

**Supplementary Table S3.** List of the unique genes of *G. kaustophilus* which has no orthologous relationship to 5 other bacilli

I.D.	GK gene	position (from)	position (to)	function	product
K-1	GK0015	24791	26155	5	unknown conserved protein
K-2	GK0145	150099	151757	4.5	transposase
K-3	GK0146	151789	151974	1.9	spore germination protein precursor (N-term divided by IS)
K-4	GK0156	169582	169719	6	unknown
K-5	GK0157	169853	170653	5	unknown conserved protein
K-6	GK0158	170646	171695	4.5	transposase of <i>IS1604</i> -like element
K-7	GK0161	173028	173336	6	unknown
K-8	GK0162	173479	174042	5	unknown conserved protein
K-9	GK0163	174102	174791	4.5	transposase
K-10	GK0164	174906	176003	5	unknown conserved protein
K-11	GK0166	177247	177786	6	unknown
K-12	GK0168	179528	179734	5	unknown conserved protein
K-13	GK0171	182500	182955	5	unknown conserved protein
K-14	GK0173	183729	183944	5	unknown conserved protein
K-15	GK0175	185011	186669	4.5	transposase
K-16	GK0176	186825	187346	6	unknown
K-17	GK0195	205733	206035	6	unknown
K-18	GK0196	206111	208174	3.5.2	sigma-L-dependent transcriptional regulator
K-19	GK0198	209695	209949	6	unknown
K-20	GK0200	211545	212756	2.1.1	alcohol dehydrogenase
K-21	GK0204	214705	214995	6	unknown
K-22	GK0207	216465	216872	6	unknown
K-23	GK0215	227296	228279	1.8	sporulation-control protein
K-24	GK0220	232629	233387	2.1.1	chitoooligosaccharide deacetylase
K-25	GK0221	233398	233994	2.6	alkaline phosphatase
K-26	GK0230	242294	242521	6	unknown
K-27	GK0243	261766	261918	5	unknown conserved protein
K-28	GK0247	263801	263965	6	unknown
K-29	GK0256	281982	282431	3.9	small heat shock protein
K-30	GK0269	295801	295965	6	unknown
K-31	GK0280	307773	308279	6	unknown
K-32	GK0286	314934	315104	4.3	lantibiotic precursor
K-33	GK0287	315293	315682	6	unknown
K-34	GK0289	316671	317405	6	unknown
K-35	GK0290	317402	318103	6	unknown
K-36	GK0292	318774	318941	6	unknown
K-37	GK0293	319184	320545	4.5	transposase of <i>IS231E</i> -like element
K-38	GK0294	320984	321136	4.3	lantibiotic precursor
K-39	GK0295	321329	322777	4.5	transposase of <i>ISBst12</i> -like element
K-40	GK0296	322998	323237	6	unknown
K-41	GK0298	324051	324278	6	unknown
K-42	GK0299	324278	324505	6	unknown
K-43	GK0301	326841	328229	4.5	transposase
K-44	GK0302	330184	331371	5	unknown conserved protein
K-45	GK0303	331436	333265	1.2	ABC transporter (ATP-binding protein) lantibiotic
K-46	GK0305	334618	334818	6	unknown
K-47	GK0309	338625	339008	4.3	lantibiotic biosynthesis protein
K-48	GK0317	346233	347723	5	unknown conserved protein
K-49	GK0318	347726	348922	5	unknown conserved protein
K-50	GK0320	353000	354220	5	unknown conserved protein
K-51	GK0321	354288	354665	4.5	transposase
K-52	GK0322	355570	355794	6	unknown
K-53	GK0326	359118	359642	6	unknown
K-54	GK0327	359842	360165	6	unknown
K-55	GK0329	362937	363209	6	unknown
K-56	GK0331	364862	365533	3.5.2	transcriptional regulator
K-57	GK0332	365707	366912	4.1	serine protease Do
K-58	GK0333	366969	367325	6	unknown
K-59	GK0334	367765	368418	6	unknown
K-60	GK0337	370659	371048	5	unknown conserved protein
K-61	GK0338	371185	372051	5	unknown conserved protein
K-62	GK0343	377195	378649	3.2	type I restriction modification system M subunit (site-specific DNA-methyltransferase subunit) (EC 2.1.1.72)
K-63	GK0348	386664	387227	5	unknown conserved protein
K-64	GK0349	387370	388617	4.5	transposase
K-65	GK0350	388610	389410	5	unknown conserved protein
K-66	GK0353	392253	392417	5	unknown conserved protein

K-67	GK0357	396133	397521	3.6	RNA methyltransferase
K-68	GK0361	401201	402388	2.1.1	glycosyltransferases
K-69	GK0362	402369	403484	5	unknown conserved protein
K-70	GK0363	403435	404844	2.1.1	phosphomannomutase
K-71	GK0364	405063	406712	6	unknown
K-72	GK0365	406956	407528	5	unknown conserved protein
K-73	GK0366	407377	407709	3.5.2	anti-sigma factor antagonist
K-74	GK0369	410600	411853	1.5	methyl-accepting chemotaxis protein
K-75	GK0388	434051	434212	6	unknown
K-76	GK0389	434830	435150	6	unknown
K-77	GK0390	435262	436449	5	unknown conserved protein
K-78	GK0391	436734	437426	5	unknown conserved protein
K-79	GK0392	437943	438251	6	unknown
K-80	GK0397	442382	442642	6	unknown
K-81	GK0403	449777	450430	6	unknown
K-82	GK0410	455566	455712	6	unknown
K-83	GK0417	460532	460708	6	unknown
K-84	GK0437	479553	479837	6	unknown
K-85	GK0440	482730	483113	6	unknown
K-86	GK0457	497684	498046	6	unknown
K-87	GK0466	506829	507020	1.8	gamma-type small acid-soluble spore protein
K-88	GK0467	507248	507457	6	unknown
K-89	GK0490	538154	538414	6	unknown
K-90	GK0491	538780	539085	6	unknown
K-91	GK0496	540660	540821	6	unknown
K-92	GK0497	540858	541163	6	unknown
K-93	GK0498	541169	541537	6	unknown
K-94	GK0499	541785	542126	6	unknown
K-95	GK0500	542198	542413	5	unknown conserved protein
K-96	GK0501	542513	542962	6	unknown
K-97	GK0502	543042	543338	6	unknown
K-98	GK0504	543772	543969	6	unknown
K-99	GK0505	544032	544259	6	unknown
K-100	GK0506	544246	544767	4.4	phage-related protein
K-101	GK0507	544785	544964	6	unknown
K-102	GK0508	544964	545131	6	unknown
K-103	GK0509	545323	545634	6	unknown
K-104	GK0510	545892	546026	6	unknown
K-105	GK0511	546016	546243	6	unknown
K-106	GK0513	547514	547702	6	unknown
K-107	GK0514	547771	547941	6	unknown
K-108	GK0515	547941	548423	5	unknown conserved protein
K-109	GK0516	548425	548685	6	unknown
K-110	GK0517	548902	549090	4.4	phage-related protein (PBSX-like element)
K-111	GK0518	549339	549542	6	unknown
K-112	GK0520	550452	550640	5	unknown conserved protein
K-113	GK0523	551788	552081	5	unknown conserved protein
K-114	GK0524	552279	553022	5	unknown conserved protein
K-115	GK0525	553466	553711	6	unknown
K-116	GK0527	554399	554764	6	unknown
K-117	GK0538	562125	562289	6	unknown
K-118	GK0540	567998	568867	4.4	phage-related protein (tail protein)
K-119	GK0541	568880	569566	4.4	phage-related protein
K-120	GK0542	569576	570931	4.4	phage-related protein
K-121	GK0543	570945	573557	4.4	phage-related protein
K-122	GK0544	573574	573810	6	unknown
K-123	GK0545	573814	574182	6	unknown
K-124	GK0546	574182	575189	6	unknown
K-125	GK0547	575202	575528	6	unknown
K-126	GK0550	576964	577311	5	unknown conserved protein
K-127	GK0552	577917	578240	6	unknown
K-128	GK0554	579401	580081	5	unknown conserved protein
K-129	GK0555	580097	580270	6	unknown
K-130	GK0556	580527	581219	5	unknown conserved protein
K-131	GK0557	581378	581695	6	unknown
K-132	GK0572	595983	596225	6	unknown
K-133	GK0575	598127	599998	5	unknown conserved protein
K-134	GK0576	600788	601369	4.5	transposase of IS654 -like element
K-135	GK0591	615873	616415	5	unknown conserved protein
K-136	GK0592	616525	617319	5	unknown conserved protein

