

Supplementary Table S1. An update of the original 1998 listing of 105 EC nodes with predicted analogous enzymes (online)

Supplementary Table S2. New listing of confirmed and predicted analogous enzymes (online)

Supplementary Table S3. Statistics of analogous enzyme searches in the ENZYME and KEGG databases

	ENZYME database	KEGG database	ENZYME & KEGG combined set
Four-digit EC nodes	4890	–	–
EC nodes with at least one assigned sequence	2487	2256	–
Without proteases sequences	2187	2041	2637
Without remaining single sequences	1893	1934	2181
Multisubunit enzyme EC nodes to be excluded	4	4	4
EC nodes selected for clustering	1889	1930	2177

Supplementary Table S4. Combined results of clustering sequences from the ENZYME and KEGG databases

		ENZYME	ENZYME	ENZYME	ENZYME	ENZYME	ENZYME	ENZYME	
	Number of clusters per EC node	0	1	2	3	4	5	>5	Total
KEGG	0	-	223	20	3	-	1	-	247
KEGG	1	230	944	59	10	1	-	1	1245
KEGG	2	31	246	103	20	5	1	1	407
KEGG	3	16	73	37	20	8	2	-	156
KEGG	4	9	19	15	12	4	2	-	61
KEGG	5	1	9	3	6	2	5	2	28
KEGG	>5	1	5	7	1	5	1	13	33
Total		288	1519	244	72	25	12	17	2177

Each cell shows the number of EC nodes whose sequences clustered into the specified number of clusters (1 – 5 or more than 5) in KEGG and ENZYME databases. Only about half of EC nodes (yellow highlighting) had the same numbers of clusters in the two databases.

Supplementary Table S5. Distribution of analogous enzymes among enzyme classes

	Enzyme class	Analogs (EC)	Analyzed set (EC)	Expect	Chi2	P(Chi2)
1	Oxidoreductase	36	616	52.5	4.9	0.16
2	Transferase	27	676	57.7	15.8	4.30×10^{-4}
3	Hydrolase	87	450	38.4	60.3	4.78×10^{-14}
4	Lyase	18	224	19.1	0.0	5.34
5	Isomerase	17	106	9.0	6.2	0.08
6	Ligase	1	109	9.3	6.5	0.06
	Total	186	2181			

Supplementary Table S6. Distribution of analogous enzymes by COG category

COG category	Analogs	All EC analyzed	Expect	Chi2	P(Chi2)
B	1	6	0.51	0.00	21.00
N	1	3	0.26	0.23	13.22
V	2	14	1.19	0.08	16.37
K	3	23	1.96	0.15	14.71
J	5	71	6.06	0.05	17.25
O	5	50	4.26	0.01	19.09
ox stress	6	18	1.54	10.24	0.03
H	7	159	13.56	2.71	2.10
T	7	59	5.03	0.43	10.77
L	8	29	2.47	10.22	0.03
M	8	173	14.75	2.65	2.17
P	9	67	5.71	1.36	5.12
Q	9	207	17.65	3.77	1.10
F	13	110	9.38	1.04	6.48
R	13	192	16.37	0.50	10.03
C	16	215	18.34	0.18	14.03
E	17	312	26.61	3.12	1.63
I	21	193	16.46	0.99	6.70
G	35	270	23.03	5.72	0.35

Supplementary Table S7. Distribution of analogous enzymes among most common folds

	Fold	Analogs	All	Expect	Chi2	P(Chi2)
1	TIM beta/alpha-barrel	51	250	21.32	39.94	2.62 x10 ⁻⁹
2	Rossmann-fold	28	212	18.08	4.91	0.27
3	Alpha/beta hydrolase	12	40	3.41	19.18	1.19 x10 ⁻⁴
4	Metallo-dependent phosphatases	11	16	1.36	61.16	5.25 x 10 ⁻¹⁴
5	Ribonuclease H-like motif	12	32	2.73	28.19	1.10 x10 ⁻⁶
6	Alpha/alpha toroid	10	33	2.81	15.88	6.74 x 10 ⁻⁴
7	Flavodoxin-like	10	63	5.37	3.17	0.75
8	P-loop containing NTPase	9	94	8.02	0.03	8.64
9	Ferredoxin-like	8	77	6.57	0.13	7.16
10	HAD-like	8	37	3.16	5.98	0.14
	Total EC nodes	186	2181			

Supplementary Table S8. Phylogenetic patterns of analogous enzymes involved in defense against reactive oxygen species

Enzyme (EC)	Examples	Instances in bacteria (out of 607)	Instances in archaea (out of 48)	Instances in eukaryotes (out of 63)
Superoxide dismutase (EC 1.15.1.1)	SODF_ECOLI SODC_ECOLI SODN_STRSO NEC1_NICLS	526 249 32 6	23 3 0 0	62 47 1 3
Catalase (EC 1.11.1.6)	CATA_HUMAN CATG_ECOLI MCAT_LACPL	323 217 122	6 6 6	49 21 0
Peroxidase (EC 1.11.1.7)	PRDX6_MOUSE PERM_HUMAN YCDB_ECOLI	551 31 247	45 0 0	55 25 7
Chloride peroxidase (EC 1.11.1.10)	PRXC_PSEPY PRXC_CURIN PRXC_CALFU	31 221 0	0 9 0	4 9 9
Peroxiredoxin (EC 1.11.1.15)	TDXH_AERPE AHPD_MYCTU OSMC_ECOLI	564 426 437	45 30 21	61 24 7

Supplementary Table S9. Complete genomes used in the analysis of phylogenetic distribution of analogous enzymes

No.	KEGG organism name	KEGG symbol	NCBI Taxonomy name	TaxID	Proteins	Domain
1	Homo sapiens (human)	hsa	Homo sapiens	9606	24329	Eukaryotes
2	Pan troglodytes (chimpanzee)	ptr	Pan troglodytes	9598	25189	Eukaryotes
3	Macaca mulatta (rhesus monkey)	mcc	Macaca mulatta	9544	23980	Eukaryotes
4	Mus musculus (mouse)	mmu	Mus musculus	10090	29561	Eukaryotes
5	Rattus norvegicus (rat)	rno	Rattus norvegicus	10116	26231	Eukaryotes
6	Canis familiaris (dog)	cfa	Canis lupus familiaris	9615	19823	Eukaryotes
7	Bos taurus (cow)	bta	Bos taurus	9913	24151	Eukaryotes
8	Sus scrofa (pig)	ssc	Sus scrofa	9823	1752	Eukaryotes
9	Monodelphis domestica (opossum)	mdo	Monodelphis domestica	13616	19136	Eukaryotes
10	Ornithorhynchus anatinus (platypus)	oaa	Ornithorhynchus anatinus	9258	16405	Eukaryotes
11	Gallus gallus (chicken)	gga	Gallus gallus	9031	18131	Eukaryotes
12	Xenopus laevis (African clawed frog)	xla	Xenopus laevis	8355	10379	Eukaryotes
13	Xenopus tropicalis (western clawed frog)	xtr	Xenopus (Silurana) tropicalis	8364	7115	Eukaryotes
14	Danio rerio (zebrafish)	dre	Danio rerio	7955	35046	Eukaryotes
15	Strongylocentrotus purpuratus (purple sea urchin)	spu	Strongylocentrotus purpuratus	7668	28905	Eukaryotes
16	Nematostella vectensis (sea anemone)	nve	Nematostella vectensis	45351	24773	Eukaryotes
17	Drosophila melanogaster (fruit fly)	dme	Drosophila melanogaster	7227	14168	Eukaryotes
18	Drosophila pseudoobscura	dpo	Drosophila pseudoobscura pseudoobscura	46245	9869	Eukaryotes
19	Anopheles gambiae (mosquito)	aga	Anopheles gambiae str. PEST	180454	13011	Eukaryotes
20	Tribolium castaneum (red flour beetle)	tca	Tribolium castaneum	7070	9476	Eukaryotes
21	Caenorhabditis elegans (nematode)	cel	Caenorhabditis elegans	6239	20101	Eukaryotes
22	Ostreococcus lucimarinus	olu	Ostreococcus lucimarinus CCE9901	436017	7603	Eukaryotes
23	Chlamydomonas reinhardtii	cre	Chlamydomonas reinhardtii	3055	14473	Eukaryotes
24	Oryza sativa japonica (Japanese rice)	osa	Oryza sativa Japonica Group	39947	28662	Eukaryotes
25	Physcomitrella patens subsp. patens	ppp	Physcomitrella patens subsp. patens	145481	36127	Eukaryotes
26	Arabidopsis thaliana (thale cress)	ath	Arabidopsis thaliana	3702	27079	Eukaryotes
27	Saccharomyces cerevisiae	sce	Saccharomyces cerevisiae	4932	6298	Eukaryotes
28	Ashbya gossypii (Eremothecium gossypii)	ago	Ashbya gossypii ATCC 10895	284811	4750	Eukaryotes
29	Kluyveromyces lactis	kla	Kluyveromyces lactis NRRL Y-1140	284590	5360	Eukaryotes
30	Debaryomyces hansenii	dha	Debaryomyces hansenii CBS767	284592	6351	Eukaryotes
31	Pichia stipitis	pic	Pichia stipitis CBS 6054	322104	5816	Eukaryotes
32	Vanderwaltozyma polyspora	vpo	Vanderwaltozyma polyspora DSM 70294	436907	5359	Eukaryotes
33	Candida glabrata	cgr	Candida glabrata CBS 138	284593	5217	Eukaryotes
34	Yarrowia lipolytica	yli	Yarrowia lipolytica CLIB122	284591	6572	Eukaryotes
35	Schizosaccharomyces pombe	spo	Schizosaccharomyces pombe 972h-	284812	5031	Eukaryotes
36	Neurospora crassa	ncr	Neurospora crassa OR74A	367110	9824	Eukaryotes
37	Podospira anserina	pan	Podospira anserina DSM 980	515849	10200	Eukaryotes
38	Magnaporthe grisea	mgr	Magnaporthe grisea 70-15	242507	14010	Eukaryotes
39	Fusarium graminearum	fgr	Gibberella zeae PH-1	229533	11686	Eukaryotes
40	Aspergillus nidulans	ani	Aspergillus nidulans FGSC A4	227321	9541	Eukaryotes
41	Aspergillus fumigatus	afm	Aspergillus fumigatus Af293	330879	9630	Eukaryotes
42	Aspergillus oryzae	aor	Aspergillus oryzae RIB40	510516	12099	Eukaryotes
43	Aspergillus niger	ang	Aspergillus niger CBS 513.88	425011	14129	Eukaryotes
44	Cryptococcus neoformans JEC21	cne	Cryptococcus neoformans var. neoformans JEC21	214684	6273	Eukaryotes
45	Cryptococcus neoformans B-3501A	cnb	Cryptococcus neoformans var. neoformans B-3501A	283643	6500	Eukaryotes
46	Laccaria bicolor	lbc	Laccaria bicolor S238N-H82	486041	18215	Eukaryotes
47	Ustilago maydis	uma	Ustilago maydis 521	237631	6562	Eukaryotes
48	Malassezia globosa	mgl	Malassezia globosa CBS 7966	425265	4286	Eukaryotes
49	Encephalitozoon cuniculi	ecu	Encephalitozoon cuniculi GB-M1	284813	1996	Eukaryotes
50	Monosiga brevicollis	mbr	Monosiga brevicollis MX1	431895	9230	Eukaryotes
51	Giardia lamblia	gla	Giardia lamblia ATCC 50803	184922	6500	Eukaryotes
52	Dictyostelium discoideum	ddi	Dictyostelium discoideum AX4	352472	13458	Eukaryotes
53	Plasmodium falciparum	pfa	Plasmodium falciparum 3D7	36329	5261	Eukaryotes
54	Plasmodium yoelii	pyo	Plasmodium yoelii yoelii str. 17XNL	352914	7353	Eukaryotes
55	Cryptosporidium parvum	cpv	Cryptosporidium parvum Iowa II	353152	3805	Eukaryotes
56	Cryptosporidium hominis	cho	Cryptosporidium hominis TU502	353151	3885	Eukaryotes
57	Theileria annulata	tan	Theileria annulata strain Ankara	353154	3795	Eukaryotes
58	Theileria parva	tpv	Theileria parva strain Muguga	333668	4087	Eukaryotes

