



## **MicroB© Bacteria**

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<b>Biological data source</b>	<b>Release date</b>
Taxonomy	20/10/2011
Genome Reviews	04/06/2011
UniProt	19/10/2011
HAMAP	25/10/2011
Gene Ontology	20/10/2011
Enzyme	20/10/2011
KEGG ligand / pathway	21/10/2011

Organism	Strain	Family	Nb of repli-cons	Genome size (pb)	Nb of CDSs	Nb of tRNAs	Nb of rRNAs	Nb of sRNAs	Nb of ECs	Nb of GOs
Acetobacter pasteurianus IFO 3283-01	NBRC 3283 = LMG 1513 = CCTM 1153	Acetobacteraceae	7	3340249	3050	57	15	3	266	5944
Gluconobacter oxydans 621H	621H	Acetobacteraceae	6	2922384	2662	50	12	3	717	5249
Gluconacetobacter diazotrophicus PA1 5	ATCC 49037 = DSM 5601 = PA15	Acetobacteraceae	3	3999591	3928	55	12	5	418	6882
Granulibacter bethesdensis CGDNIH1	ATCC BAA-1260 = CGDNIH1	Acetobacteraceae	1	2708355	2437	52	9	4	946	5092
Gluconacetobacter diazotrophicus PA1 5	ATCC 49037 = DSM 5601 = PA15	Acetobacteraceae	2	3914947	3501	55	12	3	549	6749
Acidiphilium multivorum AIU301	DSM 11245 = JCM 8867 = AIU301	Acetobacteraceae	9	4214744	3949	48	6	3	1009	7592
Acidiphilium cryptum JF-5	JF-5	Acetobacteraceae	9	3963080	3557	47	6	3	742	7038
Aster yellows witches'-broom phytoplasma AYWB	AYWB	Acholeplasmataceae	5	723970	693	31	4	3	139	1283
Acholeplasma laidlawii PG-8A	PG-8A	Acholeplasmataceae	1	1496992	1380	34	6	3	380	2841
Candidatus Phytoplasma mali	AT	Acholeplasmataceae	1	601943	497	32	6	2	104	1129
Candidatus Phytoplasma australiense		Acholeplasmataceae	1	879959	838	35	6	3	90	1322
Onion yellows phytoplasma OY-M	OY-M	Acholeplasmataceae	3	859251	759	32	6	2	81	1549
Acidaminococcus fermentans DSM 20731	ATCC 25085 = DSM 20731 = VR4	Acidaminococcaceae	1	2329769	2026	60	18	4	368	4212
Acidimicrobium ferrooxidans DSM 10331	DSM 10331 = JCM 15462 = NBRC 103882 = ICP	Acidimicrobiaceae	1	2158157	1964	46	8	3	331	4097
Acidithiobacillus ferrooxidans ATCC 23270	ATCC 23270 = DSM 14882 = NCIB 8455	Acidithiobacillaceae	1	2982397	3147	81	6	6	581	5450
Acidithiobacillus ferrooxidans ATCC 53993	ATCC 53993	Acidithiobacillaceae	1	2885038	2826	46	6	4	487	5456
Terriglobus saanensis SP1PR4	ATCC BAA-1853 = DSM 23119 = SP1PR4	Acidobacteriaceae	1	5095226	4180	48	3	4	467	7459
Acidobacterium sp. MP5ACTX9	MP5ACTX9	Acidobacteriaceae	6	5503984	4542	46	3	4	479	7495
Acidobacterium capsulatum ATCC 51196	ATCC 51196 = DSM 11244 = JCM	Acidobacteriaceae	1	4127356	3382	45	3	9	639	6122

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<i>Acidothermus cellulolyticus</i> 11B	ATCC 43068 = 11B	Acidothermaceae	1	2443540	2157	46	3	3	534	4653
<i>Arcanobacterium haemolyticum</i> DSM 20595	ATCC 9345 = DSM 20595 = NBRC 15585 = NCTC 8452 = 11018	Actinomycetaceae	1	1986154	1731	50	12	3	297	3451
<i>Mobiluncus curtisii</i> ATCC 43063	ATCC 43063 = DSM 2711 = V125	Actinomycetaceae	1	2146480	1909	46	6	5	522	3702
<i>Actinosynnema mirum</i> DSM 43827	ATCC 29888 = DSM 43827 = NBRC 14064 = IMRU 3971	Actinosynnemataceae	1	8248144	6916	58	18	3	670	11465
<i>Tolumonas auensis</i> DSM 9187	DSM 9187 = TA4	Aeromonadaceae	1	3471292	3130	91	25	4	651	7025
<i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i> A449	A449	Aeromonadaceae	6	5040536	4437	110	28	14	470	8949
<i>Aeromonas hydrophila</i> subsp. <i>hydrophila</i> ATCC 7966	ATCC 7966 = NCIB 9240	Aeromonadaceae	1	4744448	4122	128	30	14	1101	9036
<i>Bordetella avium</i> 197N	197N	Alcaligenaceae	1	3732255	3420	61	9	4	834	6829
<i>Bordetella petrii</i>	ATCC BAA-461 = DSM 12804 = CCUG 43448	Alcaligenaceae	1	5287950	5032	51	9	4	1358	9496
<i>Taylorella equigenitalis</i> MCE9	MCE9	Alcaligenaceae	1	1695860	1556	38	9	0	497	3496
<i>Bordetella parapertussis</i> 12822	NCTC 13253 = ATCC BAA-587 = 12822	Alcaligenaceae	1	4773551	4394	54	9	5	736	8445
<i>Achromobacter xylosoxidans</i> A8	A8	Alcaligenaceae	3	7359146	6815	60	10	1	1588	12768
<i>Bordetella bronchiseptica</i>	NCTC 13252 = RB50 = ATCC BAA-588	Alcaligenaceae	1	5339179	5006	55	9	5	824	9498
<i>Bordetella pertussis</i>	ATCC BAA-589 = Tohama I = NCTC 13251	Alcaligenaceae	1	4086189	3787	51	9	4	654	7385
<i>Alcanivorax borkumensis</i> SK2	SK2 = ATCC 700651 = DSM 11573	Alcanivoracaceae	1	3120143	2755	42	9	6	883	5958
<i>Kangiella koreensis</i> DSM 16069	DSM 16069 = KCTC 12182 = SW-125	Alcanivoracaceae	1	2852073	2632	41	6	3	490	5376