K-137	GK0594	618168	619829	3.3	single-stranded-DNA-specific exonuclease
K-138	GK0596	621812	622054	6	unknown
K-139	GK0597	622142	622489	3.5.2	transcriptional regulator
K-140	GK0598	622654	622818	6	unknown
K-141	GK0599	622815	624326	4.4	integrase (resolvase family)
K-142	GK0600	624313	625833	4.4	cassette chromosome recombinase B
K-143	GK0601	626592	627224	6	unknown
K-144	GK0602	627217	628182	6	unknown
K-145	GK0606	631525	631626	6	unknown
K-146	GK0607	631715	632005	5	unknown conserved protein
K-147	GK0611	633947	634378	6	unknown
K-148	GK0627	650824	651000	6	unknown
K-149	GK0634	656113	656514	6	unknown
K-150	GK0647	669145	669279	5	unknown conserved protein
K-151	GK0651	671506	671691	6	unknown
K-152	GK0655	673300	673389	5	unknown conserved protein
K-153	GK0665	683501	683977	6	unknown
K-154	GK0669	687340	688347	1.2	ABC transporter (substrate-binding protein)
K-155	GK0670	688477	689469	1.2	ABC transporter (permease)
K-156	GK0671	689435	690232	1.2	ABC transporter (ATP-binding protein)
K-157	GK0675	692418	693008	4.2	manganese oxidation
K-158	GK0691	711006	711230	1.9	spore germination protein
K-159	GK0692	711381	711605	1.9	spore germination protein
K-160	GK0712	737253	738563	2.1.2	pyruvate dehydrogenase E2 (dihydrolipoamide acetyltransferase) (EC 2.3.1.12)
K-161	GK0714	739657	739833	6	unknown
K-162	GK0715	739830	739985	6	unknown
K-163	GK0718	745599	745982	6	unknown
K-164	GK0719	746516	746746	4.3	circularin A precursor
K-165	GK0720	746814	748433	6	unknown
K-166	GK0721	748447	748956	5	unknown conserved protein
K-167	GK0722	749145	749795	1.2	ABC transporter (ATP-binding protein)
K-168	GK0732	761040	761342	6	unknown
K-169	GK0733	761459	761779	6	unknown
K-170	GK0735	762525	762701	6	unknown
K-171	GK0737	763553	764278	1.2	ABC transporter (ATP-binding protein) multidrug
K-172	GK0741	767492	768202	5	unknown conserved protein
K-173	GK0744	769585	770679	5	unknown conserved protein
K-174	GK0751	777074	777319	6	unknown
K-175	GK0752	777417	778163	4.6	huntingtin interacting protein E-like protein
K-176	GK0754	778682	779923	5	unknown conserved protein
K-177	GK0755	779929	780138	6	unknown
K-178	GK0756	780125	780373	6	unknown
K-179	GK0758	781526	783898	1.4	nitric oxide reductase cytochrome b subunit (EC 1.7.99.7)
K-180	GK0759	784037	784240	6	unknown
K-181	GK0761	785713	785880	6	unknown
K-182	GK0762	786010	786243	5	unknown conserved protein
K-183	GK0764	786937	787101	6	unknown
K-184	GK0768	792086	792784	3.5.2	transcriptional regulator of anaerobic genes (FNR/CRP family)
K-185	GK0777	799483	800292	1.1	cell wall-associated protein precursor
K-186	GK0778	800349	801536	5	unknown conserved protein
K-187	GK0779	805467	806018	5	unknown conserved protein
K-188	GK0780	806172	807422	4.5	transposase of <i>IS1604</i> -like element
K-189	GK0781	807415	808215	5	unknown conserved protein
K-190	GK0782	808558	810639	6	unknown
K-191	GK0785	813148	813816	6	unknown
K-192	GK0787	816401	816658	6	unknown
K-193	GK0789	818120	818266	6	unknown
K-194	GK0797	827694	827840	6	unknown
K-195	GK0800	830812	830997	6	unknown
K-196	GK0803	832281	832529	5	unknown conserved protein
K-197	GK0807	836084	836290	5	unknown conserved protein
K-198	GK0810	838500	838874	5	unknown conserved protein
K-199	GK0823	852563	852760	6	unknown
K-200	GK0841	869239	870321	2.1.1	glycosyltransferase
K-201	GK0842	870328	871323	5	unknown conserved protein
K-202	GK0843	871485	871787	6	unknown
K-203	GK0845	872300	872470	6	unknown
K-204	GK0848	874369	874701	6	unknown
K-205	GK0849	875084	875314	6	unknown