59	<i>Tetrahymena thermophila</i>	tet	<i>Tetrahymena thermophila</i>	5911	26066	Eukaryotes
60	<i>Trypanosoma brucei</i>	tbr	<i>Trypanosoma brucei</i> TREU927	185431	8712	Eukaryotes
61	<i>Trypanosoma cruzi</i>	tcu	<i>Trypanosoma cruzi</i> strain CL Brener	353153	19607	Eukaryotes
62	<i>Leishmania major</i>	lma	<i>Leishmania major</i> strain Friedlin	347515	8264	Eukaryotes
63	<i>Entamoeba histolytica</i>	ehi	<i>Entamoeba histolytica</i> HM-1:IMSS	294381	11065	Eukaryotes
64	<i>Escherichia coli</i> K-12 MG1655	eco	<i>Escherichia coli</i> str. K-12 substr. MG1655	511145	4467	Bacteria
65	<i>Escherichia coli</i> K-12 W3110	ecj	<i>Escherichia coli</i> str. K-12 substr. W3110	316407	4494	Bacteria
66	<i>Escherichia coli</i> K-12 DH10B	ecd	<i>Escherichia coli</i> str. K-12 substr. DH10B	316385	4357	Bacteria
67	<i>Escherichia coli</i> O157 EDL933 (EHEC)	ece	<i>Escherichia coli</i> O157:H7 EDL933	155864	5554	Bacteria
68	<i>Escherichia coli</i> O157 Sakai (EHEC)	ecs	<i>Escherichia coli</i> O157:H7 str. Sakai	386585	5483	Bacteria
69	<i>Escherichia coli</i> CFT073 (UPEC)	ecc	<i>Escherichia coli</i> CFT073	199310	5589	Bacteria
70	<i>Escherichia coli</i> UTI89 (UPEC)	eci	<i>Escherichia coli</i> UTI89	364106	5299	Bacteria
71	<i>Escherichia coli</i> 536 (UPEC)	ecp	<i>Escherichia coli</i> 536	362663	4789	Bacteria
72	<i>Escherichia coli</i> APEC O1	ecv	<i>Escherichia coli</i> APEC O1	405955	4996	Bacteria
73	<i>Escherichia coli</i> E24377A	ecw	<i>Escherichia coli</i> E24377A	331111	5264	Bacteria
74	<i>Escherichia coli</i> HS	ecx	<i>Escherichia coli</i> HS	331112	4636	Bacteria
75	<i>Escherichia coli</i> SECEC	ecm	<i>Escherichia coli</i> SMS-3-5	439855	5128	Bacteria
76	<i>Escherichia coli</i> ATCC 8739	ecl	<i>Escherichia coli</i> ATCC 8739	481805	4409	Bacteria
77	<i>Salmonella enterica</i> serovar Typhi CT18	sty	<i>Salmonella enterica</i> subsp. enterica serovar Typhi str. CT18	220341	5086	Bacteria
78	<i>Salmonella enterica</i> serovar Typhi Ty2	stt	<i>Salmonella enterica</i> subsp. enterica serovar Typhi str. Ty2	209261	4645	Bacteria
79	<i>Salmonella enterica</i> serovar Paratyphi A	spt	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi A str. ATCC 9150	295319	4403	Bacteria
80	<i>Salmonella enterica</i> serovar Paratyphi B	spq	<i>Salmonella enterica</i> subsp. enterica serovar Paratyphi B str. SPB7	272994	5779	Bacteria
81	<i>Salmonella typhimurium</i> LT2	stm	<i>Salmonella enterica</i> subsp. enterica serovar Typhimurium str. LT2	99287	4734	Bacteria
82	<i>Salmonella enterica</i> subsp. arizonae	ses	<i>Salmonella enterica</i> subsp. arizonae serovar 62:z4,z23:--	41514	4699	Bacteria
83	<i>Yersinia pestis</i> CO92	ype	<i>Yersinia pestis</i> CO92	214092	4331	Bacteria
84	<i>Yersinia pestis</i> KIM	ypk	<i>Yersinia pestis</i> KIM 10	187410	4359	Bacteria
85	<i>Yersinia pestis</i> Mediaevails	ypm	<i>Yersinia pestis</i> biovar Microtus str. 91001	229193	4405	Bacteria
86	<i>Yersinia pestis</i> Antiqua	ypa	<i>Yersinia pestis</i> Antiqua	360102	4471	Bacteria
87	<i>Yersinia pestis</i> Nepal516	ypn	<i>Yersinia pestis</i> Nepal516	377628	4204	Bacteria
88	<i>Yersinia pestis</i> Pestoides	ypp	<i>Yersinia pestis</i> Pestoides F	386656	4263	Bacteria
89	<i>Yersinia pestis</i> Angola	ypg	<i>Yersinia pestis</i> Angola	349746	4469	Bacteria
90	<i>Yersinia pseudotuberculosis</i> IP32953	yps	<i>Yersinia pseudotuberculosis</i> IP 32953	273123	4238	Bacteria
91	<i>Yersinia pseudotuberculosis</i> IP31758	ypi	<i>Yersinia pseudotuberculosis</i> IP 31758	349747	4494	Bacteria
92	<i>Yersinia pseudotuberculosis</i> YPIII	ypy	<i>Yersinia pseudotuberculosis</i> YPIII	502800	4305	Bacteria
93	<i>Yersinia enterocolitica</i>	yen	<i>Yersinia enterocolitica</i> subsp. enterocolitica 8081	393305	4281	Bacteria
94	<i>Shigella flexneri</i> 301 (serotype 2a)	sfl	<i>Shigella flexneri</i> 2a str. 301	198214	4835	Bacteria
95	<i>Shigella flexneri</i> 2457T (serotype 2a)	sfx	<i>Shigella flexneri</i> 2a str. 2457T	198215	4577	Bacteria
96	<i>Shigella flexneri</i> 8401 (serotype 5b)	sfv	<i>Shigella flexneri</i> 5 str. 8401	373384	4434	Bacteria
97	<i>Shigella sonnei</i>	ssn	<i>Shigella sonnei</i> Ss046	300269	4809	Bacteria
98	<i>Shigella boydii</i>	sbo	<i>Shigella boydii</i> Sb227	300268	4617	Bacteria
99	<i>Shigella boydii</i> CDC 3083-94	sbc	<i>Shigella boydii</i> CDC 3083-94	344609	5336	Bacteria
100	<i>Shigella dysenteriae</i>	sdv	<i>Shigella dysenteriae</i> Sd197	300267	4897	Bacteria
101	<i>Erwinia carotovora</i>	eca	<i>Pectobacterium atrosepticum</i> SCRI1043	218491	4614	Bacteria
102	<i>Photobacterium luminescens</i>	plu	<i>Photobacterium luminescens</i> subsp. laumondii TTO1	243265	5012	Bacteria
103	<i>Buchnera aphidicola</i> APS	buc	<i>Buchnera aphidicola</i> str. APS (Acyrtosiphon pisum)	107806	618	Bacteria
104	<i>Buchnera aphidicola</i> Sg	bas	<i>Buchnera aphidicola</i> str. Sg (Schizaphis graminum)	198804	619	Bacteria
105	<i>Buchnera aphidicola</i> Bp	bab	<i>Buchnera aphidicola</i> str. Bp (Baizongia pistaciae)	224915	553	Bacteria
106	<i>Buchnera aphidicola</i> str. Cc	bcc	<i>Buchnera aphidicola</i> str. Cc (Cinara cedri)	372461	397	Bacteria
107	<i>Wigglesworthia glossinidia</i>	wbr	<i>Wigglesworthia glossinidia</i> endosymbiont of Glossina brevipalpis	36870	657	Bacteria
108	<i>Sodalis glossinidius</i>	sgl	<i>Sodalis glossinidius</i> str. 'morsitans'	343509	2607	Bacteria
109	<i>Enterobacter</i> sp. 638	ent	<i>Enterobacter</i> sp. 638	399742	4385	Bacteria
110	<i>Enterobacter sakazakii</i>	esa	<i>Cronobacter sakazakii</i> ATCC BAA-894	290339	4571	Bacteria
111	<i>Klebsiella pneumoniae</i>	kpn	<i>Klebsiella pneumoniae</i> subsp. pneumoniae MGH 78578	272620	5306	Bacteria
112	<i>Citrobacter koseri</i> ATCC BAA-895	cko	<i>Citrobacter koseri</i> ATCC BAA-895	290338	5171	Bacteria
113	<i>Serratia proteamaculans</i>	spe	<i>Serratia proteamaculans</i> 568	399741	5064	Bacteria
114	<i>Candidatus Blochmannia floridanus</i>	bfl	<i>Candidatus Blochmannia floridanus</i>	203907	631	Bacteria
115	<i>Candidatus Blochmannia pennsylvanicus</i>	bpn	<i>Candidatus Blochmannia pennsylvanicus</i> str. BPEN	291272	658	Bacteria
116	<i>Haemophilus influenzae</i> (serotype d)	hin	<i>Haemophilus influenzae</i> Rd KW20	71421	1789	Bacteria

117	Haemophilus influenzae 86-028NP (nontypeable)	hit	Haemophilus influenzae 86-028NP	281310	1899	Bacteria
118	Haemophilus influenzae PittEE	hip	Haemophilus influenzae PittEE	374930	1704	Bacteria
119	Haemophilus influenzae PittGG	hiq	Haemophilus influenzae PittGG	374931	1753	Bacteria
120	Haemophilus ducreyi	hdu	Haemophilus ducreyi 35000HP	233412	1838	Bacteria
121	Haemophilus somnus	hso	Haemophilus somnus 129PT	205914	1879	Bacteria
122	Haemophilus somnus 2336	hsm	Haemophilus somnus 2336	228400	2065	Bacteria
123	Pasteurella multocida	pmu	Pasteurella multocida subsp. multocida str. Pm70	272843	2092	Bacteria
124	Mannheimia succiniciproducens	msu	Mannheimia succiniciproducens MBEL55E	221988	2459	Bacteria
125	Actinobacillus pleuropneumoniae	apl	Actinobacillus pleuropneumoniae L20	416269	2109	Bacteria
126	Actinobacillus pleuropneumoniae serovar 3 JL03	apj	Actinobacillus pleuropneumoniae serovar 3 str. JL03	434271	2147	Bacteria
127	Actinobacillus succinogenes	asu	Actinobacillus succinogenes 130Z	339671	2199	Bacteria
128	Xylella fastidiosa 9a5c	xfa	Xylella fastidiosa 9a5c	160492	2905	Bacteria
129	Xylella fastidiosa Temecula1	xft	Xylella fastidiosa Temecula1	183190	2125	Bacteria
130	Xylella fastidiosa M12	xfm	Xylella fastidiosa M12	405440	2368	Bacteria
131	Xylella fastidiosa M23	xfn	Xylella fastidiosa M23	405441	2320	Bacteria
132	Xanthomonas campestris pv. campestris ATCC 33913	xcc	Xanthomonas campestris pv. campestris str. ATCC 33913	190485	4242	Bacteria
133	Xanthomonas campestris pv. campestris 8004	xcb	Xanthomonas campestris pv. campestris str. 8004	314565	4370	Bacteria
134	Xanthomonas campestris pv. vesicatoria	xcv	Xanthomonas campestris pv. vesicatoria str. 85-10	316273	4854	Bacteria
135	Xanthomonas axonopodis	xac	Xanthomonas axonopodis pv. citri str. 306	190486	4489	Bacteria
136	Xanthomonas oryzae KACC10331	xoo	Xanthomonas oryzae pv. oryzae KACC10331	291331	4362	Bacteria
137	Xanthomonas oryzae MAFF311018	xom	Xanthomonas oryzae pv. oryzae MAFF 311018	342109	4431	Bacteria
138	Vibrio cholerae O1	vch	Vibrio cholerae O1 biovar El Tor str. N16961	243277	4008	Bacteria
139	Vibrio cholerae O395	vco	Vibrio cholerae O395	345073	3998	Bacteria
140	Vibrio vulnificus CMCP6	vvu	Vibrio vulnificus CMCP6	216895	4623	Bacteria
141	Vibrio vulnificus YJ016	vvv	Vibrio vulnificus YJ016	196600	5227	Bacteria
142	Vibrio parahaemolyticus	vpa	Vibrio parahaemolyticus RIMD 2210633	223926	4992	Bacteria
143	Vibrio fischeri	vfi	Vibrio fischeri ES114	312309	3957	Bacteria
144	Vibrio harveyi	vha	Vibrio harveyi ATCC BAA-1116	338187	6253	Bacteria
145	Photobacterium profundum	ppr	Photobacterium profundum SS9	298386	5702	Bacteria
146	Pseudomonas aeruginosa PAO1	pae	Pseudomonas aeruginosa PAO1	208964	5651	Bacteria
147	Pseudomonas aeruginosa UCBPP-PA14	pau	Pseudomonas aeruginosa UCBPP-PA14	208963	5977	Bacteria
148	Pseudomonas aeruginosa PA7	pap	Pseudomonas aeruginosa PA7	381754	6369	Bacteria
149	Pseudomonas putida KT2440	ppu	Pseudomonas putida KT2440	160488	5516	Bacteria
150	Pseudomonas putida F1	ppf	Pseudomonas putida F1	351746	5405	Bacteria
151	Pseudomonas putida GB-1	ppg	Pseudomonas putida GB-1	76869	5530	Bacteria
152	Pseudomonas putida W619	ppw	Pseudomonas putida W619	390235	5309	Bacteria
153	Pseudomonas syringae pv. tomato DC3000	pst	Pseudomonas syringae pv. tomato str. DC3000	223283	5810	Bacteria
154	Pseudomonas syringae pv. syringae B728a	psb	Pseudomonas syringae pv. syringae B728a	205918	5220	Bacteria
155	Pseudomonas syringae pv. phaseolicola 1448A	psp	Pseudomonas syringae pv. phaseolicola 1448A	264730	5436	Bacteria
156	Pseudomonas fluorescens Pf-5	pfl	Pseudomonas fluorescens Pf-5	220664	6233	Bacteria
157	Pseudomonas fluorescens PfO-1	pfo	Pseudomonas fluorescens PfO-1	205922	5833	Bacteria
158	Pseudomonas entomophila	pen	Pseudomonas entomophila L48	384676	5275	Bacteria
159	Pseudomonas mendocina	pmy	Pseudomonas mendocina ymp	399739	4704	Bacteria
160	Pseudomonas stutzeri	psa	Pseudomonas stutzeri A1501	379731	4210	Bacteria
161	Psychrobacter arcticum	par	Psychrobacter arcticus 273-4	259536	2211	Bacteria
162	Psychrobacter cryohalolentis	pcr	Psychrobacter cryohalolentis K5	335284	2581	Bacteria
163	Psychrobacter sp. PRwf-1	prw	Psychrobacter sp. PRwf-1	349106	2477	Bacteria
164	Acinetobacter sp. ADP1	aci	Acinetobacter sp. ADP1	62977	3425	Bacteria
165	Acinetobacter baumannii	acb	Acinetobacter baumannii ATCC 17978	400667	3470	Bacteria
166	Acinetobacter baumannii SDF	abm	Acinetobacter baumannii SDF	509170	3664	Bacteria
167	Acinetobacter baumannii AYE	aby	Acinetobacter baumannii AYE	509173	3890	Bacteria
168	Shewanella oneidensis	son	Shewanella oneidensis MR-1	211586	4745	Bacteria
169	Shewanella denitrificans	sdn	Shewanella denitrificans OS217	318161	3905	Bacteria
170	Shewanella frigidimarina	sfr	Shewanella frigidimarina NCIMB 400	318167	4199	Bacteria
171	Shewanella amazonensis	saz	Shewanella amazonensis SB2B	326297	3785	Bacteria
172	Shewanella baltica OS155	sbl	Shewanella baltica OS155	325240	4721	Bacteria
173	Shewanella baltica OS185	sbm	Shewanella baltica OS185	402882	4596	Bacteria
174	Shewanella baltica OS195	sbn	Shewanella baltica OS195	399599	4859	Bacteria
175	Shewanella loihica	slo	Shewanella loihica PV-4	323850	3993	Bacteria
176	Shewanella putrefaciens	spc	Shewanella putrefaciens CN-32	319224	4134	Bacteria
177	Shewanella sediminis	sse	Shewanella sediminis HAW-EB3	425104	4666	Bacteria
178	Shewanella pealeana	spl	Shewanella pealeana ATCC 700345	398579	4438	Bacteria
179	Shewanella sp. MR-4	she	Shewanella sp. MR-4	60480	4084	Bacteria

