the Dot/Icm system	14
LPO_1056	chromosome	1695	564 conserved protein of unknown function	14
LPO_1181	chromosome	1989	662 conserved protein of unknown function	14
LPO_1278	chromosome	1440	479 membrane bound lytic murein transglycosylase D	14
LPO_1470	chromosome	1650	549 Peptidase S13, D-Ala-D-Ala carboxypeptidase C precursor	14
LPO_1479	chromosome	2880	959 Putative mechanosensitive ion channel MscS	14
LPO_1506	chromosome	2682	893 aminopeptidase N	14
LPO_1608	chromosome	2019	672 substrate of the Dot/Icm secretion system	14
LPO_1800	chromosome	3822	1273 conserved exported protein of unknown function	14
LPO_1944	chromosome	1218	405 substrate of the Dot/Icm secretion system	14
LPO_2043	chromosome	1605	534 Leucine-rich repeat-containing protein Substrate of the Dot/Icm secretion system	14

LPO_2125	chromosome	1935	644 chaperone Hsp70, co-chaperone with DnaJ	14
LPO_2225	chromosome	2259	752 conserved hypothetical protein; Putative alpha/beta-Hydrolase family	14
LPO_2286	chromosome	1773	590 conserved protein of unknown function	14
LPO_3298	chromosome	1038	345 dihydro-orotase	14
LPO_0165	chromosome	2790	929 Type III restriction enzyme, res subunit	13
LPO_0512	chromosome	2352	783 component of Dot/Icm secretion system. ATPase	13
LPO_0544	chromosome	1395	464 RNA polymerase, sigma 54 (sigma N) factor	13
LPO_1065	chromosome	1449	482 conserved protein of unknown function	13
LPO_1117	chromosome	2349	782 Chitinase	13
LPO_1122	chromosome	1638	545 conserved protein of unknown function	13
LPO_1192	chromosome	1437	478 putative peptidase	13
LPO_1256	chromosome	1632	543 electron transfer flavoprotein-ubiquinone oxidoreductase (ETF-QO) (ETF-ubiquinone oxidoreductase) (ETF dehydrogenase) (Electron-transferring-flavoprotein dehydrogenase)	13
LPO_1265	chromosome	1725	574 malate dehydrogenase, (decarboxylating, NAD-requiring) (malic enzyme)	13
LPO_1333	chromosome	2472	823 leucyl-tRNA synthetase	13
LPO_1337	chromosome	2370	789 putative bifunctional protein 3-hydroxyacyl-CoA dehydrogenase and Dodecenoyl-CoA isomerase	13
LPO_1365	chromosome	1854	617 transpeptidase involved in peptidoglycan synthesis (penicillin-binding protein 2)	13
LPO_1517	chromosome	2664	887 pyruvate dehydrogenase, decarboxylase component E1, thiamin-binding	13
LPO_1526	chromosome	2037	678 Legionella secretion system protein Y	13
LPO_1529	chromosome	2157	718 Legionella secretion system protein B	13
LPO_1711	chromosome	2112	703 Alpha-amylase	13
LPO_1730	chromosome	3153	1050 Bifunctional protein putA: Proline dehydrogenase (Proline oxidase); Delta-1-pyrroline-5-carboxylate dehydrogenase (P5C dehydrogenase)]	13
LPO_1735	chromosome	1677	558 substrate of the Dot/Icm secretion system	13
LPO_1862	chromosome	2562	853 Diaminopimelate decarboxylase	13
LPO_2001	chromosome	2649	882 conserved protein of unknown function	13
LPO_2025	chromosome	2748	915 conserved protein of unknown function	13
LPO_2054	chromosome	1566	521 substrate of the Dot/Icm secretion system	13
LPO_2133	chromosome	2073	690 ATP-dependent DNA helicase	13
LPO_2153	chromosome	1059	352 conserved protein of unknown function	13
LPO_2229	chromosome	1260	419 conserved protein of unknown function	13
LPO_2492	chromosome	3045	1014 Transposase Tn3 family protein	13
LPO_2713	chromosome	2691	896 SdcA protein, paralog of SidC (substrate of the Dot/Icm system)	13
LPO_2726	chromosome	2328	775 conserved protein of unknown function	13
LPO_2901	chromosome	3204	1067 carbamoyl-phosphate synthase large subunit	13
LPO_3117	chromosome	1668	555 recombination and repair protein	13
LPO_3180	chromosome	1386	461 fused N-acetyl glucosamine-1-phosphate uridyltransferase ; glucosamine-1-phosphate acetyl transferase	13
LPO_3219	chromosome	1650	549 2-octaprenylphenol hydroxylase	13
LPO_0030	chromosome	2958	985 Diguanylate kinase	12
LPO_0169	chromosome	1368	455 conserved protein of unknown function	12
LPO_0177	chromosome	2379	fragment of conserved protein of unknown function (part 2)	12
LPO_0256	chromosome	1521	506 putative NADH-quinone oxidoreductase subunit 5 (NADH dehydrogenase subunit 5)	12
LPO_0326	chromosome	3351	1116 SdbA protein, putative substrate of the Dot/Icm system	12
LPO_0605	chromosome	1770	589 succinate dehydrogenase, flavoprotein subunit	12
LPO_0623	chromosome	2217	738 Sarcosine oxidase	12
LPO_0731	chromosome	1293	430 putative Major facilitator family transporter	12
LPO_0765	chromosome	1791	596 Thiol:disulfide interchange protein dsbD precursor (Protein-disulfide reductase) (Disulfide reductase)	12
LPO_0800	chromosome	2766	921 valyl-tRNA synthetase	12

LPO_0816	chromosome	3267	1088 putative Superfamily II DNA/RNA helicase, SNF2 family	12
LPO_0897	chromosome	2268	755 ATPase and specificity subunit of ClpA-ClpP ATP-dependent serine protease, chaperone activity	12
LPO_0972	chromosome	2316	771 Diguanylate kinase	12
LPO_1009	chromosome	2385	794 fused penicillin-binding protein 1a: murein transglycosylase ; murein transpeptidase	12
LPO_1039	chromosome	1263	420 RmuC family protein	12
LPO_1298	chromosome	2376	791 type II protein secretion LspD	12
LPO_1429	chromosome	1773	590 FAD linked oxidase	12
LPO_1546	chromosome	2001	666 putative peptidase	12
LPO_1728	chromosome	2676	891 aconitate hydratase 1	12
LPO_1736	chromosome	1641	546 substrate of the Dot/Icm secretion system	12
LPO_1742	chromosome	1347	448 succinylarginine dihydrolase	12
LPO_1923	chromosome	2451	816 DNA-binding ATP-dependent protease La	12
LPO_1988	chromosome	2733	910 Legionella transmission sensor LetS	12
LPO_2044	chromosome	1995	664 conserved protein of unknown function	12
LPO_2209	chromosome	2451	816 sensor histidine kinase	12
LPO_2267	chromosome	1482	493 peptide transport, POT family	12
LPO_2607	chromosome	1932	643 conserved protein of unknown function	12
LPO_2711	chromosome	2424	807 substrate of the Dot/Icm secretion system	12
LPO_2717	chromosome	1554	517 RND efflux system, outer membrane lipoprotein, NodT	12
LPO_2936	chromosome	2256	751 fused ferrous iron transporter, protein B: GTP-binding protein ; membrane protein	12
LPO_2970	chromosome	1413	470 Component of the Dot/Icm secretion system	12
LPO_3342	chromosome	1839	612 conserved membrane protein of unknown function	12
LPO_0117	chromosome	1803	600 putative CoA-dependent acyltransferase	11
LPO_0238	chromosome	1788	595 conserved protein of unknown function	11
LPO_0255	chromosome	2238	745 conserved protein of unknown function	11
LPO_0354	chromosome	2520	839 organic solvent tolerance protein	11
LPO_0522	chromosome	3030	1009 Component of the Dot/Icm secretion system	11
LPO_0774	chromosome	1710	569 prolyl-tRNA synthetase	11
LPO_0777	chromosome	2307	768 putative sulfate transporter	11
LPO_0802	chromosome	1263	420 Efflux transporter, RND family, MFP subunit	11
LPO_0849	chromosome	1518	505 conserved protein of unknown function	11
LPO_0851	chromosome	1647	548 conserved protein of unknown function	11
LPO_0861	chromosome	1983	660 Putative O-acetyltransferase	11
LPO_0880	chromosome	1704	567 putative Butyryl-CoA dehydrogenase	11
LPO_1015	chromosome	2097	698 type IV pilus (Tfp) assembly protein PilQ	11
LPO_1018	chromosome	1452	483 DamX-related protein	11
LPO_1021	chromosome	2796	931 isoleucyl-tRNA synthetase	11
LPO_1079	chromosome	1806	601 Streptomycin 3'-adenyltransferase	11
LPO_1083	chromosome	1185	394 conserved protein of unknown function	11
LPO_1189	chromosome	1329	442 fused DNA-binding response regulator in two-component regulatory system with ZraS: response	11
LPO_1200	chromosome	2388	795 outer membrane protein RomA	11
LPO_1306	chromosome	2394	797 substrate of the Dot/Icm secretion system	11
LPO_1377	chromosome	1404	467 conserved protein of unknown function	11
LPO_1402	chromosome	1167	388 putative Dolichyl-phosphate beta-D-mannosyltransferase	11
LPO_1568	chromosome	1710	569 acyl-CoA synthetase (long-chain-fatty-acid-CoA ligase)	11
LPO_1580	chromosome	2145	714 Pyridine nucleotide-disulphide oxidoreductase dimerisation region precursor (modular protein)	11
LPO_1623	chromosome	2316	771 phosphoenolpyruvate carboxylase	11
LPO_1765	chromosome	2487	828 acyl coenzyme A dehydrogenase	11

LPO_1838	chromosome	1062	353 Flagellar motor switch protein FlIM	11
LPO_1929	chromosome	1851	616 putative fused transporter subunits of ABC superfamily: ATP-binding components	11
LPO_2176	chromosome	1821	606 conserved protein of unknown function	11
LPO_2198	chromosome	3201	1066 Chemiosmotic efflux system protein A-like protein	11
LPO_2369	chromosome	1278	425 substrate of the Dot/Icm secretion system	11
LPO_2413	chromosome	1326	441 glutamyl tRNA reductase	11
LPO_2441	chromosome	1866	621 RNA polymerase, sigma 70 (sigma D) factor	11
LPO_2474	chromosome	1878	625 TraI protein	11
LPO_2558	chromosome	1758	585 conserved protein of unknown function	11
LPO_2595	chromosome	1998	665 putative Acyl transferase/acyl hydrolase/lysophospholipase substrate of the Dot/Icm secretion system	11
LPO_2967	chromosome	3096	1031 Component of the Dot/Icm secretion system	11
LPO_3086	chromosome	1920	639 protease, ATP-dependent zinc-metallo	11
LPO_3101	chromosome	2592	863 aminopeptidase N	11
LPO_3107	chromosome	1935	644 conserved membrane protein of unknown function	11
LPO_3170	chromosome	2178	725 Primosome factor n' (replication factor Y)	11
LPO_3275	chromosome	1827	608 Asparagine synthetase (B)	11
LPO_3295	chromosome	870	289 major outer membrane protein precursor	11
LPO_p0158	plasmid	978	325 Putative Legionella vir region protein LvrA	11
LPO_0042	chromosome	1518	505 substrate of the Dot/Icm secretion system	10
LPO_0164	chromosome	2475	824 Adenine specific DNA methylase	10
LPO_0242	chromosome	2886	961 Serine/threonine protein kinase	10
LPO_0280	chromosome	1626	541 protein of unknown function	10
LPO_0314	chromosome	1548	515 Multicopper oxidase	10
LPO_0441	chromosome	2856	951 ATPase and DNA damage recognition protein of nucleotide excision repair excinuclease UvrABC	10
LPO_0524	chromosome	2922	973 Component of the Dot/Icm secretion system	10
LPO_0576	chromosome	2361	786 outer membrane protein	10
LPO_0607	chromosome	2811	936 2-oxoglutarate decarboxylase, thiamin-requiring	10
LPO_0769	chromosome	2118	705 spermidine synthase	10
LPO_0825	chromosome	990	329 lipoate synthase	10
LPO_0903	chromosome	1332	443 exonuclease VII, large subunit	10
LPO_1047	chromosome	1242	413 substrate of the Dot/Icm secretion system	10
LPO_1102	chromosome	2061	686 conserved protein of unknown function	10
LPO_1158	chromosome	2310	769 conserved protein of unknown function	10
LPO_1253	chromosome	1065	354 substrate of the Dot/Icm secretion system	10
LPO_1346	chromosome	2379	792 Diguanylate kinase	10
LPO_1471	chromosome	1335	444 adenosylmethionine-8-amino-7-oxononanoate aminotransferase	10
LPO_1555	chromosome	1389	462 GTPase involved in ribosome synthesis and maintenance	10
LPO_1561	chromosome	1149	382 putative Fe-S containing enzyme	10
LPO_1576	chromosome	1047	348 protein of unknown function	10
LPO_1603	chromosome	1389	462 putative aldehyde dehydrogenase	10
LPO_1646	chromosome	1911	636 Penicillin-binding protein, transpeptidase	10
LPO_1699	chromosome	2307	768 Penicillin-binding protein 1C precursor	10
LPO_1759	chromosome	2586	861 uridylyltransferase	10
LPO_1842	chromosome	927	308 transcriptional regulator, LysR family	10
LPO_1857	chromosome	1689	562 Bacterial surface antigen	10
LPO_1892	chromosome	1941	646 acetyl-CoA synthetase	10
LPO_1977	chromosome	1806	601 conserved membrane protein of unknown function	10
LPO_2021	chromosome	1128	375 acyl CoA dehydrogenase	10

LPO_2031	chromosome	993	330 Leucine-rich repeat-and coiled coil-containing protein	Substrate of the Dot/Icm secretion system	10
LPO_2060	chromosome	1794	597	substrate of the Dot/Icm secretion system	10
LPO_2074	chromosome	1884	627	putative Glycosyltransferase	10
LPO_2189	chromosome	1527	508	conserved protein of unknown function	10
LPO_2194	chromosome	2643	880	protein of unknown function	10
LPO_2245	chromosome	1818	605 sphingosine-1-phosphate lyase I	Substrate of the Dot/Icm secretion system	10
LPO_2335	chromosome	1788	595	PHA synthase	10
LPO_2486	chromosome	2088	695	conserved exported protein of unknown function	10
LPO_2509	chromosome	1776	591	putative citrate transporter	10
LPO_2557	chromosome	1890	629	Kup system potassium uptake protein	10
LPO_2561	chromosome	2745	914	cation efflux transporter	10
LPO_2608	chromosome	2376	791	conserved protein of unknown function	10
LPO_2616	chromosome	1647	548	malonate decarboxylase alpha subunit	10
LPO_2623	chromosome	1785	594	conserved protein of unknown function	10
LPO_2715	chromosome	3153	1050	multidrug efflux system protein	10
LPO_2803	chromosome	2697	898	cation efflux transporter	10
LPO_2815	chromosome	3153	1050	HelA protein	10
LPO_2874	chromosome	2280	759	DNA topoisomerase I	10
LPO_3032	chromosome	1968	655	conserved protein of unknown function	10
LPO_3054	chromosome	1266	421	conserved membrane protein containing CBS domain	10
LPO_3063	chromosome	2607	868	protein chain initiation factor IF-2	10
LPO_3193	chromosome	1914	637	conserved membrane protein of unknown function	10
LPO_3334	chromosome	1812	603	lipoprotein	10
LPO_p0063	plasmid	1929	642	Penicillin-binding protein, transpeptidase	10
LPO_p0084	plasmid	1908	635	putative cadmium-transporting ATPase (Cadmium efflux ATPase)	10
LPO_0004	chromosome	2418	805	DNA gyrase, subunit B	9
LPO_0006	chromosome	1893	630	biosynthetic arginine decarboxylase, PLP-binding	9
LPO_0121	chromosome	1455	484	putative glycine dehydrogenase [decarboxylating] subunit 2 (Glycine decarboxylase subunit 2) (Glycine cleavage system P-protein subunit 2)	9
LPO_0123	chromosome	1371	456	glycine dehydrogenase subunit 1	9
LPO_0204	chromosome	861	286	Transcriptional regulator, LysR family	9
LPO_0229	chromosome	2250	749	catalase/hydroperoxidase HPI(I)	9
LPO_0261	chromosome	1104	367	substrate of the Dot/Icm secretion system	9
LPO_0290	chromosome	1245	414	RNA helicase	9
LPO_0327	chromosome	1440	479	Ras guanine nucleotide exchange factor	Substrate of the Dot/Icm secretion system
LPO_0350	chromosome	2439	812	acyl coenzyme A dehydrogenase	9
LPO_0437	chromosome	714	237	conserved protein of unknown function	9
LPO_0482	chromosome	1284	427	putative Glucan 1,4-alpha-glucosidase	9
LPO_0502	chromosome	2001	666	conserved protein of unknown function	9
LPO_0528	chromosome	870	289	methylase for 50S ribosomal subunit protein L11	9
LPO_0636	chromosome	1071	356	conserved exported protein of unknown function	9
LPO_0641	chromosome	1209	402	transposase	9
LPO_0693	chromosome	858	285	NADPH-dependent 7-cyano-7-deazaguanine reductase	9
LPO_0704	chromosome	2208	735	DNA uptake/competence protein ComA	9
LPO_0708	chromosome	1068	355	conserved protein of unknown function	9
LPO_0780	chromosome	1368	455	putative type I secretion outer membrane efflux TolC protein	9
LPO_0883	chromosome	2388	795	phosphoenolpyruvate synthase	9
LPO_0918	chromosome	963	320	D-arabinose 5-phosphate isomerase	9
LPO_0947	chromosome	1827	608	ATP-dependent DNA helicase	9

LPO_0958	chromosome	1134	377 pyridine nucleotide transhydrogenase, alpha subunit (part 1)	9
LPO_0968	chromosome	1134	377 N-succinyl-diaminopimelate deacylase	9
LPO_0982	chromosome	1542	513 putative asmA protein	9
LPO_1060	chromosome	1146	381 ecto-ATP diphosphohydrolase II	9
LPO_1140	chromosome	1560	519 conserved protein of unknown function	9
LPO_1166	chromosome	1488	495 putative Polyamine oxidase precursor	9
LPO_1269	chromosome	1026	341 RNA polymerase, sigma S (sigma 38) factor	9
LPO_1275	chromosome	1416	471 sensory histidine kinase in two-component regulatory system with QseB	9
LPO_1285	chromosome	2676	891 FimV protein	9
LPO_1287	chromosome	1299	432 oxidoreductase	9
LPO_1410	chromosome	1521	506 sn-glycerol-3-phosphate dehydrogenase, aerobic, FAD/NAD(P)-binding	9
LPO_1430	chromosome	765	254 2-deoxyribose-5-phosphate aldolase	9
LPO_1457	chromosome	2205	734 (p)ppGpp synthetase I/GTP pyrophosphokinase	9
LPO_1463	chromosome	2691	896 preprotein translocase subunit, ATPase	9
LPO_1515	chromosome	1425	474 lipoamide dehydrogenase, E3 component is part of three enzyme complexes	9
LPO_1538	chromosome	1206	401 Cyclic nucleotide-binding protein/CAAX amino terminal protease family	9
LPO_1547	chromosome	1527	508 peptide transport protein	9
LPO_1579	chromosome	2199	732 conserved membrane protein of unknown function	9
LPO_1587	chromosome	1467	488 phosphomethylpyrimidine kinase ThiD/thiamin-phosphate pyrophosphorylase fused protein ThiE	9
LPO_1588	chromosome	1128	375 UBA/THIF-type NAD/FAD binding fold	9
LPO_1599	chromosome	990	329 conserved protein of unknown function	9
LPO_1648	chromosome	1320	439 substrate of the Dot/Icm secretion system	9
LPO_1775	chromosome	1452	483 Glutamyl-tRNA(Gln) amidotransferase (subunit A)	9
LPO_1784	chromosome	2184	727 putative Adenylate cyclase, family 3	9
LPO_1845	chromosome	2583	860 alanyl-tRNA synthetase	9
LPO_1890	chromosome	1965	654 acyl CoA carboxylase subunit alpha subunit	9
LPO_1897	chromosome	1419	472 conserved protein of unknown function	9
LPO_1921	chromosome	1875	624 Peptidylprolyl isomerase	9
LPO_1935	chromosome	1140	379 general secretion pathway protein L	9
LPO_2006	chromosome	1608	535 Sensor protein	9
LPO_2018	chromosome	1482	493 coenzyme F390 synthetase	9
LPO_2062	chromosome	1362	453 conserved protein of unknown function	9
LPO_2169	chromosome	1329	442 conserved exported protein of unknown function	9
LPO_2248	chromosome	3153	1050 putative multidrug-efflux system transmembrane protein	9
LPO_2259	chromosome	1860	619 IcmL-like protein	9
LPO_2294	chromosome	1530	509 conserved protein of unknown function with GH3 auxin-responsive promoter	9
LPO_2298	chromosome	1746	581 Long-chain-fatty-acid-CoA ligase	9
LPO_2299	chromosome	1380	459 putative o-succinylbenzoate-CoA ligase	9
LPO_2404	chromosome	879	292 substrate of the Dot/Icm secretion system	9
LPO_2555	chromosome	1455	484 conserved protein of unknown function	9
LPO_2610	chromosome	1344	447 conserved protein of unknown function	9
LPO_2625	chromosome	1035	344 conserved exported protein of unknown function	9
LPO_2647	chromosome	1422	473 substrate of the Dot/Icm secretion system	9
LPO_2725	chromosome	1131	376 Metal-activated pyridoxal enzyme	9
LPO_2851	chromosome	2739	912 Substrate of the Dot/Icm system	9
LPO_2959	chromosome	1023	340 putative cyanophycin synthase	9
LPO_2965	chromosome	861	286 conserved protein of unknown function	9
LPO_3006	chromosome	1152	383 putative Glutamate-cysteine ligase family 2(GCS2)	9



LPO_3113	chromosome	1011	336 Aldo-keto reductase yakc [NADP+]	9
LPO_3126	chromosome	1866	621 lysophospholipase substrate of the Dot/Icm secretion system	9
LPO_3212	chromosome	1053	350 conserved protein of unknown function	9
LPO_3291	chromosome	1506	501 membrane bound peptidase; NefD homolog	9
LPO_3293	chromosome	1593	530 conserved exported protein of unknown function	9
LPO_p0001	plasmid	915	304 Putative ParA partition protein	9
LPO_p0044	plasmid	1605	534 Sensor protein	9
LPO_p0100	plasmid	2772	923 putative fused ribosome-associated ATPase: ATP-binding protein; ATP-binding protein	9
LPO_p0144	plasmid	2550	849 Putative Type-IV secretion system protein TraC	9
LPO_0003	chromosome	1062	353 RecF recombinational DNA repair ATPase	8
LPO_0135	chromosome	1884	627 acetyl-CoA synthetase	8
LPO_0140	chromosome	2469	822 conserved protein of unknown function	8
LPO_0149	chromosome	1425	474 pyruvate kinase II	8
LPO_0166	chromosome	1776	591 protein of unknown function	8
LPO_0172	chromosome	1368	455 exported protein of unknown function	8
LPO_0222	chromosome	885	294 ABC sugar transporter, periplasmic sugar binding protein	8
LPO_0225	chromosome	1410	469 Peptidase M20 precursor	8
LPO_0328	chromosome	2223	740 Diguanylate kinase	8
LPO_16S_2	chromosome	1509	ribosomal RNA 16S	8
LPO_0376	chromosome	2085	694 protein chain elongation factor EF-G, GTP-binding	8
LPO_0399	chromosome	1329	442 preprotein translocase membrane subunit	8
LPO_0445	chromosome	915	304 putative transporter subunit: ATP-binding component of ABC superfamily	8
LPO_0461	chromosome	1377	458 Signal Recognition Particle (SRP) component with 4.5S RNA (ffs)	8
LPO_0463	chromosome	1509	502 ankyrin protein, substrate of the Dot/Icm secretion system	8
LPO_0567	chromosome	1137	378 conserved exported protein of unknown function	8
LPO_0616	chromosome	1458	485 conserved protein of unknown function	8
LPO_16S_3	chromosome	1509	ribosomal RNA 16S	8
LPO_0668	chromosome	2202	733 fused 2-acylglycerophospho-ethanolamine acyl transferase ; acyl-acyl carrier protein synthetase	8
LPO_0743	chromosome	1782	593 putative Soluble lytic murein transglycosylase	8
LPO_0754	chromosome	1314	437 adenylate cyclase	8
LPO_0767	chromosome	1647	548 Cpn60 chaperonin GroEL, large subunit of GroESL	8
LPO_0797	chromosome	996	331 conserved membrane protein of unknown function	8
LPO_0827	chromosome	1509	502 di/tripeptide transporter homolog IraB	8
LPO_0856	chromosome	894	297 Glycosyl transferase, group 2 family protein	8
LPO_0868	chromosome	1167	388 conserved protein of unknown function	8
LPO_0869	chromosome	1443	480 Alginate o-acetyltransferase algI	8
LPO_0881	chromosome	999	332 putative choloylglycine hydrolase protein	8
LPO_0884	chromosome	1440	479 putative Sodium/hydrogen exchanger	8
LPO_0906	chromosome	1920	639 putative Diguanylate cyclase/phosphodiesterase (GGDEF and EAL domains) precursor	8
LPO_0911	chromosome	777	258 indole-3-glycerol phosphate synthase (IGPS)	8
LPO_0912	chromosome	1035	344 Anthranilate phosphoribosyltransferase	8
LPO_0931	chromosome	1416	471 transcriptional regulator FleQ	8
LPO_0976	chromosome	1308	435 putative Cytokinin dehydrogenase	8
LPO_0981	chromosome	1068	355 adenine DNA glycosylase	8
LPO_0992	chromosome	702	233 Flagella basal body P-ring formation protein flgA precursor	8
LPO_1037	chromosome	1668	555 AMP-binding protein	8
LPO_1042	chromosome	2022	673 DNA ligase, NAD(+)-dependent	8
LPO_1150	chromosome	954	317 conserved protein of unknown function	8

LPO_1203	chromosome	1896	631 K+ potassium transporter precursor	8
LPO_1300	chromosome	2106	701 adenylate cyclase 1 protein	8
LPO_1307	chromosome	1137	378 conserved protein of unknown function	8
LPO_1334	chromosome	1536	511 putative apolipoprotein N-acyltransferase	8
LPO_1416	chromosome	1302	433 3-phosphoshikimate 1-carboxyvinyltransferase	8
LPO_1431	chromosome	840	279 purine nucleoside phosphorylase II	8
LPO_1469	chromosome	1599	532 EAL domain protein	8
LPO_1489	chromosome	1026	341 conserved protein of unknown function	8
LPO_1521	chromosome	822	273 rare lipoprotein A	8
LPO_1531	chromosome	1722	573 Amidase	8
LPO_1543	chromosome	1119	372 2-methylcitrate synthase	8
LPO_1556	chromosome	1086	361 putative lipoprotein	8
LPO_1584	chromosome	1071	356 thiamine biosynthesis oxidoreductase ThiO	8
LPO_1614	chromosome	891	296 conserved membrane protein of unknown function	8
LPO_1616	chromosome	2019	672 enoyl CoA hydratase	8
LPO_1619	chromosome	1425	474 phospholipase	8
LPO_1679	chromosome	2055	684 conserved protein of unknown function	8
LPO_1718	chromosome	2343	780 Phosphoribosylformylglycinamide synthase II (FGAM synthase II)	8
LPO_1741	chromosome	1491	496 succinylglutamic semialdehyde dehydrogenase	8
LPO_1763	chromosome	831	276 membrane ATPase of the MinC-MinD-MinE system	8
LPO_1773	chromosome	2148	715 Anthranilate synthase	8
LPO_1791	chromosome	1134	377 cysteine desulfurase (tRNA sulfurtransferase), PLP-dependent	8
LPO_1861	chromosome	1443	480 putative Long chain fatty acid transport protein precursor	8
LPO_1864	chromosome	1074	357 antiporter inner membrane protein	8
LPO_1885	chromosome	1161	386 Isovaleryl-CoA dehydrogenase 2, mitochondrial precursor (IVD 2)	8
LPO_1934	chromosome	1017	338 Membrane-bound lytic transglycosylase B	8
LPO_1962	chromosome	1281	426 chloride channel protein (voltage gated)	8
LPO_2016	chromosome	1893	630 methoxymalonyl CoA synthase	8
LPO_2042	chromosome	1254	417 conserved protein of unknown function	8
LPO_2064	chromosome	1560	519 Methionine-tRNA ligase	8
LPO_2076	chromosome	1665	554 conserved protein of unknown function	8
LPO_2077	chromosome	1200	399 3-hydroxy-3-methylglutaryl coenzyme A reductase-like protein	8
LPO_2104	chromosome	1854	617 fused ATP-binding subunits of ABC superfamily protein involved in precise excision of transposons	8
LPO_2113	chromosome	696	231 putative enzyme	8
LPO_2135	chromosome	1074	357 conserved protein of unknown function	8
LPO_2140	chromosome	1269	422 enolase	8
LPO_2185	chromosome	1755	584 conserved protein of unknown function	8
LPO_2261	chromosome	1521	506 sulfate transporter	8
LPO_2276	chromosome	1101	366 conserved exported protein of unknown function	8
LPO_2282	chromosome	1275	424 acetylpolyamine aminohydolase	8
LPO_2293	chromosome	1224	407 conserved protein of unknown function	8
LPO_2322	chromosome	2235	744 conserved protein of unknown function	8
LPO_2336	chromosome	1407	468 bifunctional enoyl-CoA hydratase/phosphate acetyltransferase	8
LPO_2368	chromosome	1992	663 ribonuclease E	8
LPO_2442	chromosome	912	303 conserved protein of unknown function	8
LPO_2457	chromosome	966	321 LvhB11	8
LPO_2520	chromosome	1506	501 putative cytidine deaminase	8
LPO_2550	chromosome	918	305 putative Transcriptional regulator, LysR family	8

LPO_2567	chromosome	2166	721 catalase/hydroperoxidase HPI(I)	8
LPO_2572	chromosome	885	294 leucine-rich repeat-containing protein (substrate of the Dot/Icm secretion system)	8
LPO_2609	chromosome	1695	564 conserved exported protein of unknown function	8
LPO_2614	chromosome	1359	452 Kynurenine-oxoglutarate transaminase	8
LPO_2642	chromosome	2766	921 substrate of the Dot/Icm secretion system	8
LPO_2733	chromosome	1620	539 substrate of the Dot/Icm secretion system	8
LPO_2735	chromosome	1695	564 conserved protein of unknown function	8
LPO_2741	chromosome	897	298 tellurite resistance protein TehB	8
LPO_2746	chromosome	1347	448 conserved protein of unknown function	8
LPO_2760	chromosome	996	331 permease of drug/transporter	8
LPO_2794	chromosome	2766	921 Type IV secretory protein VirB4 component	8
LPO_2800	chromosome	1998	665 conjugative coupling factor TraD	8
LPO_2813	chromosome	1245	414 HelC protein	8
LPO_2836	chromosome	1122	373 conserved protein of unknown function	8
LPO_2883	chromosome	2037	678 metallopeptidase PepO, peptidase, M13 family	8
LPO_2951	chromosome	1305	434 putative Peptidase M16	8
LPO_2972	chromosome	2544	847 cation transporting ATPase PacS	8
LPO_2994	chromosome	2382	793 phenylalanine tRNA synthetase, beta subunit	8
LPO_3007	chromosome	1032	343 cAMP-binding protein	8
LPO_16S_1	chromosome	1509	ribosomal RNA 16S	8
LPO_3074	chromosome	1278	425 NADH:ubiquinone oxidoreductase, chain F	8
LPO_3104	chromosome	1524	507 putative Stage V sporulation protein R	8
LPO_3121	chromosome	972	323 conserved protein of unknown function	8
LPO_3166	chromosome	1911	636 Putative Glucosyltransferase Substrate of the Dot/Icm secretion system	8
LPO_3168	chromosome	1119	372 conserved protein of unknown function	8
LPO_3183	chromosome	1065	354 putative cobalt/magnesium uptake transporter	8
LPO_3189	chromosome	738	245 conserved membrane protein of unknown function	8
LPO_3198	chromosome	1875	624 glucose-inhibited cell-division protein	8
LPO_3228	chromosome	1935	644 tyramine oxidase	8
LPO_3251	chromosome	771	256 S-adenosylmethionine-6-N',N'-adenosyl (rRNA) dimethyltransferase	8
LPO_3272	chromosome	1803	600 ABC transporter, ATP binding protein	8
LPO_3311	chromosome	1530	509 conserved protein of unknown function	8
LPO_p0029	plasmid	1317	438 conserved protein of unknown function	8
LPO_p0033	plasmid	1458	485 Aminoglycoside phosphotransferase	8
LPO_p0047	plasmid	1335	444 conserved protein of unknown function	8
LPO_p0135	plasmid	2838	945 Putative F pilus assembly and aggregate stability protein traG	8
LPO_0013	chromosome	1578	525 conserved protein of unknown function	7
LPO_0064	chromosome	909	302 transcriptional regulator, LysR family	7
LPO_0092	chromosome	1524	507 conserved membrane protein of unknown function	7
LPO_0151	chromosome	993	330 D-erythrose 4-phosphate dehydrogenase	7
LPO_0270	chromosome	2559	852 putative Copper-exporting ATPase	7
LPO_0275	chromosome	1980	659 conserved protein of unknown function	7
LPO_0298	chromosome	1944	647 conserved protein of unknown function	7
LPO_0329	chromosome	1416	471 putative Histidine kinase	7
LPO_0340	chromosome	1125	374 substrate of the Dot/Icm secretion system	7
LPO_0346	chromosome	2073	690 Polyphosphate kinase	7
LPO_0382	chromosome	828	275 50S ribosomal subunit protein L2	7
LPO_0485	chromosome	996	331 ferrocyclase	7