Bacillus tusciae DSM 2912	DSM 2912 = NBRC 15312 = T2	Alicyclobacillaceae	1	3384766	3150	60	15	4	498	6153
Alicyclobacillus acidocaldarius subsp. acidocaldarius DSM 446	ATCC 27009 = DSM 446 = 104-1A	Alicyclobacillaceae	4	3205686	3084	63	18	4	479	5707
Saccharophagus degradans 2-40	2-40 = ATCC 43961 = DSM 17024	Alteromonadaceae	1	5057531	4007	41	6	6	699	7630
Marinobacter adhaerens HP15	HP15	Alteromonadaceae	3	4651725	4410	51	9	0	711	8279
Marinobacter aquaeolei VT8	DSM 11845 = ATCC 700491 = = VT8) = VT8	Alteromonadaceae	3	4779762	4272	51	9	7	747	8223
Anaerolinea thermophila UNI-1	DSM 14523 = JCM 11388 = NBRC 100420 = UNI-1	Anaerolineaceae	1	3532378	3175	50	6	3	680	5716
Neorickettsia risticii str. Illinois	Illinois	Anaplasmataceae	1	879977	898	33	3	2	244	1897
Wolbachia sp. wRi	wRi	Anaplasmataceae	1	1445873	1150	34	3	2	155	2433
Ehrlichia ruminantium str. Gardel	Gardel	Anaplasmataceae	1	1499920	950	36	3	4	175	2133
Ehrlichia chaffeensis str. Arkansas	Arkansas	Anaplasmataceae	1	1176248	1105	37	3	4	270	2182
Ehrlichia ruminantium str. Welgevonden	Welgevonden sub_strain ARC-OVI	Anaplasmataceae	1	1516355	920	36	3	4	325	2138
Wolbachia endosymbiont strain TRS of Brugia malayi	TRS	Anaplasmataceae	1	1080084	805	34	3	3	161	2004
Ehrlichia ruminantium str. Welgevonden	Welgevonden sub_strain CIRAD	Anaplasmataceae	1	1512977	958	36	3	4	280	2164
Wolbachia endosymbiont of Culex quinquefasciatus Pel	wPip	Anaplasmataceae	1	1482455	1372	34	3	3	164	2432
Anaplasma phagocytophilum HZ	HZ	Anaplasmataceae	1	1471282	1348	37	3	2	272	2229
Anaplasma centrale str. Israel	Israel	Anaplasmataceae	1	1206806	925	37	3	4	282	2260
Anaplasma marginale str. St. Maries	St. Maries	Anaplasmataceae	1	1197687	949	37	3	4	317	2231
Neorickettsia sennetsu str. Miyayama	Miyayama	Anaplasmataceae	1	859006	932	33	3	2	234	1897
Anaplasma marginale str. Florida	Florida	Anaplasmataceae	1	1202435	942	37	3	4	337	2263

Wolbachia sp. wMel		Anaplasmataceae	1	1267782	1195	34	3	4	249	2286
Ehrlichia canis str. Jake	Jake	Anaplasmataceae	1	1315030	925	36	3	5	321	2161
Thermocrinis albus DSM 14484	DSM 14484 = JCM 11386 = HI 11/12	Aquificaceae	1	1500577	1593	44	3	2	339	3701
Hydrogenobaculum sp. Y04AAS1	Y04AAS1	Aquificaceae	1	1559514	1629	45	6	3	330	3512
Aquifex aeolicus VF5	VF5	Aquificaceae	2	1590791	1556	44	6	2	393	3959
Hydrogenobacter thermophilus TK-6	DSM 6534 = IAM 12695 = TK-6	Aquificaceae	1	1743135	1894	44	3	2	368	4020
Bacillus megaterium QM B1551	ATCC 12872 = QMB1551	Bacillaceae	8	5523192	5629	139	37	13	1735	9717
Bacillus cereus AH187	AH187	Bacillaceae	5	5599857	5783	102	42	20	843	9041
Oceanobacillus iheyensis HTE831	KCTC 3954 = DSM 14371 = JCM 11309 = HTE831	Bacillaceae	1	3630528	3496	69	22	2	787	6715
Bacillus megaterium DSM 319	DSM 319	Bacillaceae	1	5097447	5124	115	33	10	1643	9239
Bacillus halodurans C-125	C-125 = ATCC BAA-125 = JCM 9153 = FERM 7344 = DSM 18197	Bacillaceae	1	4202352	4062	78	25	4	607	7827
Bacillus weihenstephanensis KBAB4	KBAB4	Bacillaceae	5	5872743	5653	108	42	2	727	9238
Bacillus cytotoxicus NVH 391-98	NVH 391-98	Bacillaceae	2	4094159	3844	106	39	7	608	6902
Bacillus cereus E33L	ZK = E33L	Bacillaceae	6	5843235	5641	96	39	9	1489	9492
Bacillus thuringiensis BMB171	BMB171	Bacillaceae	2	5643051	5349	104	42	8	390	8902
Geobacillus sp. WCH70	WCH70	Bacillaceae	3	3508804	3168	92	28	1	531	6046
Lysinibacillus sphaericus C3-41	C3-41	Bacillaceae	2	4817463	4771	85	31	6	1079	7778
Bacillus cereus Q1	Q1	Bacillaceae	3	5506207	5502	94	39	8	433	9034
Bacillus thuringiensis serovar konkukian str. 97-27	97-27	Bacillaceae	2	5314794	5197	105	39	8	1426	8984
Geobacillus sp. Y412MC61	Y412MC61	Bacillaceae	2	3667901	3446	88	25	4	594	6754
Bacillus amyloliquefaciens DSM 7	ATCC 23350 = DSM 7 = NBRC 15535 = NRRL B-14393	Bacillaceae	1	3980199	3922	94	30	0	1160	7527