180	Shewanella sp. MR-7	shm	Shewanella sp. MR-7	60481	4186	Bacteria
181	Shewanella sp. ANA-3	shn	Shewanella sp. ANA-3	94122	4519	Bacteria
182	Shewanella sp. W3-18-1	shw	Shewanella sp. W3-18-1	351745	4217	Bacteria
183	Shewanella halifaxensis	shl	Shewanella halifaxensis HAW-EB4	458817	4464	Bacteria
184	Shewanella woodyi ATCC51908	swd	Shewanella woodyi ATCC 51908	392500	5096	Bacteria
185	Idiomarina loihiensis	ilo	Idiomarina loihiensis L2TR	283942	2707	Bacteria
186	Colwellia psychrerythraea	cps	Colwellia psychrerythraea 34H	167879	5054	Bacteria
187	Pseudoalteromonas haloplanktis	pha	Pseudoalteromonas haloplanktis TAC125	326442	3621	Bacteria
188	Pseudoalteromonas atlantica	pat	Pseudoalteromonas atlantica T6c	342610	4397	Bacteria
189	Saccharophagus degradans	sde	Saccharophagus degradans 2-40	203122	4067	Bacteria
190	Psychromonas ingrahamii	pin	Psychromonas ingrahamii 37	357804	3863	Bacteria
191	Marinobacter aquaeolei	maq	Marinobacter aquaeolei VT8	351348	4390	Bacteria
192	Coxiella burnetii RSA 493	cbu	Coxiella burnetii RSA 493	227377	2183	Bacteria
193	Coxiella burnetii RSA 331	cbs	Coxiella burnetii RSA 331	360115	2278	Bacteria
194	Coxiella burnetii Dugway 5J108-111	cbd	Coxiella burnetii Dugway 5J108-111	434922	2265	Bacteria
195	Legionella pneumophila Philadelphia 1	lpn	Legionella pneumophila subsp. pneumophila str. Philadelphia 1	272624	3002	Bacteria
196	Legionella pneumophila Lens	lpf	Legionella pneumophila str. Lens	297245	3058	Bacteria
197	Legionella pneumophila Paris	lpp	Legionella pneumophila str. Paris	297246	3278	Bacteria
198	Legionella pneumophila Corby	lpc	Legionella pneumophila str. Corby	400673	3259	Bacteria
199	Methylococcus capsulatus	mca	Methylococcus capsulatus str. Bath	243233	3052	Bacteria
200	Francisella tularensis subsp. tularensis SCHU S4	ftu	Francisella tularensis subsp. tularensis SCHU S4	177416	1852	Bacteria
201	Francisella tularensis subsp. tularensis FSC 198	ftf	Francisella tularensis subsp. tularensis FSC198	393115	1852	Bacteria
202	Francisella tularensis subsp. tularensis WY96-3418	ftw	Francisella tularensis subsp. tularensis WY96-3418	418136	1872	Bacteria
203	Francisella tularensis subsp. holarctica LVS	ftl	Francisella tularensis subsp. holarctica	119857	2020	Bacteria
204	Francisella tularensis subsp. holarctica OSU18	ftb	Francisella tularensis subsp. holarctica OSU18	393011	1932	Bacteria
205	Francisella tularensis subsp. holarctica FTNF002-00	fta	Francisella tularensis subsp. holarctica FTNF002-00	458234	1887	Bacteria
206	Francisella tularensis subsp. novicida U112	ftn	Francisella novicida U112	401614	1781	Bacteria
207	Francisella tularensis subsp. mediasiatica FSC147	ftm	Francisella tularensis subsp. mediasiatica FSC147	441952	1750	Bacteria
208	Francisella philomiragia	fph	Francisella philomiragia subsp. philomiragia ATCC 25017	484022	1970	Bacteria
209	Thiomicrospira crunigena	tcx	Thiomicrospira crunigena XCL-2	317025	2259	Bacteria
210	Nitrosococcus oceani	noc	Nitrosococcus oceani ATCC 19707	323261	3186	Bacteria
211	Alkalilimnicola ehrlichei	aei	Alkalilimnicola ehrlichii MLHE-1	187272	2940	Bacteria
212	Halorhodospira halophila	hha	Halorhodospira halophila SL1	349124	2493	Bacteria
213	Hahella chejuensis	hch	Hahella chejuensis KCTC 2396	349521	6863	Bacteria
214	Chromohalobacter salexigens	csa	Chromohalobacter salexigens DSM 3043	290398	3409	Bacteria
215	Alcanivorax borkumensis	abo	Alcanivorax borkumensis SK2	393595	2806	Bacteria
216	Marinomonas sp. MWYL1	mmw	Marinomonas sp. MWYL1	400668	4598	Bacteria
217	Aeromonas hydrophila	aha	Aeromonas hydrophila subsp. hydrophila ATCC 7966	380703	4287	Bacteria
218	Aeromonas salmonicida	asa	Aeromonas salmonicida subsp. salmonicida A449	382245	4758	Bacteria
219	Dichelobacter nodosus	dno	Dichelobacter nodosus VCS1703A	246195	1351	Bacteria
220	Baumannia cicadellinicola	bci	Baumannia cicadellinicola str. Hc (Homalodisca coagulata)	374463	651	Bacteria
221	Candidatus Carsonella ruddii	crp	Candidatus Carsonella ruddii PV	387662	213	Bacteria
222	Candidatus Ruthia magnifica	rma	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)	413404	1117	Bacteria
223	Candidatus Vesicomysocius okutanii	vok	Candidatus Vesicomysocius okutanii HA	412965	978	Bacteria
224	Neisseria meningitidis MC58 (serogroup B)	nme	Neisseria meningitidis MC58	122586	2225	Bacteria
225	Neisseria meningitidis Z2491 (serogroup A)	nma	Neisseria meningitidis Z2491	122587	2208	Bacteria
226	Neisseria meningitidis FAM18	nmc	Neisseria meningitidis FAM18	272831	2046	Bacteria
227	Neisseria meningitidis 053442	nmn	Neisseria meningitidis 053442	374833	2122	Bacteria
228	Neisseria gonorrhoeae	ngo	Neisseria gonorrhoeae FA 1090	242231	2069	Bacteria
229	Chromobacterium violaceum	cvi	Chromobacterium violaceum ATCC 12472	243365	4530	Bacteria
230	Ralstonia solanacearum	rso	Ralstonia solanacearum GMI1000	267608	5193	Bacteria
231	Ralstonia eutropha JMP134	reu	Ralstonia eutropha JMP134	264198	6616	Bacteria
232	Ralstonia eutropha H16	reh	Ralstonia eutropha H16	381666	6279	Bacteria
233	Ralstonia metallidurans	rme	Ralstonia metallidurans CH34	266264	6426	Bacteria
234	Cupriavidus taiwanensis	cti	Cupriavidus taiwanensis	164546	1623	Bacteria
235	Burkholderia mallei ATCC 23344	bma	Burkholderia mallei ATCC 23344	243160	5508	Bacteria
236	Burkholderia mallei SAVP1	bmv	Burkholderia mallei SAVP1	320388	5295	Bacteria