K-206	GK0850	875342	875545	5	unknown conserved protein
K-207	GK0858	879459	879629	6	unknown
K-208	GK0860	880218	880454	6	unknown
K-209	GK0861	880534	880659	5	unknown conserved protein
K-210	GK0871	887545	888645	5	unknown conserved protein
K-211	GK0872	888642	889700	5	unknown conserved protein
K-212	GK0873	889984	890148	6	unknown
K-213	GK0874	890204	890722	6	unknown
K-214	GK0875	890765	891496	6	unknown
K-215	GK0876	891688	891939	6	unknown
K-216	GK0879	895672	896229	5	unknown conserved protein
K-217	GK0880	896370	897620	4.5	transposase of <i>IS1604</i> - like element
K-218	GK0881	897613	898413	5	unknown conserved protein
K-219	GK0882	898415	898582	6	unknown
K-220	GK0883	898846	899532	5	unknown conserved protein
K-221	GK0885	904348	906762	5	unknown conserved protein
K-222	GK0887	908410	910068	5	unknown conserved protein
K-223	GK0888	910175	911842	4.5	transposase
K-224	GK0893	916554	916682	6	unknown
K-225	GK0894	916745	917245	1.4	menaquinol-cytochrome c reductase iron-sulfur subunit
K-226	GK0914	939902	940255	6	unknown
K-227	GK0915	940392	940856	6	unknown
K-228	GK0916	941026	941880	5	unknown conserved protein
K-229	GK0917	941896	942576	6	unknown
K-230	GK0921	945597	945770	6	unknown
K-231	GK0925	948634	949446	5	unknown conserved protein
K-232	GK0931	954729	954980	6	unknown
K-233	GK0935	957209	957460	6	unknown
K-234	GK0936	957594	957893	6	unknown
K-235	GK0939	960642	960797	5	unknown conserved protein
K-236	GK0941	960954	961106	6	unknown
K-237	GK0943	963050	963133	6	unknown
K-238	GK0959	979459	980028	5	unknown conserved protein
K-239	GK0965	988493	988900	5	unknown conserved protein
K-240	GK0967	989708	990223	6	unknown
K-241	GK0971	994803	996413	5	unknown conserved protein
K-242	GK0983	1005264	1005938	6	unknown
K-243	GK0988	1010175	1010303	6	unknown
K-244	GK0992	1014608	1015315	6	unknown
K-245	GK0994	1015826	1015990	6	unknown
K-246	GK0997	1018378	1018929	5	unknown conserved protein
K-247	GK0998	1019010	1019201	6	unknown
K-248	GK1000	1026535	1026978	6	unknown
K-249	GK1001	1026765	1026989	6	unknown
K-250	GK1002	1027256	1028914	4.5	transposase
K-251	GK1003	1029307	1029630	6	unknown
K-252	GK1007	1033818	1034210	6	unknown
K-253	GK1009	1035332	1036444	3.6	tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase
K-254	GK1010	1036679	1037557	4.5	transposase
K-255	GK1011	1037575	1037946	6	unknown
K-256	GK1012	1037949	1039607	4.5	transposase
K-257	GK1013	1039636	1040115	5	unknown conserved protein
K-258	GK1014	1040174	1040620	5	unknown conserved protein
K-259	GK1015	1041475	1041903	6	unknown
K-260	GK1016	1042657	1044021	5	unknown conserved protein
K-261	GK1021	1048449	1048703	6	unknown
K-262	GK1022	1048678	1048929	6	unknown
K-263	GK1025	1053251	1053469	6	unknown
K-264	GK1036	1064132	1064359	6	unknown
K-265	GK1046	1074422	1074655	6	unknown
K-266	GK1055	1080943	1081014	6	unknown
K-267	GK1062	1088262	1088504	5	unknown conserved protein
K-268	GK1088	1112648	1112953	6	unknown
K-269	GK1116	1136763	1137224	6	unknown
K-270	GK1129	1149167	1149385	5	unknown conserved protein
K-271	GK1137	1156615	1156773	6	unknown
K-272	GK1138	1157063	1158931	6	unknown
K-273	GK1139	1158931	1159530	6	unknown
K-274	GK1140	1159668	1160063	6	unknown
K-275	GK1141	1160176	1162194	6	unknown

K-276	GK1142	1162178	1163044	1.2	ABC transporter (ATP-binding protein)
K-277	GK1143	1163037	1163669	6	unknown
K-278	GK1144	1163722	1163862	6	unknown
K-279	GK1156	1176582	1176920	6	unknown
K-280	GK1158	1177755	1178030	6	unknown
K-281	GK1159	1178305	1178547	6	unknown
K-282	GK1160	1178990	1179232	5	unknown conserved protein
K-283	GK1162	1180889	1181452	5	unknown conserved protein
K-284	GK1247	1261549	1261794	6	unknown
K-285	GK1296	1313922	1315403	4.5	group II intron reverse transcriptase/maturase
K-286	GK1309	1332247	1332612	6	unknown
K-287	GK1317	1341462	1342535	2.4	acyl-CoA transferases/carnitine dehydratase (EC 5.1.-.-)
K-288	GK1319	1344173	1345018	2.4	3-hydroxybutyryl-CoA dehydrogenase (EC 1.1.1.157)
K-289	GK1321	1346454	1347023	5	unknown conserved protein
K-290	GK1338	1362470	1362559	6	unknown
K-291	GK1348	1370756	1370893	5	unknown conserved protein
K-292	GK1353	1373753	1373962	6	unknown
K-293	GK1357	1377180	1377446	5	unknown conserved protein
K-294	GK1358	1377575	1377985	1.8	sporulation control protein
K-295	GK1361	1380635	1382089	5	unknown conserved protein
K-296	GK1363	1383547	1384029	5	unknown conserved protein
K-297	GK1365	1384943	1385914	2.2	formiminoglutamase (EC 3.5.3.8)
K-298	GK1366	1385925	1387400	6	unknown
K-299	GK1372	1394029	1394484	6	unknown
K-300	GK1373	1395145	1396050	5	unknown conserved protein
K-301	GK1375	1396592	1397899	6	unknown
K-302	GK1377	1399554	1399985	6	unknown
K-303	GK1383	1410700	1413123	6	unknown
K-304	GK1384	1413503	1415647	6	unknown
K-305	GK1386	1417264	1417851	6	unknown
K-306	GK1387	1417962	1418195	6	unknown
K-307	GK1388	1418291	1419949	6	unknown
K-308	GK1389	1420382	1420900	6	unknown
K-309	GK1391	1422127	1423431	2.2	acetamidase/formamidase
K-310	GK1392	1423826	1425238	3.7.2	glutamyl-tRNA(Gln) amidotransferase subunit A
K-311	GK1393	1425308	1425466	6	unknown
K-312	GK1394	1425665	1426363	6	unknown
K-313	GK1395	1426607	1427098	6	unknown
K-314	GK1397	1429081	1429284	6	unknown
K-315	GK1400	1431186	1431980	2.2	S-adenosylmethionine decarboxylase proenzyme
K-316	GK1402	1433326	1433583	6	unknown
K-317	GK1403	1433814	1435475	5	unknown conserved protein
K-318	GK1404	1435635	1436105	5	unknown conserved protein
K-319	GK1412	1444624	1445205	5	unknown conserved protein
K-320	GK1413	1445186	1445350	6	unknown
K-321	GK1414	1445590	1446318	6	unknown
K-322	GK1415	1446490	1450257	6	unknown
K-323	GK1416	1450524	1451960	3.2	type III restriction-modification system, methyltransferase (EC 2.1.1.-)
K-324	GK1417	1452063	1452374	6	unknown
K-325	GK1418	1452378	1452542	6	unknown
K-326	GK1420	1454494	1455384	4.6	beta-alanine synthase
K-327	GK1421	1455459	1456808	2.2	glutamate synthase small subunit (EC 1.4.1.13)
K-328	GK1422	1456828	1458117	2.3	dihydropyrimidine dehydrogenase (EC 1.3.1.2)
K-329	GK1424	1459631	1459861	6	unknown
K-330	GK1426	1462081	1463547	2.1.1	aldehyde dehydrogenase
K-331	GK1428	1465178	1465747	5	unknown conserved protein
K-332	GK1434	1475448	1476362	6	unknown
K-333	GK1435	1476514	1478607	6	unknown
K-334	GK1436	1478632	1479504	5	unknown conserved protein
K-335	GK1439	1480972	1481187	6	unknown
K-336	GK1440	1481282	1482718	2.1.3	malic enzyme (EC 1.1.1.38)
K-337	GK1449	1491014	1491172	6	unknown
K-338	GK1451	1491613	1492029	6	unknown
K-339	GK1458	1499257	1499436	6	unknown
K-340	GK1464	1505228	1505530	6	unknown
K-341	GK1467	1507176	1507376	6	unknown
K-342	GK1469	1509513	1510229	6	unknown
K-343	GK1471	1511088	1511807	2.4	3-oxoacyl-[acyl-carrier-protein] reductase (EC 1.1.1.100)
K-344	GK1473	1512764	1513789	5	unknown conserved protein
K-345	GK1474	1513847	1514041	2.4	acyl carrier protein (ACP)