Bacillus cereus G9842	G9842	Bacillaceae	3	5736823	5857	98	39	7	870	9028
Bacillus licheniformis ATCC 14580	DSM 13 = ATCC 14580 sub_strain Goettingen	Bacillaceae	1	4222645	4195	72	21	10	456	8000
Bacillus clausii KSM-K16	KSM-K16	Bacillaceae	1	4303871	4107	73	22	10	961	8055
Bacillus atrophaeus 1942	1942	Bacillaceae	1	4168266	4186	75	21	0	524	7722
Bacillus selenitireducens MLS10	ATCC 700615 = DSM 15326 = MLS10	Bacillaceae	1	3592487	3255	68	22	5	511	6575
Bacillus subtilis subsp. spizizenii str. W23	ATCC 23059 = NRRL B-14472 = W23	Bacillaceae	1	4027676	4064	77	24	6	545	7829
Bacillus subtilis BSn5	BSn5	Bacillaceae	1	4093599	4145	83	30	0	532	7858
Bacillus anthracis str. Ames	Ames	Bacillaceae	1	5227293	5331	95	33	5	863	8460
Bacillus anthracis str. CDC 684	CDC 684 = NRRL 3495	Bacillaceae	3	5506763	5896	96	33	11	819	9040
Bacillus cereus ATCC 10987	ATCC 10987	Bacillaceae	2	5432652	5841	97	36	8	851	8988
Bacillus subtilis subsp. subtilis str. 168	168	Bacillaceae	1	4215606	4237	86	30	11	1463	11212
Bacillus cellulosityticus DSM 2522	ATCC 21833 = DSM 2522 = FERM P-1141 = JCM 9156 = N -4	Bacillaceae	1	4681672	4266	81	30	6	557	7415
Bacillus cereus AH820	AH820	Bacillaceae	4	5588834	5810	95	36	7	822	9180
Anoxybacillus flavithermus WK1	DSM 21510 = WK1	Bacillaceae	1	2846746	2832	77	24	4	337	5797
Bacillus thuringiensis str. Al Hakam	Al Hakam	Bacillaceae	2	5313030	4798	104	42	8	1168	8866
Geobacillus sp. C56-T3	C56-T3	Bacillaceae	1	3650813	3315	88	25	5	540	6524
Bacillus anthracis str. A0248	A0248	Bacillaceae	3	5503926	5291	94	33	11	821	8405
Bacillus pseudofirmus OF4	OF4	Bacillaceae	3	4249248	4333	77	22	8	466	7472
Geobacillus sp. Y4.1MC1	Y4.1MC1	Bacillaceae	2	3911947	3669	90	27	5	574	7148
Bacillus cereus biovar anthracis str. CI	CI	Bacillaceae	4	5486649	5558	102	33	31	1235	9263
Bacillus anthracis str. 'Ames Ancestor'	Ames ancestor	Bacillaceae	3	5503926	5492	95	33	8	869	8610
Bacillus pumilus SAFR-032	SAFR-032	Bacillaceae	1	3704465	3681	69	21	11	932	7093
Bacillus cereus 03BB102	03BB102	Bacillaceae	2	5449308	5606	104	42	8	830	8872
Bacillus cereus ATCC 14579	ATCC 14579 = DSM 31	Bacillaceae	2	5427083	5257	108	34	8	1564	8843
Geobacillus sp. Y412MC52	Y412MC52	Bacillaceae	2	3673940	3459	88	25	4	558	6756