LPO_0526	chromosome	1590	529 fused IMP cyclohydrolase ; phosphoribosylaminoimidazolecarboxamide formyltransferase	7
LPO_0552	chromosome	1143	380 modulator for HflB protease specific for phage lambda cII repressor	7
LPO_0566	chromosome	1338	445 putative Peptidase S41A, C-terminal protease	7
LPO_0571	chromosome	1272	423 Phosphatidylcholine-hydrolyzing phospholipase C	7
LPO_0578	chromosome	1032	343 UDP-3-O-(3-hydroxymyristoyl)-glucosamine N-acyltransferase	7
LPO_0583	chromosome	1281	426 seryl-tRNA synthetase, also charges selenocysteinyl-tRNA with serine	7
LPO_0588	chromosome	831	276 aldo/keto reductase	7
LPO_0601	chromosome	1140	379 conserved protein of unknown function	7
LPO_0671	chromosome	1743	580 poly-beta-hydroxybutyrate polymerase	7
LPO_0690	chromosome	1188	395 conserved membrane protein of unknown function	7
LPO_0712	chromosome	1338	445 substrate of the Dot/Icm secretion system	7
LPO_0714	chromosome	630	209 thymidine kinase/deoxyuridine kinase	7
LPO_0727	chromosome	771	256 Exodeoxyribonuclease III	7
LPO_0770	chromosome	1881	626 DNA topoisomerase IV, subunit B	7
LPO_0782	chromosome	1185	394 glycine C-acetyltransferase	7
LPO_0789	chromosome	975	324 IcmL-like protein	7
LPO_0790	chromosome	960	319 Formimidoylglutamase (Formiminoglutamase) (Formiminoglutamate hydrolase)	7
LPO_0854	chromosome	1158	385 conserved protein of unknown function	7
LPO_0948	chromosome	1155	384 Isobutyryl-CoA dehydrogenase, mitochondrial precursor (Acyl-CoA dehydrogenase family member 8) (ACAD-8)	7
LPO_0954	chromosome	1581	526 peptide chain release factor RF-3	7
LPO_0970	chromosome	894	297 Acyltransferase family protein (Phospholipid/glycerol acyltransferase)	7
LPO_1005	chromosome	1245	414 conserved protein of unknown function	7
LPO_1040	chromosome	1179	392 conserved exported protein of unknown function	7
LPO_1046	chromosome	3447	1148 DNA polymerase III alpha subunit	7
LPO_1057	chromosome	741	246 conserved protein of unknown function	7
LPO_1073	chromosome	900	299 protein of unknown function	7
LPO_1075	chromosome	348	115 putative regulator	7
LPO_1096	chromosome	993	330 conserved protein of unknown function	7
LPO_1142	chromosome	1452	483 adenylate cyclase	7
LPO_1164	chromosome	1473	490 conserved protein of unknown function	7
LPO_1168	chromosome	1680	559 pyruvate decarboxylase	7
LPO_1184	chromosome	1344	447 conserved protein of unknown function	7
LPO_1234	chromosome	867	288 conserved protein of unknown function	7
LPO_1244	chromosome	1314	437 flagellar hook protein	7
LPO_1251	chromosome	1236	411 flagellar hook-associated protein FlgL	7
LPO_1270	chromosome	1251	416 Homogentisate 1,2-dioxygenase	7
LPO_1293	chromosome	1371	456 cysteinyl-tRNA synthetase	7
LPO_1297	chromosome	1485	494 general secretory pathway component, cryptic	7
LPO_1316	chromosome	966	321 23S rRNA pseudouridine synthase	7
LPO_1324	chromosome	1428	475 flagellar filament structural protein (flagellin)	7
LPO_1358	chromosome	1872	623 molecular chaperone HSP90 family	7
LPO_1394	chromosome	999	332 putative conserved membrane associated protein	7
LPO_1401	chromosome	1281	426 multidrug efflux system protein	7
LPO_1411	chromosome	1476	491 glycerol kinase	7
LPO_1414	chromosome	2601	866 DNA gyrase (type II topoisomerase), subunit A	7
LPO_1454	chromosome	1368	455 multidrug efflux protein	7
LPO_1498	chromosome	1035	344 ISSod13, transposase	7
LPO_1535	chromosome	1725	574 (type IV) pilus assembly protein PilB	7

LPO_1548	chromosome	1290	429 glutamate-1-semialdehyde aminotransferase (aminomutase)	7
LPO_1627	chromosome	1071	356 glutamate 5-kinase	7
LPO_1659	chromosome	825	274 Beta-lactamase domain protein	7
LPO_1726	chromosome	1245	414 Flagellar hook-length control protein	7
LPO_1757	chromosome	1686	561 Histone-lysine N-methyltransferase substrate of the Dot/Icm secretion system	7
LPO_1761	chromosome	1578	525 GMP synthetase (glutamine aminotransferase)	7
LPO_1783	chromosome	990	329 conserved exported protein of unknown function	7
LPO_1796	chromosome	1314	437 substrate of the Dot/Icm secretion system	7
LPO_1801	chromosome	456	151 conserved protein of unknown function	7
LPO_1802	chromosome	1350	449 flagellum-specific ATP synthase	7
LPO_1809	chromosome	1305	434 recombination protein	7
LPO_1811	chromosome	2292	763 putative DNA translocase ftsK	7
LPO_1812	chromosome	951	316 thioredoxin reductase, FAD/NAD(P)-binding	7
LPO_1829	chromosome	1140	379 Flagellar biosynthesis protein FlhF	7
LPO_1866	chromosome	891	296 DNA-binding transcriptional dual regulator	7
LPO_1870	chromosome	1173	390 putative Major facilitator family transporter	7
LPO_1898	chromosome	939	312 conserved protein of unknown function	7
LPO_1957	chromosome	966	321 lipase	7
LPO_2007	chromosome	657	fragment of conserved protein of unknown function (part 2)	7
LPO_2008	chromosome	900	fragment of conserved protein of unknown function (part 1)	7
LPO_2010	chromosome	846	281 conserved protein of unknown function	7
LPO_2029	chromosome	750	249 conserved protein of unknown function	7
LPO_2030	chromosome	1035	344 ISSod13, transposase	7
LPO_2061	chromosome	978	325 conserved exported protein of unknown function	7
LPO_2072	chromosome	894	297 major outer membrane protein	7
LPO_2073	chromosome	1443	480 RCC1 and BTB domain-containing protein 1 Substrate of the Dot/Icm secretion system	7
LPO_2075	chromosome	1368	455 conserved exported protein of unknown function	7
LPO_2154	chromosome	1029	342 isopentenyl pyrophosphate isomerase	7
LPO_2170	chromosome	1035	344 ISSod13, transposase	7
LPO_2173	chromosome	1236	411 conserved protein of unknown function	7
LPO_2193	chromosome	2862	953 conserved protein of unknown function with ankyrin domain	7
LPO_2197	chromosome	1257	418 proline/glycine betaine transporter-like protein	7
LPO_2201	chromosome	1638	545 Protein kinase-like Substrate of the Dot/Icm system	7
LPO_2215	chromosome	1797	598 multidrug resistance ABC transporter ATP-binding protein	7
LPO_2290	chromosome	1500	499 conserved protein of unknown function	7
LPO_2325	chromosome	1398	465 succinate semialdehyde dehydrogenase	7
LPO_2338	chromosome	891	296 curved DNA-binding protein, DnaJ homologue that functions as a co-chaperone of DnaK	7
LPO_2358	chromosome	999	332 fumarylacetoacetate hydrolase	7
LPO_2399	chromosome	1926	641 substrate of the Dot/Icm secretion system	7
LPO_2421	chromosome	930	309 lysophospholipase A	7
LPO_2424	chromosome	1701	566 ATP-dependent RNA helicase	7
LPO_2461	chromosome	2535	844 Conjugal transfer protein trbE precursor	7
LPO_2496	chromosome	1119	372 exported protein of unknown function	7
LPO_2508	chromosome	1206	401 stearoyl-CoA-9-desaturase	7
LPO_2584	chromosome	1506	501 putative secreted esterase	7
LPO_2586	chromosome	1515	504 putative unspecific monooxygenase	7
LPO_2594	chromosome	1698	565 sensor histidine kinase	7
LPO_2606	chromosome	1035	344 Transposase (ISSod13)	7

LPO_2674	chromosome	1734	577 methyltransferase	7
LPO_2700	chromosome	1221	406 Permeases of the major facilitator superfamily	7
LPO_2727	chromosome	864	287 Transcriptional regulator, LuxR family	7
LPO_2728	chromosome	1245	414 conserved protein of unknown function	7
LPO_2765	chromosome	1389	462 Mitogen-activated protein kinase kinase	7
LPO_2784	chromosome	822	273 conserved exported protein of unknown function	7
LPO_2795	chromosome	975	324 conserved protein of unknown function	7
LPO_2806	chromosome	3144	1047 copper/silver efflux system, membrane component	7
LPO_2829	chromosome	804	267 conserved protein of unknown function	7
LPO_2872	chromosome	1086	361 Protein smf	7
LPO_2875	chromosome	1974	657 putative O-acetyltransferase	7
LPO_2917	chromosome	3603	1200 enhanced entry protein EnhC	7
LPO_2955	chromosome	1134	377 Component of the Dot/Icm secretions system. ATPase	7
LPO_2960	chromosome	1107	368 (S)-2-hydroxy-acid oxidase	7
LPO_2964	chromosome	1848	615 DlpA protein (isocitrate and isopropylmalate dehydrogenases family protein)	7
LPO_3005	chromosome	1563	520 substrate of the Dot/Icm secretion system	7
LPO_3030	chromosome	978	325 ribosome small subunit-dependent GTPase A	7
LPO_3048	chromosome	861	286 conserved exported protein of unknown function	7
LPO_3064	chromosome	1479	492 transcription termination/antitermination L factor	7
LPO_3096	chromosome	1314	437 conserved membrane protein of unknown function	7
LPO_3112	chromosome	960	319 tyrosine phosphatase II superfamily protein	7
LPO_3129	chromosome	2370	789 transcriptional accessory protein	7
LPO_3133	chromosome	1302	433 putative Lysophospholipase A	7
LPO_3143	chromosome	1407	468 PhoH protein	7
LPO_3176	chromosome	2295	764 fused PTS enzyme: PEP-protein phosphotransferase (enzyme I) ; GAF domain containing protein	7
LPO_3201	chromosome	870	289 chromosome partitioning protein ParB (SpoIJ)	7
LPO_3234	chromosome	483	160 protein of unknown function	7
LPO_3250	chromosome	1338	445 putative helicase/relaxase	7
LPO_3270	chromosome	1152	383 tetraacyldisaccharide-1-P synthase	7
LPO_3314	chromosome	2238	745 DNA topoisomerase IV, subunit A	7
LPO_3323	chromosome	1554	517 F1 sector of membrane-bound ATP synthase, alpha subunit	7
LPO_p0002	plasmid	1026	341 Probable chromosome-partitioning protein parB	7
LPO_p0004	plasmid	1182	393 Putative initiator RepB protein	7
LPO_p0012	plasmid	954	317 putative Protein kinase-like	7
LPO_p0058	plasmid	1503	500 conserved protein of unknown function	7
LPO_p0059	plasmid	1167	388 S-adenosyl-L-methionine-dependent methyltransferases	7
LPO_p0061	plasmid	1581	526 Glycoside hydrolase/deacetylase, beta/alpha-barrel	7
LPO_p0062	plasmid	801	266 beta-lactamase AmpS	7
LPO_p0092	plasmid	1167	388 conserved protein of unknown function	7
LPO_p0096	plasmid	1428	475 putative RND efflux system, outer membrane lipoprotein, NodT family precursor	7
LPO_0002	chromosome	1104	367 DNA polymerase III, beta subunit	6
LPO_0007	chromosome	846	281 amidohydrolase	6
LPO_0009	chromosome	1260	419 conserved protein of unknown function	6
LPO_0019	chromosome	1386	461 Outer membrane efflux protein	6
LPO_0028	chromosome	996	331 low affinity inorganic phosphate transporter	6
LPO_0032	chromosome	1194	397 leucine aminopeptidase	6
LPO_0061	chromosome	894	297 2-methylisocitrate lyase	6
LPO_0080	chromosome	1992	663 excinulease of nucleotide excision repair, DNA damage recognition component	6

LPO_0081	chromosome	1614	537 diguanylate cyclase/phosphodiesterase domain 2	6
LPO_0089	chromosome	1326	441 substrate of the Dot/Icm secretion system	6
LPO_0091	chromosome	948	315 glutathione synthase/ribosomal protein S6 modification enzyme	6
LPO_0120	chromosome	1233	410 Putative Diguanylate phosphodiesterase (EAL domain)	6
LPO_0159	chromosome	693	230 protein of unknown function	6
LPO_0199	chromosome	726	241 conserved protein of unknown function	6
LPO_0207	chromosome	1443	480 Pentachlorophenol monooxygenase	6
LPO_0217	chromosome	1482	493 amine oxidase	6
LPO_0228	chromosome	954	317 conserved protein of unknown function	6
LPO_0240	chromosome	1539	512 Deoxyribodipyrimidine photolyase-related protein	6
LPO_0253	chromosome	840	279 conserved protein of unknown function	6
LPO_0313	chromosome	450	149 conserved protein of unknown function	6
LPO_0318	chromosome	1500	499 putative ATPase	6
LPO_0322	chromosome	1215	404 major facilitator superfamily transporter	6
LPO_0330	chromosome	1164	387 conserved protein of unknown function	6
LPO_0339	chromosome	1212	403 formate dehydrogenase	6
LPO_0358	chromosome	546	181 conserved exported protein of unknown function	6
LPO_0369	chromosome	696	231 50S ribosomal subunit protein L1	6
LPO_0379	chromosome	651	216 50S ribosomal subunit protein L3	6
LPO_0411	chromosome	1293	430 3-oxoacyl-[acyl-carrier-protein] synthase II	6
LPO_0416	chromosome	834	277 diaminopimelate epimerase	6
LPO_0436	chromosome	1455	484 Glutathione synthase/ribosomal protein S6 modification enzyme (Glutaminyl transferase)	6
LPO_0447	chromosome	639	212 SM20-related protein	6
LPO_0481	chromosome	1422	473 D-xylose (galactose, arabinose)-proton symporter	6
LPO_0516	chromosome	1083	360 Component of the Dot/Icm secretion system	6
LPO_0523	chromosome	1257	418 proline/betaine transport protein homolog	6
LPO_0525	chromosome	786	261 component of the Dot/Icm secretion system	6
LPO_0622	chromosome	1725	574 gamma-glutamyltranspeptidase	6
LPO_0624	chromosome	732	243 1-acyl-sn-glycerol-3-phosphate acetyltransferase	6
LPO_0633	chromosome	747	248 3-oxoacyl-[acyl-carrier-protein] reductase	6
LPO_0639	chromosome	1434	477 peptidase, M23/M37 family	6
LPO_0654	chromosome	1254	417 phosphate transporter	6
LPO_0667	chromosome	684	227 putative integral inner membrane protein	6
LPO_0680	chromosome	915	304 putative methyltransferase	6
LPO_0685	chromosome	1320	439 putative membrane protein with CBS regulatory domain	6
LPO_0710	chromosome	708	235 putative type IV prepilin	6
LPO_0711	chromosome	696	231 Polysaccharide deacetylase-related protein	6
LPO_0732	chromosome	1278	425 putative Major facilitator family transporter	6
LPO_0739	chromosome	1743	580 putative transporter fused subunits of ABC superfamily: ATP-binding components	6
LPO_0759	chromosome	2742	913 adenyllyl transferase	6
LPO_0772	chromosome	786	261 conserved exported protein of unknown function	6
LPO_0776	chromosome	1659	552 conserved protein of unknown function	6
LPO_0781	chromosome	651	216 Protein-L-isoaspartate(D-aspartate) O-methyltransferase	6
LPO_0784	chromosome	1674	557 putative fused transporter subunits of ABC superfamily: ATP-binding components	6
LPO_0799	chromosome	1248	415 Sodium:dicarboxylate symporter precursor	6
LPO_0806	chromosome	1254	417 serine hydroxymethyltransferase	6
LPO_0840	chromosome	1485	494 Glucose-6-phosphate isomerase	6
LPO_0847	chromosome	1092	363 putative NeuB family protein	6

LPO_0848	chromosome	720	239 putative Methyltransferase	6
LPO_0857	chromosome	975	324 putative glycosyl transferase	6
LPO_0865	chromosome	1296	431 tRNA(Ile)-lysidine synthetase	6
LPO_0878	chromosome	1371	456 adenylosuccinate lyase	6
LPO_0892	chromosome	603	200 23S rRNA pseudouridine synthase	6
LPO_0925	chromosome	1269	422 UDP-N-acetylglucosamine 1-carboxyvinyltransferase	6
LPO_0927	chromosome	678	225 outer membrane-specific lipoprotein transporter subunit ; ATP-binding component of ABC superfamily	6
LPO_0929	chromosome	1017	338 putative Secretion protein HlyD	6
LPO_0933	chromosome	912	303 putative inner membrane peptidase	6
LPO_0956	chromosome	1398	465 pyridine nucleotide transhydrogenase, beta subunit	6
LPO_0966	chromosome	1038	345 Glycosyl hydrolase, family 3	6
LPO_1001	chromosome	1452	483 UDP-N-acetylmuramoyl-L-alanyl-D-glutamate:meso-diaminopimelate ligase	6
LPO_1026	chromosome	936	311 membrane-associated, 16S rRNA-binding GTPase	6
LPO_1028	chromosome	1176	391 conserved protein of unknown function	6
LPO_1031	chromosome	1818	605 2-oxoglutarate ferredoxin oxidoreductase alpha subunit	6
LPO_1058	chromosome	1464	487 Amino acid permease-associated region	6
LPO_1062	chromosome	951	316 conserved membrane protein of unknown function	6
LPO_1076	chromosome	1248	415 phage related integrase	6
LPO_1098	chromosome	1263	420 conserved protein of unknown function	6
LPO_1116	chromosome	1653	550 putative KaiC-like protein 1	6
LPO_1119	chromosome	1116	371 serine-type D-Ala-D-Ala carboxypeptidase	6
LPO_1144	chromosome	1128	375 cyclopropane fatty acyl phospholipid synthase (unsaturated-phospholipid methyltransferase)	6
LPO_1167	chromosome	1083	360 conserved protein of unknown function	6
LPO_1193	chromosome	1074	357 Riboflavin biosynthesis protein RibD	6
LPO_1199	chromosome	1860	619 conserved protein of unknown function	6
LPO_1202	chromosome	939	312 recombination associated protein	6
LPO_1204	chromosome	984	327 conserved exported protein of unknown function	6
LPO_1252	chromosome	1740	579 putative Acyl transferase/acyl hydrolase/lysophospholipase	6
LPO_1255	chromosome	1773	590 putative transporter	6
LPO_1294	chromosome	1914	637 putative Sulfatase domain protein	6
LPO_1303	chromosome	1743	580 siderophore biosynthetic enzyme FrgA	6
LPO_1336	chromosome	1521	506 piperidine-6-carboxylate dehydrogenase	6
LPO_1352	chromosome	1200	399 general secretory pathway component, cryptic	6
LPO_1357	chromosome	1578	525 conserved protein of unknown function	6
LPO_1360	chromosome	1155	384 lipid A disaccharide synthase	6
LPO_1369	chromosome	1665	554 urocanate hydratase	6
LPO_1386	chromosome	429	142 conserved protein of unknown function	6
LPO_1434	chromosome	1368	455 Sensor histidine kinase	6
LPO_1482	chromosome	837	278 conserved protein of unknown function	6
LPO_1504	chromosome	1809	602 conserved protein of unknown function	6
LPO_1507	chromosome	924	307 conserved protein of unknown function	6
LPO_1530	chromosome	1137	378 Legionella secretion system protein D	6
LPO_1542	chromosome	1449	482 2-methylcitrate dehydratase	6
LPO_1563	chromosome	885	294 conserved protein of unknown function	6
LPO_1571	chromosome	1323	440 aminodeoxychorismate synthase, subunit I	6
LPO_1577	chromosome	1920	639 protein of unknown function	6
LPO_1591	chromosome	999	332 putative Protein tolA	6
LPO_1607	chromosome	558	185 putative Thioredoxin-like protein	6



LPO_1618	chromosome	1062	353 conserved protein of unknown function	6
LPO_1639	chromosome	1461	486 ABC transporter ATP-binding protein Uup	6
LPO_1645	chromosome	801	266 beta-lactamase AmpS	6
LPO_1662	chromosome	1167	388 putative Glucosyltransferase	6
LPO_1687	chromosome	1890	629 lolC/lolB transferase kinase protein	6
LPO_1717	chromosome	1044	347 phosphoribosylaminoimidazole synthetase	6
LPO_1739	chromosome	1224	407 Glutamate carboxypeptidase	6
LPO_1740	chromosome	1041	346 arginine succinyltransferase	6
LPO_1813	chromosome	669	222 leucyl/phenylalanyl-tRNA-protein transferase	6
LPO_1820	chromosome	1104	367 Ribonucleoside-diphosphate reductase subunit beta (Ribonucleotide reductase small subunit)	6
LPO_1830	chromosome	2079	692 putative flagellar export pore protein	6
LPO_1840	chromosome	1296	431 putative Oxidoreductase	6
LPO_1843	chromosome	1197	398 conserved protein of unknown function	6
LPO_1859	chromosome	996	331 porphobilinogen synthase	6
LPO_1888	chromosome	1608	Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial precursor (3-methylcrotonyl-CoA carboxylase 2) (MCCase subunit beta) (3-methylcrotonyl-CoA:carbon dioxide ligase subunit beta) (3-methylcrotonyl-CoA carboxylase non-biotin-containing subunit)	6
LPO_1889	chromosome	795	264 Enoyl-CoA hydratase/isomerase	6
LPO_1894	chromosome	1026	341 DL-methionine transporter subunit ; ATP-binding component of ABC superfamily	6
LPO_1903	chromosome	2067	688 glycine tRNA synthetase, beta subunit	6
LPO_1918	chromosome	1638	545 Alkaline phosphomonoesterase precursor	6
LPO_1924	chromosome	1176	391 ATPase and specificity subunit of ClpX-ClpP ATP-dependent serine protease	6
LPO_1933	chromosome	1833	610 GTP-binding membrane protein	6
LPO_1939	chromosome	1533	510 Alpha,alpha-trehalase	6
LPO_1943	chromosome	528	175 conserved membrane protein of unknown function	6
LPO_1958	chromosome	1662	553 Leucine-rich repeat protein Substrate of the Dot/Icm secretion system	6
LPO_1968	chromosome	903	300 putative AAA ATPase	6
LPO_1998	chromosome	1875	624 putative ATP-dependent helicase	6
LPO_2004	chromosome	927	308 Indigoidine synthase A-like protein, uncharacterized enzyme involved in pigment biosynthesis	6
LPO_2019	chromosome	1317	438 polyketide synthase, type I	6
LPO_2028	chromosome	954	317 conserved protein of unknown function	6
LPO_2033	chromosome	1197	398 RalF protein, translocated into host cells by the Dot/Icm system	6
LPO_2037	chromosome	810	269 3',5'-cyclic nucleotide phosphodiesterase	6
LPO_2038	chromosome	2235	744 substrate of the Dot/Icm secretion system	6
LPO_2041	chromosome	1104	367 chloromuconate cycloisomerase	6
LPO_2045	chromosome	774	257 conserved protein of unknown function	6
LPO_2052	chromosome	567	188 peptidyl-prolyl cis-trans isomerase A (rotamase A)	6
LPO_2058	chromosome	750	249 conserved exported protein of unknown function	6
LPO_2111	chromosome	708	235 Ribonuclease PH (RNase PH) (tRNA nucleotidyltransferase)	6
LPO_2120	chromosome	1008	335 transcriptional regulator OruR, AraC family	6
LPO_2127	chromosome	1338	445 2-keto-3-deoxy-D-arabino-heptulosonate 7-phosphate synthase	6
LPO_2138	chromosome	759	252 transporter, Zip family	6
LPO_2144	chromosome	654	217 radical activating enzyme	6
LPO_2171	chromosome	2070	689 conserved protein of unknown function	6
LPO_2181	chromosome	1743	580 conserved protein of unknown function	6
LPO_2196	chromosome	1539	512 Diguanylate cyclase/phosphodiesterase with PAS/PAC sensor(S)	6
LPO_2200	chromosome	1314	437 Chemiosmotic efflux system protein C-like protein	6
LPO_2213	chromosome	480	159 conserved protein of unknown function	6

LPO_2214	chromosome	867	288 putative Aminoglycoside 6-adenylyltransferase	6
LPO_2252	chromosome	909	302 Putative Sensory box sensor histidine kinase/response regulator	6
LPO_2254	chromosome	1053	350 regulatory protein, SyrP-like protein	6
LPO_2273	chromosome	1557	518 alginate O-acetylation protein AlgJ	6
LPO_2278	chromosome	1014	337 zinc binding dehydrogenase	6
LPO_2292	chromosome	1128	375 putative Beta-lactamase	6
LPO_2295	chromosome	1692	563 isovaleryl CoA dehydrogenase	6
LPO_2297	chromosome	1062	353 putative Beta-ketoacyl-acyl-carrier-protein synthase I	6
LPO_2307	chromosome	1188	395 sterol desaturase	6
LPO_2314	chromosome	1242	413 conserved protein of unknown function	6
LPO_2361	chromosome	1404	467 asparaginyl tRNA synthetase	6
LPO_2440	chromosome	1734	577 DNA primase	6
LPO_2468	chromosome	1383	460 putative conjugal transfer protein trbL	6
LPO_2531	chromosome	1230	409 phage related integrase	6
LPO_2532	chromosome	699	232 conserved protein of unknown function	6
LPO_2540	chromosome	1293	430 conserved protein of unknown function	6
LPO_2543	chromosome	1395	464 conserved protein of unknown function	6
LPO_2570	chromosome	1305	434 SdbC proteins, putative substrate of the Dot/Icm system	6
LPO_2585	chromosome	921	306 putative HTH-type transcriptional regulator syrM (Symbiotic regulator)	6
LPO_2597	chromosome	1080	359 beta-lactamase	6
LPO_2603	chromosome	1716	571 conserved exported protein of unknown function	6
LPO_2613	chromosome	876	291 putative Transcriptional regulator, LysR	6
LPO_2617	chromosome	1197	398 malonate decarboxylase subunit beta	6
LPO_2621	chromosome	942	313 putative malonyl-CoA acyl-carrier-protein transacylase	6
LPO_2683	chromosome	987	328 Alcohol dehydrogenase GroES-like protein	6
LPO_2704	chromosome	1263	420 putative Histidine kinase	6
LPO_2734	chromosome	1551	516 putative alpha-amylase	6
LPO_2737	chromosome	1044	347 3-deoxy-D-arabino-heptulosonate-7-phosphate synthase, tyrosine-repressible	6
LPO_2740	chromosome	1167	388 putative Aspartate aminotransferase (Transaminase A) (ASPAT)	6
LPO_2744	chromosome	957	318 ferredoxin reductase	6
LPO_2759	chromosome	774	257 conserved protein of unknown function	6
LPO_2779	chromosome	903	300 LvrA	6
LPO_2792	chromosome	1260	419 exported membrane protein	6
LPO_2811	chromosome	2220	739 copper transporting P-type ATPase	6
LPO_2853	chromosome	1095	364 cysteine protease	6
LPO_2878	chromosome	1242	413 conserved protein of unknown function	6
LPO_2903	chromosome	1182	393 putative oxidoreductase with FAD/NAD(P)-binding domain	6
LPO_2908	chromosome	1452	483 aminopeptidase A, a cyteinyglycinase	6
LPO_2916	chromosome	1383	460 conserved protein of unknown function	6
LPO_2947	chromosome	930	309 transporter subunit: membrane component of ABC superfamily	6
LPO_2949	chromosome	1068	355 Cell division protein FtsY homolog	6
LPO_2952	chromosome	546	181 putative methyltransferase	6
LPO_2957	chromosome	798	265 Putative methyltransferase	6
LPO_2979	chromosome	1731	576 DNA mismatch repair protein MutL	6
LPO_3018	chromosome	1026	341 Response regulator receiver	6
LPO_3022	chromosome	930	309 hydroxymethylbilane synthase	6
LPO_3031	chromosome	1170	389 substrate of the Dot/Icm secretion system	6
LPO_3066	chromosome	1440	479 NADH:ubiquinone oxidoreductase, membrane subunit N	6

LPO_3067	chromosome	1506	501 NADH:ubiquinone oxidoreductase, membrane subunit M	6
LPO_3092	chromosome	561	186 phosphatidylglycerophosphate synthase	6
LPO_3098	chromosome	1383	460 conserved membrane protein of unknown function	6
LPO_3103	chromosome	1266	421 conserved protein of unknown function	6
LPO_3106	chromosome	1206	401 putative Bacterial leucyl aminopeptidase	6
LPO_3119	chromosome	1725	574 conserved protein of unknown function	6
LPO_3122	chromosome	1257	418 conserved protein of unknown function	6
LPO_3146	chromosome	207	68 protein of unknown function	6
LPO_3155	chromosome	1650	549 conserved exported protein of unknown function	6
LPO_3159	chromosome	1035	344 conserved hypothetical protein; Willebrand factor type A domain protein	6
LPO_3162	chromosome	996	331 ATPase associated with various cellular activities, AAA_3	6
LPO_3164	chromosome	987	328 tRNA-dihydrouridine synthase	6
LPO_3182	chromosome	1290	429 conserved membrane protein of unknown function	6
LPO_3184	chromosome	1734	577 conserved protein of unknown function	6
LPO_3215	chromosome	951	316 conserved exported protein of unknown function	6
LPO_3262	chromosome	1395	464 fumarate hydratase (fumarase C), aerobic Class II	6
LPO_3264	chromosome	1152	383 conserved protein of unknown function	6
LPO_3271	chromosome	858	285 conserved protein of unknown function	6
LPO_3312	chromosome	1662	553 zinc metalloprotease	6
LPO_3321	chromosome	1377	458 F1 sector of membrane-bound ATP synthase, beta subunit	6
LPO_3341	chromosome	801	266 Astacin protease Substrate of the Dot/Icm secretion system	6
LPO_p0026	plasmid	1014	337 putative aminoglycoside phosphotransferase	6
LPO_p0032	plasmid	951	316 conserved protein of unknown function	6
LPO_p0035	plasmid	750	249 DNA alkylation repair enzyme	6
LPO_p0039	plasmid	693	230 putative TRANSCRIPTION REGULATOR PROTEIN	6
LPO_p0118	plasmid	885	294 site-specific DNA recombinase; e14 prophage (modular protein)	6
LPO_p0124	plasmid	819	272 conserved protein of unknown function	6
LPO_p0162	plasmid	2118	705 putative Histidine kinase	6
LPO_0031	chromosome	891	296 conserved protein of unknown function	5
LPO_0053	chromosome	1296	431 Amino acid permease family protein	5
LPO_0076	chromosome	1290	429 conserved protein of unknown function	5
LPO_0094	chromosome	1926	641 conserved membrane protein of unknown function	5
LPO_0104	chromosome	1251	416 conserved exported protein of unknown function	5
LPO_0106	chromosome	453	150 Putative Response regulator receiver	5
LPO_0108	chromosome	1056	351 UDP-3-O-(3-hydroxymyristoyl) glucosamine N-acyltransferase	5
LPO_0111	chromosome	861	286 N-terminal acetyltransferase, GNAT family substrate of the Dot/Icm secretion system	5
LPO_0114	chromosome	1281	426 xanthine/uracil permease	5
LPO_0125	chromosome	1083	360 aminomethyltransferase, tetrahydrofolate-dependent, subunit (T protein) of glycine cleavage complex	5
LPO_0141	chromosome	732	243 dihydropicolinate reductase	5
LPO_0153	chromosome	1335	444 conserved membrane protein of unknown function	5
LPO_0184	chromosome	747	248 conserved protein of unknown function	5
LPO_0212	chromosome	843	280 heat shock protein, protease HtpX	5
LPO_0223	chromosome	741	246 ABC sugar transporter, ATP binding protein	5
LPO_0230	chromosome	993	330 conserved protein of unknown function	5
LPO_0231	chromosome	1254	417 conserved protein of unknown function	5
LPO_0243	chromosome	1971	656 conserved protein of unknown function	5
LPO_0245	chromosome	1416	471 Deoxyribodipyrimidine photo-lyase	5
LPO_0248	chromosome	885	294 transcriptional regulator	5