K-346	GK1475	1514038	1515525	5	unknown conserved protein
K-347	GK1476	1515546	1517120	6	unknown
K-348	GK1477	1517153	1517470	6	unknown
K-349	GK1479	1520345	1520677	3.5.2	anti-sigmaB factor antagonist
K-350	GK1481	1521482	1521781	6	unknown
K-351	GK1486	1526792	1527220	6	unknown
K-352	GK1488	1528350	1529123	5	unknown conserved protein
K-353	GK1489	1529126	1529914	5	unknown conserved protein
K-354	GK1492	1532224	1533906	5	unknown conserved protein
K-355	GK1496	1536178	1536612	6	unknown
K-356	GK1505	1543706	1545388	2.4	long-chain-fatty-acid--CoA ligase (EC 6.2.1.-)
K-357	GK1513	1553140	1553301	6	unknown
K-358	GK1514	1553302	1553481	5	unknown conserved protein
K-359	GK1520	1557122	1559059	5	unknown conserved protein
K-360	GK1521	1559138	1559296	6	unknown
K-361	GK1522	1559377	1559733	6	unknown
K-362	GK1524	1560849	1561067	6	unknown
K-363	GK1528	1564577	1565374	2.1.1	hydroxypyruvate isomerase (EC 5.3.1.22)
K-364	GK1535	1574349	1575137	2.1.1	2-hydroxyhepta-2,4-diene-1,7-dioate isomerase
K-365	GK1539	1580063	1580197	6	unknown
K-366	GK1540	1580325	1580663	6	unknown
K-367	GK1542	1581647	1581784	6	unknown
K-368	GK1549	1589591	1589977	6	unknown
K-369	GK1557	1598503	1598655	6	unknown
K-370	GK1558	1598768	1599289	5	unknown conserved protein
K-371	GK1559	1599411	1599542	5	unknown conserved protein
K-372	GK1566	1601776	1601922	6	unknown
K-373	GK1576	1610124	1610288	6	unknown
K-374	GK1577	1610324	1610482	6	unknown
K-375	GK1578	1610609	1611016	6	unknown
K-376	GK1579	1611011	1611412	6	unknown
K-377	GK1584	1615141	1616097	5	unknown conserved protein
K-378	GK1586	1617639	1617737	5	unknown conserved protein
K-379	GK1587	1617771	1617911	5	unknown conserved protein
K-380	GK1592	1623878	1624219	6	unknown
K-381	GK1593	1624245	1624424	6	unknown
K-382	GK1595	1625625	1625885	6	unknown
K-383	GK1604	1634987	1635109	6	unknown
K-384	GK1611	1641004	1641183	6	unknown
K-385	GK1616	1645141	1646292	1.9	spore germination protein
K-386	GK1617	1646289	1647824	1.9	spore germination protein
K-387	GK1618	1647828	1648916	1.9	spore germination protein
K-388	GK1622	1650864	1652570	5	unknown conserved protein
K-389	GK1623	1652694	1652882	6	unknown
K-390	GK1628	1658647	1659069	5	unknown conserved protein
K-391	GK1629	1659163	1659588	1.8	stage II sporulation protein AA
K-392	GK1635	1666702	1667286	5	unknown conserved protein
K-393	GK1639	1670684	1670896	6	unknown
K-394	GK1641	1672139	1672438	6	unknown
K-395	GK1645	1675679	1676443	5	unknown conserved protein
K-396	GK1649	1679079	1679315	6	unknown
K-397	GK1650	1679200	1679388	6	unknown
K-398	GK1651	1679500	1680333	1.5	pirin-like protein
K-399	GK1669	1695812	1696756	1.4	cytochrome aa3 controlling protein
K-400	GK1670	1696934	1697473	1.4	b(o/a)3-type cytochrome c oxidase (EC 1.9.3.1) chain II
K-401	GK1671	1697757	1698920	1.4	b(o/a)3-type cytochrome c oxidase (EC 1.9.3.1) chain I
K-402	GK1672	1698913	1699548	5	unknown conserved protein
K-403	GK1673	1699545	1700123	5	unknown conserved protein
K-404	GK1678	1705486	1706736	2.1.1	cytoplasmic trehalase (alpha,alpha-trehalose glucohydrolase) (EC 3.2.1.28)
K-405	GK1679	1706680	1706958	6	unknown
K-406	GK1680	1706891	1707097	6	unknown
K-407	GK1681	1707251	1707517	6	unknown
K-408	GK1682	1707548	1707811	6	unknown
K-409	GK1684	1708941	1709711	2.4	3-oxoacyl-[acyl-carrier protein] reductase (3-ketoacyl-[acyl carrier protein] reductase)
K-410	GK1687	1711510	1711707	6	unknown
K-411	GK1693	1717681	1717893	6	unknown
K-412	GK1695	1719504	1721162	4.5	transposase
K-413	GK1699	1725393	1726028	5	unknown conserved protein
K-414	GK1700	1726131	1726709	5	unknown conserved protein