Bacillus licheniformis ATCC 14580	DSM 13 = ATCC 14580 sub_strain Novozymes	Bacillaceae	1	4222597	4181	72	21	10	449	7870
Bacillus amyloliquefaciens FZB42	FZB42	Bacillaceae	1	3918589	3693	86	30	15	777	7343
Bacillus anthracis str. Sterne	Sterne	Bacillaceae	1	5228663	5290	95	33	8	836	8919
Geobacillus kaustophilus HTA426	HTA426	Bacillaceae	2	3592666	3540	87	27	8	741	6659
Bacillus cereus B4264	B4264	Bacillaceae	1	5419036	5398	107	42	7	833	8786
Geobacillus thermodenitrificans NG80-2	NG80-2	Bacillaceae	2	3608012	3445	87	30	8	389	6694
Bacteriovorax marinus SJ	ATCC BAA-682 = DSM 15412 = SJ	Bacteriovoraceae	1	3435933	3249	36	2	0	247	5053
Bacteroides fragilis YCH46	YCH46	Bacteroidaceae	2	5310990	4624	74	18	3	307	7074
Bacteroides helcogenes P 36-108	ATCC 35417 = DSM 20613 = JCM 6297 = P 36-108	Bacteroidaceae	1	3998906	3244	67	15	1	583	5959
Bacteroides thetaiotaomicron VPI-5482	ATCC 29148 = DSM 2079 = NCTC 10582 = VPI-5482 = E50	Bacteroidaceae	2	6293399	4825	71	15	3	318	8385
Bacteroides fragilis 638R	638R	Bacteroidaceae	1	5373121	4323	72	19	0	470	7325
Bacteroides salanitronis DSM 18170	DSM 18170 = JCM 13567 = BL78	Bacteroidaceae	4	4308663	3641	82	18	1	568	5518
Bacteroides vulgatus ATCC 8482	ATCC 8482 = DSM 1447 = NCTC 11154	Bacteroidaceae	1	5163189	4065	85	21	3	289	7098
Bacteroides fragilis NCTC 9343	ATCC 25285 = NCTC 9343	Bacteroidaceae	2	5241700	4305	73	19	3	463	7087
Bartonella clarridgeiae 73	CIP 104772 = 73	Bartonellaceae	1	1522743	1382	41	6	0	428	3060
Bartonella bacilliformis KC583	ATCC 35685 = KC583	Bartonellaceae	1	1445021	1283	44	6	5	372	3040
Bartonella quintana str. Toulouse	Toulouse	Bartonellaceae	1	1581384	1305	42	6	3	240	2918
Bartonella tribocorum CIP 105476	CIP 105476 = IBS 506	Bartonellaceae	2	2642404	2154	42	6	3	504	3677
Bartonella henselae	Houston 1 = ATCC 49882	Bartonellaceae	1	1931047	1609	44	7	4	261	3185
Bartonella grahamii as4aup	as4aup	Bartonellaceae	2	2369520	1768	42	6	4	224	3457

Bdellovibrio bacteriovorus HD100	DSM 50701 = NCIB 9529 = HD100 = ATCC 15356	Bdellovibrionaceae	1	3782950	3583	36	6	4	836	5617
Beijerinckia indica subsp. indica ATCC 9039	ATCC 9039 = DSM 1715 = NCIB 8712	Beijerinckiaceae	3	4418616	3784	52	10	2	561	6965
Methylocella silvestris BL2	BL2 = DSM 15510 = NCIMB 13906	Beijerinckiaceae	1	4305430	3818	49	6	3	562	7022
Beutenbergia cavernae DSM 12333	ATCC BAA-8 = DSM 12333 = NBRC 16432	Beutenbergiaceae	1	4669183	4197	45	8	3	557	7626
Bifidobacterium animalis subsp. lactis AD011	AD011	Bifidobacteriaceae	1	1933695	1528	52	7	3	411	3297
Bifidobacterium animalis subsp. lactis DSM 10140	DSM 10140 = JCM 10602 = LMG 18314	Bifidobacteriaceae	1	1938483	1566	51	12	3	231	3302
Bifidobacterium animalis subsp. lactis V9	V9	Bifidobacteriaceae	1	1944050	1572	52	12	3	176	3304
Bifidobacterium animalis subsp. lactis BB-12	BB-12	Bifidobacteriaceae	1	1942198	1642	52	12	3	600	3291
Bifidobacterium longum subsp. longum BBMN68	BBMN68	Bifidobacteriaceae	1	2265943	1806	55	9	0	186	3675
Bifidobacterium longum subsp. infantis ATCC 15697	ATCC 15697 = DSM 20088 = JCM 1222 = NCTC 11817 = S12 sub_strain Tokyo	Bifidobacteriaceae	1	2828958	2552	77	12	0	296	4281
Bifidobacterium longum subsp. longum JDM301	JDM301	Bifidobacteriaceae	1	2477838	1959	55	9	3	182	3961
Bifidobacterium bifidum PRL2010	PRL2010	Bifidobacteriaceae	1	2214656	1707	52	9	0	666	3595
Bifidobacterium longum subsp. longum JCM 1217	ATCC 15707 = DSM 20219 = JCM 1217 = NCTC 11818 = E194b	Bifidobacteriaceae	1	2385164	1924	73	12	0	183	3710
Gardnerella vaginalis ATCC 14019	ATCC 14019 = 317	Bifidobacteriaceae	1	1667350	1365	45	6	5	423	2799
Gardnerella vaginalis 409-05	409-05	Bifidobacteriaceae	1	1617545	1258	45	6	3	283	2560
Bifidobacterium dentium Bd1	ATCC 27534 = DSM 20436 = JCM 1195 = Bd1	Bifidobacteriaceae	1	2636367	2129	55	13	3	782	4340