LPO_0251	chromosome	1080	359 N5-carboxyaminoimidazole ribonucleotide synthase	5
LPO_0258	chromosome	1590	529 putative Peptide-transporting ATPase	5
LPO_0268	chromosome	834	277 conserved protein of unknown function	5
LPO_0272	chromosome	1593	530 Benzoylformate decarboxylase	5
LPO_0295	chromosome	1347	448 outer membrane channel protein	5
LPO_0310	chromosome	981	326 conserved exported protein of unknown function	5
LPO_0317	chromosome	597	198 conserved protein of unknown function	5
LPO_0333	chromosome	1185	394 amino acid transporter	5
LPO_0349	chromosome	621	206 conserved protein of unknown function	5
LPO_0412	chromosome	1278	425 putative Beta-ketoacyl-acyl-carrier-protein synthase I	5
LPO_0446	chromosome	1059	352 substrate of the Dot/Icm secretion system	5
LPO_0454	chromosome	864	287 conserved protein of unknown function	5
LPO_0465	chromosome	525	174 conserved protein of unknown function	5
LPO_0470	chromosome	525	174 conserved exported protein of unknown function	5
LPO_0476	chromosome	1491	496 glucose-6-phosphate dehydrogenase	5
LPO_0494	chromosome	1344	447 conserved exported protein of unknown function	5
LPO_0495	chromosome	1026	341 multidrug resistance efflux pump PmrA	5
LPO_0505	chromosome	774	257 conserved protein of unknown function	5
LPO_0532	chromosome	1791	596 oxaloacetate decarboxylase alpha-chain	5
LPO_0537	chromosome	1011	336 fructose bisphosphate aldolase	5
LPO_0551	chromosome	1488	495 substrate of the Dot/Icm secretion system	5
LPO_0564	chromosome	1476	491 adenosine deaminase	5
LPO_0565	chromosome	1116	371 leucine-, isoleucine-, valine-, threonine-, and alanine-binding protein	5
LPO_0568	chromosome	1545	514 phosphoglycerate mutase III, cofactor-independent	5
LPO_0608	chromosome	1230	409 dihydrolipoyltranssuccinase	5
LPO_0609	chromosome	1164	387 succinyl-CoA synthetase, beta subunit	5
LPO_0618	chromosome	948	315 phosphoribosylpyrophosphate synthase	5
LPO_0626	chromosome	1068	355 DNA polymerase IV	5
LPO_0627	chromosome	621	206 conserved protein of unknown function	5
LPO_0650	chromosome	1359	452 glutathione oxidoreductase	5
LPO_0651	chromosome	981	326 adenosine deaminase	5
LPO_0661	chromosome	1512	503 putative bifunctional enzyme and transcriptional regulator	5
LPO_0675	chromosome	1287	428 component of SufBCD complex	5
LPO_0691	chromosome	1122	373 Carboxylate-amine ligase	5
LPO_0694	chromosome	1092	363 conserved exported protein of unknown function	5
LPO_0697	chromosome	954	317 conserved protein of unknown function	5
LPO_0707	chromosome	513	170 conserved exported protein of unknown function	5
LPO_0713	chromosome	1482	493 putative melitin resistance protein	5
LPO_0719	chromosome	1326	441 molecular chaperone and ATPase component of HslUV protease	5
LPO_0721	chromosome	1239	412 ribonuclease BN	5
LPO_0751	chromosome	2217	738 putative NADH dehydrogenase	5
LPO_0763	chromosome	1119	372 transmembrane protein, ABC-type multidrug transport system	5
LPO_0771	chromosome	1812	603 putative peptide transport fused subunits of ABC superfamily: ATP-binding components	5
LPO_0794	chromosome	2001	666 oligopeptide transporter	5
LPO_0795	chromosome	1050	349 sensor histidine kinase	5
LPO_0812	chromosome	738	245 conserved exported protein of unknown function	5
LPO_0833	chromosome	1023	340 N-acetylneuraminic acid condensing enzyme	5
LPO_0839	chromosome	1029	342 dTDP-glucose 4,6-dehydratase	5

LPO_0841	chromosome	876	291	glucose-1-phosphate thymidyltransferase	5
LPO_0843	chromosome	1002	333	alpha-N-acetylglucosaminyltransferase	5
LPO_0844	chromosome	1287	428	conserved protein of unknown function	5
LPO_0846	chromosome	1002	333	conserved protein of unknown function	5
LPO_0853	chromosome	1434	477	ABC transporter of LPS O-antigen, Wzt	5
LPO_0862	chromosome	996	331	biotin-[acetylCoA carboxylase] holoenzyme synthetase and biotin operon repressor	5
LPO_0870	chromosome	1377	458	L-serine dehydratase 3	5
LPO_0873	chromosome	1227	408	protein of unknown function	5
LPO_0876	chromosome	1344	447	putative Quinolinate synthetase	5
LPO_0877	chromosome	1650	549	quinolinate synthase, L-aspartate oxidase (B protein) subunit	5
LPO_0895	chromosome	1257	418	isocitrate dehydrogenase, specific for NADP+; e14 prophage	5
LPO_0905	chromosome	654	217	Predicted periplasmic protein (modular protein)	5
LPO_0946	chromosome	552	183	putative 3-methyladenine DNA glycosylase	5
LPO_0953	chromosome	1383	460	conserved membrane protein of unknown function	5
LPO_0967	chromosome	1281	426	Sodium:dicarboxylate symporter	5
LPO_0969	chromosome	831	276	2,3,4,5-tetrahydropyridine-2-carboxylate N-succinyltransferase	5
LPO_0971	chromosome	1152	383	cystathionine gamma-synthase, PLP-dependent	5
LPO_1010	chromosome	1008	335	conserved protein of unknown function	5
LPO_1020	chromosome	987	328	bifunctional riboflavin kinase and FAD synthetase	5
LPO_1023	chromosome	564	187	2-dehydro-3-deoxy-phosphogluconate aldolase	5
LPO_1030	chromosome	747	248	pyridoxine 5'-phosphate synthase	5
LPO_1041	chromosome	906	301	conserved exported protein of unknown function	5
LPO_1045	chromosome	1347	448	peptide ABC transporter, permease protein	5
LPO_1050	chromosome	1878	625	Capsular polysaccharide biosynthesis protein capD	5
LPO_1055	chromosome	552	183	conserved protein of unknown function	5
LPO_1092	chromosome	969	322	conserved protein of unknown function	5
LPO_1099	chromosome	1299	432	conserved membrane protein of unknown function	5
LPO_1105	chromosome	696	231	conserved protein of unknown function	5
LPO_1106	chromosome	639	212	conserved protein of unknown function	5
LPO_1124	chromosome	735	244	conserved protein of unknown function	5
LPO_1133	chromosome	945	314	Transposase, IS116/IS110/IS902	5
LPO_1156	chromosome	885	294	short chain type dehydrogenase/reductase	5
LPO_1160	chromosome	504	167	GCN5-related N-acetyltransferase	5
LPO_1161	chromosome	1485	494	substrate of the Dot/Icm secretion system	5
LPO_1165	chromosome	825	274	conserved protein of unknown function	5
LPO_1169	chromosome	1197	398	aminopeptidase	5
LPO_1173	chromosome	1038	345	permease of drug/transporter	5
LPO_1179	chromosome	1155	384	acetylornithine deacetylase	5
LPO_1180	chromosome	687	228	putative Uridine kinase	5
LPO_1187	chromosome	1470	489	putative Beta-lactamase	5
LPO_1188	chromosome	1587	528	sensor protein PilS	5
LPO_1191	chromosome	936	311	Alpha/beta hydrolase fold	5
LPO_1208	chromosome	624	207	fused phosphoribosyl-AMP cyclohydrolase ; phosphoribosyl-ATP pyrophosphatase	5
LPO_1236	chromosome	669	222	Thiocyanate hydrolase subunit gamma	5
LPO_1246	chromosome	786	261	flagellar component of cell-distal portion of basal-body rod	5
LPO_1247	chromosome	693	230	flagellar L-ring protein precursor FlgH	5
LPO_1248	chromosome	1104	367	flagellar basal body P-ring protein	5
LPO_1262	chromosome	1812	603	ABC transporter, ATP binding protein	5

LPO_1283	chromosome	855	284 bifunctional 5,10-methylene-tetrahydrofolate dehydrogenase and 5,10-methylene-tetrahydrofolate cyclohydrolase	5
LPO_1292	chromosome	1656	551 glutamyl-tRNA synthetase	5
LPO_1301	chromosome	1161	386 drug resistance transporter, Bcr/CflA	5
LPO_1314	chromosome	1377	458 serine endoprotease (protease Do), membrane-associated	5
LPO_1318	chromosome	1299	432 major facilitator family transporter (permease)	5
LPO_1328	chromosome	771	256 Sporulation domain protein	5
LPO_1329	chromosome	534	177 membrane protein required for colicin V production	5
LPO_1331	chromosome	1026	341 DNA polymerase III, delta subunit	5
LPO_1353	chromosome	1410	469 glutamine synthetase	5
LPO_1355	chromosome	774	257 conserved protein of unknown function	5
LPO_1390	chromosome	948	315 malonyl-CoA-[acyl-carrier-protein] transacylase	5
LPO_1399	chromosome	1101	366 anhydro-N-acetylmuramic acid kinase	5
LPO_1403	chromosome	1386	461 dolichol monophosphate mannose synthase	5
LPO_1412	chromosome	1272	423 citrate synthase	5
LPO_1413	chromosome	882	293 purine nucleoside phosphorylase II	5
LPO_1421	chromosome	1116	371 Pleiotropic regulatory protein	5
LPO_1435	chromosome	681	226 DNA-binding response regulator in two-component regulatory system with CpxA	5
LPO_1438	chromosome	807	268 putative enzyme with nucleoside triphosphate hydrolase domain	5
LPO_1446	chromosome	759	252 Bacterial regulatory protein, LuxR	5
LPO_1455	chromosome	1257	418 phospholipase C	5
LPO_1460	chromosome	810	269 conserved protein of unknown function	5
LPO_1461	chromosome	1740	579 ssDNA exonuclease, 5'→3'-specific	5
LPO_1465	chromosome	819	272 conserved exported protein of unknown function	5
LPO_1481	chromosome	1041	346 conserved protein of unknown function	5
LPO_1490	chromosome	1227	408 adenylate cyclase PLUS two component hybrid sensor and regulator	5
LPO_1493	chromosome	990	329 spectinomycin phosphotransferase	5
LPO_1516	chromosome	1635	544 pyruvate dehydrogenase, dihydrolipoyltransacetylase component E2	5
LPO_1545	chromosome	786	261 phenazine biosynthesis protein, PhzC/F family	5
LPO_1552	chromosome	1272	423 poly(A) polymerase I	5
LPO_1560	chromosome	783	260 putative Type IV pilus biogenesis/stability protein PilW precursor	5
LPO_1565	chromosome	732	243 conserved protein of unknown function	5
LPO_1569	chromosome	717	238 arginine 3rd transport system periplasmic binding protein	5
LPO_1581	chromosome	717	238 conserved exported protein of unknown function	5
LPO_1626	chromosome	1254	417 gamma-glutamylphosphate reductase	5
LPO_1629	chromosome	981	326 conserved protein of unknown function	5
LPO_1638	chromosome	1782	593 putative ABC transporter ATP-binding protein	5
LPO_1650	chromosome	1017	338 hydrogenase	5
LPO_1658	chromosome	1275	424 coenzyme F390 synthetase FtsA	5
LPO_1665	chromosome	540	Fragment of Dienelactone hydrolase	5
LPO_1669	chromosome	1260	419 conserved protein of unknown function	5
LPO_1671	chromosome	1971	656 acylaminoacyl peptidase	5
LPO_1702	chromosome	1368	455 conserved exported protein of unknown function	5
LPO_1703	chromosome	825	274 conserved exported protein of unknown function	5
LPO_1709	chromosome	2226	741 Alpha-amylase	5
LPO_1714	chromosome	1500	499 amidophosphoribosyltransferase	5
LPO_1766	chromosome	786	261 putative hydrolase	5
LPO_1769	chromosome	828	275 glycerol-3-phosphate transporter subunit ; membrane component of ABC superfamily	5
LPO_1776	chromosome	1434	477 Glutamyl-tRNA(Gln) amidotransferase (subunit B)	5

LPO_1793	chromosome	786	261 inositol monophosphatase	5
LPO_1794	chromosome	957	318 signal peptide peptidase	5
LPO_1808	chromosome	1032	343 putative Histidine kinase	5
LPO_1822	chromosome	1491	496 lysine tRNA synthetase, inducible	5
LPO_1825	chromosome	804	267 putative flagellar motor protein MotD	5
LPO_1826	chromosome	774	257 flagellar motor protein MotA	5
LPO_1873	chromosome	1767	588 fused lipid transporter subunits of ABC superfamily: membrane component ; ATP-binding component	5
LPO_1901	chromosome	732	243 SAM-dependent methyltransferase	5
LPO_1908	chromosome	960	319 putative proline iminopeptidase (PIP) (Prolyl aminopeptidase) (PAP)	5
LPO_1909	chromosome	438	145 D-tyr-tRNA(Tyr) deacylase	5
LPO_1914	chromosome	897	298 conserved membrane protein of unknown function	5
LPO_1928	chromosome	1227	408 site specific recombinase, phage integrase	5
LPO_1940	chromosome	1065	354 conserved membrane protein of unknown function	5
LPO_1947	chromosome	1110	369 conserved exported protein of unknown function	5
LPO_1956	chromosome	1332	443 conserved protein of unknown function	5
LPO_1967	chromosome	1806	601 potassium:proton antiporter	5
LPO_1975	chromosome	1140	379 putative Apyrase	5
LPO_1979	chromosome	993	330 conserved protein of unknown function	5
LPO_1987	chromosome	1413	470 glutamyl-tRNA synthetase	5
LPO_2022	chromosome	855	284 3-hydroxyacyl CoA dehydrogenase	5
LPO_2024	chromosome	990	329 Phospholipase, patatin family	5
LPO_2032	chromosome	1335	444 conserved protein of unknown function	5
LPO_2036	chromosome	864	287 Diacylglycerol kinase	5
LPO_2046	chromosome	1515	504 conserved protein of unknown function	5
LPO_2071	chromosome	243	80 conserved protein of unknown function	5
LPO_2088	chromosome	651	216 putative inner membrane protein	5
LPO_2091	chromosome	1197	398 Membrane-bound lytic murein transglycosylase family protein	5
LPO_2096	chromosome	1110	369 histidinol phosphate aminotransferase	5
LPO_2099	chromosome	1824	607 SecYEG protein translocase auxillary subunit	5
LPO_2107	chromosome	2124	707 bifunctional (p)ppGpp synthetase II and guanosine-3',5'-bis pyrophosphate 3'-pyrophosphohydrolyase	5
LPO_2121	chromosome	1326	441 Adenosylhomocysteinase (S-adenosyl-L-homocysteinehydrolase)	5
LPO_2124	chromosome	1140	379 chaperone Hsp40, co-chaperone with DnaK	5
LPO_2128	chromosome	1059	352 uroporphyrinogen decarboxylase	5
LPO_2145	chromosome	969	322 putative RNA binding protein (modular protein)	5
LPO_2160	chromosome	693	230 conserved protein of unknown function	5
LPO_2163	chromosome	1407	468 ATP-dependent RNA helicase, specific for 23S rRNA	5
LPO_2166	chromosome	366	121 conserved protein of unknown function	5
LPO_2204	chromosome	765	254 glucose-1-dehydrogenase, (3-oxoacyl-(acyl carrier protein) reductase)	5
LPO_2206	chromosome	942	313 conserved protein of unknown function	5
LPO_2207	chromosome	519	172 substrate of the Dot/Icm secretion system	5
LPO_2210	chromosome	1449	482 conserved protein of unknown function	5
LPO_2212	chromosome	360	119 conserved protein of unknown function	5
LPO_2224	chromosome	1368	455 conserved protein of unknown function	5
LPO_2253	chromosome	762	253 conserved protein of unknown function	5
LPO_2312	chromosome	1209	402 dipeptidyl aminopeptidase/acylaminoacyl peptidase	5
LPO_2318	chromosome	1293	430 C4-dicarboxylic acid, orotate and citrate transporter	5
LPO_2326	chromosome	1374	457 glutamine synthetase	5
LPO_2330	chromosome	1359	452 metallo-beta-lactamase superfamily protein	5

LPO_2364	chromosome	1248	415 outer membrane-specific lipoprotein transporter subunit ; membrane component of ABC superfan	5
LPO_2366	chromosome	660	219 putative phosphoglycolate phosphatase	5
LPO_2374	chromosome	1059	352 chorismate synthase	5
LPO_2383	chromosome	489	162 protein export chaperone	5
LPO_2390	chromosome	873	290 dihydrodipicolinate synthase	5
LPO_2407	chromosome	885	294 geranyltranstransferase	5
LPO_2410	chromosome	1074	357 membrane associated zinc metalloprotease	5
LPO_2414	chromosome	1089	362 peptide chain release factor RF-1	5
LPO_2434	chromosome	1410	469 putative amidase family protein	5
LPO_2437	chromosome	1002	333 O-sialoglycoprotein endopeptidase	5
LPO_2448	chromosome	1482	493 putative Alkaline phosphatase	5
LPO_2451	chromosome	555	184 protein of unknown function	5
LPO_2465	chromosome	1242	413 Conjugal transfer protein trbl	5
LPO_2466	chromosome	753	250 Conjugal transfer protein trbJ precursor	5
LPO_2469	chromosome	1890	629 Conjugal transfer protein traG	5
LPO_2477	chromosome	726	241 traL protein	5
LPO_2479	chromosome	1035	Fragment of ATP-dependent DNA helicase	5
LPO_2483	chromosome	738	245 conserved protein of unknown function	5
LPO_2506	chromosome	1182	393 Acetylornithine deacetylase	5
LPO_2554	chromosome	903	300 conserved protein of unknown function	5
LPO_2556	chromosome	909	302 transcriptional regulator	5
LPO_2562	chromosome	1710	569 conserved membrane protein of unknown function	5
LPO_2579	chromosome	1260	419 conserved exported protein of unknown function	5
LPO_2583	chromosome	885	294 conserved protein of unknown function	5
LPO_2589	chromosome	1155	384 conserved protein of unknown function	5
LPO_2605	chromosome	552	183 conserved protein of unknown function	5
LPO_2611	chromosome	555	184 conserved exported protein of unknown function	5
LPO_2612	chromosome	801	266 conserved protein of unknown function	5
LPO_2619	chromosome	624	207 nucleotidyltransferase	5
LPO_2671	chromosome	1347	448 SdbB protein (putative substrate of the Dot/Icm system)	5
LPO_2672	chromosome	558	185 conserved protein of unknown function	5
LPO_2678	chromosome	684	227 putative protein associated with replication fork, DNA repair protein	5
LPO_2687	chromosome	1419	472 Homospermidine synthase (HSS)	5
LPO_2692	chromosome	909	302 conserved protein of unknown function	5
LPO_2716	chromosome	1155	384 Acriflavine resistance protein A	5
LPO_2764	chromosome	843	280 conserved protein of unknown function	5
LPO_2768	chromosome	1200	399 integrase, phage related	5
LPO_2774	chromosome	591	196 conserved protein of unknown function	5
LPO_2797	chromosome	1554	517 conserved membrane protein of unknown function	5
LPO_2805	chromosome	1125	374 Chemiosmotic efflux system B protein B	5
LPO_2808	chromosome	1515	504 putative thymidine phosphorylase (TdrPase)	5
LPO_2846	chromosome	2238	745 2-oxoisovalerate dehydrogenase, E1 component, alpha and beta fusion	5
LPO_2848	chromosome	1167	388 conserved protein of unknown function	5
LPO_2860	chromosome	1551	516 Putative Phosphatidylcholine-sterol O-acyltransferase	5
LPO_2863	chromosome	1794	597 putative Serine-type D-Ala-D-Ala carboxypeptidase	5
LPO_2869	chromosome	945	314 10-formyltetrahydrofolate:L-methionyl-tRNA(fMet) N-formyltransferase	5
LPO_2893	chromosome	1086	361 phospho-N-acetylmuramoyl-pentapeptide transferase	5
LPO_2899	chromosome	813	270 transmembrane protein	5



LPO_2912	chromosome	1365	454 leucine aminopeptidase	5
LPO_2913	chromosome	1572	523 Virulence factor mviN homolog	5
LPO_2915	chromosome	1212	403 conserved protein of unknown function	5
LPO_2923	chromosome	1857	618 excinuclease UvrABC, endonuclease subunit	5
LPO_2925	chromosome	819	272 Phenylalanine-4-hydroxylase (PAH) (Phe-4-monooxygenase)	5
LPO_2933	chromosome	1116	371 Diguanylate kinase	5
LPO_2943	chromosome	1416	471 acetyl-CoA carboxylase, biotin carboxylase subunit	5
LPO_2946	chromosome	855	284 RNA polymerase, sigma 32 (sigma H) factor	5
LPO_2956	chromosome	1728	575 5'-nucleotidase	5
LPO_2958	chromosome	990	329 D-isomer specific 2-hydroxyacid dehydrogenase, NAD-binding	5
LPO_2963	chromosome	708	235 conserved exported protein of unknown function	5
LPO_2978	chromosome	942	313 delta(2)-isopentenylpyrophosphate tRNA-adenosine transferase	5
LPO_3008	chromosome	918	305 glutamine amidotransferase	5
LPO_3059	chromosome	2190	729 polynucleotide phosphorylase/polyadenylase	5
LPO_3068	chromosome	1974	657 NADH:ubiquinone oxidoreductase, membrane subunit L	5
LPO_3073	chromosome	2352	783 NADH dehydrogenase I chain G	5
LPO_3095	chromosome	801	266 conserved protein of unknown function	5
LPO_3105	chromosome	861	286 conserved protein of unknown function	5
LPO_3114	chromosome	813	270 sugar kinase	5
LPO_3115	chromosome	1827	608 GTP-binding protein	5
LPO_3132	chromosome	1815	604 L-glutamine:D-fructose-6-phosphate aminotransferase	5
LPO_3147	chromosome	786	261 Esterase/lipase	5
LPO_3153	chromosome	1458	485 protoporphyrinogen oxidase	5
LPO_3154	chromosome	1383	460 putative amidase	5
LPO_3187	chromosome	1995	664 methionyl-tRNA synthetase	5
LPO_3200	chromosome	771	256 chromosome partitioning protein	5
LPO_3206	chromosome	1617	538 Cytochrome c oxidase subunit 1 (Cytochrome c oxidase polypeptide I) (Cytochrome aa3 subunit 1)	5
LPO_3242	chromosome	1179	392 (Serine-type) D-alanyl-D-alanine carboxypeptidase	5
LPO_3258	chromosome	1263	420 transcription termination factor	5
LPO_3276	chromosome	966	321 conserved protein of unknown function	5
LPO_3281	chromosome	726	241 conserved protein of unknown function	5
LPO_3282	chromosome	717	238 putative methyltransferases	5
LPO_3294	chromosome	972	323 Major outer membrane protein precursor	5
LPO_3306	chromosome	1671	556 malate dehydrogenase, (decarboxylating, NAD-requiring) (malic enzyme)	5
LPO_3330	chromosome	588	195 conserved exported protein of unknown function	5
LPO_3335	chromosome	852	283 Tetrapyrrole (Corrin/porphyrin) methylase	5
LPO_3337	chromosome	2166	721 putative Sulfate transporter family protein	5
LPO_p0027	plasmid	669	222 Estradiol 17-beta-dehydrogenase	5
LPO_p0030	plasmid	687	228 putative regulator, MerR family	5
LPO_p0034	plasmid	780	259 Shikimate kinase	5
LPO_p0066	plasmid	945	314 transcriptional regulator	5
LPO_p0089	plasmid	2721	906 cation efflux transporter	5
LPO_p0094	plasmid	924	307 multidrug efflux system	5
LPO_p0097	plasmid	951	316 Ca <sup>2+</sup> /Na <sup>+</sup> antiporter	5
LPO_p0098	plasmid	846	281 Diguanylate kinase	5
LPO_p0101	plasmid	1107	368 putative transporter subunit: membrane component of ABC superfamily	5
LPO_p0133	plasmid	1854	617 putative Protein traD	5
LPO_p0147	plasmid	735	244 Putative type-F conjugative transfer system secretin TraK	5

LPO_p0164	plasmid	993	330	Response regulator receiver CheY-like	5
LPO_0001	chromosome	1359	452	chromosomal replication initiator protein DnaA, DNA-binding transcriptional dual regulator	4
LPO_0015	chromosome	1212	403	esterase of the alpha-beta hydrolase superfamily	4
LPO_0017	chromosome	933	310	conserved membrane protein of unknown function	4
LPO_0018	chromosome	906	301	conserved membrane protein of unknown function	4
LPO_0020	chromosome	1677	558	putative Hemagglutinin/proteinase precursor (HA/protease) (Vibriolysin)	4
LPO_0024	chromosome	549	182	conserved membrane protein of unknown function	4
LPO_0041	chromosome	744	247	putative periplasmic substrate binding protein	4
LPO_0044	chromosome	996	331	putative YhfP protein	4
LPO_0062	chromosome	720	239	putative Similarities with transferase enzyme	4
LPO_0072	chromosome	1299	432	regulator with hipB	4
LPO_0079	chromosome	1179	392	Aspartate aminotransferase A (Transaminase A) (AspAT)	4
LPO_0082	chromosome	1572	523	putative glutamate synthase (NADPH)	4
LPO_0093	chromosome	474	157	conserved exported protein of unknown function	4
LPO_0110	chromosome	1230	409	3-oxoacyl-[acyl-carrier-protein] synthase 2 (3-oxoacyl-[acyl-carrier-protein] synthase II) (Beta-keto:	4
LPO_0118	chromosome	1038	345	squalene and phytoene synthase	4
LPO_0127	chromosome	531	176	conserved exported protein of unknown function	4
LPO_0136	chromosome	897	298	3-hydroxyisobutyrate dehydrogenase	4
LPO_0154	chromosome	2016	671	oligopeptidase A	4
LPO_0158	chromosome	951	316	Putative replicative DNA helicase	4
LPO_0161	chromosome	366	121	conserved protein of unknown function	4
LPO_0163	chromosome	240	79	Regulatory protein munI	4
LPO_0175	chromosome	1212	403	Transposase, IS4-like	4
LPO_0190	chromosome	978	325	conserved protein of unknown function	4
LPO_0196	chromosome	885	294	conserved membrane protein of unknown function	4
LPO_0208	chromosome	1149	382	putative Major facilitator superfamily protein	4
LPO_0224	chromosome	942	313	Ribose sugar permease-like protein	4
LPO_0227	chromosome	867	288	conserved exported protein of unknown function	4
LPO_0234	chromosome	1371	456	cytochrome D ubiquinol oxidase subunit I	4
LPO_0236	chromosome	786	261	conserved membrane protein of unknown function	4
LPO_0260	chromosome	1398	465	multidrug efflux protein, outer membrane component	4
LPO_0267	chromosome	1566	521	Amino acid permease family protein	4
LPO_0274	chromosome	483	160	conserved protein of unknown function	4
LPO_0282	chromosome	888	295	D-3 phosphoglycerate dehydrogenase	4
LPO_0307	chromosome	1275	424	putative Transporter	4
LPO_0319	chromosome	1404	467	Nicotinate phosphoribosyltransferase	4
LPO_0324	chromosome	870	289	transcriptional regulator	4
LPO_0332	chromosome	2013	670	protein of unknown function	4
LPO_0334	chromosome	777	258	Putative methyltransferase	4
LPO_0353	chromosome	1047	348	Aminoglycoside phosphotransferase involved in cell wall biosynthesis	4
LPO_0355	chromosome	1290	429	peptidyl-prolyl cis-trans isomerase (PPIase)	4
LPO_0380	chromosome	606	201	50S ribosomal subunit protein L4	4
LPO_0385	chromosome	657	218	30S ribosomal subunit protein S3	4
LPO_0404	chromosome	993	330	RNA polymerase, alpha subunit	4
LPO_0407	chromosome	1365	454	putative transporter, major facilitator family	4
LPO_0414	chromosome	306	101	conserved protein of unknown function	4
LPO_0435	chromosome	1221	406	Glutamate-cysteine ligase, GCS2	4
LPO_0440	chromosome	459	152	conserved exported protein of unknown function	4

LPO_0462	chromosome	663	220 Conserved protein of unknown function	4
LPO_0474	chromosome	909	302 ribosomal protein S6 modification protein	4
LPO_0480	chromosome	663	220 multifunctional 2-keto-3-deoxygluconate 6-phosphate aldolase and 2-keto-4-hydroxyglutarate ald	4
LPO_0500	chromosome	612	203 putative Methyltransferase type 12	4
LPO_0538	chromosome	693	230 Phenol hydroxylase	4
LPO_0550	chromosome	1095	364 endo-1,4 beta-glucanase	4
LPO_0561	chromosome	1218	405 Argininosuccinate synthase	4
LPO_0594	chromosome	609	202 Uridine monophosphokinase	4
LPO_0598	chromosome	567	188 aminoglycoside N (6')-acetyltransferase	4
LPO_0599	chromosome	627	208 Component of the Dot/Icm secretion system	4
LPO_0610	chromosome	876	291 succinyl-CoA synthetase, NAD(P)-binding, alpha subunit	4
LPO_0615	chromosome	1284	427 conserved membrane protein of unknown function	4
LPO_0620	chromosome	600	199 outer membrane lipoprotein LolB	4
LPO_0630	chromosome	1188	395 putative Stearoyl-CoA 9-desaturase	4
LPO_0632	chromosome	741	246 3-oxoacyl-[acyl-carrier-protein] reductase	4
LPO_0640	chromosome	1206	401 tyrosyl-tRNA synthetase	4
LPO_0653	chromosome	447	148 conserved protein of unknown function	4
LPO_0673	chromosome	1449	482 component of SufBCD complex	4
LPO_0689	chromosome	603	200 putative Peptide deformylase 2 (PDF 2) (Polypeptide deformylase 2)	4
LPO_0699	chromosome	1944	647 conserved membrane protein of unknown function	4
LPO_0709	chromosome	540	179 Type IV fimbrial biogenesis protein PilV	4
LPO_0715	chromosome	1269	422 Major facilitator family transporter	4
LPO_0716	chromosome	1284	427 Major facilitator family transporter	4
LPO_0720	chromosome	1575	524 substrate of the Dot/Icm secretion system	4
LPO_0734	chromosome	1197	398 Tryptophan/tyrosine permease family protein	4
LPO_0747	chromosome	780	259 conserved protein of unknown function	4
LPO_0750	chromosome	1026	341 Predicted esterase of the alpha-beta hydrolase superfamily precursor	4
LPO_0760	chromosome	1212	403 dipeptidyl aminopeptidase/acylaminoacyl peptidase	4
LPO_0764	chromosome	1320	439 putative AdoMet-dependent methyltransferase, UPF0004 family	4
LPO_0796	chromosome	672	223 DNA-binding response regulator in two-component regulatory system with CusS	4
LPO_0814	chromosome	1425	474 conserved protein of unknown function	4
LPO_0828	chromosome	819	272 small-molecule methyltransferase IraA	4
LPO_0836	chromosome	1503	500 DegT/DnrJ/EryC1/StrS aminotransferase	4
LPO_0837	chromosome	564	187 dTDP-4-deoxyrhamnose-3,5-epimerase	4
LPO_0838	chromosome	885	294 dTDP-4-dehydrorhamnose reductase subunit, NAD(P)-binding, of dTDP-L-rhamnose synthase	4
LPO_0855	chromosome	1074	357 O-acetyltransferase	4
LPO_0858	chromosome	708	235 ETHE1 protein, mitochondrial precursor (Ethylmalonic encephalopathy protein 1) (Hepatoma sub	4
LPO_0871	chromosome	702	233 FKBP-type peptidyl-prolyl cis-trans isomerase (rotamase)	4
LPO_0886	chromosome	1092	363 UDP-N-acetylglucosamine-N-acetylmuramyl-(pentapeptide)pyrophosphoryl-undecaprenol N-acety	4
LPO_0894	chromosome	699	232 conserved protein of unknown function	4
LPO_0909	chromosome	849	282 putative Short-chain dehydrogenase/reductase SDR	4
LPO_0949	chromosome	777	258 Enoyl-CoA hydratase	4
LPO_0959	chromosome	555	184 conserved hypothetical protein with SCP/PR1 domains; putative signal peptide	4
LPO_0962	chromosome	642	213 conserved exported protein of unknown function	4
LPO_0974	chromosome	1350	449 Monooxygenase, FAD-binding	4
LPO_0979	chromosome	960	319 Ca <sup>2+</sup> /Na <sup>+</sup> antiporter	4
LPO_0989	chromosome	744	247 3-hydroxyacyl-CoA dehydrogenase type-2 (3-hydroxyacyl-CoA dehydrogenase type II) (Type II HAI	4
LPO_0994	chromosome	558	185 putative Enhanced entry protein EnhA	4