K-415	GK1701	1726791	1727273	6	unknown
K-416	GK1703	1728528	1729328	5	unknown conserved protein
K-417	GK1704	1729553	1730572	5	unknown conserved protein
K-418	GK1705	1730715	1731278	5	unknown conserved protein
K-419	GK1706	1731548	1731892	6	unknown
K-420	GK1708	1732760	1734196	4.5	transposase
K-421	GK1709	1734439	1734762	6	unknown
K-422	GK1711	1737643	1738086	6	unknown
K-423	GK1713	1739924	1740568	6	unknown
K-424	GK1718	1745182	1745889	5	unknown conserved protein
K-425	GK1719	1746406	1746762	6	unknown
K-426	GK1720	1746833	1748200	5	unknown conserved protein
K-427	GK1721	1748429	1749307	4.5	transposase
K-428	GK1722	1749543	1749845	6	unknown
K-429	GK1723	1750215	1750610	6	unknown
K-430	GK1724	1750697	1750942	6	unknown
K-431	GK1725	1751297	1752484	5	unknown conserved protein
K-432	GK1728	1754872	1755111	6	unknown
K-433	GK1729	1755143	1755316	6	unknown
K-434	GK1730	1756212	1757117	4.4	integrase:recombinase
K-435	GK1731	1757523	1757717	5	unknown conserved protein
K-436	GK1739	1765645	1765863	4.6	sperm protamine P1
K-437	GK1740	1765909	1766784	2.2	spermidine synthase (putrescine aminopropyltransferase) (EC 2.5.1.16)
K-438	GK1742	1768165	1769664	2.2	aminotransferase
K-439	GK1748	1776537	1777268	6	unknown
K-440	GK1749	1777373	1777717	5	unknown conserved protein
K-441	GK1753	1783227	1783820	6	unknown
K-442	GK1757	1789347	1789979	5	unknown conserved protein
K-443	GK1761	1793513	1794730	2.2	threonine synthase (EC 4.2.3.1)
K-444	GK1764	1798731	1798931	6	unknown
K-445	GK1767	1800168	1801532	5	unknown conserved protein
K-446	GK1777	1808586	1809290	5	unknown conserved protein
K-447	GK1783	1814097	1814480	5	unknown conserved protein
K-448	GK1788	1817969	1818067	5	unknown conserved protein
K-449	GK1789	1817977	1818225	6	unknown
K-450	GK1790	1818253	1818402	6	unknown
K-451	GK1791	1818443	1818988	2.5	cobalamin adenosyltransferase (EC 2.5.1.17)
K-452	GK1792	1818969	1819739	2.5	uroporphyrin-III C-methyltransferase (EC 2.1.1.107)
K-453	GK1797	1823975	1825174	2.5	cobalamin biosynthesis protein
K-454	GK1798	1825176	1825949	2.5	precorrin-4 methylase (EC 2.1.1.133)
K-455	GK1799	1825946	1826647	2.5	precorrin-2 methylase (EC 2.1.1.130)
K-456	GK1800	1826644	1827849	2.5	precorrin-6Y C5,15-methyltransferase [decarboxylating] (EC 2.1.1.132) (precorrin-6 methyltransferase)
K-457	GK1801	1827815	1828933	2.5	cobalamin biosynthesis protein
K-458	GK1802	1828940	1829587	2.5	precorrin isomerase (EC 5.4.1.2)
K-459	GK1803	1829702	1830478	2.5	precorrin-6x reductase
K-460	GK1805	1831363	1833153	2.5	precorrin-3B methylase (EC 2.1.1.131)
K-461	GK1806	1833215	1834003	1.2	ABC transporter (ATP-binding protein) cobalt
K-462	GK1807	1834009	1834734	1.2	cobalt transporter system (permease)
K-463	GK1808	1834718	1835011	1.2	cobalt transporter system (permease)
K-464	GK1809	1835016	1835759	2.5	cobalamin biosynthesis protein
K-465	GK1811	1836595	1837128	6	unknown
K-466	GK1812	1837118	1837357	6	unknown
K-467	GK1818	1844109	1845953	2.2	thimet oligopeptidase (EC 3.4.24.15)
K-468	GK1821	1848537	1848701	6	unknown
K-469	GK1822	1848998	1849747	1.8	stage III sporulation protein J
K-470	GK1823	1849792	1850058	6	unknown
K-471	GK1830	1858098	1858346	6	unknown
K-472	GK1842	1872780	1873376	5	unknown conserved protein
K-473	GK1843	1873651	1873896	6	unknown
K-474	GK1844	1873817	1873972	6	unknown
K-475	GK1845	1874028	1874447	6	unknown
K-476	GK1846	1874468	1874890	5	unknown conserved protein
K-477	GK1847	1875399	1875545	5	unknown conserved protein
K-478	GK1850	1877980	1878258	6	unknown
K-479	GK1861	1887935	1888138	5	unknown conserved protein
K-480	GK1870	1896797	1897198	5	unknown conserved protein
K-481	GK1873	1900023	1900325	6	unknown
K-482	GK1876	1903563	1905221	4.5	transposase
K-483	GK1879	1907602	1908801	1.2	ABC transporter (permease) D-xylose

K-484	GK1880	1908780	1910294	1.2	ABC transporter (ATP binding protein) D-xylose
K-485	GK1881	1910407	1911498	1.2	ABC transporter (substrate-binding protein) D-xylose
K-486	GK1886	1916266	1917153	2.1.2	fructose-1,6-bisphosphate aldolase (EC 4.1.2.13)
K-487	GK1895	1927441	1927836	6	unknown
K-488	GK1899	1931279	1932283	2.1.1	oxidoreductase
K-489	GK1903	1938876	1940534	4.5	transposase
K-490	GK1915	1955839	1956390	5	unknown conserved protein
K-491	GK1916	1956544	1957794	4.5	transposase of <i>IS1604</i> -like element
K-492	GK1917	1957787	1958587	5	unknown conserved protein
K-493	GK1925	1967185	1967832	2.2	urease accessory protein
K-494	GK1938	1977922	1979319	1.5	methyl-accepting chemotaxis protein
K-495	GK1939	1979316	1979639	6	unknown
K-496	GK1943	1983917	1984150	6	unknown
K-497	GK1944	1984230	1985687	4.5	transposase
K-498	GK1949	1991666	1992001	5	unknown conserved protein
K-499	GK1950	1992162	1992458	5	unknown conserved protein
K-500	GK1960	2003401	2004357	5	unknown conserved protein
K-501	GK1962	2005336	2005956	2.2	urease accessory protein
K-502	GK1963	2005960	2007195	5	unknown conserved protein
K-503	GK1964	2007192	2008001	5	unknown conserved protein
K-504	GK1965	2007998	2008822	5	unknown conserved protein
K-505	GK1967	2010416	2011315	5	unknown conserved protein
K-506	GK1968	2011386	2012162	3.5.2	transcriptional regulator
K-507	GK1969	2012270	2014471	2.2	dihydroxy-acid dehydratase
K-508	GK1970	2014485	2015819	5	unknown conserved protein
K-509	GK1974	2018867	2019895	1.2	C4-dicarboxylate transport system (C4-dicarboxylate-binding protein)
K-510	GK1985	2029384	2029596	6	unknown
K-511	GK1989	2034585	2036363	2.3	adenine deaminase (EC 3.5.4.2)
K-512	GK1991	2036925	2038502	5	unknown conserved protein
K-513	GK1992	2038625	2039422	2.4	enoyl-CoA hydratase (EC 4.2.1.17)
K-514	GK1993	2039566	2040303	2.1.1	phenylacetic acid catabolism protein
K-515	GK1994	2040443	2040769	5	unknown conserved protein
K-516	GK1995	2040769	2041704	2.1.1	phenylacetic acid catabolism protein
K-517	GK1997	2043061	2043936	2.1.1	repressor in the phenylacetic acid catabolism
K-518	GK1998	2043943	2044107	6	unknown
K-519	GK1999	2044064	2044189	6	unknown
K-520	GK2001	2046602	2046919	6	unknown
K-521	GK2006	2051152	2052348	5	unknown conserved protein
K-522	GK2007	2052078	2052254	6	unknown
K-523	GK2008	2052524	2053318	1.2	ABC transporter (permease) polyamine
K-524	GK2011	2055331	2056437	1.2	ABC transporter (substrate-binding protein)
K-525	GK2012	2056776	2058131	4.5	transposase
K-526	GK2015	2061279	2062007	3.5.2	transcriptional regulator
K-527	GK2019	2066566	2066832	6	unknown
K-528	GK2023	2070039	2070347	6	unknown
K-529	GK2024	2070445	2071209	2.1.2	pyruvate dehydrogenase E1 (lipoamide) (EC 1.2.4.1) beta subunit
K-530	GK2026	2072708	2073028	6	unknown
K-531	GK2028	2074114	2074917	1.2	ABC transporter (ATP-binding protein)
K-532	GK2029	2074883	2075875	1.2	ABC transporter (permease)
K-533	GK2030	2075890	2076903	1.2	ABC transporter (substrate-binding protein)
K-534	GK2033	2079460	2079660	6	unknown
K-535	GK2047	2093060	2093209	6	unknown
K-536	GK2050	2095654	2095887	6	unknown
K-537	GK2055	2101473	2101796	6	unknown
K-538	GK2058	2103418	2103588	6	unknown
K-539	GK2060	2105540	2105959	6	unknown
K-540	GK2063	2107854	2108240	5	unknown conserved protein
K-541	GK2065	2109245	2110381	5	unknown conserved protein
K-542	GK2072	2112810	2113205	6	unknown
K-543	GK2075	2115631	2115876	4.2	glutaredoxin
K-544	GK2076	2115902	2116291	5	unknown conserved protein
K-545	GK2078	2118228	2118596	5	unknown conserved protein
K-546	GK2085	2125511	2126698	5	unknown conserved protein
K-547	GK2086	2127052	2127681	3.5.2	two component response regulator
K-548	GK2087	2127659	2128681	1.3	two-component sensor histidine kinase
K-549	GK2089	2130176	2130715	6	unknown
K-550	GK2092	2134062	2134376	5	unknown conserved protein
K-551	GK2093	2134591	2134869	6	unknown
K-552	GK2094	2135720	2135974	6	unknown
K-553	GK2102	2143645	2144808	2.2	tryptophan synthase beta chain (EC 4.2.1.20)