237	Burkholderia mallei NCTC 10229	bml	Burkholderia mallei NCTC 10229	412022	5624	Bacteria
238	Burkholderia mallei NCTC 10247	bmn	Burkholderia mallei NCTC 10247	320389	5966	Bacteria
239	Burkholderia xenovorans	bxe	Burkholderia xenovorans LB400	266265	9044	Bacteria
240	Burkholderia vietnamiensis	bvi	Burkholderia vietnamiensis G4	269482	7863	Bacteria
241	Burkholderia sp. 383	bur	Burkholderia sp. 383	269483	7826	Bacteria
242	Burkholderia cenocepacia AU1054	bcn	Burkholderia cenocepacia AU 1054	331271	6632	Bacteria
243	Burkholderia cenocepacia HI2424	bch	Burkholderia cenocepacia HI2424	331272	7032	Bacteria
244	Burkholderia cenocepacia MC0-3	bcm	Burkholderia cenocepacia MC0-3	406425	7177	Bacteria
245	Burkholderia cepacia	bam	Burkholderia ambifaria AMMD	339670	6724	Bacteria
246	Burkholderia ambifaria MC40-6	bac	Burkholderia ambifaria MC40-6	398577	6886	Bacteria
247	Burkholderia multivorans	bmu	Burkholderia multivorans ATCC 17616	395019	6373	Bacteria
248	Burkholderia pseudomallei K96243	bps	Burkholderia pseudomallei K96243	272560	5935	Bacteria
249	Burkholderia pseudomallei 1710b	bpm	Burkholderia pseudomallei 1710b	320372	6420	Bacteria
250	Burkholderia pseudomallei 1106a	bpl	Burkholderia pseudomallei 1106a	357348	7263	Bacteria
251	Burkholderia pseudomallei 668	bpd	Burkholderia pseudomallei 668	320373	7307	Bacteria
252	Burkholderia thailandensis	bte	Burkholderia thailandensis E264	271848	5714	Bacteria
253	Burkholderia phymatum	bph	Burkholderia phymatum STM815	391038	7899	Bacteria
254	Polynucleobacter sp. QLW-P1DMWA-1	pnu	Polynucleobacter necessarius subsp. asymbioticus QLW-P1DMWA-1	312153	2132	Bacteria
255	Polynucleobacter necessarius	pne	Polynucleobacter necessarius subsp. necessarius STIR1	452638	1783	Bacteria
256	Bordetella pertussis	bpe	Bordetella pertussis Tohama I	257313	3867	Bacteria
257	Bordetella parapertussis	bpa	Bordetella parapertussis 12822	257311	4467	Bacteria
258	Bordetella bronchiseptica	bbr	Bordetella bronchiseptica RB50	257310	5072	Bacteria
259	Bordetella petrii	bpt	Bordetella petrii DSM 12804	340100	5091	Bacteria
260	Bordetella avium	bav	Bordetella avium 197N	360910	3510	Bacteria
261	Rhodoferrax ferrireducens	rfr	Rhodoferrax ferrireducens T118	338969	4555	Bacteria
262	Polaromonas sp. JS666	pol	Polaromonas sp. JS666	296591	5626	Bacteria
263	Polaromonas naphthalenivorans	pna	Polaromonas naphthalenivorans CJ2	365044	5064	Bacteria
264	Acidovorax avenae	aav	Acidovorax citrulli AAC00-1	397945	4858	Bacteria
265	Acidovorax sp. JS42	ajs	Acidovorax sp. JS42	232721	4383	Bacteria
266	Verminephrobacter eiseniae	vei	Verminephrobacter eiseniae EF01-2	391735	5109	Bacteria
267	Delftia acidovorans	dac	Delftia acidovorans SPH-1	398578	6153	Bacteria
268	Methylobium petroleiphilum	mpt	Methylobium petroleiphilum PM1	420662	4546	Bacteria
269	Herminiimonas arsenicoxydans	har	Herminiimonas arsenicoxydans	204773	3391	Bacteria
270	Minibacterium massiliensis	mms	Janthinobacterium sp. Marseille	375286	3750	Bacteria
271	Leptothrix cholodnii	lch	Leptothrix cholodnii SP-6	395495	4445	Bacteria
272	Nitrosomonas europaea	neu	Nitrosomonas europaea ATCC 19718	228410	2620	Bacteria
273	Nitrosomonas eutropha	net	Nitrosomonas eutropha C91	335283	2687	Bacteria
274	Nitrospira multiformis	nmu	Nitrospira multiformis ATCC 25196	323848	2876	Bacteria
275	Azoarcus sp. EbN1	eba	Aromatoleum aromaticum EbN1	76114	4673	Bacteria
276	Azoarcus sp. BH72	azo	Azoarcus sp. BH72	62928	4058	Bacteria
277	Dechloromonas aromatica	dar	Dechloromonas aromatica RCB	159087	4283	Bacteria
278	Thiobacillus denitrificans	tbd	Thiobacillus denitrificans ATCC 25259	292415	2879	Bacteria
279	Methylobacillus flagellatus	mfa	Methylobacillus flagellatus KT	265072	2822	Bacteria
280	Helicobacter pylori 26695	hpy	Helicobacter pylori 26695	85962	1630	Bacteria
281	Helicobacter pylori J99	hpj	Helicobacter pylori J99	85963	1535	Bacteria
282	Helicobacter pylori HPAG1	hpa	Helicobacter pylori HPAG1	357544	1586	Bacteria
283	Helicobacter hepaticus	hhe	Helicobacter hepaticus ATCC 51449	235279	1915	Bacteria
284	Helicobacter acinonychis	hac	Helicobacter acinonychis str. Sheeba	382638	1660	Bacteria
285	Wolinella succinogenes	wsu	Wolinella succinogenes DSM 1740	273121	2091	Bacteria
286	Thiomicrospira denitrificans	tdn	Sulfurimonas denitrificans DSM 1251	326298	2163	Bacteria
287	Campylobacter jejuni NCTC11168	cje	Campylobacter jejuni subsp. jejuni NCTC 11168	192222	1708	Bacteria
288	Campylobacter jejuni RM1221	cjr	Campylobacter jejuni RM1221	195099	1940	Bacteria
289	Campylobacter jejuni 81-176	cjj	Campylobacter jejuni subsp. jejuni 81-176	354242	1812	Bacteria
290	Campylobacter jejuni 81116	cju	Campylobacter jejuni subsp. jejuni 81116	407148	1681	Bacteria
291	Campylobacter jejuni subsp. doylei 269.97	cjd	Campylobacter jejuni subsp. doylei 269.97	360109	2040	Bacteria
292	Campylobacter fetus	cff	Campylobacter fetus subsp. fetus 82-40	360106	1820	Bacteria
293	Campylobacter curvus	ccv	Campylobacter curvus 525.92	360105	2114	Bacteria
294	Campylobacter hominis ATCC BAA-381	cha	Campylobacter hominis ATCC BAA-381	360107	1804	Bacteria
295	Campylobacter concisus 13826	cco	Campylobacter concisus 13826	360104	2195	Bacteria
296	Arcobacter butzleri	abu	Arcobacter butzleri RM4018	367737	2333	Bacteria
297	Nitratiruptor sp. SB155-2	nis	Nitratiruptor sp. SB155-2	387092	1911	Bacteria
298	Sulfurovum sp. NBC37-1	sun	Sulfurovum sp. NBC37-1	387093	2519	Bacteria
299	Geobacter sulfurreducens	gsu	Geobacter sulfurreducens PCA	243231	3528	Bacteria
300	Geobacter metallireducens	gme	Geobacter metallireducens GS-15	269799	3635	Bacteria
301	Geobacter uraniumreducens	gur	Geobacter uraniireducens Rf4	351605	4489	Bacteria
302	Pelobacter carbinolicus	pca	Pelobacter carbinolicus DSM 2380	338963	3450	Bacteria
303	Pelobacter propionicus	ppd	Pelobacter propionicus DSM 2379	338966	3913	Bacteria
304	Desulfovibrio vulgaris Hildenborough	dvu	Desulfovibrio vulgaris str. Hildenborough	882	3634	Bacteria

305	<i>Desulfovibrio vulgaris</i> DP4	dvl	<i>Desulfovibrio vulgaris</i> DP4	391774	3190	Bacteria
306	<i>Desulfovibrio desulfuricans</i>	dde	<i>Desulfovibrio desulfuricans</i> subsp. <i>desulfuricans</i> str. G20	207559	3865	Bacteria
307	<i>Lawsonia intracellularis</i>	lip	<i>Lawsonia intracellularis</i> PHE/MN1-00	363253	1388	Bacteria
308	<i>Bdellovibrio bacteriovorus</i>	bba	<i>Bdellovibrio bacteriovorus</i> HD100	264462	3629	Bacteria
309	<i>Desulfotalea psychrophila</i>	dps	<i>Desulfotalea psychrophila</i> LSv54	177439	3322	Bacteria
310	<i>Candidatus Desulfococcus oleovorans</i>	dol	<i>Desulfococcus oleovorans</i> Hxd3	96561	3323	Bacteria
311	<i>Anaeromyxobacter dehalogenans</i>	ade	<i>Anaeromyxobacter dehalogenans</i> 2CP-C	290397	4419	Bacteria
312	<i>Anaeromyxobacter</i> sp. Fw109-5	afw	<i>Anaeromyxobacter</i> sp. Fw109-5	404589	4562	Bacteria
313	<i>Myxococcus xanthus</i>	mxs	<i>Myxococcus xanthus</i> DK 1622	246197	7456	Bacteria
314	<i>Sorangium cellulosum</i>	scl	<i>Sorangium cellulosum</i> 'So ce 56'	448385	9703	Bacteria
315	<i>Syntrophus aciditrophicus</i>	sat	<i>Syntrophus aciditrophicus</i> SB	56780	3219	Bacteria
316	<i>Syntrophobacter fumaroxidans</i>	sfu	<i>Syntrophobacter fumaroxidans</i> MPOB	335543	4162	Bacteria
317	<i>Rickettsia prowazekii</i>	rpr	<i>Rickettsia prowazekii</i> str. Madrid E	272947	886	Bacteria
318	<i>Rickettsia typhi</i>	rtv	<i>Rickettsia typhi</i> str. Wilmington	257363	919	Bacteria
319	<i>Rickettsia conorii</i>	rco	<i>Rickettsia conorii</i> str. Malish 7	272944	1414	Bacteria
320	<i>Rickettsia felis</i>	rfe	<i>Rickettsia felis</i> URRWXC2	293614	1551	Bacteria
321	<i>Rickettsia bellii</i>	rbe	<i>Rickettsia bellii</i> RML369-C	336407	1469	Bacteria
322	<i>Rickettsia akari</i> Hartford	rak	<i>Rickettsia akari</i> str. Hartford	293614	1294	Bacteria
323	<i>Rickettsia bellii</i> OSU 85-389	rbo	<i>Rickettsia bellii</i> OSU 85-389	391896	1512	Bacteria
324	<i>Rickettsia canadensis</i> McKiel	rcm	<i>Rickettsia canadensis</i> str. McKiel	293613	1129	Bacteria
325	<i>Rickettsia rickettsii</i>	rri	<i>Rickettsia rickettsii</i> str. 'Sheila Smith'	392021	1381	Bacteria
326	<i>Rickettsia rickettsii</i> Iowa	rrj	<i>Rickettsia rickettsii</i> str. Iowa	452659	1495	Bacteria
327	<i>Orientia tsutsugamushi</i>	ots	<i>Orientia tsutsugamushi</i> str. Boryong	357244	2216	Bacteria
328	<i>Wolbachia</i> wMel	wol	<i>Wolbachia</i> endosymbiont of <i>Drosophila melanogaster</i>	163164	1309	Bacteria
329	<i>Wolbachia</i> wBm	wbm	<i>Wolbachia</i> endosymbiont strain TRS of <i>Brugia malayi</i>	292805	940	Bacteria
330	<i>Anaplasma marginale</i>	ama	<i>Anaplasma marginale</i> str. St. Maries	234826	1005	Bacteria
331	<i>Anaplasma phagocytophilum</i>	aph	<i>Anaplasma phagocytophilum</i> HZ	212042	1411	Bacteria
332	<i>Ehrlichia ruminantium</i> Welgevonden (South Africa)	eru	<i>Ehrlichia ruminantium</i> str. Welgevonden	254945	961	Bacteria
333	<i>Ehrlichia ruminantium</i> Welgevonden (France)	erw	<i>Ehrlichia ruminantium</i> str. Welgevonden	254945	997	Bacteria
334	<i>Ehrlichia ruminantium</i> Gardel	erg	<i>Ehrlichia ruminantium</i> str. Gardel	302409	989	Bacteria
335	<i>Ehrlichia canis</i>	ecn	<i>Ehrlichia canis</i> str. Jake	269484	984	Bacteria
336	<i>Ehrlichia chaffeensis</i>	ech	<i>Ehrlichia chaffeensis</i> str. Arkansas	205920	1158	Bacteria
337	<i>Neorickettsia sennetsu</i>	nse	<i>Neorickettsia sennetsu</i> str. Miyayama	222891	973	Bacteria
338	<i>Candidatus Pelagibacter ubique</i>	pub	<i>Candidatus Pelagibacter ubique</i> HTCC1062	335992	1389	Bacteria
339	<i>Mesorhizobium loti</i>	mlo	<i>Mesorhizobium loti</i> MAFF303099	266835	7333	Bacteria
340	<i>Mesorhizobium</i> sp. BNC1	mes	<i>Chelativorans</i> sp. BNC1	266779	4684	Bacteria
341	<i>Parvibaculum lavamentivorans</i>	pla	<i>Parvibaculum lavamentivorans</i> DS-1	402881	3707	Bacteria
342	<i>Sinorhizobium medicae</i>	smd	<i>Sinorhizobium medicae</i> WSM419	366394	6587	Bacteria
343	<i>Agrobacterium tumefaciens</i> C58 (UWash/Dupont)	atu	<i>Agrobacterium tumefaciens</i> str. C58	176299	5459	Bacteria
344	<i>Agrobacterium tumefaciens</i> C58 (Cereon)	atc	<i>Agrobacterium tumefaciens</i> str. C58	176299	5360	Bacteria
345	<i>Rhizobium etli</i>	ret	<i>Rhizobium etli</i> CFN 42	347834	6093	Bacteria
346	<i>Rhizobium leguminosarum</i>	rle	<i>Rhizobium leguminosarum</i> bv. <i>viciae</i> 3841	216596	7348	Bacteria
347	<i>Brucella melitensis</i>	bme	<i>Brucella melitensis</i> bv. 1 str. 16M	224914	3264	Bacteria
348	<i>Brucella melitensis</i> biovar Abortus	bmf	<i>Brucella melitensis</i> biovar Abortus 2308	359391	3418	Bacteria
349	<i>Brucella suis</i>	bms	<i>Brucella suis</i> 1330	204722	3451	Bacteria
350	<i>Brucella abortus</i> 9-941	bmb	<i>Brucella abortus</i> bv. 1 str. 9-941	262698	3356	Bacteria
351	<i>Brucella ovis</i>	bov	<i>Brucella ovis</i> ATCC 25840	444178	3198	Bacteria
352	<i>Ochrobactrum anthropi</i>	oan	<i>Ochrobactrum anthropi</i> ATCC 49188	439375	4932	Bacteria
353	<i>Bradyrhizobium japonicum</i>	bja	<i>Bradyrhizobium japonicum</i> USDA 110	224911	8373	Bacteria
354	<i>Bradyrhizobium</i> sp. ORS278	bra	<i>Bradyrhizobium</i> sp. ORS278	114615	6818	Bacteria
355	<i>Bradyrhizobium</i> sp. BTAi1	bbt	<i>Bradyrhizobium</i> sp. BTAi1	288000	7810	Bacteria
356	<i>Rhodopseudomonas palustris</i> CGA009	rpa	<i>Rhodopseudomonas palustris</i> CGA009	258594	4898	Bacteria
357	<i>Rhodopseudomonas palustris</i> HaA2	rpb	<i>Rhodopseudomonas palustris</i> HaA2	316058	4772	Bacteria
358	<i>Rhodopseudomonas palustris</i> BisB18	rpc	<i>Rhodopseudomonas palustris</i> BisB18	316056	5016	Bacteria
359	<i>Rhodopseudomonas palustris</i> BisB5	rpd	<i>Rhodopseudomonas palustris</i> BisB5	316057	4492	Bacteria
360	<i>Rhodopseudomonas palustris</i> BisA53	rpe	<i>Rhodopseudomonas palustris</i> BisA53	316055	4972	Bacteria
361	<i>Nitrobacter winogradskyi</i>	nwi	<i>Nitrobacter winogradskyi</i> Nb-255	323098	3198	Bacteria
362	<i>Nitrobacter hamburgensis</i>	nha	<i>Nitrobacter hamburgensis</i> X14	323097	4741	Bacteria
363	<i>Bartonella henselae</i>	bhe	<i>Bartonella henselae</i> str. Houston-1	283166	1665	Bacteria
364	<i>Bartonella quintana</i>	bqu	<i>Bartonella quintana</i> str. Toulouse	283165	1356	Bacteria
365	<i>Bartonella bacilliformis</i>	bbk	<i>Bartonella bacilliformis</i> KC583	360095	1375	Bacteria
366	<i>Bartonella tribocorum</i>	btr	<i>Bartonella tribocorum</i> CIP 105476	382640	2171	Bacteria
367	<i>Xanthobacter autotrophicus</i>	xau	<i>Xanthobacter autotrophicus</i> Py2	78245	5155	Bacteria
368	<i>Methylobacterium extorquens</i>	mex	<i>Methylobacterium extorquens</i> PA1	419610	4956	Bacteria
369	<i>Methylobacterium radiotolerans</i>	mrd	<i>Methylobacterium radiotolerans</i> JCM 2831	426355	6626	Bacteria