LPO_0998	chromosome	927	308 S-adenosyl-dependent methyltransferase activity on membrane-located substrates	4
LPO_1008	chromosome	1122	373 alanine dehydrogenase	4
LPO_1029	chromosome	888	295 Leucine-rich repeat protein Substrate of the Dot/Icm secretion system	4
LPO_1032	chromosome	969	322 2-oxoglutarate ferredoxin oxidoreductase beta subunit	4
LPO_1033	chromosome	675	224 Inner membrane protein yccA	4
LPO_1048	chromosome	885	294 phosphoribose diphosphate:decaprenyl-phosphate phosphoribosyltransferase	4
LPO_1068	chromosome	273	90 conserved protein of unknown function	4
LPO_1069	chromosome	1776	591 inner membrane protein	4
LPO_1080	chromosome	606	201 S-adenosyl-L-methionine-dependent methyltransferases	4
LPO_1085	chromosome	231	76 Transcriptional regulator, XRE family	4
LPO_1093	chromosome	852	283 conserved protein of unknown function	4
LPO_1095	chromosome	1212	403 conserved exported protein of unknown function	4
LPO_1108	chromosome	711	236 conserved exported protein of unknown function	4
LPO_1113	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1121	chromosome	1065	354 Major acid phosphatase Map (histidine-acid phosphatase)	4
LPO_1137	chromosome	1695	564 putative monovalent cation:proton antiporter (CPA2 family)	4
LPO_1157	chromosome	474	157 substrate of the Dot/Icm secretion system	4
LPO_1159	chromosome	1482	493 thermostable carboxypeptidase 1	4
LPO_1176	chromosome	732	243 OmpA-like transmembrane domain protein	4
LPO_1185	chromosome	1089	362 pyruvate formate lyase-activating enzyme PflA	4
LPO_1186	chromosome	420	139 conserved protein of unknown function	4
LPO_1190	chromosome	246	81 conserved protein of unknown function	4
LPO_1197	chromosome	1638	545 CTP synthetase	4
LPO_1201	chromosome	774	257 putative Competence lipoprotein ComL	4
LPO_1205	chromosome	1173	390 SAM-dependent methyltransferase	4
LPO_1206	chromosome	1095	364 glycosyl hydrolase family 3	4
LPO_1212	chromosome	1059	352 fused histidinol-phosphatase ; imidazoleglycerol-phosphate dehydratase	4
LPO_1213	chromosome	1095	364 Histidinol-phosphate aminotransferase (Imidazole acetol-phosphate transaminase)	4
LPO_1220	chromosome	633	210 orotate phosphoribosyltransferase	4
LPO_1223	chromosome	456	151 YbaK/prolyl-tRNA synthetase associated region	4
LPO_1226	chromosome	549	182 GCN5-related N-acetyltransferase	4
LPO_1239	chromosome	1308	435 2-acylglycerophosphoethanolamine acyltransferase	4
LPO_1243	chromosome	678	225 Flagellar basal-body rod modification protein FlgD	4
LPO_1249	chromosome	882	293 flagellar biosynthesis protein FlgJ	4
LPO_1250	chromosome	1950	649 flagellar hook-associated protein 1	4
LPO_1266	chromosome	384	127 conserved protein of unknown function	4
LPO_1281	chromosome	849	282 putative DNA (exogenous) processing protein	4
LPO_1315	chromosome	726	241 conserved protein of unknown function	4
LPO_1321	chromosome	411	136 flagellar protein potentiates polymerization	4
LPO_1326	chromosome	885	294 acetyl-CoA carboxylase, beta (carboxyltransferase) subunit	4
LPO_1330	chromosome	597	198 nicotinic acid mononucleotide adenyltransferase, NAD(P)-dependent	4
LPO_1361	chromosome	963	320 Oxidoreductase, Gfo/Idh/MocA family	4
LPO_1364	chromosome	1119	372 cell wall shape-determining protein	4
LPO_1370	chromosome	1521	506 Histidine ammonia-lyase (Histidase)	4
LPO_1372	chromosome	810	269 short chain dehydrogenase	4
LPO_1379	chromosome	1086	361 tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase	4
LPO_1415	chromosome	1050	349 3-phosphoserine/phosphohydroxythreonine aminotransferase	4
LPO_1418	chromosome	1677	558 30S ribosomal subunit protein S1	4

LPO_1444	chromosome	747	248 pseudouridine synthase	4
LPO_1466	chromosome	747	248 conserved protein of unknown function	4
LPO_1468	chromosome	474	157 conserved exported protein of unknown function	4
LPO_1483	chromosome	1590	529 putative Mitogen-activated protein kinase kinase	4
LPO_1484	chromosome	750	249 conserved protein of unknown function	4
LPO_1491	chromosome	297	98 putative Mitomycin resistance protein mcrB	4
LPO_1492	chromosome	423	140 putative Protein-export membrane protein secD	4
LPO_1518	chromosome	390	129 conserved protein of unknown function	4
LPO_1522	chromosome	1224	407 D-alanyl-D-alanine carboxypeptidase (penicillin-binding protein 6a)	4
LPO_1523	chromosome	837	278 D-alanine-aminotransferase	4
LPO_1525	chromosome	600	199 lipoyl-protein ligase	4
LPO_1528	chromosome	648	215 Legionella secretion system protein A	4
LPO_1534	chromosome	744	247 generic methyl-transferase	4
LPO_1539	chromosome	540	179 conserved protein of unknown function	4
LPO_1540	chromosome	456	151 conserved membrane protein of unknown function	4
LPO_1586	chromosome	789	262 thiamin biosynthesis ThiGH complex subunit	4
LPO_1590	chromosome	1260	419 periplasmic protein	4
LPO_1593	chromosome	678	225 membrane spanning protein in TolA-TolQ-TolR complex	4
LPO_1602	chromosome	489	162 putative ErfK/YbiS/YcfS/YnhG protein	4
LPO_1636	chromosome	996	331 Acyl-CoA N-acyltransferase	4
LPO_1637	chromosome	957	318 glutamate rich protein GrpB	4
LPO_1644	chromosome	876	291 conserved protein of unknown function	4
LPO_1651	chromosome	984	327 putative hydrolase	4
LPO_1657	chromosome	822	273 conserved protein of unknown function	4
LPO_1661	chromosome	984	327 3-oxoacyl-(Acyl-carrier-protein) synthase III	4
LPO_1672	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1677	chromosome	1269	422 threonine synthase	4
LPO_1686	chromosome	1872	623 myo-inositol catabolism protein lolD	4
LPO_1692	chromosome	768	255 putative Dimethylargininase	4
LPO_1694	chromosome	1038	345 membrane protein	4
LPO_1698	chromosome	513	170 conserved protein of unknown function	4
LPO_1708	chromosome	477	Fragment of Excinuclease ABC, C subunit, N-terminal	4
LPO_1733	chromosome	693	230 bifunctional 3-demethylubiquinone-9 3-methyltransferase and 2-octaprenyl-6-hydroxy phenol met	4
LPO_1737	chromosome	1257	418 DNA polymerase V, subunit C	4
LPO_1745	chromosome	558	185 ribosome recycling factor	4
LPO_1751	chromosome	1689	562 substrate of the Dot/Icm secretion system	4
LPO_1753	chromosome	519	172 conserved protein of unknown function	4
LPO_1758	chromosome	765	254 methionine aminopeptidase	4
LPO_1762	chromosome	1473	490 IMP dehydrogenase	4
LPO_1768	chromosome	1092	363 glycerol-3-phosphate transporter subunit ; ATP-binding component of ABC superfamily	4
LPO_1772	chromosome	1284	427 chloride channel, voltage-gated	4
LPO_1778	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1797	chromosome	609	202 conserved protein of unknown function	4
LPO_1798	chromosome	1368	455 UDP-N-acetylmuramate:L-alanyl-gamma-D-glutamyl-meso-diaminopimelate ligase	4
LPO_1805	chromosome	1635	544 flagellar basal-body MS-ring and collar protein	4
LPO_1836	chromosome	411	136 Flagellar protein flhO	4
LPO_1860	chromosome	393	130 conserved exported protein of unknown function	4
LPO_1867	chromosome	945	314 Transposase, IS116/IS110/IS902	4

LPO_1874	chromosome	813	270 putative Acetyltransferase, GNAT family	4
LPO_1883	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1886	chromosome	1185	394 acetyl-CoA acetyltransferase	4
LPO_1906	chromosome	786	261 Outer membrane protein	4
LPO_1907	chromosome	2166	721 DNA-dependent ATPase I and helicase II	4
LPO_1920	chromosome	807	268 enoyl-[acyl-carrier-protein] reductase, NADH-dependent	4
LPO_1936	chromosome	471	156 putative general secretion pathway protein	4
LPO_1949	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1964	chromosome	1107	368 conserved protein of unknown function	4
LPO_1973	chromosome	903	300 hydrolase or acyltransferase	4
LPO_1980	chromosome	1263	420 (serine-type) D-alanyl-D-alanine carboxypeptidase	4
LPO_1982	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_1989	chromosome	1245	414 6-phosphofructokinase	4
LPO_1993	chromosome	1422	473 Amino acid antiporter	4
LPO_1994	chromosome	1431	476 substrate of the Dot/Icm secretion system	4
LPO_2013	chromosome	615	204 conserved protein of unknown function	4
LPO_2017	chromosome	1044	347 pyoverdine biosynthesis regulatory gene SyrP-like protein	4
LPO_2039	chromosome	639	212 conserved exported protein of unknown function	4
LPO_2047	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_2094	chromosome	744	247 conserved protein of unknown function	4
LPO_2102	chromosome	1014	337 S-adenosylmethionine:tRNA ribosyltransferase-isomerase	4
LPO_2112	chromosome	1035	344 transporter	4
LPO_2122	chromosome	1149	382 methionine adenosyltransferase 1	4
LPO_2126	chromosome	600	199 Heat-shock protein GrpE(HSP-70 cofactor)	4
LPO_2130	chromosome	696	231 conserved protein of unknown function	4
LPO_2148	chromosome	924	307 ABC transport system periplasmic substrate binding protein	4
LPO_2151	chromosome	825	274 conserved protein of unknown function	4
LPO_2155	chromosome	1299	432 hydroxymethylglutaryl CoA reductase	4
LPO_2156	chromosome	879	292 conserved protein of unknown function	4
LPO_2161	chromosome	1707	568 ABC-type multidrug transport system, ATPase component	4
LPO_2178	chromosome	534	fragment of transposase (fragment) (part 2)	4
LPO_2192	chromosome	489	162 conserved exported protein of unknown function	4
LPO_2217	chromosome	1122	373 Sid related protein-like protein	4
LPO_2222	chromosome	624	207 Methyltransferase type 11	4
LPO_2223	chromosome	1122	373 Acetylserotonin O-methyltransferase	4
LPO_2235	chromosome	372	123 exported protein of unknown function	4
LPO_2242	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_2266	chromosome	1155	384 conserved protein of unknown function	4
LPO_2269	chromosome	537	178 substrate of the Dot/Icm secretion system	4
LPO_2270	chromosome	1431	476 replication factor C subunit (activator I)	4
LPO_2285	chromosome	1596	531 substrate of the Dot/Icm system	4
LPO_2301	chromosome	753	250 3-oxoacyl reductase	4
LPO_2308	chromosome	2343	780 Nitric oxide reductase	4
LPO_2309	chromosome	1833	610 putative ABC transporter ATP-binding protein	4
LPO_2313	chromosome	1269	422 putative GTP cyclohydrolase II	4
LPO_2315	chromosome	645	214 uracil phosphoribosyltransferase	4
LPO_2324	chromosome	1161	386 alcohol dehydrogenase	4
LPO_2341	chromosome	552	183 conserved protein of unknown function	4

LPO_2342	chromosome	1239	412	prolidase	4
LPO_2345	chromosome	843	280	conserved protein of unknown function	4
LPO_2393	chromosome	783	260	3-hydroxybutyrate dehydrogenase	4
LPO_2395	chromosome	906	301	proton conductor component of flagella motor	4
LPO_2396	chromosome	939	312	protein that enables flagellar motor rotation	4
LPO_2400	chromosome	1122	373	type II secretion system protein	4
LPO_2401	chromosome	1929	642	putative FAD/FMN-containing dehydrogenase	4
LPO_2406	chromosome	231	76	exodeoxyribonuclease VII small subunit	4
LPO_2419	chromosome	891	296	Dna-J like membrane chaperone protein	4
LPO_2425	chromosome	918	305	transcriptional regulator	4
LPO_2430	chromosome	852	283	conserved protein of unknown function	4
LPO_2433	chromosome	1128	375	putative oxidoreductase	4
LPO_2445	chromosome	777	258	putative Uroporphyrin-III C/tetrapyrrole (Corrin/Porphyrin) methyltransferase	4
LPO_2473	chromosome	1188	395	protein of unknown function	4
LPO_2475	chromosome	354	117	TraJ protein	4
LPO_2485	chromosome	651	216	protein of unknown function	4
LPO_2518	chromosome	1332	443	Na(+)/H(+) antiporter nhaA 1 (Sodium/proton antiporter nhaA 1)	4
LPO_2526	chromosome	1767	588	Putative inner membrane protein (modular protein) from phage origin	4
LPO_2530	chromosome	624	207	conserved protein of unknown function	4
LPO_2535	chromosome	936	311	conserved exported protein of unknown function	4
LPO_2541	chromosome	1209	402	conserved membrane protein of unknown function	4
LPO_2545	chromosome	1347	448	conserved protein of unknown function	4
LPO_2568	chromosome	1278	425	conserved protein of unknown function	4
LPO_2569	chromosome	1233	410	proline/betaine transporter	4
LPO_2573	chromosome	480	159	bacterioferritin (cytochrome b1)	4
LPO_2581	chromosome	765		Fragment of leucine rich repeat protein (part 1)	4
LPO_2587	chromosome	915	304	conserved protein of unknown function	4
LPO_2593	chromosome	819	272	substrate of the Dot/Icm secretion system	4
LPO_2601	chromosome	1107	368	conserved protein of unknown function	4
LPO_2634	chromosome	540	179	conserved exported protein of unknown function	4
LPO_2639	chromosome	681	226	D-alanyl-D-alanine dipeptidase	4
LPO_2641	chromosome	969	322	putative Arylamine N-acetyltransferase	4
LPO_2653	chromosome	933	310	conserved protein of unknown function	4
LPO_2654	chromosome	720	239	peptide aspartate b-dioxygenase	4
LPO_2663	chromosome	2226	741	Hydrogenase maturation protein HypF	4
LPO_2666	chromosome	678	225	putative High-affinity nickel-transporter	4
LPO_2667	chromosome	1032	343	bactoprenol glucosyl transferase; CPS-53 (KpLE1) prophage	4
LPO_2677	chromosome	1197	398	fused 4'-phosphopantothenoilcysteine decarboxylase ; phosphopantothenoilcysteine synthetase	4
LPO_2705	chromosome	696	231	conserved protein of unknown function	4
LPO_2710	chromosome	945	314	Transposase, IS116/IS110/IS902	4
LPO_2762	chromosome	1368	455	membrane protein regulates uhpT expression	4
LPO_2780	chromosome	360	119	conserved protein of unknown function	4
LPO_2790	chromosome	657	218	conserved exported protein of unknown function	4
LPO_2791	chromosome	777	258	conserved exported protein of unknown function	4
LPO_2807	chromosome	1362	453	putative mRNA Cleavage and polyadenylation specificity factor	4
LPO_2817	chromosome	2136	711	zinc, cobalt and lead efflux system	4
LPO_2820	chromosome	462	153	conserved protein of unknown function	4
LPO_2823	chromosome	1164	387	Acetate kinase (Acetokinase)	4

LPO_2835	chromosome	834	277 Transmembrane protein	4
LPO_2852	chromosome	732	243 D-alanyl-D-alanine dipeptidase	4
LPO_2854	chromosome	945	314 Transposase, IS116/IS110/IS902	4
LPO_2873	chromosome	438	145 conserved protein of unknown function	4
LPO_2897	chromosome	681	226 acid phosphatase, class B	4
LPO_2904	chromosome	753	250 conserved protein of unknown function	4
LPO_2921	chromosome	660	219 conserved exported protein of unknown function	4
LPO_2926	chromosome	1098	365 competence-damage inducible protein	4
LPO_2930	chromosome	660	219 50S ribosomal protein L25 (General stress protein CTC)	4
LPO_2932	chromosome	1092	363 putative GTP-binding protein	4
LPO_2941	chromosome	759	252 pantothenate synthetase	4
LPO_2950	chromosome	1326	441 putative Peptidase M16	4
LPO_2962	chromosome	888	295 putative MhpE-like protein	4
LPO_2969	chromosome	456	151 Component of the Dot/Icm secretion system	4
LPO_2976	chromosome	987	328 Heptosyl transferase, glycosyltransferase family 9 protein	4
LPO_2980	chromosome	1434	477 N-acetylmuramoyl-L-alanine amidase	4
LPO_2982	chromosome	1482	493 putative carbohydrate kinase	4
LPO_2990	chromosome	432	143 30S ribosomal subunit protein S9	4
LPO_3009	chromosome	1056	351 N-ethylmaleimide reductase, FMN-linked	4
LPO_3024	chromosome	1125	374 uroporphyrinogen III methylase	4
LPO_3025	chromosome	1188	395 protoporphyrinogen IX and coproporphyrinogen III oxidase HemY	4
LPO_3045	chromosome	1671	556 DNA polymerase III, gamma and tau subunits	4
LPO_3050	chromosome	1479	492 conserved protein of unknown function	4
LPO_3053	chromosome	717	238 conserved protein of unknown function	4
LPO_3055	chromosome	537	178 inorganic pyrophosphatase	4
LPO_3072	chromosome	1023	340 NADH:ubiquinone oxidoreductase, membrane subunit H	4
LPO_3082	chromosome	750	249 triosephosphate isomerase	4
LPO_3084	chromosome	1368	455 phosphoglucosamine mutase	4
LPO_3085	chromosome	876	291 7,8-dihydropteroate synthase	4
LPO_3102	chromosome	1932	643 Serine-protein kinase, PrkA type	4
LPO_3127	chromosome	1641	546 conserved protein of unknown function	4
LPO_3139	chromosome	765	254 Rhodanese-like	4
LPO_3142	chromosome	1200	399 Permease of the major facilitator superfamily	4
LPO_3151	chromosome	1305	434 TPR repeat containing protein	4
LPO_3167	chromosome	756	251 pteridine reductase	4
LPO_3173	chromosome	795	264 thymidylate synthetase	4
LPO_3178	chromosome	1011	336 cytoplasmic L-asparaginase I	4
LPO_3208	chromosome	1614	537 cytochrome c	4
LPO_3210	chromosome	1029	342 CapM protein	4
LPO_3239	chromosome	1047	348 Putative Pyridine nucleotide-disulphide oxidoreductase, class I	4
LPO_3240	chromosome	963	320 lytic murein transglycosylase	4
LPO_3290	chromosome	756	251 Stomatin like transmembrane protein	4
LPO_3303	chromosome	1170	389 Acetylornithine aminotransferase (ACOAT)	4
LPO_3307	chromosome	969	322 SUA5/YciO/YrdC family:Sua5/YciO/YrdC/YwIC protein family	4
LPO_3327	chromosome	837	278 F0 sector of membrane-bound ATP synthase, subunit a	4
LPO_3336	chromosome	1068	355 alkane-1-monooxygenase	4
LPO_p0020	plasmid	1251	416 Acyl-CoA N-acyltransferase	4
LPO_p0025	plasmid	1038	345 Acyl-CoA N-acyltransferase	4



LPO_p0031	plasmid	636	211 Putative NADPH-dependent 7-cyano-7-deazaguanine reductase (modular protein)	4
LPO_p0036	plasmid	459	152 Transcription activator, effector binding	4
LPO_p0038	plasmid	375	124 Glyoxalase family protein superfamily	4
LPO_p0040	plasmid	978	325 conserved protein of unknown function	4
LPO_p0048	plasmid	885	294 conserved protein of unknown function	4
LPO_p0054	plasmid	474	157 GCN5-related N-acetyltransferase	4
LPO_p0055	plasmid	291	Fragment of putative GCN5-related N-acetyltransferase	4
LPO_p0069	plasmid	1485	494 Acyl-CoA N-acyltransferase	4
LPO_p0090	plasmid	285	94 exported protein of unknown function	4
LPO_p0104	plasmid	372	Fragment of integrase (part 2)	4
LPO_p0128	plasmid	639	212 exported protein of unknown function	4
LPO_p0146	plasmid	1467	488 Putative Conjugative transfer protein TraB	4
LPO_p0153	plasmid	753	250 TraT complement resistance protein precursor	4
LPO_p0160	plasmid	894	297 Prolyl aminopeptidase	4
LPO_0012	chromosome	471	156 Thioredoxin related protein	3
LPO_0014	chromosome	840	279 pirin-like protein	3
LPO_0021	chromosome	912	303 integral membrane protein	3
LPO_0027	chromosome	1392	463 Amino acid transporter	3
LPO_0033	chromosome	1026	341 conserved protein of unknown function	3
LPO_0034	chromosome	732	243 conserved exported protein of unknown function	3
LPO_0039	chromosome	357	118 conserved exported protein of unknown function	3
LPO_0046	chromosome	861	286 conserved membrane protein of unknown function	3
LPO_0052	chromosome	879	292 acetyltransferase	3
LPO_0054	chromosome	867	288 conserved membrane protein of unknown function	3
LPO_0056	chromosome	483	160 conserved membrane protein of unknown function	3
LPO_0066	chromosome	1248	415 SdbB protein (putative substrate of the Dot/Icm system)	3
LPO_0068	chromosome	405	134 putative regulator, MerR family	3
LPO_0070	chromosome	987	328 conserved membrane protein of unknown function	3
LPO_0084	chromosome	582	193 conserved protein of unknown function	3
LPO_0085	chromosome	1311	436 proline aminopeptidase P II	3
LPO_0086	chromosome	1203	400 2-octaprenyl-6-methoxyphenol hydroxylase, FAD/NAD(P)-binding	3
LPO_0088	chromosome	768	255 conserved protein of unknown function	3
LPO_0095	chromosome	591	196 conserved protein of unknown function	3
LPO_0096	chromosome	717	238 glutamine ABC transporter	3
LPO_0101	chromosome	750	249 putative enzyme	3
LPO_0103	chromosome	1341	446 cytosolic IMP-GMP specific 5'-nucleotidase	3
LPO_0112	chromosome	576	191 peptide methionine sulfoxide reductase	3
LPO_0115	chromosome	807	268 conserved protein of unknown function	3
LPO_0137	chromosome	1500	499 methylmalonate-semialdehyde dehydrogenase [acylating] (MMSDH), oxidoreductase protein	3
LPO_0147	chromosome	1071	356 conserved exported protein of unknown function	3
LPO_0150	chromosome	1191	396 phosphoglycerate kinase	3
LPO_0152	chromosome	2007	668 transketolase 1, thiamin-binding	3
LPO_0162	chromosome	981	326 conserved protein of unknown function	3
LPO_0167	chromosome	525	174 protein of unknown function	3
LPO_0168	chromosome	837	278 DNA-damage-inducible protein D	3
LPO_0171	chromosome	741	246 conserved protein of unknown function	3
LPO_0181	chromosome	516	171 Putative GCN5-related N-acetyltransferase	3
LPO_0185	chromosome	879	292 sensory box protein	3

LPO_0192	chromosome	717	238 conserved exported protein of unknown function	3
LPO_0194	chromosome	774	257 hydrolase	3
LPO_0200	chromosome	747	248 conserved protein of unknown function	3
LPO_0202	chromosome	567	188 F-box containing protein Substrate of the Dot/Icm secretion system	3
LPO_0205	chromosome	1050	349 Pyoverdine biosynthesis protein PvcA	3
LPO_0210	chromosome	975	324 O-methyltransferase	3
LPO_0214	chromosome	855	284 conserved protein of unknown function	3
LPO_0226	chromosome	1053	350 acyl CoA transferase/carnitine dehydratase	3
LPO_0235	chromosome	990	329 Cytochrome d ubiquinol oxidase subunit 2	3
LPO_0246	chromosome	708	235 inner membrane protein, LrgB family protein	3
LPO_0252	chromosome	501	166 N5-carboxyaminoimidazole ribonucleotide mutase	3
LPO_0284	chromosome	1395	464 pyridine nucleotide-disulfide oxidoreductase	3
LPO_0287	chromosome	954	317 conserved protein of unknown function	3
LPO_0289	chromosome	1152	383 stearyl CoA 9-desaturase	3
LPO_0292	chromosome	678	225 conserved membrane protein of unknown function	3
LPO_0304	chromosome	399	132 conserved protein of unknown function	3
LPO_0305	chromosome	639	212 bacteriophage related DNA polymerase	3
LPO_0309	chromosome	657	218 N-acetylmuramoyl-L-alanine amidase	3
LPO_0320	chromosome	621	206 nicotinamidase/pyrazinamidase	3
LPO_0331	chromosome	882	293 transcriptional regulator	3
LPO_0367	chromosome	549	182 transcription termination factor	3
LPO_0370	chromosome	534	177 50S ribosomal subunit protein L10	3
LPO_0371	chromosome	381	126 50S ribosomal subunit protein L7/L12	3
LPO_0375	chromosome	528	175 30S ribosomal subunit protein S7	3
LPO_0378	chromosome	318	105 30S ribosomal subunit protein S10	3
LPO_0388	chromosome	255	84 30S ribosomal subunit protein S17	3
LPO_0391	chromosome	552	183 50S ribosomal subunit protein L5	3
LPO_0402	chromosome	399	132 30S ribosomal subunit protein S11	3
LPO_0413	chromosome	846	281 Putative lipid A biosynthesis acyltransferase	3
LPO_0418	chromosome	363	120 conserved protein of unknown function	3
LPO_0424	chromosome	255	fragment of Diguanylate cyclase yddV (DGC)	3
LPO_0432	chromosome	600	199 conserved protein of unknown function	3
LPO_0434	chromosome	720	239 N-formylglutamate amidohydrolase	3
LPO_0469	chromosome	729	242 conserved exported protein of unknown function	3
LPO_0475	chromosome	246	81 conserved protein of unknown function	3
LPO_0478	chromosome	1839	612 6-phosphogluconate dehydratase	3
LPO_0479	chromosome	996	331 glucokinase	3
LPO_0497	chromosome	870	289 conserved membrane protein of unknown function	3
LPO_0501	chromosome	801	266 substrate of the Dot/Icm secretion system	3
LPO_0510	chromosome	576	191 component of Dot/Icm secretion system. Pore-forming molecule	3
LPO_0511	chromosome	1131	376 component of Dot/Icm secretion system. ATPase component	3
LPO_0513	chromosome	570	189 Component of the Dot/Icm secretion system. Lipoprotein of the OmpA protein family	3
LPO_0521	chromosome	627	208 Component of the Dot/Icm secretion system. Probable ATPase component	3
LPO_0530	chromosome	483	160 acetyl CoA carboxylase, BCCP subunit	3
LPO_0539	chromosome	543	180 dotV membrane protein of dot/Icm type IV secretion system	3
LPO_0540	chromosome	285	94 conserved protein of unknown function	3
LPO_0548	chromosome	1197	398 Transposase, IS4-like	3
LPO_0553	chromosome	915	304 modulator for HflB protease specific for phage lambda cII repressor	3

LPO_0557	chromosome	459	152 arginine repressor	3
LPO_0559	chromosome	648	215 amino acid (glutamine) ABC transporter, permease	3
LPO_0560	chromosome	669	222 Amino acid ABC transporter, ATP-binding protein	3
LPO_0570	chromosome	297	98 conserved exported protein of unknown function	3
LPO_0590	chromosome	849	282 substrate of the Dot/Icm secretion system	3
LPO_0592	chromosome	468	155 conserved protein of unknown function	3
LPO_0593	chromosome	723	240 Acyl-CoA N-acyltransferase	3
LPO_0596	chromosome	999	332 putative aminoglycoside phosphotransferase	3
LPO_0600	chromosome	378	125 conserved membrane protein of unknown function	3
LPO_0613	chromosome	390	129 conserved protein of unknown function	3
LPO_0617	chromosome	282	93 global DNA-binding transcriptional dual regulator	3
LPO_0621	chromosome	507	168 pantetheine-phosphate adenylyltransferase	3
LPO_0628	chromosome	825	274 formamidopyrimidine/5-formyluracil/ 5-hydroxymethyluracil DNA glycosylase	3
LPO_0635	chromosome	294	97 conserved protein of unknown function	3
LPO_0655	chromosome	654	217 conserved protein of unknown function	3
LPO_0656	chromosome	765	254 conserved exported protein of unknown function	3
LPO_0659	chromosome	921	306 Aspartate carbamoyltransferase (Aspartate transcarbamylase) (ATCase)	3
LPO_0660	chromosome	384	127 conserved exported protein of unknown function	3
LPO_0672	chromosome	462	153 Iron sulfur cluster assembly transcriptional regulator (SufA)	3
LPO_0674	chromosome	753	250 component of SufBCD complex, ATP-binding component of ABC superfamily	3
LPO_0676	chromosome	1245	414 selenocysteine lyase, PLP-dependent	3
LPO_0677	chromosome	450	149 NifU-like protein	3
LPO_0679	chromosome	960	319 lysyl-tRNA synthetase	3
LPO_0682	chromosome	1296	431 putative to nasA protein	3
LPO_0695	chromosome	573	190 3-methyl-adenine DNA glycosylase I, constitutive	3
LPO_0702	chromosome	378	125 conserved exported protein of unknown function	3
LPO_0725	chromosome	351	116 putative restriction endonuclease-like	3
LPO_0729	chromosome	1242	413 Malate dehydrogenase (Oxaloacetate-decarboxylating) (NADP(+))	3
LPO_0735	chromosome	1191	396 tryptophan/tyrosine permease	3
LPO_0736	chromosome	693	230 outer membrane protein	3
LPO_0741	chromosome	1125	374 putative transporter subunit: permease component of ABC superfamily	3
LPO_0748	chromosome	870	289 conserved protein of unknown function	3
LPO_0793	chromosome	696	231 endo-1,4-beta-xylanase-like protein	3
LPO_0811	chromosome	1053	350 conserved membrane protein of unknown function	3
LPO_0813	chromosome	639	212 putative Surface antigen msp4 family protein precursor	3
LPO_0815	chromosome	1611	536 glutamine-dependent NAD(+) synthetase (NAD(+) synthase [glutamine-hydrolyzing]) (NadE)	3
LPO_0822	chromosome	1188	395 conserved membrane protein of unknown function	3
LPO_0829	chromosome	1356	451 conserved protein of unknown function	3
LPO_0834	chromosome	1134	377 N-acylglucosamine 2-epimerase	3
LPO_0835	chromosome	609	202 putative Transferase hexapeptide repeat	3
LPO_0842	chromosome	957	318 NAD dependent epimerase/dehydratase, UDP-glucose-4-epimerase	3
LPO_0845	chromosome	1116	371 conserved protein of unknown function	3
LPO_0852	chromosome	852	283 ABC transporter of LPS O-antigen, Wzm	3
LPO_0863	chromosome	738	245 putative 4'-phosphopantetheinyl transferase hetI	3
LPO_0887	chromosome	1416	471 Beta-Ala-His dipeptidase	3
LPO_0898	chromosome	780	259 Glycosyl transferase, family 2	3
LPO_0901	chromosome	600	199 putative rhomboid family protein	3
LPO_0902	chromosome	903	300 Peptidase	3

LPO_0904	chromosome	1725	574 Type I secretion outer membrane protein, TolC family precursor	3
LPO_0907	chromosome	726	241 conserved exported protein of unknown function	3
LPO_0908	chromosome	1326	441 putative flavin-containing monooxygenase	3
LPO_0913	chromosome	579	192 aminodeoxychorismate synthase, subunit II	3
LPO_0917	chromosome	528	175 3-deoxy-D-manno-octulosonate 8-phosphate phosphatase	3
LPO_0926	chromosome	759	252 putative NIF3-like protein 1	3
LPO_0941	chromosome	534	177 periplasmic thioredoxin of cytochrome c-type biogenesis	3
LPO_0951	chromosome	867	288 conserved exported protein of unknown function	3
LPO_0955	chromosome	384	127 conserved exported protein of unknown function	3
LPO_0965	chromosome	447	148 conserved exported protein of unknown function	3
LPO_0980	chromosome	732	243 substrate of the Dot/Icm secretion system	3
LPO_0984	chromosome	897	298 conserved exported protein of unknown function	3
LPO_0995	chromosome	771	256 Type III pantothenate kinase (Pantothenic acid kinase) (PanK-III)	3
LPO_0999	chromosome	363	120 cell division transmembrane protein FtsL	3
LPO_1002	chromosome	1053	350 putative erythronate-4-phosphate dehydrogenase	3
LPO_1012	chromosome	549	182 Tfp pilus assembly protein PilN	3
LPO_1034	chromosome	807	268 nitrilase	3
LPO_1035	chromosome	1443	480 putative peptidase	3
LPO_1043	chromosome	2184	727 bacterial extracellular solute-binding protein	3
LPO_1049	chromosome	1509	502 LphB	3
LPO_1066	chromosome	705	234 conserved protein of unknown function [OmpA/MotB domain protein ]	3
LPO_1070	chromosome	810	269 conserved protein of unknown function	3
LPO_1084	chromosome	1221	406 conserved protein of unknown function	3
LPO_1088	chromosome	669	222 putative hydrolase	3
LPO_1097	chromosome	504	167 Peptide methionine sulfoxide reductase-related protein	3
LPO_1101	chromosome	882	293 putative lipase	3
LPO_1126	chromosome	1329	442 membrane bound lytic murein transglycosylase D	3
LPO_1131	chromosome	696	231 cystine/glutamine-binding periplasmic protein	3
LPO_1138	chromosome	1509	502 putative Long-chain-fatty-acid-CoA ligase (Long-chain acyl-CoA synthetase)	3
LPO_1147	chromosome	612	203 putative transcriptional regulator, TetR family	3
LPO_1152	chromosome	1023	340 polyamine transporter subunit ; periplasmic-binding component of ABC superfamily	3
LPO_1153	chromosome	768	255 polyamine transporter subunit ; membrane component of ABC superfamily	3
LPO_1155	chromosome	1095	364 polyamine transporter subunit ; ATP-binding component of ABC superfamily	3
LPO_1163	chromosome	1056	351 Methylated-DNA-protein-cysteine methyltransferase	3
LPO_1170	chromosome	765	254 lipase B	3
LPO_1178	chromosome	1287	428 putative Citrate-proton symporter (Citrate transporter) (Citrate carrier protein)	3
LPO_1195	chromosome	1209	402 riboflavin biosynthesis protein RibA	3
LPO_1198	chromosome	825	274 3-deoxy-D-manno-octulosonate 8-phosphate synthase	3
LPO_1214	chromosome	1296	431 bifunctional histidinal dehydrogenase and histidinol dehydrogenase	3
LPO_1218	chromosome	1533	510 cytochrome d terminal oxidase, subunit I	3
LPO_1224	chromosome	420	139 transcriptional regulator	3
LPO_1225	chromosome	789	262 Phenazine biosynthesis PhzC/PhzF protein	3
LPO_1238	chromosome	426	141 Thiocyanate hydrolase	3
LPO_1240	chromosome	936	311 coproporphyrinogen III oxidase	3
LPO_1241	chromosome	393	130 flagellar component of cell-proximal portion of basal-body rod	3
LPO_1267	chromosome	759	252 broad specificity 5'(3')-nucleotidase and polyphosphatase	3
LPO_1276	chromosome	678	225 DNA-binding response regulator in two-component regulatory system with Qsec	3
LPO_1280	chromosome	765	254 putative hydroxyacylglutathione hydrolase	3