K-554	GK2106	2149278	2149637	5	unknown conserved protein
K-555	GK2109	2151453	2151803	6	unknown
K-556	GK2110	2151955	2152293	5	unknown conserved protein
K-557	GK2116	2158433	2158789	6	unknown
K-558	GK2119	2160648	2160815	6	unknown
K-559	GK2126	2167059	2167637	5	unknown conserved protein
K-560	GK2127	2167782	2168243	5	unknown conserved protein
K-561	GK2130	2170385	2170522	6	unknown
K-562	GK2135	2173024	2174571	2.4	methylmalonyl-CoA decarboxylase (EC 4.1.1.41)
K-563	GK2136	2174630	2176285	2.4	long-chain-fatty-acid--CoA ligase
K-564	GK2139	2179116	2180552	1.2	sodium:proline symporter (osmoregulation)
K-565	GK2142	2185266	2185550	6	unknown
K-566	GK2143	2186168	2186743	6	unknown
K-567	GK2144	2192353	2192973	6	unknown
K-568	GK2145	2193054	2193344	5	unknown conserved protein
K-569	GK2155	2204374	2204529	6	unknown
K-570	GK2158	2206786	2206908	6	unknown
K-571	GK2160	2207969	2208154	6	unknown
K-572	GK2164	2209421	2209615	6	unknown
K-573	GK2166	2210197	2210424	6	unknown
K-574	GK2175	2219113	2219301	6	unknown
K-575	GK2216	2256030	2256380	6	unknown
K-576	GK2237	2275627	2276241	6	unknown
K-577	GK2249	2285560	2285646	6	unknown
K-578	GK2256	2291482	2291970	5	unknown conserved protein
K-579	GK2267	2301297	2302175	4.5	transposase
K-580	GK2269	2302794	2304158	1.2	amino acid transporter
K-581	GK2271	2305159	2306448	6	unknown
K-582	GK2273	2307153	2307905	5	unknown conserved protein
K-583	GK2274	2308498	2308827	6	unknown
K-584	GK2287	2320916	2321167	6	unknown
K-585	GK2303	2335367	2335717	1.8	sporulation protein
K-586	GK2305	2336804	2337232	1.8	stage V sporulation AC
K-587	GK2323	2352022	2352264	5	unknown conserved protein
K-588	GK2324	2352345	2352464	6	unknown
K-589	GK2328	2353447	2353644	5	unknown conserved protein
K-590	GK2336	2361651	2361920	5	unknown conserved protein
K-591	GK2339	2365024	2366835	6	unknown
K-592	GK2345	2373362	2373556	6	unknown
K-593	GK2346	2373638	2374132	1.5	chemotaxis protein
K-594	GK2348	2375590	2375841	6	unknown
K-595	GK2351	2377943	2378155	6	unknown
K-596	GK2354	2379882	2380145	5	unknown conserved protein
K-597	GK2355	2380207	2380575	5	unknown conserved protein
K-598	GK2356	2381774	2383135	6	unknown
K-599	GK2357	2383247	2385115	6	unknown
K-600	GK2358	2385115	2385501	6	unknown
K-601	GK2360	2387093	2389144	6	unknown
K-602	GK2361	2389141	2390010	1.2	ABC transporter (ATP-binding protein)
K-603	GK2362	2390007	2390666	5	unknown conserved protein
K-604	GK2363	2391020	2393041	6	unknown
K-605	GK2364	2393025	2393891	1.2	ABC transporter (ATP-binding protein)
K-606	GK2365	2393884	2394516	6	unknown
K-607	GK2366	2394811	2394933	6	unknown
K-608	GK2367	2395038	2395784	5	unknown conserved protein
K-609	GK2372	2402285	2402869	5	unknown conserved protein
K-610	GK2417	2444344	2444742	6	unknown
K-611	GK2418	2444782	2446194	1.8	spore peptidoglycan hydrolase (N-acetylglucosaminidase) (EC 3.2.1.-)
K-612	GK2429	2459337	2459726	6	unknown
K-613	GK2431	2460226	2460552	5	unknown conserved protein
K-614	GK2447	2473856	2474035	6	unknown
K-615	GK2451	2475899	2477263	5	unknown conserved protein
K-616	GK2458	2484045	2484554	6	unknown
K-617	GK2459	2484518	2484895	6	unknown
K-618	GK2464	2488656	2488883	6	unknown
K-619	GK2481	2501652	2501960	6	unknown
K-620	GK2536	2552246	2552332	6	unknown
K-621	GK2537	2552366	2552602	6	unknown
K-622	GK2538	2552565	2552708	6	unknown
K-623	GK2539	2553084	2553332	5	unknown conserved protein