370	Methylobacterium sp. 4-46	met	Methylobacterium sp. 4-46	426117	7145	Bacteria
371	Beijerinckia indica	bid	Beijerinckia indica subsp. indica ATCC 9039	395963	3982	Bacteria
372	Caulobacter crescentus	ccr	Caulobacter crescentus CB15	190650	3819	Bacteria
373	Caulobacter sp. K31	cak	Caulobacter sp. K31	366602	5515	Bacteria
374	Silicibacter pomeroyi	sil	Ruegeria pomeroyi DSS-3	246200	4348	Bacteria
375	Silicibacter sp. TM1040	sit	Ruegeria sp. TM1040	292414	3956	Bacteria
376	Rhodobacter sphaeroides 2.4.1	rsp	Rhodobacter sphaeroides 2.4.1	272943	4370	Bacteria
377	Rhodobacter sphaeroides ATCC 17029	rsh	Rhodobacter sphaeroides ATCC 17029	349101	4253	Bacteria
378	Rhodobacter sphaeroides ATCC 17025	rsq	Rhodobacter sphaeroides ATCC 17025	349102	4465	Bacteria
379	Jannaschia sp. CCS1	jan	Jannaschia sp. CCS1	290400	4336	Bacteria
380	Roseobacter denitrificans	rde	Roseobacter denitrificans OCh 114	375451	4191	Bacteria
381	Paracoccus denitrificans	pde	Paracoccus denitrificans PD1222	318586	5177	Bacteria
382	Dinoroseobacter shibae	dsh	Dinoroseobacter shibae DFL 12	398580	4271	Bacteria
383	Maricaulis maris	mmr	Maricaulis maris MCS10	394221	3133	Bacteria
384	Hyphomonas neptunium	hne	Hyphomonas neptunium ATCC 15444	228405	3568	Bacteria
385	Zymomonas mobilis	zmo	Zymomonas mobilis subsp. mobilis ZM4	264203	2058	Bacteria
386	Novosphingobium aromaticivorans	nar	Novosphingobium aromaticivorans DSM 12444	279238	4031	Bacteria
387	Sphingopyxis alaskensis	sal	Sphingopyxis alaskensis RB2256	317655	3260	Bacteria
388	Sphingomonas wittichii	swi	Sphingomonas wittichii RW1	392499	5455	Bacteria
389	Erythrobacter litoralis	eli	Erythrobacter litoralis HTCC2594	314225	3056	Bacteria
390	Gluconobacter oxydans	gox	Gluconobacter oxydans 621H	290633	2731	Bacteria
391	Granulobacter thebesdensis	gbe	Granulobacter thebesdensis CGDNIH1	391165	2498	Bacteria
392	Acidiphilium cryptum JF-5	acr	Acidiphilium cryptum JF-5	349163	3692	Bacteria
393	Rhodospirillum rubrum	rru	Rhodospirillum rubrum ATCC 11170	269796	3920	Bacteria
394	Magnetospirillum magneticum	mag	Magnetospirillum magneticum AMB-1	342108	4611	Bacteria
395	Magnetococcus sp. MC-1	mgm	Magnetococcus sp. MC-1	156889	3815	Bacteria
396	Acidobacteria bacterium	aba	Candidatus Koribacter versatilis Ellin345	204669	4834	Bacteria
397	Solibacter usitatus	sus	Candidatus Solibacter usitatus Ellin6076	234267	8002	Bacteria
398	Syntrophomonas wolfei	swo	Syntrophomonas wolfei subsp. wolfei str. Goettingen	335541	2642	Bacteria
399	Caldicellulosiruptor saccharolyticus	csc	Caldicellulosiruptor saccharolyticus DSM 8903	351627	2829	Bacteria
400	Bacillus subtilis	bsu	Bacillus subtilis subsp. subtilis str. 168	224308	4225	Bacteria
401	Bacillus halodurans	bha	Bacillus halodurans C-125	272558	4171	Bacteria
402	Bacillus anthracis Ames	ban	Bacillus anthracis str. Ames	198094	5630	Bacteria
403	Bacillus anthracis Ames 0581	bar	Bacillus anthracis str. 'Ames Ancestor'	261594	5965	Bacteria
404	Bacillus anthracis A2012	baa	Bacillus anthracis str. A2012	191218	5874	Bacteria
405	Bacillus anthracis Sterne	bat	Bacillus anthracis str. Sterne	260799	5415	Bacteria
406	Bacillus cereus ATCC 14579	bce	Bacillus cereus ATCC 14579	226900	5502	Bacteria
407	Bacillus cereus ATCC 10987	bca	Bacillus cereus ATCC 10987	222523	6014	Bacteria
408	Bacillus cereus ZK	bcz	Bacillus cereus E33L	288681	5796	Bacteria
409	Bacillus cereus subsp. cytotoxis NVH 391-98	bcy	Bacillus cytotoxicus NVH 391-98	315749	4176	Bacteria
410	Bacillus thuringiensis 97-27	btb	Bacillus thuringiensis serovar konkukian str. 97-27	281309	5343	Bacteria
411	Bacillus thuringiensis Al Hakam	btl	Bacillus thuringiensis str. Al Hakam	412694	4945	Bacteria
412	Bacillus weihenstephanensis	bwe	Bacillus weihenstephanensis KBAB4	315730	5983	Bacteria
413	Bacillus licheniformis ATCC 14580	bli	Bacillus licheniformis ATCC 14580	279010	4337	Bacteria
414	Bacillus licheniformis DSM13	bld	Bacillus licheniformis ATCC 14580	279010	4289	Bacteria
415	Bacillus clausii	bcl	Bacillus clausii KSM-K16	66692	4204	Bacteria
416	Bacillus amyloliquefaciens	bay	Bacillus amyloliquefaciens FZB42	326423	3813	Bacteria
417	Bacillus pumilus	bpu	Bacillus pumilus SAFR-032	315750	3825	Bacteria
418	Oceanobacillus iheyensis	oih	Oceanobacillus iheyensis HTE831	221109	3594	Bacteria
419	Geobacillus thermodenitrificans	gtm	Geobacillus thermodenitrificans NG80-2	420246	3590	Bacteria
420	Lysinibacillus sphaericus	lsp	Lysinibacillus sphaericus C3-41	444177	4972	Bacteria
421	Exiguobacterium sibiricum	esi	Exiguobacterium sibiricum 255-15	262543	3155	Bacteria
422	Staphylococcus aureus N315	sau	Staphylococcus aureus subsp. aureus N315	158879	2700	Bacteria
423	Staphylococcus aureus Mu50	sav	Staphylococcus aureus subsp. aureus Mu50	158878	2809	Bacteria
424	Staphylococcus aureus MW2	sam	Staphylococcus aureus subsp. aureus MW2	196620	2712	Bacteria
425	Staphylococcus aureus MRSA252	sar	Staphylococcus aureus subsp. aureus MRSA252	282458	2845	Bacteria
426	Staphylococcus aureus MSSA476	sas	Staphylococcus aureus subsp. aureus MSSA476	282459	2747	Bacteria
427	Staphylococcus aureus COL	sac	Staphylococcus aureus subsp. aureus COL	93062	2727	Bacteria
428	Staphylococcus aureus RF122	sab	Staphylococcus aureus RF122	273036	2663	Bacteria
429	Staphylococcus aureus USA300	saa	Staphylococcus aureus subsp. aureus USA300_FPR3757	451515	2692	Bacteria
430	Staphylococcus aureus USA300 TCH1516	sax	Staphylococcus aureus subsp. aureus USA300_TCH1516	451516	2835	Bacteria
431	Staphylococcus aureus NCTC8325	sao	Staphylococcus aureus subsp. aureus NCTC 8325	93061	2969	Bacteria
432	Staphylococcus aureus JH9	saj	Staphylococcus aureus subsp. aureus JH9	359786	2847	Bacteria