LPO_1290	chromosome	1200	399 tryptophan synthase, beta subunit	3
LPO_1319	chromosome	747	248 putative Enhanced entry protein EnhA	3
LPO_1332	chromosome	492	163 Rare lipoprotein B	3
LPO_1335	chromosome	1089	362 conserved protein of unknown function	3
LPO_1345	chromosome	1131	376 TPR repeat protein	3
LPO_1347	chromosome	963	320 Type II secretory pathway protein	3
LPO_1348	chromosome	618	205 type II secretory pathway protein LspJ	3
LPO_1351	chromosome	423	140 pseudopilin, cryptic, general secretion pathway	3
LPO_1371	chromosome	1389	462 aldehyde dehydrogenase, NAD dependent	3
LPO_1373	chromosome	432	143 ribonuclease HI, degrades RNA of DNA-RNA hybrids	3
LPO_1393	chromosome	1239	412 3-oxoacyl-[acyl-carrier-protein] synthase II	3
LPO_1395	chromosome	639	212 thymidylate kinase	3
LPO_1397	chromosome	342	113 type 4 fimbrial biogenesis protein PilZ	3
LPO_1398	chromosome	789	262 putative metallodependent hydrolase	3
LPO_1404	chromosome	1143	380 Choline/ethanolamine kinase	3
LPO_1405	chromosome	771	256 conserved protein of unknown function	3
LPO_1419	chromosome	291	96 conserved exported protein of unknown function	3
LPO_1420	chromosome	1170	389 conserved protein of unknown function	3
LPO_1424	chromosome	780	259 short chain dehydrogenase	3
LPO_1427	chromosome	849	282 p-hydroxybenzoate octaprenyltransferase	3
LPO_1436	chromosome	849	282 putative protein involved in divalent ion export	3
LPO_1439	chromosome	840	279 Polymerase and histidinol phosphatase-like	3
LPO_1441	chromosome	1215	404 tryptophanyl-tRNA synthetase TrpS	3
LPO_1443	chromosome	582	193 Segregation and condensation protein B	3
LPO_1452	chromosome	852	283 lipase A	3
LPO_1459	chromosome	1194	397 putative aminotransferase, PLP-dependent	3
LPO_1462	chromosome	993	330 tRNA-dihydrouridine synthase A	3
LPO_1467	chromosome	594	197 dephospho-CoA kinase	3
LPO_1472	chromosome	948	315 biotin synthase	3
LPO_1475	chromosome	639	212 dethiobiotin synthetase	3
LPO_1476	chromosome	315	104 conserved protein of unknown function	3
LPO_1477	chromosome	630	209 transmembrane protein	3
LPO_1509	chromosome	702	233 oxidoreductase, short chain dehydrogenase/reductase	3
LPO_1519	chromosome	753	250 inner membrane protein AmpE	3
LPO_1551	chromosome	732	243 Integral membrane protein TerC	3
LPO_1553	chromosome	426	141 2-amino-4-hydroxy-6-hydroxymethyl-dihydropteridine pyrophosphokinase	3
LPO_1558	chromosome	1278	425 histidyl tRNA synthetase	3
LPO_1592	chromosome	456	151 membrane spanning protein in TolA-TolQ-TolR complex	3
LPO_1594	chromosome	396	131 acyl-CoA thioesterase	3
LPO_1596	chromosome	564	187 Sigma factor RpoE (sigma 24)	3
LPO_1605	chromosome	489	162 conserved exported protein of unknown function	3
LPO_1617	chromosome	1320	439 beta-ketoacyl-CoA thiolase, anaerobic, subunit	3
LPO_1621	chromosome	375	124 conserved protein of unknown function	3
LPO_1622	chromosome	660	219 conserved protein of unknown function	3
LPO_1628	chromosome	426	141 Acetyltransferase	3
LPO_1634	chromosome	948	315 conserved protein of unknown function	3
LPO_1649	chromosome	759	252 conserved membrane protein of unknown function	3
LPO_1660	chromosome	981	326 3-beta-hydroxysteroid dehydrogenase/isomerase	3

LPO_1663	chromosome	651	216 conserved membrane protein of unknown function	3
LPO_1666	chromosome	849	282 Acetyltransferase, GNAT family	3
LPO_1667	chromosome	891	296 putative polysaccharide deacetylase family protein	3
LPO_1674	chromosome	1086	361 putative Transposase (IS4 family)	3
LPO_1680	chromosome	576	191 putative YceI-like family protein	3
LPO_1682	chromosome	594	197 polyprenyl-pyrophosphate binding protein	3
LPO_1688	chromosome	1005	334 myo-inositol-2-dehydrogenase	3
LPO_1693	chromosome	1317	438 putative Amino acid antiporter	3
LPO_1697	chromosome	597	198 Permease of the major facilitator superfamily	3
LPO_1704	chromosome	558	185 conserved protein of unknown function	3
LPO_1713	chromosome	1320	439 Phosphoribosylamine-glycine ligase	3
LPO_1715	chromosome	981	326 Phosphoribosylamidoimidazole-succinocarboxamide synthase	3
LPO_1716	chromosome	1260	419 Phosphoribosylformylglycinamide synthase I (FGAM synthase I)	3
LPO_1722	chromosome	1350	449 Thiol:disulfide interchange protein DsbD	3
LPO_1725	chromosome	1203	400 conserved protein of unknown function	3
LPO_1729	chromosome	1395	464 Amino acid antiporter	3
LPO_1734	chromosome	720	239 putative Uracil DNA glycosylase	3
LPO_1743	chromosome	741	246 conserved protein of unknown function	3
LPO_1749	chromosome	411	136 envelope stress induced periplasmic protein	3
LPO_1750	chromosome	447	148 conserved protein of unknown function	3
LPO_1755	chromosome	357	Fragment of protein of unknown function	3
LPO_1756	chromosome	264	87 conserved protein of unknown function	3
LPO_1770	chromosome	879	292 glycerol-3-phosphate transporter subunit ; membrane component of ABC superfamily	3
LPO_1807	chromosome	1314	437 putative DNA-binding response regulator in two-component system	3
LPO_1816	chromosome	1359	452 peptidase required for the maturation and secretion of the antibiotic peptide MccB17	3
LPO_1818	chromosome	951	316 conserved protein of unknown function	3
LPO_1821	chromosome	483	160 conserved exported protein of unknown function	3
LPO_1827	chromosome	717	238 RNA polymerase, sigma 28 (sigma F) factor	3
LPO_1828	chromosome	870	289 Cobyrinic acid a,c-diamide synthase	3
LPO_1832	chromosome	771	256 Flagellar biosynthetic protein fliR	3
LPO_1841	chromosome	720	239 oxidoreductase, short chain dehydrogenase/reductase family_	3
LPO_1849	chromosome	936	311 conserved protein of unknown function	3
LPO_1869	chromosome	885	294 conserved protein of unknown function	3
LPO_1872	chromosome	972	323 lipid A 4'kinase	3
LPO_1878	chromosome	687	228 conserved protein of unknown function	3
LPO_1891	chromosome	909	302 Hydroxymethylglutaryl-CoA lyase (HMG-CoA lyase) (HL) (3-hydroxy-3-methylglutarate-CoA lyase)	3
LPO_1893	chromosome	417	138 conserved exported protein of unknown function	3
LPO_1904	chromosome	906	301 glycine tRNA synthetase, alpha subunit	3
LPO_1911	chromosome	783	260 putative lipoprotein precursor (Vaj) transmembrane	3
LPO_1912	chromosome	963	320 glutathione synthetase	3
LPO_1916	chromosome	351	116 putative Rhodanese domain protein	3
LPO_1926	chromosome	1332	443 peptidyl-prolyl cis/trans isomerase (trigger factor)	3
LPO_1938	chromosome	1326	441 deoxyguanosinetriphosphate triphosphohydrolase-like protein	3
LPO_1941	chromosome	441	146 Glyoxalase/bleomycin resistance protein/dioxygenase	3
LPO_1955	chromosome	354	117 conserved exported protein of unknown function	3
LPO_1963	chromosome	210	69 conserved protein of unknown function	3
LPO_1965	chromosome	504	167 conserved protein of unknown function	3
LPO_1969	chromosome	951	316 transmembrane protein	3

LPO_1971	chromosome	1188	395 Cupin superfamily protein	3
LPO_2020	chromosome	1524	507 peptide synthetase	3
LPO_2026	chromosome	984	327 3',5'-cyclic nucleotide phosphodiesterase	3
LPO_2040	chromosome	1290	429 conserved membrane protein of unknown function	3
LPO_2063	chromosome	705	234 Transcriptional regulator, GntR-family	3
LPO_2065	chromosome	1332	443 L-lysine 6-monooxygenase (NADPH)	3
LPO_2067	chromosome	624	207 putative S-transferase	3
LPO_2068	chromosome	423	140 organic hydroperoxide resistance protein OsmC	3
LPO_2079	chromosome	1314	437 guanine aminohydrolase	3
LPO_2081	chromosome	468	155 Phosphohistidine phosphatase SixA	3
LPO_2087	chromosome	624	207 conserved protein of unknown function	3
LPO_2101	chromosome	834	277 queuine tRNA-ribosyltransferase	3
LPO_2110	chromosome	867	288 Uncharacterized stress-induced protein	3
LPO_2117	chromosome	603	200 conserved exported protein of unknown function	3
LPO_2123	chromosome	1113	370 carbamoyl phosphate synthetase small subunit, glutamine amidotransferase	3
LPO_2131	chromosome	1761	586 arginine tRNA synthetase	3
LPO_2132	chromosome	1059	352 conserved membrane protein of unknown function	3
LPO_2137	chromosome	1143	380 cation efflux family protein	3
LPO_2139	chromosome	603	200 Maf-like protein Nham_0113	3
LPO_2159	chromosome	525	174 conserved protein of unknown function	3
LPO_2165	chromosome	186	61 protein of unknown function	3
LPO_2184	chromosome	906	301 transcriptional regulator	3
LPO_2187	chromosome	462	153 cAMP/cGMP-dependent protein kinase	3
LPO_2188	chromosome	1878	625 Kup system potassium uptake protein	3
LPO_2191	chromosome	177	58 protein of unknown function	3
LPO_2202	chromosome	915	304 putative PCP degradation transcriptional activation protein	3
LPO_2230	chromosome	687	228 putative TRANSCRIPTION REGULATOR PROTEIN	3
LPO_2231	chromosome	774	257 acetyltransferase	3
LPO_2237	chromosome	1104	367 putative Adenosylhomocysteinase	3
LPO_2247	chromosome	1107	368 HlyD family secretion protein	3
LPO_2256	chromosome	402	133 conserved exported protein of unknown function	3
LPO_2257	chromosome	954	317 Inner membrane protein alx	3
LPO_2274	chromosome	1422	473 alginate O-acetylation protein	3
LPO_2281	chromosome	405	134 conserved protein of unknown function	3
LPO_2287	chromosome	975	Fragment of putative chitinase	3
LPO_2288	chromosome	1086	361 choline monooxygenase	3
LPO_2331	chromosome	651	216 conserved exported protein of unknown function	3
LPO_2337	chromosome	1119	372 acetate kinase	3
LPO_2350	chromosome	651	216 conserved protein of unknown function	3
LPO_2352	chromosome	1314	437 glycerol-3-phosphate transporter subunit ; periplasmic-binding component of ABC superfamily	3
LPO_2356	chromosome	657	218 Catechol-O-methyltransferase domain-containing protein 1	3
LPO_2357	chromosome	1047	348 4-hydroxyphenylpyruvate dioxygenase (legiolysin)	3
LPO_2363	chromosome	684	227 outer membrane-specific lipoprotein transporter subunit ; ATP-binding component of ABC superfa	3
LPO_2371	chromosome	1404	467 substrate of the Dot/Icm secretion system	3
LPO_2372	chromosome	774	257 conserved protein of unknown function	3
LPO_2384	chromosome	990	329 glycerol-3-phosphate dehydrogenase (NAD+)	3
LPO_2394	chromosome	1161	386 esterase of the alpha-beta hydrolase superfamily	3
LPO_2398	chromosome	1296	431 putative serine transporter	3

LPO_2408	chromosome	855	284 putative S-adenosyl-L-methionine-dependent methyltransferase	3
LPO_2417	chromosome	825	274 conserved protein of unknown function	3
LPO_2426	chromosome	2025	674 2,4-dienoyl-CoA reductase, NADH and FMN-linked	3
LPO_2476	chromosome	345	114 TraK	3
LPO_2482	chromosome	852	283 conserved protein of unknown function	3
LPO_2495	chromosome	1149	382 exported protein of unknown function[Sporulation related repeat]	3
LPO_2513	chromosome	405	134 transposase	3
LPO_2516	chromosome	1011	336 Fatty acid desaturase	3
LPO_2519	chromosome	876	291 protein of unknown function	3
LPO_2528	chromosome	807	268 protein of unknown function	3
LPO_2529	chromosome	627	208 conserved protein of unknown function	3
LPO_2533	chromosome	1212	403 Transposase, IS4-like	3
LPO_2544	chromosome	636	211 conserved hypothetical protein; putative FMN-binding split barrel protein	3
LPO_2551	chromosome	348	115 conserved protein of unknown function	3
LPO_2553	chromosome	294	97 conserved protein of unknown function with SNARE domain	3
LPO_2563	chromosome	888	295 Universal stress protein A	3
LPO_2565	chromosome	927	308 outer membrane protease	3
LPO_2588	chromosome	402	133 mutator MutT protein	3
LPO_2602	chromosome	729	242 conserved exported protein of unknown function	3
LPO_2604	chromosome	795	264 conserved exported protein of unknown function	3
LPO_2620	chromosome	843	280 2(5'-triphosphoribosyl)-3'-dephosphocoenzyme A synthase CitG, modifier of citrate lyase	3
LPO_2631	chromosome	960	319 S-transferase	3
LPO_2644	chromosome	450	149 conserved protein of unknown function	3
LPO_2645	chromosome	447	148 putative acyltransferase with acyl-CoA N-acyltransferase domain	3
LPO_2649	chromosome	1278	425 sensory box histidine kinase	3
LPO_2652	chromosome	618	205 conserved protein of unknown function	3
LPO_2657	chromosome	786	261 sulfhydrogenase delta subunit	3
LPO_2658	chromosome	846	281 hydrogenase/sulfur reductase gamma subunit	3
LPO_2659	chromosome	1116	371 4Fe-4S ferredoxin, iron-sulfur binding domain protein	3
LPO_2660	chromosome	1059	352 carbamoyl phosphate phosphatase, hydrogenase 3 maturation protein	3
LPO_2669	chromosome	813	270 conserved protein of unknown function	3
LPO_2670	chromosome	891	296 cysteine and O-acetyl-L-serine efflux system	3
LPO_2690	chromosome	651	216 Thiamine diphosphokinase	3
LPO_2701	chromosome	1266	421 conserved protein of unknown function	3
LPO_2703	chromosome	888	295 conserved protein of unknown function	3
LPO_2712	chromosome	1149	382 SdeD protein (substrate of the Dot/Icm system)	3
LPO_2719	chromosome	1233	410 putative to nasA protein	3
LPO_2739	chromosome	261	86 Chorismate mutase	3
LPO_2752	chromosome	1374	457 membrane-bound lytic murein transglycosylase A	3
LPO_2756	chromosome	756	251 transcriptional regulator	3
LPO_2757	chromosome	597	198 conserved exported protein of unknown function	3
LPO_2770	chromosome	297	98 conserved protein of unknown function	3
LPO_2776	chromosome	1287	428 putative proline/glycine betaine transporter	3
LPO_2783	chromosome	585	194 conserved protein of unknown function	3
LPO_2821	chromosome	1791	596 putative Poly-beta-hydroxybutyrate polymerase	3
LPO_2822	chromosome	1407	468 bifunctional enoyl-CoA hydratase/phosphate acetyltransferase	3
LPO_2824	chromosome	756	251 enoyl-[acyl-carrier-protein] reductase, NADH-dependent	3
LPO_2830	chromosome	900	299 conserved protein of unknown function	3



LPO_2832	chromosome	195	64 conserved protein of unknown function	3
LPO_2837	chromosome	768	255 conserved protein of unknown function	3
LPO_2844	chromosome	363	120 conserved exported protein of unknown function	3
LPO_2876	chromosome	441	146 conserved membrane protein of unknown function	3
LPO_2880	chromosome	798	265 conserved protein of unknown function	3
LPO_2882	chromosome	852	283 glutamine amidotransferase	3
LPO_2885	chromosome	1197	398 GTP-binding tubulin-like cell division protein	3
LPO_2886	chromosome	1239	412 ATP-binding cell division protein involved in recruitment of FtsK to Z ring	3
LPO_2888	chromosome	1095	364 D-alanine–D-alanine ligase A	3
LPO_2889	chromosome	933	310 UDP-N-acetylenolpyruvoylglucosamine reductase	3
LPO_2890	chromosome	1410	469 UDP-N-acetylmuramate:L-alanine ligase	3
LPO_2892	chromosome	1344	447 UDP-N-acetylmuramoyl-L-alanine:D-glutamate ligase	3
LPO_2895	chromosome	780	259 cell division protein ZipA	3
LPO_2900	chromosome	483	160 transcription elongation factor	3
LPO_2906	chromosome	1071	356 permease	3
LPO_2931	chromosome	570	189 peptidyl-tRNA hydrolase	3
LPO_2939	chromosome	663	220 conserved protein of unknown function	3
LPO_2940	chromosome	789	262 3-methyl-2-oxobutanoate hydroxymethyltransferase	3
LPO_2942	chromosome	540	179 conserved protein of unknown function	3
LPO_2945	chromosome	867	288 conserved protein of unknown function	3
LPO_2948	chromosome	651	216 transporter subunit: ATP-binding component of ABC superfamily	3
LPO_2954	chromosome	912	303 Component of the Dot/Icm secretion system. Lipoprotein	3
LPO_2981	chromosome	483	160 ATPase with strong ADP affinity	3
LPO_2987	chromosome	741	246 ubiquinol-cytochrome c reductase, cytochrome c1	3
LPO_2999	chromosome	1914	637 threonyl-tRNA synthetase	3
LPO_3013	chromosome	495	164 peptidyl-prolyl cis-trans isomerase B (rotamase B)	3
LPO_3014	chromosome	1152	383 tRNA-guanine transglycosylase	3
LPO_3023	chromosome	753	250 Uroporphyrinogen-III synthetase	3
LPO_3029	chromosome	1233	410 fused tRNA nucleotidyl transferase ; 2'3'-cyclic phosphodiesterase and 2'nucleotidase and phosphatase	3
LPO_3051	chromosome	726	241 DNA-binding response regulator	3
LPO_3052	chromosome	642	213 conserved protein of unknown function	3
LPO_3057	chromosome	540	179 GTP cyclohydrolase I	3
LPO_3076	chromosome	1254	417 NADH dehydrogenase subunit D	3
LPO_3077	chromosome	684	227 NADH dehydrogenase I chain C	3
LPO_3089	chromosome	1977	658 putative O-acetyltransferase	3
LPO_3093	chromosome	693	230 ATPase regulatory factor involved in DnaA inactivation	3
LPO_3108	chromosome	1998	665 DNA helicase and single-stranded DNA-dependent ATPase	3
LPO_3110	chromosome	846	281 putative heat shock protein Hsp33	3
LPO_3116	chromosome	888	295 NAD kinase	3
LPO_3124	chromosome	723	240 UBOX-containing protein Substrate of the Dot/Icm secretion system	3
LPO_3152	chromosome	216	71 DNA-binding transcriptional repressor	3
LPO_3156	chromosome	897	298 TPR repeat containing protein	3
LPO_3161	chromosome	912	303 conserved protein of unknown function	3
LPO_3169	chromosome	495	164 conserved protein of unknown function	3
LPO_3191	chromosome	687	228 Queuosine biosynthesis protein queC	3
LPO_3192	chromosome	1470	489 mannose-1-phosphate guanyltransferase	3
LPO_3199	chromosome	627	208 methyltransferase, SAM-dependent methyltransferase, glucose-inhibited cell-division protein	3
LPO_3202	chromosome	495	164 conserved protein of unknown function	3

LPO_3211	chromosome	606	201 putative arginine transporter	3
LPO_3218	chromosome	618	205 conserved protein of unknown function	3
LPO_3221	chromosome	270	89 Putative TatB protein (twin arginine translocation)	3
LPO_3229	chromosome	1488	495 conserved protein of unknown function	3
LPO_3233	chromosome	1164	387 exported protein of unknown function [Sel-1 domain]	3
LPO_3236	chromosome	252	83 Stability protein StbD	3
LPO_3245	chromosome	1194	397 ABC transporter, permease	3
LPO_3247	chromosome	1146	381 putative Lipoprotein	3
LPO_3248	chromosome	1629	542 outer membrane efflux protein	3
LPO_3253	chromosome	726	241 TatABCE protein translocation system subunit	3
LPO_3254	chromosome	312	103 putative DNA-binding protein hemimethylated	3
LPO_3263	chromosome	624	207 conserved membrane protein of unknown function	3
LPO_3266	chromosome	849	282 Putative lipid A biosynthesis acyltransferase	3
LPO_3267	chromosome	1071	356 conserved exported protein of unknown function	3
LPO_3313	chromosome	855	284 conserved protein of unknown function	3
LPO_3324	chromosome	543	180 F1 sector of membrane-bound ATP synthase, delta subunit	3
LPO_3325	chromosome	471	156 F0 sector of membrane-bound ATP synthase, subunit b	3
LPO_3333	chromosome	357	118 conserved protein of unknown function	3
LPO_p0003	plasmid	381	126 protein of unknown function	3
LPO_p0005	plasmid	846	281 chromosome partitioning protein ParB (SpoOJ)	3
LPO_p0006	plasmid	474	157 protein of unknown function	3
LPO_p0008	plasmid	459	152 RecX-family regulatory protein	3
LPO_p0010	plasmid	1137	378 Aminoglycoside N(6')-acetyltransferase	3
LPO_p0018	plasmid	351	116 conserved protein of unknown function	3
LPO_p0021	plasmid	894	297 Muramoyltetrapeptide carboxypeptidase	3
LPO_p0023	plasmid	858	285 GCN5-related N-acetyltransferase	3
LPO_p0037	plasmid	429	142 conserved protein of unknown function	3
LPO_p0049	plasmid	579	192 putative nucleotidyltransferase	3
LPO_p0051	plasmid	639	212 Streptomycin 3''-adenylyltransferase	3
LPO_p0053	plasmid	501	166 Acetyltransferase, GNAT family	3
LPO_p0060	plasmid	906	301 Putative esterase	3
LPO_p0067	plasmid	573	190 conserved protein of unknown function	3
LPO_p0071	plasmid	783	260 putative Streptomycin 3''-adenylyltransferase	3
LPO_p0072	plasmid	1812	603 putative ABC transporter ATP-binding protein	3
LPO_p0073	plasmid	1464	487 ABC transporter ATP-binding protein Uup	3
LPO_p0085	plasmid	396	131 conserved protein of unknown function	3
LPO_p0099	plasmid	1086	361 putative HlyD family secretion protein	3
LPO_p0134	plasmid	624	207 conserved membrane protein of unknown function	3
LPO_p0136	plasmid	1383	460 putative Protein traH precursor	3
LPO_p0139	plasmid	1812	603 Putative Type-F conjugative transfer system mating-pair stabilisation protein TraN	3
LPO_p0141	plasmid	978	325 Protein traU precursor	3
LPO_p0151	plasmid	372	123 conserved exported protein of unknown function	3
LPO_p0157	plasmid	522	173 protein of unknown function	3
LPO_p0161	plasmid	1092	363 putative periplasmic binding protein-like	3
LPO_0005	chromosome	1041	346 Agmatine deiminase (Agmatine iminohydrolase)	2
LPO_0010	chromosome	258	85 protein Hfq	2
LPO_0011	chromosome	1245	414 putative GTPase	2
LPO_0016	chromosome	999	332 putative membrane fusion protein of efflux pump	2

LPO_0022	chromosome	480	159 conserved protein of unknown function	2
LPO_0026	chromosome	573	190 Rcp protein, confers resistance to cationic antimicrobial peptides and promotes intracellular infection	2
LPO_0029	chromosome	642	213 putative ubiquinone biosynthesis protein	2
LPO_0040	chromosome	594	197 conserved exported protein of unknown function	2
LPO_0048	chromosome	213	70 substrate of the Dot/Icm secretion system	2
LPO_0049	chromosome	399	132 conserved protein of unknown function	2
LPO_0058	chromosome	282	93 Excinuclease ABC, C subunit domain protein	2
LPO_0060	chromosome	753	250 conserved protein of unknown function	2
LPO_0069	chromosome	744	247 Glutaredoxin	2
LPO_0073	chromosome	240	79 DNA-binding transcriptional regulator	2
LPO_0077	chromosome	609	202 conserved membrane protein of unknown function	2
LPO_0083	chromosome	315	104 Cell division protein ZapA	2
LPO_0087	chromosome	1164	387 putative oxidoreductase with FAD/NAD(P)-binding domain	2
LPO_0090	chromosome	459	152 conserved protein of unknown function	2
LPO_0100	chromosome	2100	699 exoribonuclease R, RNase R	2
LPO_0109	chromosome	783	260 conserved exported protein of unknown function	2
LPO_0116	chromosome	270	89 conserved protein of unknown function	2
LPO_0122	chromosome	300	99 conserved protein of unknown function	2
LPO_0126	chromosome	468	155 conserved protein of unknown function	2
LPO_0130	chromosome	1299	432 putative ABC-type Taurine transport system, ATPase component	2
LPO_0131	chromosome	615	204 thiol:disulfide interchange protein precursor DsbA	2
LPO_0132	chromosome	603	200 putative Cytochrome c4	2
LPO_0144	chromosome	459	152 conserved protein of unknown function	2
LPO_0155	chromosome	1206	401 Integrase	2
LPO_0157	chromosome	228	75 phage transcriptional regulator AlpA	2
LPO_0186	chromosome	1083	360 Eal domain protein	2
LPO_0189	chromosome	480	159 conserved membrane protein of unknown function	2
LPO_0195	chromosome	456	151 conserved exported protein of unknown function	2
LPO_0198	chromosome	411	136 Peptide chain release factor	2
LPO_0201	chromosome	756	251 putative ABC transport system permease protein	2
LPO_0206	chromosome	795	264 pyoverdine biosynthesis protein PvcB	2
LPO_0209	chromosome	1233	410 conserved protein of unknown function	2
LPO_0211	chromosome	819	272 conserved protein of unknown function	2
LPO_0215	chromosome	453	150 conserved protein of unknown function	2
LPO_0216	chromosome	1458	485 protein of unknown function	2
LPO_0233	chromosome	1035	344 conserved exported protein of unknown function	2
LPO_0237	chromosome	537	178 conserved membrane protein of unknown function	2
LPO_0244	chromosome	588	195 conserved protein of unknown function	2
LPO_0259	chromosome	987	328 Membrane fusion protein	2
LPO_0263	chromosome	207	Fragment of endonuclease	2
LPO_0276	chromosome	795	264 lipolytic enzyme	2
LPO_0277	chromosome	1467	488 betaine aldehyde dehydrogenase, NAD-dependent	2
LPO_0278	chromosome	1323	440 4-aminobutyrate aminotransferase, PLP-dependent	2
LPO_0283	chromosome	600	199 short chain dehydrogenase	2
LPO_0286	chromosome	759	252 conserved protein of unknown function	2
LPO_0293	chromosome	639	212 conserved protein of unknown function	2
LPO_0296	chromosome	1038	345 conserved membrane protein of unknown function	2
LPO_0297	chromosome	993	330 Multidrug resistance protein (substrate of the Dot/Icm) secretion system	2

LPO_0299	chromosome	1785	594 conserved protein of unknown function	2
LPO_0302	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_0311	chromosome	252	83 conserved exported protein of unknown function	2
LPO_0316	chromosome	981	326 Magnesium and cobalt transport protein CorA	2
LPO_0343	chromosome	231	76 conserved exported protein of unknown function	2
LPO_0344	chromosome	570	189 Elongation factor EF-P	2
LPO_0345	chromosome	981	326 putative lysine aminomutase	2
LPO_0347	chromosome	1206	401 lipoprotein	2
LPO_0348	chromosome	534	177 chromate transport protein	2
LPO_0351	chromosome	693	230 substrate of the Dot/Icm secretion system	2
LPO_0352	chromosome	663	220 putative dTDP-glucose pyrophosphorylase RfbA	2
LPO_0356	chromosome	975	324 4-hydroxy-L-threonine phosphate dehydrogenase, NAD-dependent	2
LPO_0360	chromosome	171	56 protein of unknown function	2
LPO_0365	chromosome	1191	396 protein chain elongation factor EF-Tu (duplicate of tufA)	2
LPO_0368	chromosome	435	144 50S ribosomal subunit protein L11	2
LPO_0377	chromosome	1191	396 protein chain elongation factor EF-Tu (duplicate of tufA)	2
LPO_0384	chromosome	339	112 50S ribosomal subunit protein L22	2
LPO_0386	chromosome	414	137 50S ribosomal subunit protein L16	2
LPO_0394	chromosome	540	179 50S ribosomal subunit protein L6	2
LPO_0396	chromosome	507	168 30S ribosomal subunit protein S5	2
LPO_0398	chromosome	435	144 50S ribosomal subunit protein L15	2
LPO_0400	chromosome	357	118 30S ribosomal subunit protein S13	2
LPO_0403	chromosome	621	206 30S ribosomal subunit protein S4	2
LPO_0406	chromosome	480	159 Single-stranded DNA-binding protein	2
LPO_0409	chromosome	414	137 putative acyl carrier protein	2
LPO_0410	chromosome	897	298 3-hydroxymyristoyl/3-hydroxydecanoyl-(acyl carrier protein) dehydratase	2
LPO_0419	chromosome	648	215 Phospholipase/Carboxylesterase	2
LPO_0430	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_0443	chromosome	1020	339 Heat shock protein HtpX	2
LPO_0452	chromosome	294	97 Endonuclease	2
LPO_0455	chromosome	447	148 methylated DNA protein cysteine S-methyltransferase	2
LPO_0457	chromosome	753	250 tRNA (guanine-1-)-methyltransferase	2
LPO_0458	chromosome	510	169 16S rRNA processing protein	2
LPO_0464	chromosome	1404	467 Glutamate/gamma-aminobutyrate antiporter	2
LPO_0466	chromosome	342	113 putative Carboxymuconolactone decarboxylase	2
LPO_0467	chromosome	444	147 conserved exported protein of unknown function	2
LPO_0484	chromosome	540	179 conserved membrane protein of unknown function	2
LPO_0488	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_0499	chromosome	432	143 conserved protein of unknown function	2
LPO_0506	chromosome	213	70 conserved protein of unknown function	2
LPO_0515	chromosome	639	212 Component of the Dot/Icm secretion system. Inner membrane protein	2
LPO_0520	chromosome	399	132 Component of the Dot/Icm secretion system. Predicted innermembrane protein	2
LPO_0529	chromosome	1344	447 acetyl-CoA carboxylase, biotin carboxylase subunit	2
LPO_0531	chromosome	438	145 3-dehydroquinone dehydratase type II	2
LPO_0533	chromosome	1632	543 zinc metalloproteinase precursor	2
LPO_0534	chromosome	849	282 MhpC, Predicted hydrolases or acyltransferases (alpha/beta hydrolase superfamily)	2
LPO_0541	chromosome	738	245 CDP-diacylglycerol-serine-O-phosphatidyltransferase	2
LPO_0543	chromosome	300	99 ribosome-associated, sigma 54 modulation protein	2