Bifidobacterium animalis subsp. lactis BI-04	BI-04 = DGCC2908 = RB 4825 = SD5219	Bifidobacteriaceae	1	1938709	1567	52	12	3	231	3307
Bifidobacterium longum subsp. infantis ATCC 15697	ATCC 15697 = DSM 20088 = JCM 1222 = NCTC 11817 = S12 sub_strain JGI	Bifidobacteriaceae	1	2832748	2416	79	12	3	322	4264
Bifidobacterium bifidum S17	S17	Bifidobacteriaceae	1	2186882	1784	53	9	0	183	3466
Bifidobacterium longum subsp. infantis 157F	157F	Bifidobacteriaceae	3	2408831	1999	59	12	0	184	3807
Bifidobacterium longum NCC2705	NCC 2705	Bifidobacteriaceae	2	2260266	1730	57	12	3	228	3577
Bifidobacterium adolescentis ATCC 15703	ATCC 15703 = DSM 20083 = NCTC 11814 = E194a	Bifidobacteriaceae	1	2089645	1632	54	15	3	182	3452
Bifidobacterium longum DJO10A	DJO10A	Bifidobacteriaceae	3	2389526	2003	58	13	2	197	3894
Blattabacterium sp. (Blattella germanica) str. Bge	Bge	Blattabacteriaceae	1	636850	587	34	3	3	338	1805
Blattabacterium sp. (Periplaneta americana) str. BPLAN	BPLAN	Blattabacteriaceae	2	640442	582	33	3	3	127	1765
Brachyspira pilosicoli 95/1000	ATCC BAA-1826 = 95/1000	Brachyspiraceae	1	2586443	2301	33	3	4	183	4107
Brachyspira murdochii DSM 12563	ATCC 51284 = DSM 12563 = 56-150	Brachyspiraceae	1	3241804	2809	34	3	4	344	4455
Brachyspira hyodysenteriae WA1	ATCC 49526 = WA1	Brachyspiraceae	2	3036634	2644	34	3	4	200	4408
Rhodopseudomonas palustris CGA009	ATCC BAA-98 = CGA009	Bradyrhizobiaceae	2	5467640	4840	49	8	6	961	9232
Bradyrhizobium japonicum USDA 110	USDA 110	Bradyrhizobiaceae	1	9105828	8317	50	3	3	586	13709
Rhodopseudomonas palustris TIE-1	TIE-1	Bradyrhizobiaceae	1	5744041	5246	52	6	3	686	9346
Oligotropha carboxidovorans OM5	ATCC 49405 = DSM 1227 = OM5	Bradyrhizobiaceae	2	3878687	3847	45	3	4	891	6618
Nitrobacter winogradskyi Nb-255	Nb-255 = ATCC 25391	Bradyrhizobiaceae	1	3402093	3122	49	3	5	870	5837
Rhodopseudomonas palustris BisA53	BisA53	Bradyrhizobiaceae	1	5505494	4878	48	6	6	826	8774

Rhodopseudomonas palustris BisB5	BisB5	Bradyrhizobiaceae	1	4892717	4397	51	6	6	831	8109
Bradyrhizobium sp. BTAi1	BTAi1 = ATCC BAA-1182	Bradyrhizobiaceae	2	8493513	7622	52	8	8	1963	13057
Nitrobacter hamburgensis X14	X14 = DSM 10229	Bradyrhizobiaceae	4	5011522	4326	55	3	3	690	7061
Rhodopseudomonas palustris HaA2	HaA2	Bradyrhizobiaceae	1	5331656	4683	50	3	6	871	8842
Rhodopseudomonas palustris DX-1	DX-1	Bradyrhizobiaceae	1	5404117	4917	50	6	4	615	8916
Rhodopseudomonas palustris BisB18	BisB18	Bradyrhizobiaceae	1	5513844	4886	50	6	6	874	8936
Bradyrhizobium sp. ORS 278	ORS278	Bradyrhizobiaceae	1	7456587	6748	50	6	5	1862	11572
Ochrobactrum anthropi ATCC 49188	ATCC 49188 = DSM 6882 = NCTC 12168	Brucellaceae	6	5205777	4799	58	12	7	629	9023
Brucella abortus S19	S19	Brucellaceae	2	3283936	3001	55	9	3	318	6148
Brucella melitensis ATCC 23457	ATCC 23457	Brucellaceae	2	3311219	3136	55	12	7	522	6240
Brucella ovis ATCC 25840	ATCC 25840 = 63/290 = NCTC 10512	Brucellaceae	2	3275590	2893	53	9	3	605	5895
Brucella canis ATCC 23365	ATCC 23365 = NCTC 10854	Brucellaceae	2	3312769	3251	55	12	5	320	6065
Brucella melitensis bv. 1 str. 16M	NCTC 10094 = ATCC 23456 = 16M	Brucellaceae	2	3294931	3182	54	12	3	1152	6575
Brucella microti CCM 4915	CCM 4915	Brucellaceae	2	3337369	3287	55	9	4	546	6277
Brucella melitensis biovar Abortus 2308	2308	Brucellaceae	2	3278307	3333	55	9	4	862	6193
Brucella suis 1330	1330	Brucellaceae	2	3315175	3273	55	9	3	675	6190
Brucella suis ATCC 23445	ATCC 23445 = NCTC 10510	Brucellaceae	2	3324607	3241	54	12	5	318	5985
Brucella abortus bv. 1 str. 9-941	9-941	Brucellaceae	2	3286445	3086	55	9	3	362	5866
Burkholderia mallei SAVP1	SAVP1	Burkholderiaceae	2	5232401	5189	55	9	4	854	9009
Burkholderia ambifaria MC40-6	MC40-6	Burkholderiaceae	4	7642536	6697	68	18	4	905	12355
Polynucleobacter necessarius subsp. asymbioticus QLW-P1DMWA-1	QLW-P1DMWA-1	Burkholderiaceae	1	2159490	2077	38	3	4	561	4544
Ralstonia eutropha H16	ATCC 17699 = H16 = DSM 428 = Stanier 337	Burkholderiaceae	3	7416678	6626	59	15	4	2284	12867
Burkholderia sp. CCGE1003	CCGE1003	Burkholderiaceae	2	7043595	5988	63	18	4	762	11648
Burkholderia glumae BGR1	BGR1	Burkholderiaceae	6	7284683	5773	66	15	4	313	10702