433	<i>Staphylococcus aureus</i> JH1	sah	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> JH1	359787	2906	Bacteria
434	<i>Staphylococcus aureus</i> Newman	sae	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> str. Newman	426430	2687	Bacteria
435	<i>Staphylococcus epidermidis</i> ATCC 12228	sep	<i>Staphylococcus epidermidis</i> ATCC 12228	176280	2561	Bacteria
436	<i>Staphylococcus epidermidis</i> RP62A	ser	<i>Staphylococcus epidermidis</i> RP62A	176279	2668	Bacteria
437	<i>Staphylococcus haemolyticus</i>	sha	<i>Staphylococcus haemolyticus</i> JCS1435	279808	2753	Bacteria
438	<i>Staphylococcus saprophyticus</i>	ssp	<i>Staphylococcus saprophyticus</i> subsp. <i>saprophyticus</i> ATCC 15305	342451	2595	Bacteria
439	<i>Listeria monocytogenes</i> EGD-e	lmo	<i>Listeria monocytogenes</i> EGD-e	169963	2940	Bacteria
440	<i>Listeria monocytogenes</i> F2365	lmf	<i>Listeria monocytogenes</i> str. 4b F2365	265669	2934	Bacteria
441	<i>Listeria innocua</i>	lin	<i>Listeria innocua</i> Clip11262	272626	3145	Bacteria
442	<i>Listeria welshimeri</i> SLCC5334	lwe	<i>Listeria welshimeri</i> serovar 6b str. SLCC5334	386043	2864	Bacteria
443	<i>Lactococcus lactis</i> subsp. <i>lactis</i> IL1403	lla	<i>Lactococcus lactis</i> subsp. <i>lactis</i> IL1403	272623	2425	Bacteria
444	<i>Lactococcus lactis</i> subsp. <i>cremoris</i> SK11	llc	<i>Lactococcus lactis</i> subsp. <i>cremoris</i> SK11	272622	2742	Bacteria
445	<i>Lactococcus lactis</i> subsp. <i>cremoris</i> MG1363	llm	<i>Lactococcus lactis</i> subsp. <i>cremoris</i> MG1363	416870	2585	Bacteria
446	<i>Streptococcus pyogenes</i> SF370 (serotype M1)	spy	<i>Streptococcus pyogenes</i> M1 GAS	160490	1811	Bacteria
447	<i>Streptococcus pyogenes</i> MGAS5005 (serotype M1)	spz	<i>Streptococcus pyogenes</i> MGAS5005	293653	1950	Bacteria
448	<i>Streptococcus pyogenes</i> MGAS8232 (serotype M18)	spm	<i>Streptococcus pyogenes</i> MGAS8232	186103	1863	Bacteria
449	<i>Streptococcus pyogenes</i> MGAS315 (serotype M3)	spg	<i>Streptococcus pyogenes</i> MGAS315	198466	1951	Bacteria
450	<i>Streptococcus pyogenes</i> SSI-1 (serotype M3)	sps	<i>Streptococcus pyogenes</i> SSI-1	193567	1933	Bacteria
451	<i>Streptococcus pyogenes</i> MGAS10270 (serotype M3)	sph	<i>Streptococcus pyogenes</i> MGAS10270	370552	2067	Bacteria
452	<i>Streptococcus pyogenes</i> MGAS10750 (serotype M3)	spi	<i>Streptococcus pyogenes</i> MGAS10750	370554	2060	Bacteria
453	<i>Streptococcus pyogenes</i> MGAS2096 (serotype M3)	spj	<i>Streptococcus pyogenes</i> MGAS2096	370553	1979	Bacteria
454	<i>Streptococcus pyogenes</i> MGAS9429 (serotype M3)	spk	<i>Streptococcus pyogenes</i> MGAS9429	370551	1962	Bacteria
455	<i>Streptococcus pyogenes</i> Manfredo (serotype M5)	spf	<i>Streptococcus pyogenes</i> str. Manfredo	160491	1907	Bacteria
456	<i>Streptococcus pyogenes</i> MGAS10394 (serotype M6)	spa	<i>Streptococcus pyogenes</i> MGAS10394	286636	1971	Bacteria
457	<i>Streptococcus pyogenes</i> MGAS6180 (serotype M28)	spb	<i>Streptococcus pyogenes</i> MGAS6180	319701	1977	Bacteria
458	<i>Streptococcus pneumoniae</i> TIGR4	spn	<i>Streptococcus pneumoniae</i> TIGR4	170187	2303	Bacteria
459	<i>Streptococcus pneumoniae</i> R6	spr	<i>Streptococcus pneumoniae</i> R6	171101	2116	Bacteria
460	<i>Streptococcus pneumoniae</i> D39	spd	<i>Streptococcus pneumoniae</i> D39	373153	2069	Bacteria
461	<i>Streptococcus pneumoniae</i> Hungary19A 6	spv	<i>Streptococcus pneumoniae</i> Hungary19A-6	487214	2402	Bacteria
462	<i>Streptococcus agalactiae</i> 2603 (serotype V)	sag	<i>Streptococcus agalactiae</i> 2603V/R	208435	2276	Bacteria
463	<i>Streptococcus agalactiae</i> NEM316 (serotype III)	san	<i>Streptococcus agalactiae</i> NEM316	211110	2235	Bacteria
464	<i>Streptococcus agalactiae</i> A909 (serotype Ia)	sak	<i>Streptococcus agalactiae</i> A909	205921	2136	Bacteria
465	<i>Streptococcus mutans</i>	smu	<i>Streptococcus mutans</i> UA159	210007	2042	Bacteria
466	<i>Streptococcus thermophilus</i> CNRZ1066	stc	<i>Streptococcus thermophilus</i> CNRZ1066	299768	2000	Bacteria
467	<i>Streptococcus thermophilus</i> LMG18311	stl	<i>Streptococcus thermophilus</i> LMG 18311	264199	1974	Bacteria
468	<i>Streptococcus thermophilus</i> LMD-9	ste	<i>Streptococcus thermophilus</i> LMD-9	322159	2009	Bacteria
469	<i>Streptococcus sanguinis</i>	ssa	<i>Streptococcus sanguinis</i> SK36Links	388919	2348	Bacteria
470	<i>Streptococcus suis</i> 05ZYH33	ssu	<i>Streptococcus suis</i> 05ZYH33	391295	2254	Bacteria
471	<i>Streptococcus suis</i> 98HAH33	ssv	<i>Streptococcus suis</i> 98HAH33	391296	2253	Bacteria
472	<i>Streptococcus gordonii</i>	sgo	<i>Streptococcus gordonii</i> str. Challis substr. CH1	467705	2150	Bacteria
473	<i>Lactobacillus plantarum</i>	lpl	<i>Lactobacillus plantarum</i> WCFS1	220668	3185	Bacteria
474	<i>Lactobacillus johnsonii</i>	ljo	<i>Lactobacillus johnsonii</i> NCC 533	257314	1918	Bacteria
475	<i>Lactobacillus acidophilus</i>	lac	<i>Lactobacillus acidophilus</i> NCFM	272621	1936	Bacteria
476	<i>Lactobacillus sakei</i>	lsa	<i>Lactobacillus sakei</i> subsp. <i>sakei</i> 23K	314315	1963	Bacteria
477	<i>Lactobacillus salivarius</i>	lsl	<i>Lactobacillus salivarius</i> UCC118	362948	2184	Bacteria
478	<i>Lactobacillus delbrueckii</i> ATCC 11842	ldb	<i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> ATCC 11842	390333	2217	Bacteria
479	<i>Lactobacillus delbrueckii</i> ATCC BAA-365	lbu	<i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> ATCC BAA-365	321956	2040	Bacteria
480	<i>Lactobacillus brevis</i>	lbr	<i>Lactobacillus brevis</i> ATCC 367	387344	2351	Bacteria

481	<i>Lactobacillus casei</i>	lca	<i>Lactobacillus casei</i> ATCC 334	321967	2929	Bacteria
482	<i>Lactobacillus gasserii</i>	lga	<i>Lactobacillus gasserii</i> ATCC 33323	324831	1898	Bacteria
483	<i>Lactobacillus reuteri</i>	lre	<i>Lactobacillus reuteri</i> DSM 20016	557436	2027	Bacteria
484	<i>Pediococcus pentosaceus</i>	ppe	<i>Pediococcus pentosaceus</i> ATCC 25745	278197	1847	Bacteria
485	<i>Enterococcus faecalis</i>	efa	<i>Enterococcus faecalis</i> V583	226185	3413	Bacteria
486	<i>Oenococcus oeni</i>	ooe	<i>Oenococcus oeni</i> PSU-1	203123	1864	Bacteria
487	<i>Leuconostoc mesenteroides</i>	lme	<i>Leuconostoc mesenteroides</i> subsp. <i>mesenteroides</i> ATCC 8293	203120	2108	Bacteria
488	<i>Leuconostoc citreum</i>	lci	<i>Leuconostoc citreum</i> KM20	349519	1905	Bacteria
489	<i>Symbiobacterium thermophilum</i>	sth	<i>Symbiobacterium thermophilum</i> IAM 14863	292459	3455	Bacteria
490	<i>Clostridium acetobutylicum</i>	cac	<i>Clostridium acetobutylicum</i> ATCC 824	272562	4022	Bacteria
491	<i>Clostridium perfringens</i> 13	cpe	<i>Clostridium perfringens</i> str. 13	195102	2849	Bacteria
492	<i>Clostridium perfringens</i> ATCC 13124	cpf	<i>Clostridium perfringens</i> ATCC 13124	195103	3017	Bacteria
493	<i>Clostridium perfringens</i> SM101	cpr	<i>Clostridium perfringens</i> SM101	289380	2722	Bacteria
494	<i>Clostridium tetani</i> E88	ctc	<i>Clostridium tetani</i> E88	212717	2506	Bacteria
495	<i>Clostridium novyi</i>	cno	<i>Clostridium novyi</i> NT	386415	2427	Bacteria
496	<i>Clostridium thermocellum</i>	cth	<i>Clostridium thermocellum</i> ATCC 27405	203119	3305	Bacteria
497	<i>Clostridium difficile</i>	cdf	<i>Clostridium difficile</i> 630	272563	3982	Bacteria
498	<i>Clostridium botulinum</i> A	cbo	<i>Clostridium botulinum</i> A str. ATCC 3502	413999	3795	Bacteria
499	<i>Clostridium botulinum</i> A ATCC 19397	cba	<i>Clostridium botulinum</i> A str. ATCC 19397	441770	3696	Bacteria
500	<i>Clostridium botulinum</i> A Hall	cbh	<i>Clostridium botulinum</i> A str. Hall	441771	3569	Bacteria
501	<i>Clostridium botulinum</i> A3 Loch Maree	cbl	<i>Clostridium botulinum</i> A3 str. Loch Maree	498214	4105	Bacteria
502	<i>Clostridium botulinum</i> B1	cbb	<i>Clostridium botulinum</i> B1 str. Okra	498213	3975	Bacteria
503	<i>Clostridium botulinum</i> F	cbf	<i>Clostridium botulinum</i> F str. Langeland	441772	3856	Bacteria
504	<i>Clostridium beijerinckii</i>	cbe	<i>Clostridium beijerinckii</i> NCIMB 8052	290402	5243	Bacteria
505	<i>Clostridium kluyveri</i>	ckl	<i>Clostridium kluyveri</i> DSM 555	431943	3994	Bacteria
506	<i>Clostridium phytofermentans</i>	cpy	<i>Clostridium phytofermentans</i> ISDg	357809	4023	Bacteria
507	<i>Alkaliphilus metalliredigens</i>	amt	<i>Alkaliphilus metalliredigens</i> QYMF	293826	4941	Bacteria
508	<i>Alkaliphilus oremlandii</i>	aoe	<i>Alkaliphilus oremlandii</i> OhILAs	350688	2991	Bacteria
509	<i>Carboxydotherrhus hydrogenoformans</i>	chy	<i>Carboxydotherrhus hydrogenoformans</i> Z-2901	246194	2707	Bacteria
510	<i>Desulfotobacterium hafniense</i>	dsy	<i>Desulfotobacterium hafniense</i> Y51	138119	5137	Bacteria
511	<i>Desulfotomaculum reducens</i>	drm	<i>Desulfotomaculum reducens</i> MI-1	349161	3423	Bacteria
512	<i>Pelotomaculum thermopropionicum</i>	pth	<i>Pelotomaculum thermopropionicum</i> SI	370438	2977	Bacteria
513	<i>Candidatus Desulforudis audaxviator</i>	dau	<i>Candidatus Desulforudis audaxviator</i> MP104C	477974	2295	Bacteria
514	<i>Thermoanaerobacter tengcongensis</i>	tte	<i>Thermoanaerobacter tengcongensis</i> MB4	273068	2721	Bacteria
515	<i>Thermoanaerobacter</i> sp. X514	tex	<i>Thermoanaerobacter</i> sp. X514	399726	2479	Bacteria
516	<i>Thermoanaerobacter pseudethanolicus</i>	tpd	<i>Thermoanaerobacter pseudethanolicus</i> ATCC 33223	340099	2366	Bacteria
517	<i>Moorella thermoacetica</i>	mta	<i>Moorella thermoacetica</i> ATCC 39073	264732	2615	Bacteria
518	<i>Mycoplasma genitalium</i>	mge	<i>Mycoplasma genitalium</i> G37	243273	525	Bacteria
519	<i>Mycoplasma pneumoniae</i>	mpn	<i>Mycoplasma pneumoniae</i> M129	272634	733	Bacteria
520	<i>Mycoplasma pulmonis</i>	mpu	<i>Mycoplasma pulmonis</i> UAB CTIP	272635	815	Bacteria
521	<i>Mycoplasma penetrans</i>	mpe	<i>Mycoplasma penetrans</i> HF-2	272633	1069	Bacteria
522	<i>Mycoplasma gallisepticum</i>	mga	<i>Mycoplasma gallisepticum</i> R	233150	781	Bacteria
523	<i>Mycoplasma mycoides</i>	mmy	<i>Mycoplasma mycoides</i> subsp. <i>mycoides</i> SC str. PG1	272632	1052	Bacteria
524	<i>Mycoplasma mobile</i>	mmo	<i>Mycoplasma mobile</i> 163K	267748	667	Bacteria
525	<i>Mycoplasma hyopneumoniae</i> 232	mhy	<i>Mycoplasma hyopneumoniae</i> 232	295358	727	Bacteria
526	<i>Mycoplasma hyopneumoniae</i> J	mhj	<i>Mycoplasma hyopneumoniae</i> J	262719	709	Bacteria
527	<i>Mycoplasma hyopneumoniae</i> 7448	mhp	<i>Mycoplasma hyopneumoniae</i> 7448	262722	711	Bacteria
528	<i>Mycoplasma synoviae</i>	msy	<i>Mycoplasma synoviae</i> 53	262723	728	Bacteria
529	<i>Mycoplasma capricolum</i>	mcp	<i>Mycoplasma capricolum</i> subsp. <i>capricolum</i> ATCC 27343	340047	867	Bacteria
530	<i>Ureaplasma urealyticum</i>	uur	<i>Ureaplasma parvum</i> serovar 3 str. ATCC 700970	273119	653	Bacteria
531	<i>Ureaplasma parvum</i>	upa	<i>Ureaplasma parvum</i> serovar 3 str. ATCC 27815	505682	641	Bacteria
532	<i>Phytoplasma OY</i>	poy	Onion yellows phytoplasma OY-M	262768	793	Bacteria
533	<i>Phytoplasma AYWB</i>	ayw	Aster yellows witches'-broom phytoplasma AYWB	322098	730	Bacteria
534	<i>Acholeplasma laidlawii</i>	acl	<i>Acholeplasma laidlawii</i> PG-8A	441768	1433	Bacteria
535	<i>Mesoplasma florum</i>	mfl	<i>Mesoplasma florum</i> L1	265311	717	Bacteria
536	<i>Mycobacterium tuberculosis</i> H37Rv	mtu	<i>Mycobacterium tuberculosis</i> H37Rv	83332	4048	Bacteria
537	<i>Mycobacterium tuberculosis</i> CDC1551	mtc	<i>Mycobacterium tuberculosis</i> CDC1551	83331	4293	Bacteria
538	<i>Mycobacterium tuberculosis</i> H37Ra	mra	<i>Mycobacterium tuberculosis</i> H37Ra	419947	4084	Bacteria
539	<i>Mycobacterium tuberculosis</i> F11	mtf	<i>Mycobacterium tuberculosis</i> F11	336982	3998	Bacteria
540	<i>Mycobacterium bovis</i> AF2122/97	mbo	<i>Mycobacterium bovis</i> AF2122/97	233413	4003	Bacteria
541	<i>Mycobacterium bovis</i> BCG Pasteur 1173P2	mbb	<i>Mycobacterium bovis</i> BCG str. Pasteur 1173P2	410289	4036	Bacteria
542	<i>Mycobacterium leprae</i>	mle	<i>Mycobacterium leprae</i> TN	272631	2770	Bacteria