LPO_0549	chromosome	714	237 tRNA (m7G46) methyltransferase, SAM-dependent	2
LPO_0554	chromosome	1296	431 adenylosuccinate synthetase	2
LPO_0556	chromosome	570	189 putative Cupin region protein	2
LPO_0562	chromosome	1236	411 argininosuccinate lyase	2
LPO_0574	chromosome	1353	450 zinc metallopeptidase	2
LPO_0584	chromosome	225	74 conserved protein of unknown function	2
LPO_0586	chromosome	933	310 Phytanoyl-CoA dioxygenase domain-containing protein 1	2
LPO_0595	chromosome	468	155 acetyltransferase, GNAT family	2
LPO_0604	chromosome	348	115 succinate dehydrogenase, membrane subunit, binds cytochrome b556	2
LPO_0611	chromosome	648	215 pyridoxine 5'-phosphate oxidase	2
LPO_0634	chromosome	399	132 putative Polyhydroxyalkanoate synthesis repressor PhaR	2
LPO_0644	chromosome	171	56 protein of unknown function	2
LPO_0649	chromosome	537	178 putative transferase	2
LPO_0657	chromosome	564	187 conserved protein of unknown function	2
LPO_0662	chromosome	261	86 conserved protein of unknown function	2
LPO_0663	chromosome	375	124 regulatory protein P-II for glutamine synthetase	2
LPO_0666	chromosome	816	271 putative 4-amino-4-deoxychorismate lyase	2
LPO_0681	chromosome	645	214 Alanyl-tRNA synthetase related protein	2
LPO_0686	chromosome	1047	348 putative oxidoreductase, Zn-dependent and NAD(P)-binding	2
LPO_0726	chromosome	783	260 exodeoxyribonuclease III	2
LPO_0733	chromosome	819	272 DNA adenine methylase	2
LPO_0740	chromosome	1122	373 putative transporter subunit: permease component of ABC superfamily	2
LPO_0746	chromosome	465	154 putative transmembrane protein	2
LPO_0752	chromosome	765	254 putative acetoacetate decarboxylase (ADC) (AAD)	2
LPO_0755	chromosome	807	268 conserved protein of unknown function	2
LPO_0758	chromosome	753	250 arginine ABC transporter, periplasmic binding protein	2
LPO_0762	chromosome	927	308 ABC transporter ATP-binding protein	2
LPO_0783	chromosome	1023	340 threonine 3-dehydrogenase, NAD(P)-binding	2
LPO_0787	chromosome	426	141 predicted transporter component	2
LPO_0788	chromosome	1173	390 (outer) membrane protein	2
LPO_0803	chromosome	405	134 conserved exported protein of unknown function	2
LPO_0809	chromosome	957	318 thiamin-monophosphate kinase	2
LPO_0818	chromosome	1383	460 replicative DNA helicase	2
LPO_0821	chromosome	435	144 conserved hypothetical protein, CBS domain	2
LPO_0824	chromosome	1551	516 Diguanylate kinase	2
LPO_0830	chromosome	765	254 Imidazole glycerol phosphate synthase subunit HisF (IGP synthase cyclase subunit) (IGP synthase subunit HisF) (ImGP synthase subunit HisF) (IGPS subunit hisF)	2
LPO_0831	chromosome	642	213 Imidazole glycerol phosphate synthase subunit HisH (IGP synthase glutamine amidotransferase subunit) (IGP synthase subunit HisH) (ImGP synthase subunit HisH) (IGPS subunit HisH)	2
LPO_0866	chromosome	537	178 conserved protein of unknown function	2
LPO_0872	chromosome	1260	419 Beta lactamase induction signal transducer AmpG	2
LPO_0875	chromosome	384	127 conserved exported protein of unknown function	2
LPO_0888	chromosome	318	105 conserved exported protein of unknown function	2
LPO_0890	chromosome	909	302 Rod shape-determining protein MreC	2
LPO_0891	chromosome	480	159 Rod shape-determining protein MreD	2
LPO_0900	chromosome	1251	416 O-Antigen Polymerase family	2
LPO_0914	chromosome	726	241 putative lipopolysaccharide transport protein B: ATP-binding component of ABC superfamily	2
LPO_0915	chromosome	417	138 putative conserved hypothetical protein OstA family	2
LPO_0916	chromosome	570	189 conserved exported protein of unknown function	2

LPO_0920	chromosome	783	260 toluene transporter subunit: membrane component of ABC superfamily	2
LPO_0928	chromosome	1251	416 ABC transporter, permease protein	2
LPO_0932	chromosome	282	93 conserved protein of unknown function	2
LPO_0935	chromosome	681	226 heme exporter subunit ; membrane component of ABC superfamily	2
LPO_0937	chromosome	792	263 heme exporter subunit ; membrane component of ABC superfamily	2
LPO_0940	chromosome	1953	650 heme lyase, CcmF subunit	2
LPO_0945	chromosome	405	134 putative lipoprotein	2
LPO_0950	chromosome	1059	352 3-hydroxyisobutyryl-CoA hydrolase, mitochondrial precursor (3-hydroxyisobutyryl-coenzyme A hydrolase) (HIBYL-CoA-H) (HIB-CoA hydrolase)	2
LPO_0960	chromosome	276	91 conserved protein of unknown function	2
LPO_0961	chromosome	1134	377 Diguanylate kinase	2
LPO_0975	chromosome	753	250 conserved protein of unknown function	2
LPO_0983	chromosome	657	218 conserved protein of unknown function	2
LPO_0990	chromosome	498	165 Putative flagella synthesis protein FlgN	2
LPO_0991	chromosome	321	106 putative Anti-sigma-28 factor, FlgM	2
LPO_1000	chromosome	1662	553 transpeptidase involved in septal peptidoglycan synthesis (penicillin-binding protein 3)	2
LPO_1003	chromosome	660	219 putative peptidase, M50 family	2
LPO_1004	chromosome	609	202 Putative membrane-associated phospholipid phosphatase	2
LPO_1006	chromosome	750	249 Electron transfer flavoprotein beta-subunit (Beta-ETF)	2
LPO_1013	chromosome	600	199 Tfp pilus assembly protein PilO	2
LPO_1016	chromosome	528	175 shikimate kinase I	2
LPO_1019	chromosome	432	143 Universal stress protein A	2
LPO_1022	chromosome	465	154 prolipoprotein signal peptidase (signal peptidase II)	2
LPO_1027	chromosome	690	229 gap repair protein	2
LPO_1036	chromosome	879	292 putative esterase of the alpha-beta hydrolase superfamily	2
LPO_1051	chromosome	753	250 conserved protein of unknown function	2
LPO_1077	chromosome	684	fragment of virulence factor MviN (part 1)	2
LPO_1081	chromosome	495	164 N-acetyltransferase ats1	2
LPO_1100	chromosome	420	139 bacterial/Archaeal transporter family protein	2
LPO_1107	chromosome	384	127 conserved protein of unknown function	2
LPO_1110	chromosome	294	97 Excinuclease ABC, C subunit domain protein	2
LPO_1115	chromosome	273	90 KaiB-like protein 2	2
LPO_1118	chromosome	474	157 putative acyltransferase	2
LPO_1125	chromosome	381	126 conserved protein of unknown function	2
LPO_1127	chromosome	762	253 Peb1 (arginine binding periplasmic protein)	2
LPO_1129	chromosome	591	196 conserved protein of unknown function	2
LPO_1134	chromosome	294	97 Endonuclease	2
LPO_1141	chromosome	1140	379 protein of unknown function	2
LPO_1148	chromosome	906	301 conserved exported protein of unknown function	2
LPO_1154	chromosome	825	274 polyamine transporter subunit ; membrane component of ABC superfamily	2
LPO_1171	chromosome	735	244 substrate of the Dot/Icm secretion system	2
LPO_1175	chromosome	651	216 Phosphoribosyltransferase	2
LPO_1196	chromosome	468	155 riboflavin synthase beta chain	2
LPO_1207	chromosome	726	241 ThiJ/Pfpl family	2
LPO_1209	chromosome	768	255 imidazole glycerol phosphate synthase, catalytic subunit with HisH	2
LPO_1210	chromosome	720	239 N-(5'-phospho-L-riboseyl-formimino)-5-amino-1-(5'-phosphoribosyl)-4-imidazolecarboxamide isomerase	2
LPO_1211	chromosome	600	199 imidazole glycerol phosphate synthase, glutamine amidotransferase subunit with HisF	2
LPO_1215	chromosome	882	293 ATP phosphoribosyltransferase	2

LPO_1219	chromosome	1137	378 cytochrome d terminal oxidase, subunit II	2
LPO_1228	chromosome	960	319 IAA acetyltransferase/MarR transcriptional regulatory protein	2
LPO_1229	chromosome	561	186 conserved protein of unknown function	2
LPO_1231	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_1242	chromosome	423	140 flagellar component of cell-proximal portion of basal-body rod	2
LPO_1245	chromosome	747	248 flagellar component of cell-proximal portion of basal-body rod	2
LPO_1264	chromosome	372	123 conserved exported protein of unknown function	2
LPO_1268	chromosome	741	246 novel lipoprotein homolog NlpD	2
LPO_1271	chromosome	744	247 conserved protein of unknown function	2
LPO_1273	chromosome	600	199 component of RuvABC resolvosome, regulatory subunit	2
LPO_1274	chromosome	321	106 conserved exported protein of unknown function	2
LPO_1282	chromosome	210	69 conserved protein of unknown function	2
LPO_1289	chromosome	597	198 N-(5-phosphoribosyl)anthranilate isomerase	2
LPO_1291	chromosome	819	272 tryptophan synthase, alpha subunit	2
LPO_1302	chromosome	1215	404 multidrug resistance efflux pump	2
LPO_1304	chromosome	1035	344 conserved protein of unknown function	2
LPO_1309	chromosome	294	97 Endonuclease	2
LPO_1317	chromosome	1344	447 isopentenyl-adenosine A37 tRNA methylthiolase	2
LPO_1327	chromosome	1248	415 bifunctional folylpolyglutamate synthase and dihydrofolate synthase	2
LPO_1343	chromosome	117	Fragment of Excinuclease ABC, C subunit (part 2)	2
LPO_1349	chromosome	378	125 Type II secretory pathway protein Lspl	2
LPO_1350	chromosome	486	161 type II secretory pathway protein LspH	2
LPO_1356	chromosome	900	299 1-aminocyclopropane-1-carboxylate deaminase	2
LPO_1359	chromosome	297	98 global DNA-binding transcriptional dual regulator	2
LPO_1362	chromosome	213	70 protein of unknown function	2
LPO_1363	chromosome	576	191 ribonuclease HIII, degrades RNA of DNA-RNA hybrids	2
LPO_1366	chromosome	471	156 conserved protein of unknown function	2
LPO_1367	chromosome	339	112 putative lojap-related protein	2
LPO_1368	chromosome	1398	465 proton/peptide symporter	2
LPO_1374	chromosome	702	233 DNA polymerase III epsilon subunit	2
LPO_1375	chromosome	378	125 conserved exported protein of unknown function	2
LPO_1382	chromosome	282	93 Excinuclease ABC, C subunit, N-terminal Endonuclease	2
LPO_1385	chromosome	198	65 protein of unknown function	2
LPO_1389	chromosome	954	317 3-oxoacyl-[acyl-carrier-protein] synthase III	2
LPO_1391	chromosome	747	248 3-oxoacyl-[acyl-carrier-protein] reductase	2
LPO_1392	chromosome	249	82 acyl carrier protein (ACP)	2
LPO_1396	chromosome	906	301 DNA polymerase III, delta prime subunit	2
LPO_1400	chromosome	1293	430 putative Major facilitator family transporter	2
LPO_1406	chromosome	480	159 conserved exported protein of unknown function	2
LPO_1417	chromosome	693	230 cytidylate kinase	2
LPO_1426	chromosome	537	178 4-hydroxybenzoate synthetase	2
LPO_1428	chromosome	399	132 conserved exported protein of unknown function	2
LPO_1433	chromosome	804	267 conserved membrane protein of unknown function	2
LPO_1437	chromosome	477	158 putative metal-dependent hydrolase	2
LPO_1442	chromosome	792	263 putative Segregation and condensation protein A	2
LPO_1450	chromosome	450	149 Phosphatidylethanolamine-binding protein	2
LPO_1456	chromosome	1335	444 23S rRNA (uracil-5)-methyltransferase	2
LPO_1473	chromosome	1146	381 8-amino-7-oxononanoate synthase	2

LPO_1496	chromosome	294	97 Endonuclease	2
LPO_1497	chromosome	258	Fragment of Transposase, IS111A/IS1328/IS1533 (part 2)	2
LPO_1501	chromosome	516	171 conserved protein of unknown function	2
LPO_1508	chromosome	534	177 conserved exported protein of unknown function	2
LPO_1512	chromosome	294	97 Endonuclease	2
LPO_1514	chromosome	465	154 putative Ribosomal-protein-alanine acetyltransferase RimI	2
LPO_1520	chromosome	1173	390 sodium/hydrogen antiporter	2
LPO_1524	chromosome	264	87 conserved protein of unknown function	2
LPO_1533	chromosome	327	108 conserved protein of unknown function	2
LPO_1541	chromosome	816	271 Putative phosphotransferase	2
LPO_1557	chromosome	675	224 transmembrane protein	2
LPO_1562	chromosome	426	141 multifunctional nucleoside diphosphate kinase and apyrimidinic endonuclease and 3'-phosphodiesterase	2
LPO_1570	chromosome	510	169 MutT/nudix family protein	2
LPO_1572	chromosome	1074	357 Pyruvate dehydrogenase E1 component subunit alpha	2
LPO_1573	chromosome	975	324 Pyruvate dehydrogenase E1 component subunit beta	2
LPO_1574	chromosome	1113	370 branched-chain alpha-keto acid dehydrogenase subunit E2	2
LPO_1583	chromosome	945	314 thiamine biosynthesis protein NMT-1	2
LPO_1589	chromosome	834	277 3'-nucleotidase/nuclease	2
LPO_1595	chromosome	957	318 ATP-dependent DNA helicase, component of RuvABC resolvosome	2
LPO_1597	chromosome	393	130 conserved protein of unknown function	2
LPO_1611	chromosome	228	75 30S ribosomal subunit protein S18	2
LPO_1620	chromosome	678	225 RES domain protein	2
LPO_1625	chromosome	471	156 NUDIX hydrolase	2
LPO_1635	chromosome	753	250 transcriptional regulator SkgA, mercury resistance	2
LPO_1640	chromosome	294	97 Excinuclease ABC, C subunit, N-terminal	2
LPO_1642	chromosome	753	250 conserved protein of unknown function	2
LPO_1652	chromosome	753	250 conserved protein of unknown function	2
LPO_1654	chromosome	294	97 Excinuclease ABC, C subunit domain protein	2
LPO_1673	chromosome	216	Fragment of Excinuclease ABC, C subunit domain protein	2
LPO_1676	chromosome	1254	417 putative Alpha/beta hydrolase substrate of the Dot/Icm secretion system	2
LPO_1683	chromosome	258	85 putative signal peptide protein	2
LPO_1685	chromosome	897	298 myo-inositol catabolism protein IolE	2
LPO_1689	chromosome	1416	471 D-xylose-proton symporter	2
LPO_1690	chromosome	1674	557 class 4 metalloprotease	2
LPO_1691	chromosome	921	306 conserved protein of unknown function	2
LPO_1696	chromosome	1119	372 Putative heparan-alpha-glucosaminide N-acetyltransferase	2
LPO_1701	chromosome	1362	453 conserved exported protein of unknown function	2
LPO_1710	chromosome	891	296 conserved protein of unknown function	2
LPO_1719	chromosome	714	237 conserved protein of unknown function	2
LPO_1723	chromosome	852	283 putative oxidoreductase with NAD(P)-binding Rossmann-fold domain	2
LPO_1727	chromosome	627	208 substrate of the Dot/Icm secretion system	2
LPO_1746	chromosome	744	247 uridylylate kinase	2
LPO_1748	chromosome	765	254 30S ribosomal subunit protein S2	2
LPO_1774	chromosome	297	98 Glutamyl-tRNA(Gln) amidotransferase (subunit C)	2
LPO_1779	chromosome	753	250 conserved protein of unknown function	2
LPO_1781	chromosome	288	95 Excinuclease ABC, C subunit, N-terminal	2
LPO_1785	chromosome	465	154 conserved exported protein of unknown function	2
LPO_1786	chromosome	789	262 conserved exported protein of unknown function	2



LPO_1787	chromosome	288	95 DNA-binding protein fis	2
LPO_1790	chromosome	384	127 putative NifU family protein	2
LPO_1792	chromosome	774	257 putative methyltransferase	2
LPO_1799	chromosome	549	182 conserved membrane protein of unknown function	2
LPO_1803	chromosome	639	212 Polar flagellar assembly protein FliH	2
LPO_1804	chromosome	990	329 flagellar motor switching and energizing component	2
LPO_1810	chromosome	609	202 Outer-membrane lipoprotein carrier protein precursor	2
LPO_1823	chromosome	1008	335 Peptide chain release factor 2 (RF-2)	2
LPO_1831	chromosome	1149	382 flagellar export pore protein	2
LPO_1835	chromosome	750	249 flagellar biosynthesis protein	2
LPO_1837	chromosome	330	109 Flagellar motor switch protein FliN	2
LPO_1847	chromosome	1047	348 DNA strand exchange and recombination protein with protease and nuclease activity	2
LPO_1854	chromosome	195	64 conserved exported protein of unknown function	2
LPO_1865	chromosome	555	184 conserved exported protein of unknown function	2
LPO_1868	chromosome	294	97 Excinuclease ABC, C subunit-like	2
LPO_1871	chromosome	951	316 conserved exported protein of unknown function	2
LPO_1880	chromosome	753	250 conserved protein of unknown function	2
LPO_1882	chromosome	294	97 Excinuclease ABC, C subunit, N-terminal	2
LPO_1895	chromosome	594	197 DL-methionine transporter subunit ; membrane component protein of ABC superfamily	2
LPO_1896	chromosome	780	259 DL-methionine transporter subunit ; periplasmic-binding component of ABC superfamily	2
LPO_1900	chromosome	168	55 conserved protein of unknown function	2
LPO_1902	chromosome	531	176 D,D-heptose 1,7-bisphosphate phosphatase	2
LPO_1913	chromosome	1296	431 Glutamate-cysteine ligase	2
LPO_1917	chromosome	663	220 conserved protein of unknown function	2
LPO_1922	chromosome	279	92 HU, DNA-binding transcriptional regulator, beta subunit	2
LPO_1925	chromosome	645	214 proteolytic subunit of ClpA-ClpP and ClpX-ClpP ATP-dependent serine proteases	2
LPO_1932	chromosome	756	251 leader peptidase (signal peptidase I)	2
LPO_1946	chromosome	315	104 conserved exported protein of unknown function	2
LPO_1950	chromosome	753	250 conserved protein of unknown function	2
LPO_1952	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_1961	chromosome	1281	426 Major facilitator family transporter (Permease)	2
LPO_1966	chromosome	480	159 putative SEC-C motif domain protein	2
LPO_1974	chromosome	903	300 integral membrane protein	2
LPO_1978	chromosome	606	201 glutathionine S-transferase	2
LPO_1983	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_1992	chromosome	318	105 regulator of penicillin binding proteins and beta lactamase transcription (morphogene)	2
LPO_1995	chromosome	753	250 3-deoxy-manno-octulosonate cytidyltransferase	2
LPO_1996	chromosome	180	59 conserved protein of unknown function	2
LPO_1997	chromosome	669	222 glycoprotease (O-sialoglycoprotein endopeptidase)	2
LPO_2002	chromosome	558	185 Type IV pilus assembly PilZ	2
LPO_2005	chromosome	1122	373 conserved exported protein of unknown function	2
LPO_2015	chromosome	768	255 putative transposase	2
LPO_2023	chromosome	240	79 conserved protein of unknown function	2
LPO_2048	chromosome	294	97 Excinuclease ABC, C subunit, N-terminal	2
LPO_2066	chromosome	351	116 conserved protein of unknown function	2
LPO_2069	chromosome	378	125 substrate of the Dot/Icm secretion system	2
LPO_2082	chromosome	546	181 dihydrofolate reductase	2
LPO_2083	chromosome	294	97 Excinuclease ABC C subunit domain protein	2

LPO_2089	chromosome	501	166 conserved membrane protein of unknown function	2
LPO_2092	chromosome	558	185 conserved exported protein of unknown function	2
LPO_2097	chromosome	342	113 putative pterin-4-alpha-carbinolamine dehydratase (PHS) (4-alpha-hydroxy-tetrahydropterin dehydratase) (Pterin carbinolamine dehydratase) (PCD)	2
LPO_2098	chromosome	918	305 SecYEG protein translocase auxillary subunit	2
LPO_2100	chromosome	336	111 SecYEG protein translocase auxillary subunit	2
LPO_2105	chromosome	492	163 aspartyl protease	2
LPO_2109	chromosome	630	209 guanylate kinase	2
LPO_2114	chromosome	789	262 Pyrroline-5-carboxylate reductase (P5CR) (P5C reductase)	2
LPO_2119	chromosome	1689	562 serine metalloprotease	2
LPO_2141	chromosome	270	89 cell division protein FtsB-like	2
LPO_2142	chromosome	879	292 putative mevalonate kinase	2
LPO_2143	chromosome	948	315 Diphosphomevalonate decarboxylase	2
LPO_2149	chromosome	738	245 ABC transporter, ATP binding protein	2
LPO_2150	chromosome	1125	374 putative ABC-type transport system involved in resistance to organic solvents, permease component	2
LPO_2164	chromosome	912	303 putative membrane protein	2
LPO_2167	chromosome	1203	400 conserved exported protein of unknown function	2
LPO_2183	chromosome	1086	361 conserved protein of unknown function	2
LPO_2199	chromosome	969	322 Chemiosmotic efflux system protein B-like protein	2
LPO_2226	chromosome	849	282 conserved protein of unknown function	2
LPO_2234	chromosome	702	233 conserved protein of unknown function	2
LPO_2236	chromosome	345	114 conserved exported protein of unknown function	2
LPO_2241	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_2244	chromosome	762	253 (2-pyrone-4,6-)dicarboxylic acid hydrolase	2
LPO_2268	chromosome	582	193 conserved protein of unknown function	2
LPO_2272	chromosome	285	94 conserved protein of unknown function	2
LPO_2277	chromosome	1224	407 conserved exported protein of unknown function	2
LPO_2291	chromosome	720	239 conserved membrane protein of unknown function	2
LPO_2302	chromosome	1011	336 3-oxoacyl-(acyl carrier protein) synthase III FabH	2
LPO_2319	chromosome	510	169 conserved exported protein of unknown function	2
LPO_2327	chromosome	789	262 conserved protein of unknown function	2
LPO_2328	chromosome	864	287 conserved protein of unknown function	2
LPO_2349	chromosome	294	97 Endonuclease	2
LPO_2351	chromosome	489	162 conserved membrane protein of unknown function	2
LPO_2354	chromosome	696	231 conserved exported protein of unknown function	2
LPO_2359	chromosome	639	212 glutathione S-transferase	2
LPO_2365	chromosome	564	187 phosphatidylglycerophosphate synthetase	2
LPO_2367	chromosome	948	315 23S rRNA pseudouridylate synthase	2
LPO_2373	chromosome	1023	340 putative semialdehyde dehydrogenase	2
LPO_2375	chromosome	933	310 N5-glutamine methyltransferase	2
LPO_2377	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_2387	chromosome	303	100 conserved exported protein of unknown function	2
LPO_2388	chromosome	1293	430 conserved protein of unknown function	2
LPO_2389	chromosome	231	76 conserved exported protein of unknown function	2
LPO_2402	chromosome	795	264 Phytanoyl-CoA dioxygenase	2
LPO_2403	chromosome	1353	450 repair protein radA homolog	2
LPO_2405	chromosome	384	127 conserved protein of unknown function	2
LPO_2409	chromosome	591	196 putative amidophosphoribosyltransferase	2

LPO_2415	chromosome	864	287 N5-glutamine methyltransferase, modifies release factors RF-1 and RF-2	2
LPO_2416	chromosome	477	158 DNA-binding transcriptional regulator of rRNA transcription, DnaK suppressor protein	2
LPO_2418	chromosome	1260	419 3-deoxy-D-manno-octulosonic-acid transferase (KDO transferase)	2
LPO_2420	chromosome	774	257 conserved exported protein of unknown function	2
LPO_2428	chromosome	516	171 Alkylhydroperoxidase AhpD family core domain protein	2
LPO_2431	chromosome	993	330 Malate dehydrogenase	2
LPO_2439	chromosome	444	147 conserved hypothetical protein; putative GatB/Yqey domain	2
LPO_2446	chromosome	558	185 conserved protein of unknown function	2
LPO_2447	chromosome	1305	434 conserved protein of unknown function	2
LPO_2450	chromosome	288	95 protein of unknown function	2
LPO_2453	chromosome	885	294 Legionella vir region protein	2
LPO_2462	chromosome	699	232 Conjugal transfer protein trbF	2
LPO_2464	chromosome	405	134 conserved exported protein of unknown function	2
LPO_2467	chromosome	213	70 conserved exported protein of unknown function	2
LPO_2481	chromosome	234	77 conserved protein of unknown function	2
LPO_2488	chromosome	561	186 site-specific DNA recombinase; e14 prophage	2
LPO_2502	chromosome	195	64 General stress response protein	2
LPO_2503	chromosome	354	117 PRC-barrel domain protein	2
LPO_2511	chromosome	429	142 conserved membrane protein of unknown function	2
LPO_2522	chromosome	264	87 exported protein of unknown function	2
LPO_2523	chromosome	267	88 conserved protein of unknown function	2
LPO_2546	chromosome	708	235 conserved protein of unknown function	2
LPO_2548	chromosome	1227	408 conserved membrane protein of unknown function	2
LPO_2559	chromosome	1149	382 sodium-proton antiporter	2
LPO_2560	chromosome	939	312 Putative Universal stress protein UspA	2
LPO_2564	chromosome	564	187 conserved protein of unknown function	2
LPO_2575	chromosome	360	119 conserved protein of unknown function	2
LPO_2576	chromosome	1071	356 methyltransferase	2
LPO_2577	chromosome	1200	399 peptidase	2
LPO_2578	chromosome	573	190 aminoglycoside 6'-N-acetyltransferase	2
LPO_2591	chromosome	306	101 substrate of the Dot/Icm secretion system	2
LPO_2599	chromosome	294	97 conserved protein of unknown function	2
LPO_2615	chromosome	1278	425 Major facilitator family transporter	2
LPO_2624	chromosome	483	160 conserved protein of unknown function with cupin domain	2
LPO_2629	chromosome	1191	396 putative transporter	2
LPO_2632	chromosome	474	157 putative 3-demethylubiquinone-9 3-methyltransferase	2
LPO_2633	chromosome	411	136 Glyoxalase/bleomycin resistance protein/dioxygenase	2
LPO_2637	chromosome	486	161 conserved exported protein of unknown function	2
LPO_2640	chromosome	729	242 integral membrane protein	2
LPO_2643	chromosome	495	164 conserved protein of unknown function	2
LPO_2646	chromosome	630	209 conserved protein of unknown function	2
LPO_2661	chromosome	1107	368 protein required for maturation of hydrogenases	2
LPO_2675	chromosome	1389	462 phosphomannomutase	2
LPO_2684	chromosome	495	164 small heat shock protein HspC2	2
LPO_2691	chromosome	267	88 conserved membrane protein of unknown function	2
LPO_2696	chromosome	738	245 carbonic anhydrase Mig5	2
LPO_2697	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_2707	chromosome	294	97 Excinuclease ABC C subunit domain protein	2

LPO_2709	chromosome	753	Fragment of transposase (part 1)	2
LPO_2718	chromosome	315	104 conserved protein of unknown function	2
LPO_2722	chromosome	531	176 conserved protein of unknown function	2
LPO_2729	chromosome	753	250 Putative Ribonuclease H-like	2
LPO_2731	chromosome	294	97 Excinuclease ABC, C subunit, N-termina	2
LPO_2736	chromosome	252	83 conserved protein of unknown function	2
LPO_2742	chromosome	432	143 DNA-binding transcriptional regulator	2
LPO_2761	chromosome	1668	555 conserved membrane protein of unknown function	2
LPO_2771	chromosome	201	66 conserved protein of unknown function	2
LPO_2772	chromosome	246	81 conserved protein of unknown function	2
LPO_2782	chromosome	414	137 conserved exported protein of unknown function	2
LPO_2793	chromosome	318	105 conserved exported protein of unknown function	2
LPO_2796	chromosome	1368	455 conserved exported protein of unknown function	2
LPO_2799	chromosome	330	109 conserved membrane protein of unknown function	2
LPO_2814	chromosome	1257	418 HelB protein	2
LPO_2825	chromosome	744	247 3-oxoacyl-[acyl-carrier-protein] reductase	2
LPO_2833	chromosome	423	140 single strand DNA binding protein	2
LPO_2834	chromosome	507	168 antirestriction protein	2
LPO_2845	chromosome	1146	381 Glutaryl-CoA dehydrogenase, mitochondrial precursor (GCD)	2
LPO_2858	chromosome	195	Fragment of Excinuclease ABC (part 2)	2
LPO_2861	chromosome	1158	385 acid sphingomyelinase-like phosphodiesterase	2
LPO_2884	chromosome	915	304 UDP-3-O-acyl N-acetylglucosamine deacetylase	2
LPO_2887	chromosome	720	239 Cell division protein FtsQ	2
LPO_2891	chromosome	1185	394 integral membrane protein involved in stabilizing FstZ ring during cell division	2
LPO_2898	chromosome	1062	353 conserved exported protein of unknown function	2
LPO_2918	chromosome	498	165 enhanced entry protein EnhB	2
LPO_2929	chromosome	312	103 50S ribosomal subunit protein L21	2
LPO_2934	chromosome	969	322 octaprenyl diphosphate synthase	2
LPO_2953	chromosome	492	163 Component of the Dot/Icm secretion system. Lipoprotein	2
LPO_2968	chromosome	456	151 Component of the Dot/Icm secretion system	2
LPO_2971	chromosome	1641	546 conserved membrane protein of unknown function	2
LPO_2973	chromosome	531	176 conserved protein of unknown function	2
LPO_2975	chromosome	831	276 Phytanoyl-CoA dioxygenase, PhyH	2
LPO_2989	chromosome	627	208 ubiquinol-cytochrome c reductase, iron-sulfur subunit	2
LPO_2998	chromosome	339	112 Translation initiation factor IF-3	2
LPO_3004	chromosome	216	71 conserved protein of unknown function	2
LPO_3011	chromosome	345	114 conserved protein of unknown function	2
LPO_3012	chromosome	630	209 conserved membrane protein of unknown function	2
LPO_3017	chromosome	1251	416 8-amino-7-oxononanoate synthase	2
LPO_3019	chromosome	564	187 conserved membrane protein of unknown function	2
LPO_3020	chromosome	1290	429 Sensor protein	2
LPO_3026	chromosome	924	307 Cation diffusion facilitator family transporter	2
LPO_3046	chromosome	339	112 UPF0133 family protein	2
LPO_3047	chromosome	594	197 gap repair protein	2
LPO_3056	chromosome	342	113 purine nucleoside phosphoramidase	2
LPO_3058	chromosome	1092	363 L-sorbose dehydrogenase	2
LPO_3062	chromosome	372	123 30s ribosome binding factor	2
LPO_3065	chromosome	444	147 conserved protein of unknown function	2

LPO_3070	chromosome	660	219 NADH-quinone oxidoreductase chain J	2
LPO_3071	chromosome	501	166 NADH dehydrogenase subunit I	2
LPO_3081	chromosome	306	101 preprotein translocase membrane subunit	2
LPO_3091	chromosome	225	74 protein of unknown function	2
LPO_3131	chromosome	666	221 thiopurine S-methyltransferase	2
LPO_3135	chromosome	294	97 Excinuclease ABC, C subunit domain protein	2
LPO_3149	chromosome	963	320 conserved exported protein of unknown function	2
LPO_3150	chromosome	981	326 putative Enterobacter ribonuclease	2
LPO_3158	chromosome	891	296 conserved protein of unknown function	2
LPO_3163	chromosome	444	147 conserved protein of unknown function	2
LPO_3165	chromosome	360	119 conserved exported protein of unknown function	2
LPO_3174	chromosome	771	256 phosphatidylglycerol-prolipoprotein diacylglycerol transferase	2
LPO_3179	chromosome	885	294 conserved protein of unknown function	2
LPO_3185	chromosome	636	211 DNA glycosylase and apyrimidinic (AP) lyase (endonuclease III)	2
LPO_3186	chromosome	615	204 putative Electron transport complex, RnfABCDGE type, B subunit (RnfB)	2
LPO_3188	chromosome	570	189 3-octaprenyl-4-hydroxybenzoate carboxy-lyase	2
LPO_3196	chromosome	294	97 Endonuclease	2
LPO_3216	chromosome	426	141 conserved protein of unknown function	2
LPO_3223	chromosome	966	321 conserved protein of unknown function	2
LPO_3226	chromosome	945	314 Diguanylate kinase	2
LPO_3230	chromosome	201	66 conserved protein of unknown function	2
LPO_3231	chromosome	894	297 conserved membrane protein of unknown function	2
LPO_3246	chromosome	690	229 ABC transporter, ATP binding protein	2
LPO_3252	chromosome	402	133 aspartate 1-decarboxylase	2
LPO_3257	chromosome	1467	488 3-octaprenyl-4-hydroxybenzoate decarboxylase	2
LPO_3261	chromosome	786	261 Ribosomal RNA small subunit methyltransferase E (16S rRNA m3U1498 methyltransferase)	2
LPO_3265	chromosome	837	278 lipid A lauroyl acyltransferase	2
LPO_3273	chromosome	471	156 conserved protein of unknown function	2
LPO_3280	chromosome	1044	347 conserved protein of unknown function	2
LPO_3286	chromosome	294	97 Excinuclease ABC, C subunit, N-terminal	2
LPO_3296	chromosome	177	58 protein of unknown function	2
LPO_3297	chromosome	885	294 putative Sodium-type flagellar protein motY precursor	2
LPO_3299	chromosome	624	207 ribonuclease T (RNase T)	2
LPO_3302	chromosome	579	192 superoxide dismutase, Fe	2
LPO_3304	chromosome	768	255 Ribonuclease Z	2
LPO_3309	chromosome	852	283 phosphatidylserine decarboxylase	2
LPO_3316	chromosome	282	93 Excinuclease ABC C subunit domain protein	2
LPO_3318	chromosome	753	Fragment of transposase (part 1)	2
LPO_3320	chromosome	438	145 F1 sector of membrane-bound ATP synthase, epsilon subunit	2
LPO_3322	chromosome	867	288 F1 sector of membrane-bound ATP synthase, gamma subunit	2
LPO_3331	chromosome	573	190 conserved exported protein of unknown function containing BON domain protein	2
LPO_3332	chromosome	600	199 DnaA initiator-associating factor for replication initiation	2
LPO_3338	chromosome	294	97 Excinuclease ABC C subunit domain protein	2
LPO_3343	chromosome	1341	446 GTPase	2
LPO_3344	chromosome	1671	556 cytoplasmic insertase into membrane protein, Sec system	2
LPO_3345	chromosome	345	114 protein C5 component of RNase P	2
LPO_p0009	plasmid	522	173 DNA topology modulation protein	2
LPO_p0011	plasmid	567	188 conserved protein of unknown function	2