<i>Ralstonia pickettii</i> 12D	12D	Burkholderiaceae	5	5685358	5361	54	12	4	688	9515
<i>Ralstonia eutropha</i> JMP134	JMP134 = LMG 1197	Burkholderiaceae	4	7255290	6446	66	18	3	1162	12198
<i>Burkholderia cenocepacia</i> J2315	J2315 = LMG 16656	Burkholderiaceae	4	8055782	7230	74	18	6	915	13035
<i>Burkholderia thailandensis</i> E264	E264 = ATCC 700388 = DSM 13276 = CIP 106301	Burkholderiaceae	2	6723972	5634	58	12	5	727	10653
<i>Cupriavidus taiwanensis</i>	LMG 19424 = R1 = )	Burkholderiaceae	3	6476522	5968	63	15	4	1741	11193
<i>Burkholderia</i> sp. 383	ATCC 17760 = NCIB 9086 = R18194 = 383) = 383	Burkholderiaceae	3	8676277	7717	67	18	4	2149	14066
<i>Burkholderia xenovorans</i> LB400	LB400	Burkholderiaceae	3	9731138	8702	65	18	4	1891	15725
<i>Burkholderia phymatum</i> STM815	DSM 17167 = STM815	Burkholderiaceae	4	8676562	7496	62	16	3	976	13788
<i>Burkholderia cenocepacia</i> HI2424	HI2424	Burkholderiaceae	4	7702840	6919	67	17	6	1116	12821
<i>Burkholderia mallei</i> NCTC 10247	NCTC 10247	Burkholderiaceae	2	5848380	5413	56	10	5	927	9364
<i>Burkholderia pseudomallei</i> 1710b	1710b	Burkholderiaceae	2	7308054	6347	60	12	4	1390	10902
<i>Ralstonia solanacearum</i> GMI1000	GMI1000	Burkholderiaceae	2	5810922	5118	57	12	4	1309	10076
<i>Burkholderia pseudomallei</i> K96243	K96243	Burkholderiaceae	2	7247547	5851	61	12	4	804	10794
<i>Burkholderia rhizoxinica</i> HKI 454	DSM 19002 = CIP 109453 = HKI 454	Burkholderiaceae	3	3750138	3870	46	9	0	1014	6200
<i>Polynucleobacter necessarius</i> subsp. <i>necessarius</i> STIR1	STIR1	Burkholderiaceae	1	1560469	1508	37	4	3	368	3343
<i>Burkholderia ambifaria</i> AMMD	AMMD = ATCC BAA-244 = )	Burkholderiaceae	4	7528567	6610	69	18	4	1113	12398
<i>Burkholderia multivorans</i> ATCC 17616	ATCC 17616 = 249 sub_strain Tohoku University	Burkholderiaceae	4	7008810	6222	66	15	5	1501	11910
<i>Burkholderia phytotfirmans</i> PsJN	DSM 17436 = PsJN	Burkholderiaceae	3	8214658	7241	63	18	4	953	13372
<i>Burkholderia pseudomallei</i> 1106a	1106a	Burkholderiaceae	2	7089249	7181	59	12	4	1138	10806
<i>Burkholderia cenocepacia</i> AU 1054	AU 1054	Burkholderiaceae	3	7279116	6475	67	18	6	1092	12229

Burkholderia mallei NCTC 10229	NCTC 10229	Burkholderiaceae	2	5742303	5154	56	10	5	894	9183
Burkholderia pseudomallei 668	668	Burkholderiaceae	2	7040403	7117	59	12	4	1125	10900
Burkholderia cenocepacia MC0-3	MC0-3	Burkholderiaceae	3	7971389	7008	67	18	4	919	13332
Ralstonia pickettii 12J	12J	Burkholderiaceae	3	5325729	4952	55	9	3	699	9452
Cupriavidus metallidurans CH34	CH34 = ATCC 43123 = DSM 2839	Burkholderiaceae	4	6913352	6738	62	12	4	1627	11878
Burkholderia mallei ATCC 23344	ATCC 23344	Burkholderiaceae	2	5835527	5026	56	10	4	843	9418
Burkholderia multivorans ATCC 17616	ATCC 17616 = 249 sub_strain DOE JGI	Burkholderiaceae	4	7008622	6260	65	15	4	1444	12007
Burkholderia sp. CCGE1002	CCGE1002	Burkholderiaceae	4	7884858	6889	73	21	4	849	12654
Burkholderia vietnamiensis G4	R1808 = G4 = LMG 22486) = LMG 22486	Burkholderiaceae	8	8391070	7617	67	18	5	1096	12661
Campylobacter jejuni subsp. jejuni S3	S3	Campylobacteraceae	2	1724586	1813	44	9	0	543	3791
Campylobacter jejuni subsp. jejuni IA3902	IA3902	Campylobacteraceae	2	1672219	1666	44	9	3	483	3716
Arcobacter nitrofigilis DSM 7299	ATCC 33309 = DSM 7299 = LMG 7604 = NCTC 12251 = CI	Campylobacteraceae	1	3192235	3126	56	12	3	475	6183
Sulfurospirillum deleyianum DSM 6946	ATCC 51133 = DSM 6946 = 5175	Campylobacteraceae	1	2306351	2265	43	9	3	365	4820
Campylobacter jejuni subsp. jejuni NCTC 11168	NCTC 11168	Campylobacteraceae	1	1641481	1643	43	9	3	510	3777
Campylobacter jejuni subsp. jejuni 81-176	81-176	Campylobacteraceae	3	1699052	1758	44	9	3	442	3717
Campylobacter jejuni subsp. jejuni ICDCCJ07001	ICDCCJ0700 1	Campylobacteraceae	2	1708924	1531	44	9	0	200	3379
Campylobacter fetus subsp. fetus 82-40	82-40	Campylobacteraceae	1	1773615	1719	41	9	4	454	3774
Arcobacter butzleri RM4018	RM4018	Campylobacteraceae	1	2341251	2259	54	15	2	641	4757
Campylobacter jejuni RM1221	RM1221	Campylobacteraceae	1	1777831	1838	44	6	3	440	3655
Campylobacter curvus 525.92	525.92	Campylobacteraceae	1	1971264	1931	46	3	3	526	3957