K-624	GK2558	2571218	2571373	6	unknown
K-625	GK2589	2606225	2606563	6	unknown
K-626	GK2597	2611745	2612689	6	unknown
K-627	GK2621	2633784	2634245	6	unknown
K-628	GK2622	2634267	2634974	6	unknown
K-629	GK2623	2634971	2635546	6	unknown
K-630	GK2626	2637263	2637724	5	unknown conserved protein
K-631	GK2627	2637820	2639031	5	unknown conserved protein
K-632	GK2628	2639018	2640073	1.5	switching motility protein
K-633	GK2629	2640086	2641750	1.5	ATPases involved in pili biogenesis
K-634	GK2630	2641747	2643087	6	unknown
K-635	GK2631	2643105	2643875	5	unknown conserved protein
K-636	GK2632	2643886	2645337	6	unknown
K-637	GK2633	2645453	2646085	6	unknown
K-638	GK2634	2646069	2646638	6	unknown
K-639	GK2635	2646678	2648372	6	unknown
K-640	GK2636	2648439	2651321	6	unknown
K-641	GK2648	2664828	2665313	5	unknown conserved protein
K-642	GK2663	2684155	2685603	4.5	transposase
K-643	GK2676	2696967	2698412	6	unknown
K-644	GK2678	2699412	2700173	6	unknown
K-645	GK2681	2702731	2703729	6	unknown
K-646	GK2683	2704638	2704781	6	unknown
K-647	GK2684	2704905	2706083	6	unknown
K-648	GK2691	2711902	2712066	6	unknown
K-649	GK2711	2734291	2735034	5	unknown conserved protein
K-650	GK2729	2749311	2749433	6	unknown
K-651	GK2754	2777991	2778131	6	unknown
K-652	GK2759	2782274	2783932	2.1.1	acetyl-CoA synthetase (acetate-CoA ligase) (EC 6.2.1.1)
K-653	GK2760	2783976	2785082	6	unknown
K-654	GK2765	2790094	2790261	6	unknown
K-655	GK2767	2791236	2792738	6	unknown
K-656	GK2768	2792943	2794091	6	unknown
K-657	GK2769	2794214	2795323	5	unknown conserved protein
K-658	GK2770	2795463	2796068	5	unknown conserved protein
K-659	GK2771	2796294	2797202	2.3	ribonucleotide reductase small subunit (EC 1.17.4.1)
K-660	GK2773	2798863	2799414	6	unknown
K-661	GK2775	2800598	2800924	6	unknown
K-662	GK2776	2800941	2802686	1.2	ABC1 family protein kinase
K-663	GK2777	2802707	2803849	2.4	acetyl-CoA acetyltransferases
K-664	GK2778	2803964	2804806	2.4	3-ketoacyl-[acyl carrier protein] reductase
K-665	GK2779	2804822	2805613	2.4	enoyl-CoA hydratase/carnithine racemase
K-666	GK2780	2805711	2806925	2.4	acyl-CoA dehydrogenase
K-667	GK2781	2806922	2808064	2.4	acyl-CoA dehydrogenase
K-668	GK2782	2808085	2809620	2.4	long-chain-fatty-acid--CoA ligase (fadD-9) (EC 6.2.1.-)
K-669	GK2784	2810243	2810755	6	unknown
K-670	GK2797	2822666	2822848	6	unknown
K-671	GK2804	2830318	2830578	5	unknown conserved protein
K-672	GK2813	2841252	2841647	5	unknown conserved protein
K-673	GK2826	2852951	2853106	6	unknown
K-674	GK2834	2861125	2861337	6	unknown
K-675	GK2840	2866767	2866913	6	unknown
K-676	GK2852	2880543	2881445	5	unknown conserved protein
K-677	GK2862	2888231	2888491	5	unknown conserved protein
K-678	GK2867	2892811	2894889	6	unknown
K-679	GK2868	2895038	2895523	6	unknown
K-680	GK2871	2896391	2896588	6	unknown
K-681	GK2881	2907833	2908783	1.2	cation efflux transporter
K-682	GK2883	2909744	2909935	6	unknown
K-683	GK2887	2912427	2912777	6	unknown
K-684	GK2888	2912937	2913230	6	unknown
K-685	GK2890	2914877	2915215	6	unknown
K-686	GK2891	2915273	2915428	6	unknown
K-687	GK2892	2915497	2915832	5	unknown conserved protein
K-688	GK2893	2915852	2917588	2.2	N-methylhydantoinase B (ATP-hydrolyzing) (EC 3.5.2.14)
K-689	GK2897	2921800	2922549	2.2	hydantoin racemase (EC 5.1.99.-)
K-690	GK2900	2925453	2926451	1.2	ABC transporter (permease) ferrichrome
K-691	GK2901	2926482	2927423	1.2	ABC transporter (substrate-binding protein) ferrichrome
K-692	GK2905	2931510	2932826	3.2	type I restriction-modification system specificity determinant
K-693	GK2906	2932826	2933944	6	unknown

K-694	GK2907	2934024	2934902	4.5	transposase
K-695	GK2908	2935016	2935360	6	unknown
K-696	GK2909	2935710	2936687	6	unknown
K-697	GK2910	2936764	2936961	6	unknown
K-698	GK2911	2936987	2938150	4.5	transposase of <i>IS1604</i> -like element
K-699	GK2912	2938293	2938856	5	unknown conserved protein
K-700	GK2913	2939310	2940323	4.4	integrase-recombinase
K-701	GK2919	2953901	2954152	6	unknown
K-702	GK2921	2955030	2955383	6	unknown
K-703	GK2935	2967188	2967625	6	unknown
K-704	GK2938	2969550	2969726	6	unknown
K-705	GK2939	2970340	2970522	6	unknown
K-706	GK2940	2970668	2971198	6	unknown
K-707	GK2941	2971284	2971583	6	unknown
K-708	GK2942	2971646	2972833	5	unknown conserved protein
K-709	GK2943	2973664	2973822	6	unknown
K-710	GK2955	2983989	2984291	5	unknown conserved protein
K-711	GK2987	3011031	3011984	6	unknown
K-712	GK2988	3011991	3012386	6	unknown
K-713	GK2989	3012735	3014396	4.5	transposase
K-714	GK2990	3015127	3015558	6	unknown
K-715	GK3013	3036056	3036190	5	unknown conserved protein
K-716	GK3014	3036289	3036483	5	unknown conserved protein
K-717	GK3015	3036458	3036610	6	unknown
K-718	GK3018	3038803	3039366	2.5	protein involved in biotin synthesis
K-719	GK3019	3039544	3041526	5	unknown conserved protein
K-720	GK3020	3041785	3042348	5	unknown conserved protein
K-721	GK3039	3059991	3061166	6	unknown
K-722	GK3040	3061394	3061984	5	unknown conserved protein
K-723	GK3041	3062006	3062431	5	unknown conserved protein
K-724	GK3042	3062558	3062707	6	unknown
K-725	GK3047	3068246	3068437	6	unknown
K-726	GK3048	3068594	3068809	6	unknown
K-727	GK3050	3070470	3070646	6	unknown
K-728	GK3051	3070715	3071782	6	unknown
K-729	GK3052	3071822	3071992	6	unknown
K-730	GK3093	3116266	3116520	6	unknown
K-731	GK3096	3118950	3120590	4.2	mercuric reductase (EC 1.16.1.1)
K-732	GK3097	3120648	3120941	1.2	transporter
K-733	GK3104	3126893	3127153	5	unknown conserved protein in <i>Tn5401</i>
K-734	GK3105	3127122	3127382	5	unknown conserved protein in <i>Tn5401</i>
K-735	GK3108	3131311	3131931	6	unknown
K-736	GK3111	3133965	3134351	6	unknown
K-737	GK3116	3137605	3139227	4.5	transposase
K-738	GK3118	3140643	3141494	6	unknown
K-739	GK3119	3141775	3142302	6	unknown
K-740	GK3120	3142574	3143275	2.1.1	acylneuramate cytidyltransferase (EC 2.7.7.43)
K-741	GK3121	3143272	3144321	2.1.1	nucleoside-diphosphate-sugar pyrophosphorylases
K-742	GK3124	3146023	3146682	5	unknown conserved protein
K-743	GK3125	3146679	3147578	3.7.3	methionyl-tRNA formyltransferase (EC 2.1.2.9)
K-744	GK3126	3147575	3148747	2.1.1	UDP-N-acetylglucosamine-2-epimerase (5.1.3.-)
K-745	GK3129	3151046	3152944	5	unknown conserved protein
K-746	GK3130	3152934	3153542	6	unknown
K-747	GK3132	3154700	3154885	6	unknown
K-748	GK3145	3163193	3166240	6	unknown
K-749	GK3148	3168741	3168956	6	unknown
K-750	GK3158	3180425	3180691	6	unknown
K-751	GK3160	3181767	3182879	6	unknown
K-752	GK3161	3182883	3184271	6	unknown
K-753	GK3163	3185375	3186823	1.1	protein involved in polysaccharide biosynthesis
K-754	GK3164	3186825	3187556	2.1.1	acetyltransferases
K-755	GK3166	3188903	3189916	5	unknown conserved protein
K-756	GK3167	3189913	3190650	6	unknown
K-757	GK3172	3196971	3198377	2.2	carboxyl-terminal processing protease
K-758	GK3173	3198409	3199149	6	unknown
K-759	GK3174	3199313	3199714	6	unknown
K-760	GK3178	3204484	3205395	5	unknown conserved protein
K-761	GK3179	3205395	3206003	5	unknown conserved protein
K-762	GK3183	3216317	3217213	6	unknown
K-763	GK3184	3217210	3218004	5	unknown conserved protein