LPO_p0014	plasmid	423	140 conserved protein of unknown function	2
LPO_p0017	plasmid	444	147 conserved protein of unknown function	2
LPO_p0019	plasmid	468	155 acetyltransferase, GNAT family	2
LPO_p0024	plasmid	453	150 Acetyltransferase	2
LPO_p0057	plasmid	576	191 putative Pyridoxamine 5'-phosphate oxidase (PNP/PMP oxidase) (PNPOx)	2
LPO_p0070	plasmid	960	319 glutamate rich protein GrpB	2
LPO_p0075	plasmid	396	131 Protein of unknown function	2
LPO_p0081	plasmid	1155	384 sodium-proton antiporter	2
LPO_p0083	plasmid	414	137 protein of unknown function	2
LPO_p0091	plasmid	291	96 protein of unknown function	2
LPO_p0095	plasmid	426	141 Transcriptional regulator slyA	2
LPO_p0102	plasmid	432	143 protein of unknown function	2
LPO_p0105	plasmid	186	Fragment of integrase (part 1)	2
LPO_p0106	plasmid	303	100 IS3 element protein InsE; DLP12 prophage	2
LPO_p0112	plasmid	174	57 protein of unknown function	2
LPO_p0125	plasmid	324	107 protein of unknown function	2
LPO_p0126	plasmid	804	267 conserved protein of unknown function	2
LPO_p0129	plasmid	210	69 conserved protein of unknown function	2
LPO_p0131	plasmid	369	122 protein of unknown function	2
LPO_p0137	plasmid	495	164 Putative conjugative transfer protein TrbB	2
LPO_p0152	plasmid	402	133 exported protein of unknown function	2
LPO_p0159	plasmid	651	216 protein of unknown function	2
LPO_0008	chromosome	192	63 protein of unknown function	1
LPO_0035	chromosome	243	80 Putative endonuclease	1
LPO_0036	chromosome	243	80 conserved protein of unknown function	1
LPO_0037	chromosome	189	62 conserved protein of unknown function	1
LPO_0051	chromosome	663	220 chloramphenicol acetyltransferase	1
LPO_0059	chromosome	330	109 conserved protein of unknown function	1
LPO_0063	chromosome	702	233 conserved protein of unknown function	1
LPO_0065	chromosome	720	239 conserved protein of unknown function	1
LPO_0071	chromosome	219	Phage integrase (fragment)	1
LPO_0074	chromosome	294	fragment of LvrA (part 1)	1
LPO_0075	chromosome	450	fragment of LvrA (part 2)	1
LPO_0097	chromosome	447	148 conserved protein of unknown function	1
LPO_0099	chromosome	465	154 conserved exported protein of unknown function	1
LPO_0102	chromosome	651	216 ribose 5-phosphate isomerase, constitutive	1
LPO_0105	chromosome	1194	397 conserved protein of unknown function	1
LPO_0129	chromosome	1740	579 putative ABC-type transport system, permease component	1
LPO_0133	chromosome	603	200 GTP-binding protein	1
LPO_0138	chromosome	177	58 conserved protein of unknown function	1
LPO_0145	chromosome	243	80 putative endonuclease	1
LPO_0156	chromosome	750	249 protein of unknown function	1
LPO_0180	chromosome	192	63 conserved protein of unknown function	1
LPO_0183	chromosome	315	104 conserved protein of unknown function	1
LPO_0187	chromosome	756	251 methionine aminopeptidase	1
LPO_0188	chromosome	213	70 conserved protein of unknown function	1
LPO_0191	chromosome	420	139 conserved protein of unknown function	1
LPO_0203	chromosome	699	232 conserved protein of unknown function	1

LPO_0218	chromosome	189	62 conserved protein of unknown function	1
LPO_0219	chromosome	336	111 Putative Ribonuclease H	1
LPO_0220	chromosome	243	80 putative endonuclease	1
LPO_0239	chromosome	699	232 2-deoxy-D-gluconate-3-dehydrogenase	1
LPO_0247	chromosome	390	129 murein hydrolase exporter	1
LPO_0254	chromosome	354	117 Nitrogen regulatory protein P-II	1
LPO_0257	chromosome	852	283 Transcriptional regulator, LysR family	1
LPO_0264	chromosome	228	75 Putative Ribonuclease H	1
LPO_0265	chromosome	189	62 conserved protein of unknown function	1
LPO_0288	chromosome	342	113 putative oxidoreductase	1
LPO_0294	chromosome	528	175 conserved protein of unknown function	1
LPO_0300	chromosome	189	62 conserved protein of unknown function	1
LPO_0321	chromosome	387	128 Glyoxalase/bleomycin resistance protein/dioxygenase	1
LPO_0336	chromosome	243	80 Putative excinuclease ABC, C subunit, N-terminal	1
LPO_0337	chromosome	261	86 conserved protein of unknown function	1
LPO_0338	chromosome	189	62 conserved protein of unknown function	1
LPO_0342	chromosome	747	248 L-allo-threonine dehydrogenase, NAD(P)-binding	1
LPO_0357	chromosome	492	163 dihydrofolate reductase	1
LPO_0359	chromosome	204	67 conserved protein of unknown function	1
LPO_5S_2	chromosome	126	ribosomal RNA 5S	1
LPO_tRNA2	chromosome	76	tRNA-Thr	1
LPO_tRNA4	chromosome	74	tRNA-Gly	1
LPO_0366	chromosome	330	109 preprotein translocase membrane subunit	1
LPO_0374	chromosome	381	126 30S ribosomal subunit protein S12	1
LPO_0381	chromosome	297	98 50S ribosomal subunit protein L23	1
LPO_0383	chromosome	279	92 30S ribosomal subunit protein S19	1
LPO_0389	chromosome	366	121 50S ribosomal subunit protein L14	1
LPO_0392	chromosome	288	95 30S ribosomal subunit protein S14	1
LPO_0395	chromosome	360	119 50S ribosomal subunit protein L18	1
LPO_0420	chromosome	435	144 Polyketide cyclase/dehydrase family protein	1
LPO_0421	chromosome	273	90 conserved protein of unknown function	1
LPO_0426	chromosome	387	128 conserved exported protein of unknown function	1
LPO_0428	chromosome	189	62 conserved protein of unknown function	1
LPO_0429	chromosome	330	109 conserved protein of unknown function	1
LPO_0438	chromosome	474	157 conserved protein of unknown function	1
LPO_0439	chromosome	552	183 osmotically inducible protein Y	1
LPO_0442	chromosome	582	193 LemA protein	1
LPO_0444	chromosome	774	257 putative transporter subunit: membrane component of ABC superfamily	1
LPO_0448	chromosome	708	235 zinc metalloprotease	1
LPO_0451	chromosome	330	109 Putative Ribonuclease H	1
LPO_0456	chromosome	366	121 50S ribosomal subunit protein L19	1
LPO_0460	chromosome	261	86 30S ribosomal subunit protein S16	1
LPO_0468	chromosome	537	178 inner (transmembrane) protein	1
LPO_0471	chromosome	1008	335 cytochrome c oxidase assembly protein	1
LPO_0472	chromosome	885	294 putative protoheme IX farnesyltransferase	1
LPO_0473	chromosome	642	213 Electron transport protein SCO1/SenC	1
LPO_0477	chromosome	714	237 putative 6-phosphogluconolactonase	1
LPO_0483	chromosome	237	78 Transcriptional regulator, XRE family	1

LPO_0489	chromosome	261	86 Putative ribonuclease H-like	1
LPO_0491	chromosome	399	132 conserved protein of unknown function	1
LPO_0492	chromosome	414	137 diadenosine tetraphosphate (Ap4A) hydrolase, histidine triad family protein	1
LPO_0493	chromosome	360	119 Glyoxalase/bleomycin resistance protein/dioxygenase	1
LPO_0508	chromosome	345	114 component of Dot/Icm secretion system. Substrate recognition; presentation to translocon	1
LPO_0509	chromosome	363	120 component of Dot/Icm secretion system. Chaperone for IcmQ. Chaperone for IcmQ	1
LPO_0514	chromosome	285	94 Component of the Dot/Icm secretion system. Predicted inner membrane protein	1
LPO_0518	chromosome	810	269 Component of the Dot/Icm secretion system	1
LPO_0535	chromosome	756	251 Endonuclease/exonuclease/phosphatase family	1
LPO_0545	chromosome	165	54 50S ribosomal subunit protein L33	1
LPO_0546	chromosome	237	78 50S ribosomal subunit protein L28	1
LPO_0558	chromosome	735	244 amino acid (glutamine) ABC transporter, periplasmic amino acid binding protein	1
LPO_0563	chromosome	1116	371 Ornithine carbamoyltransferase	1
LPO_0572	chromosome	717	238 undecaprenyl pyrophosphate synthase	1
LPO_0573	chromosome	855	284 phosphatidate cytidyltransferase	1
LPO_0580	chromosome	453	150 (3R)-hydroxymyristol acyl carrier protein dehydratase	1
LPO_0581	chromosome	771	256 UDP-N-acetylglucosamine acetyltransferase	1
LPO_0587	chromosome	828	275 Putative Methyltransferase	1
LPO_0597	chromosome	411	136 Glutathione transferase fosA (Fosfomycin resistance protein)	1
LPO_0603	chromosome	321	106 succinate dehydrogenase, membrane subunit, binds cytochrome b556	1
LPO_0631	chromosome	399	132 conserved exported protein of unknown function	1
LPO_0643	chromosome	204	67 conserved protein of unknown function	1
LPO_55_3	chromosome	124	ribosomal RNA 5S	1
LPO_0658	chromosome	420	139 Holliday junction resolvase	1
LPO_0664	chromosome	582	193 putative ligase	1
LPO_0669	chromosome	420	139 conserved protein of unknown function	1
LPO_0670	chromosome	384	127 conserved exported protein of unknown function	1
LPO_0688	chromosome	405	134 conserved protein of unknown function	1
LPO_0692	chromosome	408	135 CoA-binding protein	1
LPO_0696	chromosome	381	126 Glyoxylase	1
LPO_0700	chromosome	393	130 Putative membrane protein	1
LPO_0703	chromosome	1308	435 conserved protein of unknown function	1
LPO_0718	chromosome	549	182 peptidase component of the HslUV protease	1
LPO_0724	chromosome	600	199 putative Multimeric flavodoxin WrbA	1
LPO_0728	chromosome	228	75 50S ribosomal subunit protein L31	1
LPO_0738	chromosome	846	281 Secretion protein HlyD precursor	1
LPO_0742	chromosome	1440	479 multidrug efflux MFS outer membrane protein	1
LPO_0744	chromosome	654	217 D-ribulose-5-phosphate 3-epimerase	1
LPO_0749	chromosome	255	84 conserved exported protein of unknown function	1
LPO_0756	chromosome	828	275 conserved protein of unknown function	1
LPO_0757	chromosome	267	88 conserved protein of unknown function	1
LPO_0768	chromosome	441	146 putative DNA-binding ferritin-like protein	1
LPO_0785	chromosome	612	203 conserved protein of unknown function	1
LPO_0791	chromosome	810	269 sepiapterin reductase	1
LPO_0792	chromosome	1212	403 imidazolonepropionase	1
LPO_0798	chromosome	462	153 conserved exported protein of unknown function	1
LPO_0804	chromosome	438	145 conserved protein of unknown function	1
LPO_0808	chromosome	444	147 transcription antitermination protein	1



LPO_0810	chromosome	483	160 phosphatidylglycerophosphatase A	1
LPO_0817	chromosome	435	144 conserved exported protein of unknown function	1
LPO_0820	chromosome	450	149 17 kDa surface antigen precursor	1
LPO_0832	chromosome	699	232 CMP-N-acetylneuraminic acid synthetase	1
LPO_0864	chromosome	954	317 acetyl-CoA carboxylase, carboxytransferase, alpha subunit	1
LPO_0879	chromosome	1704	567 putative transporter	1
LPO_0885	chromosome	843	280 quinolinate phosphoribosyltransferase	1
LPO_0889	chromosome	1038	345 cell wall structural complex MreBCD, actin-like component MreB	1
LPO_0896	chromosome	336	111 ATP-dependent Clp protease adaptor protein ClpS	1
LPO_0919	chromosome	798	265 toluene transporter subunit: ATP-binding component of ABC superfamily	1
LPO_0921	chromosome	477	158 toluene transporter subunit: membrane component of ABC superfamily	1
LPO_0922	chromosome	609	202 Toluene tolerance protein	1
LPO_0923	chromosome	282	93 putative anti-sigma-B factor antagonist (Anti-anti-sigma-B factor)	1
LPO_0924	chromosome	246	81 putative DNA-binding transcriptional regulator	1
LPO_0930	chromosome	594	197 conserved exported protein of unknown function	1
LPO_0934	chromosome	603	200 heme exporter subunit ; ATP-binding component of ABC superfamily	1
LPO_0938	chromosome	159	52 heme exporter protein CcmD	1
LPO_0939	chromosome	432	143 periplasmic heme chaperone	1
LPO_0957	chromosome	297	98 Pyridine nucleotide transhydrogenase, alpha subunit (part 2)	1
LPO_0964	chromosome	435	144 conserved membrane protein of unknown function	1
LPO_0978	chromosome	378	125 Sel-1 protein	1
LPO_0987	chromosome	1032	343 putative 2-alkenal reductase	1
LPO_0988	chromosome	546	181 Isochorismatase domain-containing protein 2A, mitochondrial precursor	1
LPO_0997	chromosome	459	152 putative DNA-binding transcription factors	1
LPO_1007	chromosome	939	312 Electron transfer flavoprotein, alpha subunit	1
LPO_1011	chromosome	1065	354 Tfp pilus assembly protein, ATPase PilM	1
LPO_1014	chromosome	585	194 Tfp pilus assembly protein PilP	1
LPO_1017	chromosome	1110	369 3-dehydroquinase synthase	1
LPO_1052	chromosome	261	86 conserved protein of unknown function	1
LPO_1053	chromosome	243	80 Putative endonuclease	1
LPO_1078	chromosome	900	fragment of virulence factor MviN (part 2)	1
LPO_1087	chromosome	456	151 Putative Acetyltransferases	1
LPO_1090	chromosome	459	152 conserved membrane protein of unknown function	1
LPO_1091	chromosome	603	200 putative Proton transporter	1
LPO_1111	chromosome	261	86 conserved protein of unknown function	1
LPO_1112	chromosome	189	62 conserved protein of unknown function	1
LPO_1136	chromosome	189	62 conserved protein of unknown function	1
LPO_1174	chromosome	246	81 conserved exported protein of unknown function	1
LPO_1182	chromosome	486	161 conserved protein of unknown function	1
LPO_1194	chromosome	603	200 Riboflavin synthase alpha chain	1
LPO_1216	chromosome	297	98 putative Trp repressor	1
LPO_1221	chromosome	234	77 cold shock protein; Qin prophage	1
LPO_1222	chromosome	573	190 Sigma 54 modulation protein/ribosomal protein S30EA	1
LPO_1227	chromosome	660	219 transporter	1
LPO_1232	chromosome	261	86 putative Ribonuclease H-like	1
LPO_1233	chromosome	189	62 conserved protein of unknown function	1
LPO_1258	chromosome	366	Fragment of transposase (part 1)	1
LPO_1259	chromosome	384	Fragment of transposase (part 2)	1

LPO_1260	chromosome	261	Fragment of transposase (part 3)	1
LPO_1261	chromosome	294	97 Excinuclease ABC, C subunit, N-terminal	1
LPO_1272	chromosome	525	174 component of RuvABC resolvase, endonuclease	1
LPO_1277	chromosome	546	181 putative intracellular septation protein involved in cell division	1
LPO_1284	chromosome	201	66 conserved protein of unknown function	1
LPO_1288	chromosome	789	262 pseudouridylate synthase I	1
LPO_1296	chromosome	315	104 conserved protein of unknown function	1
LPO_1305	chromosome	315	104 conserved protein of unknown function	1
LPO_1311	chromosome	189	62 conserved protein of unknown function	1
LPO_1323	chromosome	282	93 conserved protein of unknown function	1
LPO_1338	chromosome	1185	394 3-ketoacyl-CoA thiolase (thiolase I)	1
LPO_1341	chromosome	330	109 conserved protein of unknown function	1
LPO_1354	chromosome	561	186 conserved exported protein of unknown function	1
LPO_1380	chromosome	1056	351 Flavanone 3-dioxygenase	1
LPO_1383	chromosome	261	86 Putative Ribonuclease H	1
LPO_1384	chromosome	189	62 conserved protein of unknown function	1
LPO_1387	chromosome	192	63 50S ribosomal subunit protein L32	1
LPO_1388	chromosome	1029	342 fatty acid/phospholipid synthesis protein	1
LPO_1408	chromosome	657	218 adenylate kinase	1
LPO_1422	chromosome	690	229 orotidine-5'-phosphate decarboxylase	1
LPO_1425	chromosome	483	160 conserved exported protein of unknown function	1
LPO_1432	chromosome	396	131 Cytidine deaminase (Cytidine aminohydrolase) (CDA)	1
LPO_1440	chromosome	621	206 Translation factor	1
LPO_1449	chromosome	984	327 Putative 2OG-Fe(II) oxygenase superfamily protein	1
LPO_1451	chromosome	366	121 conserved exported protein of unknown function	1
LPO_1453	chromosome	519	172 conserved protein of unknown function	1
LPO_1458	chromosome	366	121 conserved protein of unknown function	1
LPO_1464	chromosome	405	134 nucleoside triphosphate pyrophosphohydrolase, marked preference for dGTP	1
LPO_1474	chromosome	720	239 Biotin biosynthesis protein BioH	1
LPO_1480	chromosome	675	224 methyl-directed mismatch repair protein	1
LPO_1487	chromosome	531	176 GCN5-related N-acetyltransferase	1
LPO_1494	chromosome	189	62 conserved protein of unknown function	1
LPO_1495	chromosome	231	76 Putative Ribonuclease H-like	1
LPO_1499	chromosome	633	Fragment of Transposase, IS111A/IS1328/IS1533 (part 1)	1
LPO_1502	chromosome	381	126 conserved protein of unknown function	1
LPO_1510	chromosome	189	62 conserved protein of unknown function	1
LPO_1511	chromosome	330	109 conserved protein of unknown function	1
LPO_1536	chromosome	1221	406 pilus assembly protein PilC	1
LPO_1537	chromosome	864	287 Type 4 prepilin-like proteins leader peptide processing enzyme	1
LPO_1549	chromosome	177	58 Rubredoxin (Rd)	1
LPO_1550	chromosome	423	140 transmembrane protein	1
LPO_1554	chromosome	423	140 putative stress-induced protein, ATP-binding protein	1
LPO_1559	chromosome	552	183 conserved protein of unknown function	1
LPO_1564	chromosome	624	207 tRNA-hydroxylase	1
LPO_1566	chromosome	729	242 putative UDP-2,3-diacetylglucosamine pyrophosphatase	1
LPO_1567	chromosome	696	231 putative septum site-determining protein minC	1
LPO_1578	chromosome	321	106 protein of unknown function	1
LPO_1582	chromosome	726	241 integral membrane protein	1

LPO_1585	chromosome	204	67 Thiamine biosynthesis sulfur transport protein ThiS	1
LPO_1598	chromosome	240	79 conserved protein of unknown function	1
LPO_1600	chromosome	549	182 putative cytochrome b561	1
LPO_1604	chromosome	768	255 (CDP-alcohol) phosphatidyltransferase	1
LPO_1609	chromosome	450	149 50S ribosomal subunit protein L9	1
LPO_1610	chromosome	912	303 membrane protein	1
LPO_1612	chromosome	339	112 30S ribosomal subunit protein S6	1
LPO_1613	chromosome	198	65 carbon storage regulator CsrA	1
LPO_1615	chromosome	735	244 putative ErfK/YbiS/YcfS/YnhG family protein precursor	1
LPO_1624	chromosome	447	148 Protein of unknown function [cupin domain]	1
LPO_1632	chromosome	240	fragment of transposase	1
LPO_1633	chromosome	246	Fragment of transposase	1
LPO_1641	chromosome	261	86 conserved protein of unknown function	1
LPO_1647	chromosome	420	139 putative transcriptional regulator	1
LPO_1653	chromosome	261	86 Putative ribonuclease H-like	1
LPO_1655	chromosome	396	131 conserved protein of unknown function	1
LPO_1656	chromosome	2208	735 copper transporter	1
LPO_1668	chromosome	1215	404 putative integral membrane protein	1
LPO_1678	chromosome	765	254 conserved exported protein of unknown function	1
LPO_1705	chromosome	297	98 conserved protein of unknown function	1
LPO_1706	chromosome	432	143 conserved protein of unknown function	1
LPO_1707	chromosome	261	86 Putative ribonuclease H-like	1
LPO_1712	chromosome	579	192 phosphoribosylglycinamide formyltransferase 1	1
LPO_1720	chromosome	195	64 conserved exported protein of unknown function	1
LPO_1731	chromosome	678	225 conserved exported protein of unknown function	1
LPO_1732	chromosome	372	123 Putative ProQ activator of osmoprotectant transporter ProP	1
LPO_1747	chromosome	879	292 protein chain elongation factor EF-Ts	1
LPO_1760	chromosome	444	147 tRNA-specific adenosine deaminase	1
LPO_1764	chromosome	270	89 cell division topological specificity factor	1
LPO_1767	chromosome	876	291 conserved membrane protein of unknown function	1
LPO_1780	chromosome	261	86 conserved protein of unknown function	1
LPO_1806	chromosome	315	104 Flagellar hook-basal body complex protein	1
LPO_1814	chromosome	372	123 Rhodanese domain protein	1
LPO_1817	chromosome	777	258 conserved exported protein of unknown function	1
LPO_1839	chromosome	240	79 conserved exported protein of unknown function	1
LPO_1846	chromosome	453	150 Regulatory protein RecX	1
LPO_1848	chromosome	330	109 conserved protein of unknown function	1
LPO_1850	chromosome	189	62 conserved protein of unknown function	1
LPO_1851	chromosome	330	109 conserved protein of unknown function	1
LPO_1852	chromosome	243	80 Putative endonuclease	1
LPO_1877	chromosome	999	332 conserved membrane protein of unknown function	1
LPO_1899	chromosome	243	80 conserved protein of unknown function	1
LPO_1905	chromosome	168	55 protein of unknown function	1
LPO_1915	chromosome	282	93 conserved protein of unknown function	1
LPO_1930	chromosome	675	224 RNase III	1
LPO_1931	chromosome	393	130 transmembrane protein	1
LPO_1937	chromosome	534	177 conserved protein of unknown function	1
LPO_1951	chromosome	261	86 conserved protein of unknown function	1

LPO_1960	chromosome	423	140 conserved exported protein of unknown function	1
LPO_1976	chromosome	534	177 conserved protein of unknown function	1
LPO_1984	chromosome	261	86 conserved protein of unknown function	1
LPO_1985	chromosome	189	62 conserved protein of unknown function	1
LPO_1991	chromosome	411	136 Tfp pilus assembly protein, major type IV pilin class A	1
LPO_1999	chromosome	336	111 Ferredoxin 1	1
LPO_2027	chromosome	282	Fragment of transcriptional regulator LuxR	1
LPO_2049	chromosome	261	86 conserved protein of unknown function	1
LPO_2050	chromosome	480	159 conserved protein of unknown function	1
LPO_2051	chromosome	168	55 conserved protein of unknown function	1
LPO_2057	chromosome	567	188 Transcriptional regulator, TetR family	1
LPO_2070	chromosome	222	73 protein of unknown function	1
LPO_2078	chromosome	738	245 conserved protein of unknown function	1
LPO_2084	chromosome	261	86 Putative Ribonuclease H	1
LPO_2085	chromosome	189	62 conserved protein of unknown function	1
LPO_2086	chromosome	417	138 glutathione S-transferase-related protein-like protein	1
LPO_2090	chromosome	861	286 Polysaccharide deacetylase-related protein	1
LPO_2103	chromosome	414	137 conserved membrane protein of unknown function	1
LPO_2115	chromosome	576	191 conserved membrane protein of unknown function	1
LPO_2118	chromosome	282	93 conserved protein of unknown function	1
LPO_2129	chromosome	339	112 bifunctional dihydroneopterin aldolase ; dihydroneopterin triphosphate 2'-epimerase	1
LPO_2146	chromosome	531	176 peptidoglycan-associated outer membrane lipoprotein	1
LPO_2147	chromosome	555	184 conserved exported protein of unknown function	1
LPO_2152	chromosome	300	99 conserved exported protein of unknown function	1
LPO_2172	chromosome	183	60 conserved protein of unknown function	1
LPO_2203	chromosome	588	195 pyridoxamine 5'-phosphate oxidase	1
LPO_2205	chromosome	321	106 conserved protein of unknown function	1
LPO_2208	chromosome	420	139 two component response regulator	1
LPO_2211	chromosome	1179	392 conserved protein of unknown function	1
LPO_2228	chromosome	402	133 conserved protein of unknown function	1
LPO_2233	chromosome	615	204 conserved membrane protein of unknown function	1
LPO_2239	chromosome	189	62 conserved protein of unknown function	1
LPO_2262	chromosome	627	208 (beta)-carbonic anhydrase	1
LPO_2264	chromosome	972	323 ornithine cyclodeaminase	1
LPO_2265	chromosome	447	148 ketosteroid isomerase	1
LPO_2271	chromosome	333	110 conserved protein of unknown function	1
LPO_2275	chromosome	639	212 conserved membrane protein of unknown function	1
LPO_2279	chromosome	528	175 Phosphatidylethanolamine-binding protein	1
LPO_2284	chromosome	924	307 nucleoside-diphosphate sugar epimerase	1
LPO_2289	chromosome	1122	373 conserved membrane protein of unknown function	1
LPO_2296	chromosome	1422	473 putative Propionyl-CoA carboxylase beta chain, mitochondrial precursor (PCCase subunit beta) (Propanoyl-CoA:carbon dioxide ligase subunit beta)	1
LPO_2300	chromosome	234	77 conserved protein of unknown function	1
LPO_2306	chromosome	1224	407 multidrug resistance protein D	1
LPO_2310	chromosome	387	128 conserved membrane protein of unknown function	1
LPO_2323	chromosome	699	232 glutamine amidotransferase, class I	1
LPO_2329	chromosome	252	83 conserved exported protein of unknown function	1
LPO_2340	chromosome	564	187 acyltransferase	1
LPO_2346	chromosome	219	72 protein of unknown function	1

LPO_2347	chromosome	189	62 conserved protein of unknown function	1
LPO_2353	chromosome	720	239 glycerophosphodiester phosphodiesterase, cytosolic	1
LPO_2355	chromosome	1074	357 Leucine dehydrogenase (LeuDH)	1
LPO_2360	chromosome	429	142 conserved protein of unknown function	1
LPO_2378	chromosome	261	86 conserved protein of unknown function	1
LPO_2379	chromosome	189	62 conserved protein of unknown function	1
LPO_2380	chromosome	570	189 putative Smr domain protein	1
LPO_2381	chromosome	420	139 putative rhodanese-related sulfurtransferase	1
LPO_2382	chromosome	255	84 glutaredoxin 3	1
LPO_2385	chromosome	819	272 Glutamate racemase	1
LPO_2391	chromosome	255	84 conserved exported protein of unknown function	1
LPO_2397	chromosome	474	157 conserved protein of unknown function	1
LPO_2411	chromosome	279	92 conserved protein of unknown function	1
LPO_2412	chromosome	177	58 conserved protein of unknown function	1
LPO_2422	chromosome	516	171 conserved protein of unknown function	1
LPO_2427	chromosome	489	162 superoxide dismutase, Cu, Zn	1
LPO_2429	chromosome	540	179 alkyl hydroperoxide reductase, peroxiredoxin	1
LPO_2432	chromosome	561	186 ADP-ribose diphosphatase	1
LPO_2436	chromosome	834	277 conserved membrane protein of unknown function	1
LPO_2443	chromosome	378	125 protein of unknown function	1
LPO_2444	chromosome	186	61 protein of unknown function	1
LPO_2449	chromosome	243	80 conserved protein of unknown function	1
LPO_2452	chromosome	681	226 conserved protein of unknown function	1
LPO_2463	chromosome	864	287 Conjugal transfer protein trbG precursor	1
LPO_2470	chromosome	546	181 Conjugal transfer protein traF precursor	1
LPO_2480	chromosome	246	Fragment of ATP-dependent DNA helicase	1
LPO_2484	chromosome	264	87 protein of unknown function	1
LPO_2487	chromosome	381	126 exported protein of unknown function	1
LPO_2499	chromosome	300	Fragment of IS630 family transposase (part 1)	1
LPO_2500	chromosome	474	fragment of IS630 family transposase (pseudogene part 2)	1
LPO_2504	chromosome	183	60 protein of unknown function	1
LPO_2505	chromosome	504	167 Acetyltransferase, GNAT family	1
LPO_2527	chromosome	255	84 conserved protein of unknown function	1
LPO_2534	chromosome	462	153 conserved protein of unknown function	1
LPO_2549	chromosome	474	157 conserved protein of unknown function	1
LPO_2566	chromosome	1608	535 amino acid permease	1
LPO_2574	chromosome	198	65 protein of unknown function	1
LPO_2582	chromosome	264	fragment of leucine rich repeat protein (part 2)	1
LPO_2590	chromosome	1098	365 conserved protein of unknown function	1
LPO_2592	chromosome	660	219 conserved protein of unknown function	1
LPO_2598	chromosome	438	145 conserved exported protein of unknown function	1
LPO_2618	chromosome	717	238 malonate decarboxylase gamma subunit	1
LPO_2622	chromosome	912	303 alkaline phosphatase	1
LPO_2630	chromosome	552	183 NADPH-dependent FMN reductase domain protein	1
LPO_2635	chromosome	552	183 conserved protein of unknown function	1
LPO_2638	chromosome	267	88 conserved protein of unknown function	1
LPO_2650	chromosome	555	184 guanylate cyclase	1
LPO_2651	chromosome	384	127 conserved protein of unknown function	1

LPO_2656	chromosome	1293	430 putative Coenzyme F420 hydrogenase	1
LPO_2662	chromosome	228	75 Hydrogenase expression/formation protein HypC	1
LPO_2665	chromosome	342	113 protein involved with the maturation of hydrogenases 1 and 2	1
LPO_2668	chromosome	408	135 putative GtrA-like protein	1
LPO_2679	chromosome	237	78 conserved protein of unknown function	1
LPO_2681	chromosome	441	146 RNA ligase/cyclic nucleotide phosphodiesterase	1
LPO_2682	chromosome	414	137 conserved protein of unknown function with CBS domain	1
LPO_2686	chromosome	687	228 putative cyclase	1
LPO_2689	chromosome	480	159 putative rRNA methylase	1
LPO_2693	chromosome	189	62 conserved protein of unknown function	1
LPO_2699	chromosome	189	62 conserved protein of unknown function	1
LPO_2708	chromosome	261	Fragment of transposase (part 2)	1
LPO_2720	chromosome	474	157 Bkd operon transcriptional regulator	1
LPO_2724	chromosome	180	59 conserved exported protein of unknown function	1
LPO_2730	chromosome	261	86 Putative ribonuclease H-like	1
LPO_2745	chromosome	1020	339 5-carboxyvanillate decarboxylase	1
LPO_2750	chromosome	426	141 conserved protein of unknown function	1
LPO_2751	chromosome	630	209 conserved protein of unknown function	1
LPO_2755	chromosome	915	304 putative Lipoprotein	1
LPO_2763	chromosome	435	144 conserved protein of unknown function	1
LPO_2766	chromosome	588	195 Bacterial regulatory protein, LuxR	1
LPO_2769	chromosome	390	129 conserved protein of unknown function	1
LPO_2775	chromosome	519	172 Peptide deformylase (PDF) (Polypeptide deformylase)	1
LPO_2786	chromosome	606	201 conserved membrane protein of unknown function	1
LPO_2789	chromosome	366	121 conserved exported protein of unknown function	1
LPO_2801	chromosome	897	298 conserved exported protein of unknown function	1
LPO_2804	chromosome	1245	414 Chemiosmotic efflux system B protein C	1
LPO_2809	chromosome	906	301 Ribose-phosphate pyrophosphokinase	1
LPO_2810	chromosome	171	56 conserved exported protein of unknown function	1
LPO_2819	chromosome	411	136 protein of unknown function	1
LPO_2826	chromosome	210	69 DNA-binding transcriptional repressor	1
LPO_2827	chromosome	429	142 conserved exported protein of unknown function	1
LPO_2831	chromosome	537	178 Aminoglycoside N(6')acetyltransferase	1
LPO_2842	chromosome	726	241 conserved protein of unknown function	1
LPO_2850	chromosome	180	59 conserved exported protein of unknown function	1
LPO_2855	chromosome	189	62 conserved protein of unknown function	1
LPO_2862	chromosome	174	57 conserved protein of unknown function	1
LPO_2866	chromosome	498	165 substrate of the Dot/Icm secretion system	1
LPO_2867	chromosome	750	249 conserved membrane protein of unknown function	1
LPO_2868	chromosome	1284	427 16S rRNA m5C967 methyltransferase, S-adenosyl-L-methionine-dependent	1
LPO_2871	chromosome	1038	345 signal peptide protein	1
LPO_2894	chromosome	1338	445 UDP-N-acetylmuramoyl-tripeptide:D-alanyl-D-alanine ligase	1
LPO_2907	chromosome	1080	359 permease	1
LPO_2919	chromosome	723	240 enhanced entry protein EnhA	1
LPO_2924	chromosome	660	219 DNA-binding response regulator in two-component regulatory system with BarA	1
LPO_2927	chromosome	1026	341 GTPase involved in cell partitioning and DNA repair	1
LPO_2935	chromosome	234	77 conserved protein of unknown function	1
LPO_2937	chromosome	228	75 ferrous iron transporter A	1