Campylobacter jejuni subsp. jejuni 81116	81116 = NCTC 11828	Campylobacteraceae	1	1628115	1626	44	9	3	510	3665
Campylobacter jejuni subsp. jejuni M1	M1 = 99/308	Campylobacteraceae	1	1616648	1622	44	9	0	323	3646
Campylobacter jejuni subsp. doylei 269.97	ATCC BAA-1458 = RM4099 = 269.97	Campylobacteraceae	1	1845106	1731	44	9	4	423	3535
Campylobacter lari RM2100	RM2100 = D67 = ATCC BAA-1060	Campylobacteraceae	2	1571661	1546	46	9	2	418	3415
Campylobacter hominis ATCC BAA-381	ATCC BAA-381 = LMG 19568 = NCTC 13146 = CH001A	Campylobacteraceae	2	1714951	1687	44	9	3	445	3170
Campylobacter concisus 13826	13826	Campylobacteraceae	3	2099413	2080	46	9	3	486	3802
Dichelobacter nodosus VCS1703A	VCS1703A	Cardiobacteriaceae	1	1389350	1280	45	9	4	410	3038
Catenulispora acidiphila DSM 44928	DSM 44928 = NRRL B-24433 = NBRC 102108 = JCM 14897	Catenulisporaceae	1	10467782	8914	57	12	3	753	14258
Caulobacter crescentus NA1000	NA1000 = CB15N	Caulobacteraceae	1	4042929	3877	51	6	37	1297	7214
Caulobacter segnis ATCC 21756	ATCC 21756 = DSM 7131 = JCM 7823 = NBRC 15250 = LMG 17158 = TK0059	Caulobacteraceae	1	4655622	4139	51	6	3	577	7866
Brevundimonas subvibrioides ATCC 15264	ATCC 15264 = DSM 4735 = LMG 14903 = NBRC 16000 = CB 81	Caulobacteraceae	1	3445263	3327	47	6	3	467	5847
Caulobacter sp. K31	K31	Caulobacteraceae	3	5889399	5438	49	7	3	673	9375
Phenylobacterium zucineum HLK1	HLK1	Caulobacteraceae	2	4379231	3854	42	3	6	320	7563
Caulobacter crescentus CB15	CB15 = ATCC 19089	Caulobacteraceae	1	4016947	3741	51	6	7	390	6933
Cellulomonas flavigena DSM 20109	ATCC 482 = DSM 20109 = NCIB 8073 = NRS 134	Cellulomonadaceae	1	4123179	3678	45	6	3	475	6480
Chlamydia trachomatis G/11074	G/11074	Chlamydiaceae	1	1042875	919	37	6	3	197	1992
Chlamydia trachomatis B/Jali20/OT	Jali20/OT	Chlamydiaceae	2	1051858	900	37	6	3	147	2006

Chlamydia trachomatis E/11023	E/11023	Chlamydiaceae	1	1043025	926	37	6	3	198	1985
Chlamydia trachomatis G/9768	G/9768	Chlamydiaceae	1	1042810	920	37	6	3	197	1992
Chlamydia muridarum Nigg	MoPn = Nigg	Chlamydiaceae	2	1080451	916	37	6	3	210	2131
Chlamydophila pneumoniae LPCoLN	LPCoLN	Chlamydiaceae	2	1248550	1105	38	3	3	220	2056
Chlamydia trachomatis D-LC	D-LC	Chlamydiaceae	2	1050013	878	37	6	3	313	2006
Chlamydophila pneumoniae J138	J138	Chlamydiaceae	1	1226565	1070	38	3	3	217	2253
Chlamydia trachomatis G/9301	G/9301	Chlamydiaceae	1	1042811	921	37	6	3	197	1995
Chlamydia trachomatis E/150	E/150	Chlamydiaceae	1	1042996	927	37	6	3	198	1984
Chlamydia trachomatis Sweden2	Sweden2	Chlamydiaceae	2	1050008	896	22	6	3	148	1992
Chlamydophila pneumoniae CWL029	CWL029	Chlamydiaceae	1	1230230	1052	38	3	3	218	2227
Chlamydophila caviae GPIC	GPIC	Chlamydiaceae	2	1181356	1005	38	3	3	180	2065
Chlamydia trachomatis 434/Bu	434/Bu = ATCC VR-902B	Chlamydiaceae	2	1046341	898	37	6	3	163	2004
Chlamydia trachomatis L2b/UCH-1/proctitis	UCH-1/proctitis	Chlamydiaceae	2	1046369	897	37	6	3	156	1990
Chlamydia trachomatis B/TZ1A828/OT	TZ1A828/OT	Chlamydiaceae	2	1051784	901	37	6	3	147	1999
Chlamydophila pneumoniae AR39	AR39	Chlamydiaceae	1	1229853	1111	38	3	3	216	2227
Chlamydophila abortus S26/3	S26/3	Chlamydiaceae	1	1144377	960	38	3	3	218	2071
Chlamydia trachomatis D/UW-3/Cx	D/UW-3/Cx	Chlamydiaceae	1	1042519	895	37	6	3	213	2160
Chlamydia trachomatis G/11222	G/11222	Chlamydiaceae	1	1042354	927	37	6	3	196	1987
Chlamydia trachomatis A/HAR-13	HAR-13 = ATCC VR-571B	Chlamydiaceae	2	1051969	916	37	4	3	322	2049
Chlamydophila felis Fe/C-56	Fe/C-56	Chlamydiaceae	2	1173791	1013	38	3	4	171	2135
Chlamydia trachomatis D-EC	D-EC	Chlamydiaceae	2	1050015	878	37	6	3	313	2006
Chlamydophila pneumoniae TW-183	TW-183	Chlamydiaceae	1	1225935	1111	38	3	3	217	2239
Chlorobium chlorochromatii CaD3	CaD3	Chlorobiaceae	1	2572079	2001	45	3	3	640	4129