K-764	GK3185	3218009	3218401	6	unknown
K-765	GK3186	3219062	3221971	1.1	surface layer (S-layer) glycoprotein
K-766	GK3189	3224707	3225216	6	unknown
K-767	GK3194	3227715	3228614	5	unknown conserved protein
K-768	GK3196	3230640	3231074	1.4	iron-sulfur binding protein
K-769	GK3197	3231471	3232055	6	unknown
K-770	GK3200	3234394	3234579	6	unknown
K-771	GK3203	3237101	3237241	6	unknown
K-772	GK3211	3246337	3247215	5	unknown conserved protein
K-773	GK3216	3252945	3253922	2.1.2	pyruvate dehydrogenase E1 (lipoamide) beta subunit (EC 1.2.4.1)
K-774	GK3217	3253923	3255002	2.1.2	pyruvate dehydrogenase E1 (lipoamide) alpha subunit (EC 1.2.4.1)
K-775	GK3223	3259583	3260647	1.2	arsenic oxyanion-translocation pump
K-776	GK3232	3268055	3268171	6	unknown
K-777	GK3234	3269050	3269220	6	unknown
K-778	GK3235	3269227	3269949	6	unknown
K-779	GK3236	3270832	3272160	4.5	transposase
K-780	GK3237	3272717	3273199	6	unknown
K-781	GK3239	3275419	3277077	4.5	transposase
K-782	GK3243	3279169	3279486	6	unknown
K-783	GK3244	3279689	3279904	6	unknown
K-784	GK3249	3285674	3285778	5	unknown conserved protein
K-785	GK3250	3286456	3286704	6	unknown
K-786	GK3257	3295134	3295844	5	unknown conserved protein
K-787	GK3263	3306183	3306299	6	unknown
K-788	GK3264	3306868	3307839	5	unknown conserved protein
K-789	GK3266	3308609	3308986	5	unknown conserved protein
K-790	GK3267	3309008	3309439	6	unknown
K-791	GK3268	3309442	3310755	6	unknown
K-792	GK3271	3313028	3313975	5	unknown conserved protein
K-793	GK3272	3314017	3314847	1.2	ABC transporter (permease) sugar
K-794	GK3273	3314834	3315712	1.2	ABC transporter (permease) sugar
K-795	GK3275	3317534	3318547	3.5.2	transcriptional regulator (lacI family)
K-796	GK3276	3318587	3319480	5	unknown conserved protein
K-797	GK3278	3320909	3321382	6	unknown
K-798	GK3279	3321426	3321626	6	unknown
K-799	GK3281	3322528	3323598	5	unknown conserved protein
K-800	GK3282	3323742	3324341	6	unknown
K-801	GK3285	3327240	3327497	5	unknown conserved protein
K-802	GK3286	3327466	3327861	6	unknown
K-803	GK3287	3328422	3328898	5	unknown conserved protein
K-804	GK3288	3328904	3330430	5	unknown conserved protein
K-805	GK3290	3331065	3331220	6	unknown
K-806	GK3291	3331374	3332120	5	unknown conserved protein
K-807	GK3292	3332122	3332721	5	unknown conserved protein
K-808	GK3293	3333143	3334576	6	unknown
K-809	GK3294	3334788	3336410	5	unknown conserved protein
K-810	GK3295	3336639	3336998	6	unknown
K-811	GK3296	3337239	3338210	2.1.1	UDP-glucose 4-epimerase (EC 5.1.3.2)
K-812	GK3302	3345899	3347557	4.5	transposase
K-813	GK3303	3347712	3349331	4.5	transposase
K-814	GK3305	3351040	3351216	6	unknown
K-815	GK3308	3352575	3353708	2.1.1	mannosyl transferase
K-816	GK3309	3353705	3354211	2.2	serine acetyltransferase (EC 2.3.1.30)
K-817	GK3310	3354622	3355500	4.5	transposase
K-818	GK3312	3357579	3359024	4.5	transposase of <i>ISBstI2</i>
K-819	GK3315	3361487	3362377	2.1.1	glycosyltransferase
K-820	GK3316	3362398	3363546	1.1	UDP-galactopyranose mutase (EC 5.4.99.9)
K-821	GK3318	3364877	3365062	6	unknown
K-822	GK3321	3367245	3367925	5	unknown conserved protein
K-823	GK3322	3367930	3368526	6	unknown
K-824	GK3328	3373378	3373746	6	unknown
K-825	GK3344	3387653	3387898	6	unknown
K-826	GK3351	3394175	3394273	6	unknown
K-827	GK3367	3406576	3406773	5	unknown conserved protein
K-828	GK3379	3417996	3418436	6	unknown
K-829	GK3396	3437695	3437886	6	unknown
K-830	GK3403	3445697	3446074	5	unknown conserved protein
K-831	GK3426	3466115	3466633	5	unknown conserved protein
K-832	GK3427	3467068	3467301	6	unknown
K-833	GK3429	3468284	3468433	6	unknown

K-834	GK3431	3470444	3471808	5	unknown conserved protein
K-835	GK3434	3474215	3474532	6	unknown
K-836	GK3435	3474927	3476684	6	unknown
K-837	GK3449	3491982	3492548	5	unknown conserved protein
K-838	GK3460	3503101	3503844	3.6	rRNA methylase
K-839	GK3462	3505613	3506992	6	unknown

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