LPO_2944	chromosome	717	238 Dienelactone hydrolase family protein	1
LPO_2974	chromosome	801	266 putative methyltransferase	1
LPO_2983	chromosome	396	131 Stringent starvation protein B	1
LPO_2984	chromosome	621	206 stringent starvation protein A	1
LPO_2988	chromosome	1215	404 ubiquinol-cytochrome c reductase, cytochrome b	1
LPO_2991	chromosome	435	144 50S ribosomal subunit protein L13	1
LPO_2995	chromosome	1017	338 phenylalanine tRNA synthetase, alpha subunit	1
LPO_3003	chromosome	486	161 putative transcriptional regulator	1
LPO_3015	chromosome	492	163 Disulfide bond formation protein B (Disulfide oxidoreductase)	1
LPO_3027	chromosome	663	220 conserved protein of unknown function	1
LPO_3028	chromosome	564	187 oligoribonuclease	1
LPO_5S_1	chromosome	124	ribosomal RNA 5S	1
LPO_3037	chromosome	204	67 conserved protein of unknown function	1
LPO_3040	chromosome	117	Fragment of Excinuclease ABC (part 1)	1
LPO_3042	chromosome	261	86 Putative Ribonuclease H-like	1
LPO_3043	chromosome	189	62 conserved protein of unknown function	1
LPO_3044	chromosome	219	72 protein of unknown function	1
LPO_3060	chromosome	276	91 30S ribosomal subunit protein S15	1
LPO_3061	chromosome	912	303 tRNA pseudouridine synthase	1
LPO_3069	chromosome	306	101 NADH:ubiquinone oxidoreductase, membrane subunit K	1
LPO_3078	chromosome	477	158 NADH-quinone oxidoreductase subunit B (NADH dehydrogenase I subunit B) (NDH-1 subunit B)	1
LPO_3079	chromosome	357	118 NADH dehydrogenase I chain A	1
LPO_3087	chromosome	621	206 23S rRNA methyltransferase	1
LPO_3088	chromosome	267	88 putative RNA-binding protein	1
LPO_3097	chromosome	1503	500 transporter	1
LPO_3099	chromosome	1113	370 esterase of the alpha-beta hydrolase family	1
LPO_3111	chromosome	498	165 conserved protein of unknown function	1
LPO_3128	chromosome	381	126 putative hydrolase	1
LPO_3137	chromosome	189	62 conserved protein of unknown function	1
LPO_3144	chromosome	1014	337 IMP dehydrogenase/GMP reductase	1
LPO_3145	chromosome	417	138 Protein of unknown function	1
LPO_3148	chromosome	234	77 conserved protein of unknown function	1
LPO_3171	chromosome	393	130 Thioesterase	1
LPO_3172	chromosome	258	85 conserved exported protein of unknown function	1
LPO_3194	chromosome	189	62 conserved protein of unknown function	1
LPO_3195	chromosome	330	109 conserved protein of unknown function	1
LPO_3204	chromosome	870	289 cytochrome c oxidase, subunit III	1
LPO_3205	chromosome	543	180 cytochrome c oxidase assembly protein	1
LPO_3207	chromosome	1206	401 cytochrome c oxidase, subunit II	1
LPO_3209	chromosome	354	117 Rieske domain-containing protein. Part of Ubiquinol-cytochrome c reductase (bc1 complex or complex III)	1
LPO_3224	chromosome	870	289 bifunctional methionine sulfoxide reductase B/A protein	1
LPO_3227	chromosome	189	62 conserved protein of unknown function	1
LPO_3238	chromosome	504	167 conserved exported protein of unknown function	1
LPO_3244	chromosome	327	108 DNA polymerase, beta-like region	1
LPO_3255	chromosome	195	64 conserved protein of unknown function	1
LPO_3260	chromosome	327	108 thioredoxin 1	1
LPO_3269	chromosome	1032	343 UDP-3-O-[3-hydroxymyristoyl] glucosamine N-acyltransferase	1
LPO_3274	chromosome	315	104 conserved protein of unknown function	1

LPO_3279	chromosome	951	316 cysteine synthase A, O-acetylserine sulfhydrylase A subunit	1
LPO_3283	chromosome	312	103 integration host factor (IHF), DNA-binding protein, beta subunit	1
LPO_3284	chromosome	567	188 deoxycytidine triphosphate deaminase	1
LPO_3287	chromosome	261	86 Putative ribonuclease H-like	1
LPO_3288	chromosome	189	62 conserved protein of unknown function	1
LPO_3301	chromosome	318	105 monothiol glutaredoxin	1
LPO_3305	chromosome	783	260 putative Glycerophosphodiester phosphodiesterase	1
LPO_3317	chromosome	261	Fragment of transposase (part 2)	1
LPO_3328	chromosome	396	131 ATP synthase protein I	1
LPO_3339	chromosome	261	86 putative Ribonuclease H-like	1
LPO_3340	chromosome	189	62 conserved protein of unknown function	1
LPO_p0007	plasmid	585	194 Phage_integrase	1
LPO_p0013	plasmid	564	187 putative DNA-binding transcriptional regulator	1
LPO_p0015	plasmid	492	163 YbaK/aminoacyl-tRNA synthetase associated region	1
LPO_p0022	plasmid	387	128 Conserved protein of unknown function [conserved barrel domain protein]	1
LPO_p0028	plasmid	444	147 Acetyltransferase	1
LPO_p0041	plasmid	213	70 conserved protein of unknown function	1
LPO_p0043	plasmid	657	218 conserved protein of unknown function	1
LPO_p0046	plasmid	693	230 DNA-binding response regulator in two-component regulatory system with RstB	1
LPO_p0050	plasmid	432	143 conserved protein of unknown function	1
LPO_p0056	plasmid	348	115 conserved protein of unknown function	1
LPO_p0064	plasmid	423	140 Methicillin resistance regulatory protein med	1
LPO_p0068	plasmid	213	70 conserved protein of unknown function	1
LPO_p0074	plasmid	840	279 Putative diguanylate kinase	1
LPO_p0076	plasmid	507	168 Diguanylate kinase	1
LPO_p0080	plasmid	651	216 Methyltransferase type 11	1
LPO_p0088	plasmid	585	194 Putative Universal stress protein UspA	1
LPO_p0107	plasmid	492	163 putative HSP20-like chaperone (modular protein)	1
LPO_p0108	plasmid	588	195 Heat shock hsp20	1
LPO_p0111	plasmid	534	Fragment of transposase	1
LPO_p0113	plasmid	489	162 putative methyltransferase	1
LPO_p0114	plasmid	321	106 PemK-like protein; toxin of a toxin-antitoxin system	1
LPO_p0115	plasmid	234	77 conserved protein of unknown function	1
LPO_p0117	plasmid	327	108 protein of unknown function	1
LPO_p0123	plasmid	354	117 conserved protein of unknown function	1
LPO_p0138	plasmid	783	260 Putative F pilus assembly protein traF	1
LPO_p0140	plasmid	708	235 Putative type-F conjugative transfer system pilin assembly protein TrbC	1
LPO_p0142	plasmid	636	211 putative Protein traW precursor	1
LPO_p0143	plasmid	366	121 Putative pilus assembly protein precursor	1
LPO_p0148	plasmid	615	204 Putative conjugative transfer protein TraE	1
LPO_p0149	plasmid	291	96 Putative Type IV conjugative transfer system protein TraL	1
LPO_p0150	plasmid	312	103 Putative type IV conjugative transfer system pilin TraA	1
LPO_p0155	plasmid	204	67 protein of unknown function	1
LPO_0025	chromosome	426	141 hemin binding protein	0
LPO_0045	chromosome	324	107 conserved protein of unknown function	0
LPO_0047	chromosome	237	78 conserved protein of unknown function	0
LPO_tRNA44	chromosome	76	tRNA-Asn	0
LPO_0113	chromosome	597	198 putative phosphatidyl transferase	0



LPO_0124	chromosome	378	125 glycine cleavage complex lipoylprotein	0
LPO_0142	chromosome	186	61 conserved protein of unknown function	0
LPO_0146	chromosome	693	230 activator of ProP osmoprotectant transporter	0
LPO_0160	chromosome	450	149 protein of unknown function	0
LPO_0176	chromosome	162	fragment of conserved protein of unknown function (part 1)	0
LPO_0182	chromosome	225	74 conserved protein of unknown function	0
LPO_0232	chromosome	318	105 conserved protein of unknown function	0
LPO_0241	chromosome	414	137 putative Membrane protein	0
LPO_0250	chromosome	213	70 conserved protein of unknown function	0
LPO_0271	chromosome	447	148 transcriptional regulator np20	0
LPO_0281	chromosome	933	310 glutaminase	0
LPO_0291	chromosome	276	91 RNA binding protein, cold-inducible rrm	0
LPO_0301	chromosome	330	109 conserved protein of unknown function	0
LPO_0315	chromosome	396	131 conserved exported protein of unknown function	0
LPO_0341	chromosome	663	220 conserved protein of unknown function	0
LPO_tRNA1	chromosome	76	tRNA-Ala	0
LPO_0361	chromosome	210	69 protein of unknown function	0
LPO_0362	chromosome	228	75 conserved protein of unknown function	0
LPO_tRNA3	chromosome	85	tRNA-Tyr	0
LPO_tRNA5	chromosome	76	tRNA-Thr	0
LPO_tRNA6	chromosome	76	tRNA-Trp	0
LPO_0387	chromosome	195	64 50S ribosomal subunit protein L29	0
LPO_0390	chromosome	330	109 50S ribosomal subunit protein L24	0
LPO_0393	chromosome	396	131 30S ribosomal subunit protein S8	0
LPO_0397	chromosome	186	61 50S ribosomal subunit protein L30	0
_)CDS41671	chromosome	114	37 50S ribosomal subunit protein L36	0
LPO_0405	chromosome	384	127 50S ribosomal subunit protein L17	0
LPO_0408	chromosome	759	252 Glucose 1-dehydrogenase	0
LPO_0417	chromosome	129	42 Putative lipopeptide precursor	0
LPO_0422	chromosome	330	109 putative SmpA/OmlA domain protein precursor	0
LPO_0423	chromosome	411	136 DNA-binding transcriptional dual regulator of siderophore biosynthesis and transport	0
LPO_0425	chromosome	306	fragment of Diguanylate cyclase yddV (DGC)	0
LPO_0427	chromosome	192	63 protein of unknown function	0
LPO_0453	chromosome	282	93 conserved exported protein of unknown function	0
LPO_0486	chromosome	234	77 cold shock protein homolog	0
LPO_0496	chromosome	927	308 conserved membrane protein of unknown function	0
LPO_0498	chromosome	381	126 putative transcriptional regulator	0
_)CDS50336	chromosome	261	86 component of the Dot/Icm secretion system	0
LPO_0519	chromosome	585	194 Component of the Dot/Icm secretion system	0
LPO_0542	chromosome	270	89 phosphohistidinoprotein-hexose phosphotransferase component of N-regulated PTS system (Npr)	0
LPO_0577	chromosome	501	166 putative Outer membrane chaperone Skp (OmpH)	0
LPO_0582	chromosome	405	134 CrcB protein, camphor resistance	0
LPO_0585	chromosome	264	87 conserved protein of unknown function	0
LPO_tRNA43	chromosome	77	tRNA-Pro	0
LPO_0606	chromosome	723	240 succinate dehydrogenase, FeS subunit	0
LPO_0612	chromosome	372	123 transmission trait enhancer protein LetE	0
LPO_0619	chromosome	189	62 conserved protein of unknown function	0
LPO_tRNA42	chromosome	75	tRNA-Gln	0

LPO_0625	chromosome	321	106 multidrug efflux system protein	0
LPO_tRNA7	chromosome	74	tRNA-Gly	0
LPO_0629	chromosome	231	76 conserved protein of unknown function	0
LPO_0637	chromosome	606	201 Spore maturation protein A	0
LPO_0638	chromosome	534	177 spore maturation protein B	0
LPO_0642	chromosome	207	68 protein of unknown function	0
LPO_tRNA8	chromosome	76	tRNA-Ala	0
LPO_0645	chromosome	210	69 protein of unknown function	0
LPO_0652	chromosome	186	61 conserved protein of unknown function	0
LPO_0665	chromosome	186	61 conserved protein of unknown function	0
LPO_0678	chromosome	336	111 Iron sulfur cluster assembly protein (Suft)	0
LPO_0687	chromosome	345	114 conserved exported protein of unknown function	0
LPO_0705	chromosome	414	137 type-IV pilin	0
LPO_0717	chromosome	1224	407 phosphopentomutase	0
LPO_0753	chromosome	273	90 signal peptide protein	0
LPO_0761	chromosome	573	190 putative lipoprotein	0
LPO_0766	chromosome	291	96 Cpn10 chaperonin GroES, small subunit of GroESL	0
LPO_0779	chromosome	852	283 putative C32 tRNA thiolase	0
LPO_0786	chromosome	438	145 predicted transporter component	0
LPO_0805	chromosome	312	103 Predicted periplasmic or secreted lipoprotein	0
LPO_0807	chromosome	468	155 transcriptional repressor of nrd genes	0
LPO_0819	chromosome	1074	357 alanine racemase 1, PLP-binding, biosynthetic	0
LPO_0823	chromosome	273	90 Zinc finger, CDGSH-type domain protein	0
LPO_0826	chromosome	282	93 Predicted endonuclease containing a URI domain	0
LPO_0860	chromosome	195	64 pleiotropic regulatory protein for carbon source metabolism	0
LPO_tRNA41	chromosome	87	tRNA-Leu	0
LPO_0910	chromosome	177	58 conserved protein of unknown function	0
LPO_0942	chromosome	402	133 heme lyase, CcmH subunit	0
LPO_0943	chromosome	687	228 Conserved Hypothetical Protein; Tetratricopeptide repeat	0
LPO_0944	chromosome	204	67 protein with a Dodecin-like topology	0
LPO_tRNA40	chromosome	88	tRNA-Ser	0
LPO_0977	chromosome	510	169 conserved protein of unknown function	0
LPO_0985	chromosome	183	60 conserved protein of unknown function	0
LPO_0986	chromosome	339	112 conserved protein of unknown function	0
LPO_0993	chromosome	408	135 conserved exported protein of unknown function	0
LPO_1044	chromosome	978	325 peptide ABC transporter, permease protein	0
LPO_tRNA9	chromosome	73	tRNA-Thr	0
LPO_1071	chromosome	201	66 conserved protein of unknown function	0
LPO_1074	chromosome	507	168 conserved hypothetical protein	0
LPO_1089	chromosome	207	68 conserved exported protein of unknown function	0
LPO_1103	chromosome	204	67 conserved protein of unknown function	0
LPO_1143	chromosome	327	108 conserved protein of unknown function	0
LPO_1145	chromosome	381	126 conserved membrane protein of unknown function	0
LPO_1149	chromosome	198	65 conserved protein of unknown function	0
LPO_1162	chromosome	765	254 conserved membrane protein of unknown function	0
LPO_1172	chromosome	267	88 protein of unknown function	0
LPO_tRNA39	chromosome	88	tRNA-Ser	0
LPO_1217	chromosome	171	56 conserved protein of unknown function	0

LPO_1235	chromosome	627	208 conserved membrane protein of unknown function	0
LPO_1237	chromosome	309	102 Thiocyanate hydrolase subunit alpha	0
LPO_tRNA38	chromosome	77	tRNA-Arg	0
LPO_1254	chromosome	456	151 conserved exported protein of unknown function	0
LPO_1263	chromosome	318	105 conserved exported protein of unknown function	0
LPO_1286	chromosome	468	155 integral membrane protein	0
LPO_1299	chromosome	1029	342 oxidoreductase	0
LPO_tRNA37	chromosome	77	tRNA-Met	0
LPO_1342	chromosome	177	Fragment of Excinuclease ABC, C subunit (part 1)	0
LPO_1376	chromosome	474	157 enhanced entry protein EnhA	0
LPO_1378	chromosome	420	139 putative chaperone involved in Fe-S cluster assembly and activation; hesB-like	0
LPO_1409	chromosome	363	120 thioredoxin	0
LPO_1485	chromosome	402	133 conserved membrane protein of unknown function	0
LPO_1486	chromosome	522	173 AsnC family transcription regulator protein	0
LPO_1503	chromosome	291	96 conserved protein of unknown function	0
LPO_1527	chromosome	606	201 Legionella secretion system protein Z	0
LPO_1532	chromosome	570	189 hypoxanthine-guanine phosphoribosyltransferase	0
LPO_1606	chromosome	501	166 conserved membrane protein of unknown function	0
LPO_tRNA10	chromosome	90	tRNA-Ser	0
LPO_tRNA11	chromosome	77	tRNA-Arg	0
LPO_1631	chromosome	168	fragment of transposase	0
LPO_1670	chromosome	558	185 conserved membrane protein of unknown function	0
LPO_1681	chromosome	531	176 cytochrome b561 transmembrane protein	0
LPO_1738	chromosome	525	174 SOS (Error prone) mutagenesis protein UmuD (RumA)	0
LPO_1744	chromosome	366	121 putative Cytochrome c, class I precursor	0
LPO_1771	chromosome	972	323 Alcohol dehydrogenase, zinc-binding	0
LPO_1789	chromosome	369	122 FeS cluster assembly protein	0
LPO_1815	chromosome	222	73 translation initiation factor IF-1	0
LPO_1824	chromosome	402	133 conserved protein of unknown function	0
LPO_1834	chromosome	270	89 flagellar biosynthesis protein	0
LPO_1844	chromosome	198	65 conserved protein of unknown function	0
LPO_1853	chromosome	495	164 Competence-damage inducible protein CinA	0
LPO_1875	chromosome	1002	333 dihydro-orotate oxidase, FMN-linked	0
LPO_1887	chromosome	315	104 conserved membrane protein of unknown function	0
LPO_1919	chromosome	639	212 uridine/cytidine kinase	0
LPO_tRNA36	chromosome	77	tRNA-Asp	0
LPO_tRNA35	chromosome	76	tRNA-Val	0
LPO_tRNA34	chromosome	85	tRNA-Leu	0
LPO_tRNA33	chromosome	76	tRNA-His	0
LPO_tRNA32	chromosome	77	tRNA-Arg	0
LPO_tRNA31	chromosome	77	tRNA-Pro	0
LPO_tRNA30	chromosome	76	tRNA-Glu	0
LPO_tRNA29	chromosome	76	tRNA-Glu	0
LPO_tRNA28	chromosome	76	tRNA-Ala	0
LPO_1954	chromosome	258	85 putative acylphosphatase (Acylphosphate phosphohydrolase)	0
LPO_1959	chromosome	267	88 conserved protein of unknown function	0
LPO_1972	chromosome	327	108 conserved exported protein of unknown function	0
LPO_1990	chromosome	414	137 putative fimbrial protein precursor (Pilin) pilA-like	0

LPO_2003	chromosome	270	89 protein that protects iron-sulfur proteins against oxidative damage	0
LPO_tRNA12	chromosome	76	tRNA-Phe	0
LPO_2009	chromosome	693	230 DNA-binding response regulator in two-component regulatory system with RstB	0
LPO_2012	chromosome	255	84 conserved protein of unknown function	0
LPO_2055	chromosome	228	75 conserved protein of unknown function	0
LPO_2095	chromosome	315	104 conserved protein of unknown function	0
LPO_2106	chromosome	387	128 L-PSP (mRNA) endoribonuclease	0
LPO_2108	chromosome	204	67 DNA-directed RNA polymerase omega chain (RNAP omega subunit) (Transcriptase omega chain) (I	0
LPO_tRNA13	chromosome	76	tRNA-Lys	0
LPO_tRNA14	chromosome	76	tRNA-Lys	0
LPO_tRNA15	chromosome	77	tRNA-Arg	0
LPO_2162	chromosome	210	69 DNA-binding transcriptional repressor	0
LPO_2174	chromosome	753	250 conserved protein of unknown function	0
LPO_2177	chromosome	291	96 putative excinuclease ABC, C subunit, N-terminal	0
LPO_2179	chromosome	156	fragment of transposase (fragment) (part 1)	0
LPO_2195	chromosome	390	129 conserved protein of unknown function	0
LPO_2227	chromosome	429	142 conserved membrane protein of unknown function	0
LPO_2232	chromosome	375	124 Glyoxalase family protein superfamily	0
LPO_tRNA27	chromosome	73	tRNA-Lys	0
LPO_2260	chromosome	501	166 heat shock chaperone	0
LPO_2263	chromosome	294	97 conserved protein of unknown function	0
LPO_2280	chromosome	1050	349 conserved exported protein of unknown function	0
LPO_2283	chromosome	417	138 conserved exported protein of unknown function	0
LPO_2305	chromosome	228	75 acyl carrier protein	0
LPO_2316	chromosome	201	66 conserved protein of unknown function	0
LPO_2320	chromosome	195	64 protein of unknown function	0
LPO_2321	chromosome	657	218 transmembrane protein DedA family protein	0
LPO_2332	chromosome	291	96 conserved protein of unknown function	0
LPO_2333	chromosome	312	103 putative Transport-associated precursor	0
LPO_2339	chromosome	315	104 putative chaperone-modulator protein CbpM	0
LPO_2343	chromosome	561	186 conserved membrane protein of unknown function	0
LPO_2362	chromosome	399	132 conserved protein of unknown function	0
LPO_tRNA26	chromosome	87	tRNA-Leu	0
LPO_tRNA25	chromosome	74	tRNA-Cys	0
LPO_tRNA24	chromosome	76	tRNA-Gly	0
LPO_2423	chromosome	219	72 conserved protein of unknown function	0
LPO_2438	chromosome	240	79 30S ribosomal subunit protein S21	0
LPO_tRNA16	chromosome	77	tRNA-Met	0
LPO_2455	chromosome	312	103 Legionella vir region protein	0
LPO_2456	chromosome	261	86 global regulator	0
LPO_2459	chromosome	336	111 conserved membrane protein of unknown function	0
LPO_2460	chromosome	300	99 Conjugal transfer protein trbD	0
LPO_2471	chromosome	165	54 TraD protein	0
LPO_2478	chromosome	441	146 traM protein	0
LPO_2489	chromosome	318	105 conserved protein of unknown function	0
LPO_2490	chromosome	261	86 conserved protein of unknown function	0
LPO_2501	chromosome	252	83 conserved exported protein of unknown function	0
LPO_2512	chromosome	327	108 transposase	0

LPO_2514	chromosome	327	108 conserved membrane protein of unknown function	0
LPO_2517	chromosome	336	111 conserved exported protein of unknown function	0
LPO_2525	chromosome	366	121 putative TraK protein	0
LPO_2536	chromosome	210	69 conserved protein of unknown function	0
LPO_2539	chromosome	312	103 mannose-6-phosphate isomerase	0
LPO_2542	chromosome	261	Ferredoxin reductase-like protein, putative (Fragment)	0
LPO_2547	chromosome	198	65 conserved protein of unknown function	0
LPO_2552	chromosome	711	236 conserved exported protein of unknown function	0
LPO_2596	chromosome	828	275 conserved protein of unknown function	0
LPO_2600	chromosome	192	63 conserved exported protein of unknown function	0
LPO_2626	chromosome	381	126 conserved membrane protein of unknown function	0
LPO_2627	chromosome	96	fragment of conserved exported protein of unknown function	0
LPO_2628	chromosome	108	fragment of conserved exported protein of unknown function	0
LPO_2648	chromosome	408	135 putative Response regulator rcp1	0
LPO_2655	chromosome	480	159 hydrogenase expression/formation protein	0
LPO_2664	chromosome	759	252 GTP hydrolase involved in nickel liganding into hydrogenases	0
LPO_2673	chromosome	585	194 dITP/XTP pyrophosphatase	0
LPO_2676	chromosome	459	152 deoxyuridinetriphosphatase	0
LPO_2688	chromosome	174	57 protein of unknown function	0
LPO_2694	chromosome	225	74 conserved exported protein of unknown function	0
LPO_2695	chromosome	573	190 lysine decarboxylase	0
LPO_2721	chromosome	342	113 conserved membrane protein of unknown function	0
LPO_2723	chromosome	369	122 conserved exported protein of unknown function	0
LPO_2738	chromosome	585	194 chorismate mutase/prephenate dehydratase (P-protein)	0
LPO_2743	chromosome	375	124 Myoglobin (Hemoglobin)	0
LPO_2747	chromosome	369	122 conserved protein of unknown function	0
LPO_2748	chromosome	384	127 mechanosensitive channel	0
LPO_2749	chromosome	828	275 conserved protein of unknown function	0
LPO_2753	chromosome	291	96 conserved protein of unknown function	0
LPO_2754	chromosome	336	111 chaperonin CsaA	0
LPO_tRNA23	chromosome	76	tRNA-Pro	0
LPO_2773	chromosome	492	163 conserved protein of unknown function	0
LPO_2778	chromosome	267	88 conserved protein of unknown function	0
LPO_2781	chromosome	228	75 Carbon storage regulator homolog (Regulator of secondary metabolites)	0
LPO_2785	chromosome	432	143 conserved exported protein of unknown function	0
LPO_2787	chromosome	327	108 conserved exported protein of unknown function	0
LPO_2788	chromosome	267	88 conserved protein of unknown function	0
LPO_2798	chromosome	147	48 protein of unknown function	0
LPO_2816	chromosome	396	131 conserved protein of unknown function	0
LPO_2818	chromosome	165	54 conserved exported protein of unknown function	0
LPO_tRNA22	chromosome	77	tRNA-Pro	0
LPO_2840	chromosome	378	125 conserved protein of unknown function	0
LPO_2841	chromosome	198	65 protein of unknown function	0
LPO_2843	chromosome	255	84 conserved protein of unknown function	0
LPO_2849	chromosome	267	88 FlhB domain protein (modular protein)	0
LPO_2857	chromosome	135	Fragment of Excinuclease ABC (part 1)	0
LPO_2864	chromosome	792	263 ParB-like partition protein	0
LPO_2870	chromosome	513	170 peptide deformylase	0

LPO_2877	chromosome	366	121 conserved protein of unknown function	0
LPO_2881	chromosome	417	138 conserved protein of unknown function	0
LPO_2902	chromosome	273	90 conserved protein of unknown function	0
LPO_2909	chromosome	435	144 DNA polymerase III, chi subunit	0
LPO_2911	chromosome	318	105 conserved protein of unknown function	0
LPO_2914	chromosome	267	88 30S ribosomal subunit protein S20	0
LPO_2922	chromosome	1608	535 conserved exported protein of unknown function containing Collagen helix repeat	0
LPO_2928	chromosome	279	92 50S ribosomal subunit protein L27	0
LPO_2938	chromosome	1083	360 putative ATPase	0
LPO_2966	chromosome	717	238 diene lactone hydrolase family protein	0
LPO_2977	chromosome	213	70 conserved protein of unknown function	0
LPO_2992	chromosome	318	105 ferredoxin 2Fe-2S protein	0
LPO_2993	chromosome	300	99 integration host factor (IHF), DNA-binding protein, alpha subunit	0
LPO_2996	chromosome	360	119 50S ribosomal subunit protein L20	0
LPO_2997	chromosome	201	66 50S ribosomal protein L35	0
LPO_tRNA21	chromosome	75	tRNA-Val	0
LPO_3000	chromosome	228	75 conserved protein of unknown function	0
LPO_3001	chromosome	213	70 conserved protein of unknown function	0
LPO_3010	chromosome	300	99 transcriptional regulator	0
LPO_3016	chromosome	429	142 Cytochrome c5	0
LPO_3021	chromosome	171	56 conserved protein of unknown function	0
LPO_3035	chromosome	228	75 conserved protein of unknown function	0
LPO_3036	chromosome	210	69 protein of unknown function	0
LPO_tRNA20	chromosome	77	tRNA-Ile	0
LPO_3038	chromosome	207	68 protein of unknown function	0
LPO_3041	chromosome	177	Fragment of Excinuclease ABC (part 2)	0
LPO_tRNA19	chromosome	77	tRNA-Met	0
LPO_3075	chromosome	504	167 NADH:ubiquinone oxidoreductase, chain E	0
LPO_tRNA18	chromosome	85	tRNA-Leu	0
LPO_3094	chromosome	228	75 conserved protein of unknown function	0
LPO_3100	chromosome	798	265 dehydroshikimate reductase, NAD(P)-binding	0
LPO_3118	chromosome	207	68 stress protein, member of the CspA-family	0
LPO_3125	chromosome	135	44 exported protein of unknown function	0
LPO_3130	chromosome	192	63 protein of unknown function	0
LPO_3136	chromosome	261	86 putative Ribonuclease H-like	0
LPO_3140	chromosome	471	156 trans-translation protein	0
LPO_3141	chromosome	465	154 putative peroxiredoxin Bcp (Thioredoxin reductase) (Bacterioferritin comigratory protein homolog)	0
LPO_3160	chromosome	486	161 conserved protein of unknown function	0
LPO_3175	chromosome	807	268 permease	0
LPO_3177	chromosome	528	175 nucleotide hydrolase	0
LPO_3181	chromosome	339	Fragment of arsenite efflux membrane component-like protein	0
LPO_3190	chromosome	543	180 conserved membrane protein of unknown function	0
LPO_3203	chromosome	273	90 conserved protein of unknown function	0
LPO_3217	chromosome	753	250 bifunctional 2-octaprenyl-6-methoxy-1, 4-benzoquinone methylase and S-adenosylmethionine: 2-DMK methyltransferase	0
LPO_3220	chromosome	186	61 Putative TatA protein(twin arginine translocation)	0
LPO_3222	chromosome	261	86 conserved exported protein of unknown function	0
LPO_3232	chromosome	192	63 conserved protein of unknown function	0

LPO_3235	chromosome	297	98 toxin of the RelE-RelB toxin-antitoxin system; Qin prophage	0
LPO_3237	chromosome	201	66 conserved protein of unknown function	0
LPO_3243	chromosome	420	139 Nucleotidyltransferase substrate binding protein	0
LPO_3249	chromosome	831	276 diadenosine tetraphosphatase	0
LPO_3256	chromosome	714	237 CDP-6-deoxy-3,4-glucoseen reductase	0
LPO_3268	chromosome	831	276 UDP-N-acetylglucosamine acetyltransferase	0
LPO_3300	chromosome	606	201 alkyl hydroperoxide reductase	0
LPO_tRNA17	chromosome	87	tRNA-Leu	0
LPO_3326	chromosome	276	91 F0F1 ATP synthase subunit C	0
LPO_3346	chromosome	135	44 50S ribosomal subunit protein L34	0
LPO_p0016	plasmid	636	211 Alanyl-tRNA synthetase related protein	0
LPO_p0042	plasmid	129	Fragment of protein of unknown function	0
LPO_p0052	plasmid	195	64 protein of unknown function	0
LPO_p0078	plasmid	378	125 conserved protein of unknown function	0
LPO_p0082	plasmid	741	246 Acetoacetyl-CoA reductase	0
LPO_p0086	plasmid	549	182 site-specific DNA recombinase; e14 prophage	0
LPO_p0093	plasmid	1530	509 multidrug efflux system protein	0
LPO_p0103	plasmid	195	64 conserved protein of unknown function	0
LPO_p0119	plasmid	261	86 RelB antitoxin	0
LPO_p0120	plasmid	282	93 Addiction module toxin, RelE/StbE family	0
LPO_p0122	plasmid	291	96 Transcriptional regulator, XRE family	0
LPO_p0127	plasmid	264	87 conserved protein of unknown function	0
LPO_p0130	plasmid	303	100 protein of unknown function	0
LPO_p0145	plasmid	228	75 putative Type IV conjugative transfer system protein TraV	0
LPO_p0154	plasmid	225	74 pleiotropic regulatory protein for carbon source metabolism (modular protein)	0

Table S2. Used primers.

Primer name	Sequence
pUC57 Fw	GTAAAACGACGGCCAGTG
pUC57 Rv	GGAAACAGCTATGACCATG
<i>mazF-lp</i> Fw	TTTTTCATATGAACCGTGGTGACG
<i>mazF-lp</i> Rv	TTTGAATTCTTACAGGCACAGAAC
<i>mazF-lp</i> Fw (Nco)	TTTTCCATGGGTAACCGTGGTGA
<i>mazF-lp</i> (His) Rv (Eco)	TTTGAATTCTTAATGATGATGATGATGATGCAGGCACAGAACCT
<i>ycdD</i> Fw (XbaI)	TTTTCTAGACTTCAAATTATTAGAGGCAA
<i>ycdD</i> Rv (EcoRI)	TTTGAATTCTTATGACCATTTACCAATCCAGTC
Px-F1	TTGCCACCACCGTAACTGTTTTTC
Px-F3	AACACCGTCGCCGTTAGA
Px-F8	CGAAAGAACCAACGTCAGC
Px-F9	GGTAGCAACGCCGCCAACAC
Px-F11	GCGCAACTAACAGAACGTCT
Px-F12	TTCGGCATTTAACAAAG
J	GGTTCAAGATACCTAGAGAC
E2	CTACAGGTTACTTTTGTA
E	GAAGATCAATACATAAAGAG
D5	AATTCGTCCCTTAAGTAAGC
Px- <i>ycdD</i> 1	TATCTCAACGCTCTTTGGTG
Px- <i>ycdD</i> 2	CCCTCTACTAATTTTTTGGTC
Px- <i>ycdD</i> 3	CGCACGCTATAAAGAATATC
Px- <i>ycdD</i> 4	ACACCCGTTGTTTTGTAGCG
palindrome 1 Fw	GGGAGGATATATTATATTATATATAGAGGG
palindrome 1 Rv	CCCTCTATATATAATATAATATATATCCTCCC
palindrome 2 Fw	GGGTATATTATATATAGATGGAGATAATGATGGG
palindrome 2 Rv	CCCATCATTATCTCCATCTATATATAATATACCC
Palindrome 3 Fw	CCCCTAACTAACCTTTTAGGTGCTTTTCCCC
Palindrome 3 Rv	GGGGAAAAGCACCTAAAAGGTTAGTTAGGGG