543	<i>Mycobacterium avium</i> paratuberculosis	mpa	<i>Mycobacterium avium</i> subsp. paratuberculosis K-10	262316	4399	Bacteria
544	<i>Mycobacterium avium</i> 104	mav	<i>Mycobacterium avium</i> 104	243243	5313	Bacteria
545	<i>Mycobacterium smegmatis</i>	msm	<i>Mycobacterium smegmatis</i> str. MC2 155	246196	6938	Bacteria
546	<i>Mycobacterium ulcerans</i>	mul	<i>Mycobacterium ulcerans</i> Agy99	362242	4981	Bacteria
547	<i>Mycobacterium vanbaalenii</i>	mva	<i>Mycobacterium vanbaalenii</i> PYR-1	350058	6136	Bacteria
548	<i>Mycobacterium gilvum</i>	mgi	<i>Mycobacterium gilvum</i> PYR-GCK	350054	5669	Bacteria
549	<i>Mycobacterium</i> sp. MCS	mmc	<i>Mycobacterium</i> sp. MCS	164756	5698	Bacteria
550	<i>Mycobacterium</i> sp. KMS	mkm	<i>Mycobacterium</i> sp. KMS	189918	6079	Bacteria
551	<i>Mycobacterium</i> sp. JLS	mjl	<i>Mycobacterium</i> sp. JLS	164757	5845	Bacteria
552	<i>Corynebacterium glutamicum</i> ATCC 13032 (Kyowa Hakko)	cgl	<i>Corynebacterium glutamicum</i> ATCC 13032	196627	3073	Bacteria
553	<i>Corynebacterium glutamicum</i> ATCC 13032 (Bielefeld)	cgb	<i>Corynebacterium glutamicum</i> ATCC 13032	196627	3138	Bacteria
554	<i>Corynebacterium glutamicum</i> R	cgt	<i>Corynebacterium glutamicum</i> R	340322	3156	Bacteria
555	<i>Corynebacterium efficiens</i>	cef	<i>Corynebacterium efficiens</i> YS-314	196164	3020	Bacteria
556	<i>Corynebacterium diphtheriae</i>	cdi	<i>Corynebacterium diphtheriae</i> NCTC 13129	257309	2389	Bacteria
557	<i>Corynebacterium jeikeium</i>	cjk	<i>Corynebacterium jeikeium</i> K411	306537	2181	Bacteria
558	<i>Corynebacterium urealyticum</i>	cur	<i>Corynebacterium urealyticum</i> DSM 7109	504474	2084	Bacteria
559	<i>Nocardia farcinica</i>	nfa	<i>Nocardia farcinica</i> IFM 10152	247156	6000	Bacteria
560	<i>Rhodococcus</i> sp. RHA1	rha	<i>Rhodococcus jostii</i> RHA1	101510	9221	Bacteria
561	<i>Streptomyces coelicolor</i>	sco	<i>Streptomyces coelicolor</i> A3(2)	100226	8301	Bacteria
562	<i>Streptomyces avermitilis</i>	sma	<i>Streptomyces avermitilis</i> MA-4680	227882	7762	Bacteria
563	<i>Tropheryma whippelii</i> Twist	twh	<i>Tropheryma whippelii</i> str. Twist	203267	862	Bacteria
564	<i>Tropheryma whippelii</i> TW08/27	tws	<i>Tropheryma whippelii</i> TW08/27	218496	839	Bacteria
565	<i>Leifsonia xyli</i> xyl CTCB07	lxx	<i>Leifsonia xyli</i> subsp. xyl str. CTCB07	281090	2376	Bacteria
566	<i>Arthrobacter</i> sp. FB24	art	<i>Arthrobacter</i> sp. FB24	290399	4605	Bacteria
567	<i>Arthrobacter aureus</i>	aau	<i>Arthrobacter aureus</i> TC1	290340	4780	Bacteria
568	<i>Renibacterium salmoninarum</i>	rsa	<i>Renibacterium salmoninarum</i> ATCC 33209	288705	3558	Bacteria
569	<i>Kocuria rhizophila</i>	krh	<i>Kocuria rhizophila</i> DC2201	378753	2414	Bacteria
570	<i>Propionibacterium acnes</i>	pac	<i>Propionibacterium acnes</i> KPA171202	267747	2368	Bacteria
571	<i>Nocardioide</i> sp. JS614	nca	<i>Nocardioide</i> sp. JS614	196162	5026	Bacteria
572	<i>Thermobifida fusca</i>	tfu	<i>Thermobifida fusca</i> YX	269800	3184	Bacteria
573	<i>Frankia</i> sp. CcI3	fra	<i>Frankia</i> sp. CcI3	106370	4618	Bacteria
574	<i>Frankia</i> sp. EAN1pec	fre	<i>Frankia</i> sp. EAN1pec	298653	7377	Bacteria
575	<i>Frankia alni</i>	fal	<i>Frankia alni</i> ACN14a	326424	6786	Bacteria
576	<i>Acidothermus cellulolyticus</i>	ace	<i>Acidothermus cellulolyticus</i> 11B	351607	2217	Bacteria
577	<i>Kineococcus radiotolerans</i>	kra	<i>Kineococcus radiotolerans</i> SRS30216	266940	4778	Bacteria
578	<i>Saccharopolyspora erythraea</i>	sen	<i>Saccharopolyspora erythraea</i> NRRL 2338	405948	7264	Bacteria
579	<i>Salinispora tropica</i>	stp	<i>Salinispora tropica</i> CNB-440	369723	4654	Bacteria
580	<i>Salinispora arenicola</i>	saq	<i>Salinispora arenicola</i> CNS-205	391037	5172	Bacteria
581	<i>Bifidobacterium longum</i>	blo	<i>Bifidobacterium longum</i> NCC2705	206672	1800	Bacteria
582	<i>Bifidobacterium adolescentis</i>	bad	<i>Bifidobacterium adolescentis</i> ATCC 15703	367928	1701	Bacteria
583	<i>Rubrobacter xylanophilus</i>	rxu	<i>Rubrobacter xylanophilus</i> DSM 9941	266117	3281	Bacteria
584	<i>Fusobacterium nucleatum</i>	fnu	<i>Fusobacterium nucleatum</i> subsp. nucleatum ATCC 25586	190304	2129	Bacteria
585	<i>Rhodopirellula baltica</i>	rba	<i>Rhodopirellula baltica</i> SH 1	243090	7405	Bacteria
586	<i>Opitutus terrae</i>	ote	<i>Opitutus terrae</i> PB90-1	452637	4705	Bacteria
587	<i>Chlamydia trachomatis</i> serovar D	ctr	<i>Chlamydia trachomatis</i> D/UW-3/CX	272561	940	Bacteria
588	<i>Chlamydia trachomatis</i> serovar A	cta	<i>Chlamydia trachomatis</i> A/HAR-13	315277	963	Bacteria
589	<i>Chlamydia muridarum</i>	cmu	<i>Chlamydia muridarum</i> Nigg	243161	962	Bacteria
590	<i>Chlamydia pneumoniae</i> CWL029	cpn	<i>Chlamydia pneumoniae</i> CWL029	115713	1122	Bacteria
591	<i>Chlamydia pneumoniae</i> AR39	cpa	<i>Chlamydia pneumoniae</i> AR39	115711	1167	Bacteria
592	<i>Chlamydia pneumoniae</i> J138	cpj	<i>Chlamydia pneumoniae</i> J138	138677	1110	Bacteria
593	<i>Chlamydia pneumoniae</i> TW183	cpt	<i>Chlamydia pneumoniae</i> TW-183	182082	1155	Bacteria
594	<i>Chlamydia caviae</i>	cca	<i>Chlamydia caviae</i> GPIC	227941	1060	Bacteria
595	<i>Chlamydia abortus</i>	cab	<i>Chlamydia abortus</i> S26/3	218497	1003	Bacteria
596	<i>Chlamydia felis</i>	cfe	<i>Chlamydia felis</i> Fe/C-56	264202	1054	Bacteria
597	<i>Candidatus Protochlamydia amoebophila</i>	pcu	<i>Candidatus Protochlamydia amoebophila</i> UWE25	264201	2075	Bacteria
598	<i>Borrelia burgdorferi</i>	bbu	<i>Borrelia burgdorferi</i> B31	224326	1701	Bacteria
599	<i>Borrelia garinii</i>	bga	<i>Borrelia garinii</i> PBi	290434	970	Bacteria
600	<i>Borrelia afzelii</i>	baf	<i>Borrelia afzelii</i> PKo	390236	1253	Bacteria
601	<i>Treponema pallidum</i>	tpa	<i>Treponema pallidum</i> subsp. pallidum str. Nichols	243276	1095	Bacteria
602	<i>Treponema denticola</i>	tde	<i>Treponema denticola</i> ATCC 35405	243275	2838	Bacteria
603	<i>Leptospira interrogans</i> serovar lai	lil	<i>Leptospira interrogans</i> serovar Lai str. 56601	189518	4768	Bacteria
604	<i>Leptospira interrogans</i> serovar Copenhageni	lic	<i>Leptospira interrogans</i> serovar Copenhageni str. Fiocruz L1-130	267671	3753	Bacteria
605	<i>Leptospira borgpetersenii</i> JB197	lbj	<i>Leptospira borgpetersenii</i> serovar Hardjo-bovis JB197	355277	3242	Bacteria
606	<i>Leptospira borgpetersenii</i> L550	lbl	<i>Leptospira borgpetersenii</i> serovar Hardjo-bovis L550	355276	3273	Bacteria

607	<i>Leptospira biflexa</i> serovar Patoc Patoc 1 (Paris)	lbi	<i>Leptospira biflexa</i> serovar Patoc strain 'Patoc 1 (Paris)'	456481	3440	Bacteria
608	<i>Synechocystis</i> sp. PCC6803	syn	<i>Synechocystis</i> sp. PCC 6803	1148	3314	Bacteria
609	<i>Synechococcus</i> sp. WH8102	syw	<i>Synechococcus</i> sp. WH 8102	84588	2581	Bacteria
610	<i>Synechococcus elongatus</i> PCC6301	syc	<i>Synechococcus elongatus</i> PCC 6301	269084	2582	Bacteria
611	<i>Synechococcus elongatus</i> PCC7942	syf	<i>Synechococcus elongatus</i> PCC 7942	1140	2715	Bacteria
612	<i>Synechococcus</i> sp. CC9605	syd	<i>Synechococcus</i> sp. CC9605	110662	2756	Bacteria
613	<i>Synechococcus</i> sp. CC9902	syf	<i>Synechococcus</i> sp. CC9902	316279	2358	Bacteria
614	<i>Synechococcus</i> sp. CC9311	syg	<i>Synechococcus</i> sp. CC9311	64471	2944	Bacteria
615	<i>Synechococcus</i> sp. RCC307	syr	<i>Synechococcus</i> sp. RCC307	316278	2583	Bacteria
616	<i>Synechococcus</i> sp. WH7803	syx	<i>Synechococcus</i> sp. WH 7803	32051	2586	Bacteria
617	<i>Synechococcus</i> sp. PCC7002	syp	<i>Synechococcus</i> sp. PCC 7002	32049	3237	Bacteria
618	<i>Cyanobacteria</i> Yellowstone A-Prime	cya	<i>Synechococcus</i> sp. JA-3-3Ab	321327	2897	Bacteria
619	<i>Cyanobacteria</i> Yellowstone B-Prime	cyb	<i>Synechococcus</i> sp. JA-2-3B'a(2-13)	321332	2942	Bacteria
620	<i>Thermosynechococcus elongatus</i>	tel	<i>Thermosynechococcus elongatus</i> BP-1	197221	2525	Bacteria
621	<i>Gloeobacter violaceus</i>	gvi	<i>Gloeobacter violaceus</i> PCC 7421	251221	4482	Bacteria
622	<i>Anabaena</i> sp. PCC7120	ana	<i>Nostoc</i> sp. PCC 7120	103690	6214	Bacteria
623	<i>Anabaena variabilis</i>	ava	<i>Anabaena variabilis</i> ATCC 29413	240292	5764	Bacteria
624	<i>Prochlorococcus marinus</i> SS120	pma	<i>Prochlorococcus marinus</i> subsp. marinus str. CCMP1375	167539	1930	Bacteria
625	<i>Prochlorococcus marinus</i> MED4	pmm	<i>Prochlorococcus marinus</i> subsp. pastoris str. CCMP1986	59919	1763	Bacteria
626	<i>Prochlorococcus marinus</i> MIT9313	pmt	<i>Prochlorococcus marinus</i> str. MIT 9313	74547	2330	Bacteria
627	<i>Prochlorococcus marinus</i> NATL2A	pmn	<i>Prochlorococcus marinus</i> str. NATL2A	59920	2229	Bacteria
628	<i>Prochlorococcus marinus</i> MIT9312	pmi	<i>Prochlorococcus marinus</i> str. MIT 9312	74546	1856	Bacteria
629	<i>Prochlorococcus marinus</i> AS9601	pmb	<i>Prochlorococcus marinus</i> str. AS9601	146891	1984	Bacteria
630	<i>Prochlorococcus marinus</i> MIT 9515	pmc	<i>Prochlorococcus marinus</i> str. MIT 9515	167542	1965	Bacteria
631	<i>Prochlorococcus marinus</i> MIT 9303	pmf	<i>Prochlorococcus marinus</i> str. MIT 9303	59922	3136	Bacteria
632	<i>Prochlorococcus marinus</i> MIT 9301	pmg	<i>Prochlorococcus marinus</i> str. MIT 9301	167546	1963	Bacteria
633	<i>Prochlorococcus marinus</i> MIT 9215	pmh	<i>Prochlorococcus marinus</i> str. MIT 9215	93060	2055	Bacteria
634	<i>Prochlorococcus marinus</i> MIT 9211	pmj	<i>Prochlorococcus marinus</i> str. MIT 9211	93059	1901	Bacteria
635	<i>Prochlorococcus marinus</i> NATL1A	pme	<i>Prochlorococcus marinus</i> str. NATL1A	167555	2250	Bacteria
636	<i>Trichodesmium erythraeum</i>	ter	<i>Trichodesmium erythraeum</i> IMS101	203124	5126	Bacteria
637	<i>Bacteroides thetaiotaomicron</i>	bth	<i>Bacteroides thetaiotaomicron</i> VPI-5482	226186	4902	Bacteria
638	<i>Bacteroides fragilis</i> YCH46	bfr	<i>Bacteroides fragilis</i> YCH46	295405	4717	Bacteria
639	<i>Bacteroides fragilis</i> NCTC9343	bfs	<i>Bacteroides fragilis</i> NCTC 9343	272559	4395	Bacteria
640	<i>Bacteroides vulgatus</i>	bvu	<i>Bacteroides vulgatus</i> ATCC 8482	435590	4183	Bacteria
641	<i>Porphyromonas gingivalis</i>	pgi	<i>Porphyromonas gingivalis</i> W83	242619	2015	Bacteria
642	<i>Parabacteroides distasonis</i>	pdi	<i>Parabacteroides distasonis</i> ATCC 8503	435591	3965	Bacteria
643	<i>Salinibacter ruber</i>	sru	<i>Salinibacter ruber</i> DSM 13855	309807	2898	Bacteria
644	<i>Cytophaga hutchinsonii</i>	chu	<i>Cytophaga hutchinsonii</i> ATCC 33406	269798	3837	Bacteria
645	<i>Gramella forsetii</i>	gfo	<i>Gramella forsetii</i> KT0803	411154	3637	Bacteria
646	<i>Flavobacterium johnsoniae</i>	fjo	<i>Flavobacterium johnsoniae</i> UW101	376686	5137	Bacteria
647	<i>Flavobacterium psychrophilum</i>	fps	<i>Flavobacterium psychrophilum</i> JIP02/86	402612	2499	Bacteria
648	<i>Chlorobaculum tepidum</i>	cte	<i>Chlorobium tepidum</i> TLS	194439	2344	Bacteria
649	<i>Chlorobium chlorochromatii</i>	cch	<i>Chlorobium chlorochromatii</i> CaD3	340177	2050	Bacteria
650	<i>Chlorobium phaeobacteroides</i>	cph	<i>Chlorobium phaeobacteroides</i> DSM 266	290317	2799	Bacteria
651	<i>Prosthecochloris vibrioformis</i>	pvi	<i>Chlorobium phaeovibrioides</i> DSM 265	290318	1824	Bacteria
652	<i>Pelodictyon luteolum</i>	plt	<i>Chlorobium luteolum</i> DSM 273	319225	2137	Bacteria
653	<i>Dehalococcoides ethenogenes</i>	det	<i>Dehalococcoides ethenogenes</i> 195	243164	1642	Bacteria
654	<i>Dehalococcoides</i> sp. CBDB1	deh	<i>Dehalococcoides</i> sp. CBDB1	255470	1510	Bacteria
655	<i>Dehalococcoides</i> sp. BAV1	deb	<i>Dehalococcoides</i> sp. BAV1	216389	1436	Bacteria
656	<i>Roseiflexus</i> sp. RS-1	rrs	<i>Roseiflexus</i> sp. RS-1	357808	4682	Bacteria
657	<i>Roseiflexus castenholzii</i> DSM13941	rca	<i>Roseiflexus castenholzii</i> DSM 13941	383372	4509	Bacteria
658	<i>Chloroflexus aurantiacus</i>	cau	<i>Chloroflexus aurantiacus</i> J-10-fl	324602	3990	Bacteria
659	<i>Herpetosiphon aurantiacus</i>	hau	<i>Herpetosiphon aurantiacus</i> ATCC 23779	316274	5363	Bacteria
660	<i>Deinococcus radiodurans</i>	dra	<i>Deinococcus radiodurans</i> R1	243230	3244	Bacteria
661	<i>Deinococcus geothermalis</i>	dge	<i>Deinococcus geothermalis</i> DSM 11300	319795	3150	Bacteria
662	<i>Thermus thermophilus</i> HB27	tth	<i>Thermus thermophilus</i> HB27	262724	2263	Bacteria
663	<i>Thermus thermophilus</i> HB8	tth	<i>Thermus thermophilus</i> HB8	300852	2291	Bacteria
664	<i>Aquifex aeolicus</i>	aae	<i>Aquifex aeolicus</i> VF5	224324	1611	Bacteria
665	<i>Thermotoga maritima</i>	tma	<i>Thermotoga maritima</i> MSB8	243274	1928	Bacteria
666	<i>Thermotoga petrophila</i>	tpt	<i>Thermotoga petrophila</i> RKU-1	390874	1864	Bacteria
667	<i>Thermotoga lettingae</i>	tlt	<i>Thermotoga lettingae</i> TMO	416591	2110	Bacteria
668	<i>Thermosipho melanesiensis</i>	tme	<i>Thermosipho melanesiensis</i> BI429	391009	1992	Bacteria
669	<i>Fervidobacterium nodosum</i>	fno	<i>Fervidobacterium nodosum</i> Rt17-B1	381764	1847	Bacteria
670	<i>Petrogla mobilis</i>	pmo	<i>Petrogla mobilis</i> SJ95	403833	2015	Bacteria
671	<i>Methanococcus jannaschii</i>	mja	<i>Methanocaldococcus jannaschii</i> DSM 2661	243232	1830	Archaea
672	<i>Methanococcus maripaludis</i> S2	mmp	<i>Methanococcus maripaludis</i> S2	267377	1772	Archaea
673	<i>Methanococcus maripaludis</i> C5	mmq	<i>Methanococcus maripaludis</i> C5	402880	1889	Archaea
674	<i>Methanococcus maripaludis</i> C6	mmx	<i>Methanococcus maripaludis</i> C6	444158	1888	Archaea
675	<i>Methanococcus maripaludis</i> C7	mmz	<i>Methanococcus maripaludis</i> C7	426368	1855	Archaea
676	<i>Methanococcus aeolicus</i>	mae	<i>Methanococcus aeolicus</i> Nankai-3	419665	1552	Archaea

677	<i>Methanococcus vannielii</i>	mvn	<i>Methanococcus vannielii</i> SB	406327	1752	Archaea
678	<i>Methanosarcina acetivorans</i>	mac	<i>Methanosarcina acetivorans</i> C2A	188937	4721	Archaea
679	<i>Methanosarcina barkeri</i>	mba	<i>Methanosarcina barkeri</i> str. Fusaro	269797	3831	Archaea
680	<i>Methanosarcina mazei</i>	mma	<i>Methanosarcina mazei</i> Go1	192952	3436	Archaea
681	<i>Methanococcoides burtonii</i>	mbu	<i>Methanococcoides burtonii</i> DSM 6242	259564	2497	Archaea
682	<i>Methanosaeta thermophila</i>	mtp	<i>Methanosaeta thermophila</i> PT	349307	1781	Archaea
683	<i>Methanospirillum hungatei</i>	mhu	<i>Methanospirillum hungatei</i> JF-1	323259	3304	Archaea
684	<i>Methanocorpusculum labreanum</i>	mml	<i>Methanocorpusculum labreanum</i> Z	410358	1819	Archaea
685	<i>Methanoculleus marisnigri</i>	mem	<i>Methanoculleus marisnigri</i> JR1	368407	2555	Archaea
686	<i>Candidatus Methanoregula boonei</i>	mbn	<i>Candidatus Methanoregula boonei</i> 6A8	456442	2513	Archaea
687	<i>Methanobacterium thermoautotrophicum</i>	mth	<i>Methanothermobacter thermoautotrophicus</i> str. Delta H	187420	1921	Archaea
688	<i>Methanosphaera stadtmanae</i>	mst	<i>Methanosphaera stadtmanae</i> DSM 3091	339860	1588	Archaea
689	<i>Methanobrevibacter smithii</i> ATCC 35061	msi	<i>Methanobrevibacter smithii</i> ATCC 35061	420247	1835	Archaea
690	<i>Methanopyrus kandleri</i>	mka	<i>Methanopyrus kandleri</i> AV19	190192	1729	Archaea
691	<i>Archaeoglobus fulgidus</i>	afu	<i>Archaeoglobus fulgidus</i> DSM 4304	224325	2486	Archaea
692	<i>Halobacterium salinarum</i> R1	hsl	<i>Halobacterium salinarum</i> R1	478009	2934	Archaea
693	<i>Haloarcula marismortui</i>	hma	<i>Haloarcula marismortui</i> ATCC 43049	272569	4301	Archaea
694	<i>Thermoplasma acidophilum</i>	tac	<i>Thermoplasma acidophilum</i> DSM 1728	273075	1530	Archaea
695	<i>Thermoplasma volcanium</i>	tvo	<i>Thermoplasma volcanium</i> GSS1	273116	1548	Archaea
696	<i>Picrophilus torridus</i>	pto	<i>Picrophilus torridus</i> DSM 9790	263820	1582	Archaea
697	<i>Pyrococcus horikoshii</i>	pho	<i>Pyrococcus horikoshii</i> OT3	70601	2005	Archaea
698	<i>Pyrococcus abyssi</i>	pab	<i>Pyrococcus abyssi</i> GE5	272844	1995	Archaea
699	<i>Pyrococcus furiosus</i>	pfu	<i>Pyrococcus furiosus</i> DSM 3638	186497	2228	Archaea
700	<i>Thermococcus kodakarensis</i>	tko	<i>Thermococcus kodakarensis</i> KOD1	69014	2358	Archaea
701	Uncultured methanogenic archaeon RC-I	rci	uncultured methanogenic archaeon RC-I	351160	3166	Archaea
702	<i>Aeropyrum pernix</i>	ape	<i>Aeropyrum pernix</i> K1	272557	1752	Archaea
703	<i>Staphylothermus marinus</i>	smr	<i>Staphylothermus marinus</i> F1	399550	1646	Archaea
704	<i>Ignicoccus hospitalis</i>	iho	<i>Ignicoccus hospitalis</i> KIN4/I	453591	1492	Archaea
705	<i>Hyperthermus butylicus</i>	hbu	<i>Hyperthermus butylicus</i> DSM 5456	415426	1672	Archaea
706	<i>Sulfolobus solfataricus</i>	sso	<i>Sulfolobus solfataricus</i> P2	273057	3033	Archaea
707	<i>Sulfolobus tokodaii</i>	sto	<i>Sulfolobus tokodaii</i> str. 7	273063	2874	Archaea
708	<i>Sulfolobus acidocaldarius</i>	sai	<i>Sulfolobus acidocaldarius</i> DSM 639	330779	2329	Archaea
709	<i>Metallosphaera sedula</i>	mse	<i>Metallosphaera sedula</i> DSM 5348	399549	2342	Archaea
710	<i>Pyrobaculum aerophilum</i>	pai	<i>Pyrobaculum aerophilum</i> str. IM2	178306	2706	Archaea
711	<i>Pyrobaculum islandicum</i>	pis	<i>Pyrobaculum islandicum</i> DSM 4184	384616	2062	Archaea
712	<i>Pyrobaculum arsenaticum</i>	pas	<i>Pyrobaculum arsenaticum</i> DSM 13514	340102	2408	Archaea
713	<i>Caldivirga maquilensis</i>	cma	<i>Caldivirga maquilensis</i> IC-167	397948	2045	Archaea
714	<i>Thermoproteus neutrophilus</i>	tne	<i>Thermoproteus neutrophilus</i> V24Sta	444157	2053	Archaea
715	<i>Thermofilum pendens</i>	tpe	<i>Thermofilum pendens</i> Hrk 5	368408	1931	Archaea
716	<i>Nitrosopumilus maritimus</i>	nmr	<i>Nitrosopumilus maritimus</i> SCM1	436308	1840	Archaea
717	<i>Nanoarchaeum equitans</i>	neq	<i>Nanoarchaeum equitans</i> Kin4-M	228908	582	Archaea
718	<i>Candidatus Korarchaeum cryptofilum</i>	kcr	<i>Candidatus Korarchaeum cryptofilum</i> OPF8	374847	1661	Archaea