Chloroherpeton thalassium ATCC 35110	ATCC 35110 = GB-78	Chlorobiaceae	1	3293456	2710	44	3	3	454	5296
Chlorobium phaeobacteroides BS1	BS1	Chlorobiaceae	1	2736403	2469	46	6	3	430	4681
Chlorobaculum parvum NCIB 8327	DSM 263 = NCIB 8327 = NCIB 8327)	Chlorobiaceae	1	2289249	2044	49	6	3	419	4387
Pelodictyon phaeoclathratiforme BU-1	DSM 5477 = BU-1	Chlorobiaceae	1	3018238	2707	49	9	2	439	4906
Chlorobium luteolum DSM 273	DSM 273	Chlorobiaceae	1	2364842	2083	48	6	3	534	4523
Chlorobium limicola DSM 245	DSM 245 = NBRC 103803	Chlorobiaceae	1	2763181	2434	48	6	3	444	4798
Chlorobium phaeovibrioides DSM 265	DSM 265	Chlorobiaceae	1	1966858	1753	45	3	3	494	4075
Chlorobium phaeobacteroides DSM 266	DSM 266	Chlorobiaceae	1	3133902	2650	47	6	3	531	5002
Prosthecochloris aestuarii DSM 271	DSM 271 = SK 413	Chlorobiaceae	2	2579695	2327	46	3	2	443	4826
Chlorobium tepidum TLS	TLS = ATCC 49652 = DSM 12025	Chlorobiaceae	1	2154946	2255	50	6	3	493	4311
Roseiflexus sp. RS-1	RS-1	Chloroflexaceae	1	5801598	4517	48	6	3	684	7726
Chloroflexus sp. Y-400-fl	ATCC 29364 = DSM 637 = Y-400-fl	Chloroflexaceae	1	5268950	4159	49	9	3	558	7157
Chloroflexus aurantiacus J-10-fl	ATCC 29366 = DSM 635 = J-10-fl	Chloroflexaceae	1	5258541	3853	49	9	3	566	7286
Roseiflexus castenholzii DSM 13941	DSM 13941 = HLO8	Chloroflexaceae	1	5723298	4330	48	6	3	563	7496
Chloroflexus aggregans DSM 9485	MD-66 = DSM 9485	Chloroflexaceae	1	4684931	3730	48	9	3	558	6904
Nitrosococcus oceani ATCC 19707	ATCC 19707 = NCIMB 11848	Chromatiaceae	1	3481691	2976	45	6	5	359	2272
Nitrosococcus watsonii C-113	C-113	Chromatiaceae	3	3373286	2908	45	6	4	511	5779
Nitrosococcus halophilus Nc4	Nc4	Chromatiaceae	1	4079427	3749	45	6	4	546	6906
Allochrochromatium vinosum DSM 180	ATCC 17899 = DSM 180 = NBRC 103801 = D	Chromatiaceae	3	3669074	3220	51	9	4	536	7023
Desulfurispirillum indicum S5	ATCC BAA-1389 = S5	Chrysiogenaceae	1	2928377	2571	37	9	4	398	5589
Alkaliphilus oremlandii OhILAs	OhILAs	Clostridiaceae	1	3123558	2836	86	26	5	405	5647
Clostridium difficile CD196	CD196	Clostridiaceae	1	4110554	3476	82	29	6	283	7132

Clostridium beijerinckii NCIMB 8052	ATCC 51743 = NCIMB 8052	Clostridiaceae	1	6000632	5020	94	43	6	685	9704
Clostridium kluveri DSM 555	ATCC 8527 = DSM 555 = NCIMB 10680	Clostridiaceae	2	4023800	3913	61	20	6	680	6859
Clostridium perfringens str. 13	13 = Type A	Clostridiaceae	2	3085740	2723	96	29	4	332	5280
Clostridium perfringens SM101	SM101 = Type A	Clostridiaceae	3	2921996	2567	94	30	3	548	5030
Clostridium sticklandii	ATCC 12662 = DSM 519 = JCM 1433 = NCIB 10654	Clostridiaceae	1	2715461	2573	59	18	1	585	5384
Clostridium tetani E88	Massachusetts = E88	Clostridiaceae	2	2873333	2435	54	18	5	636	4967
Clostridium cellulovorans 743B	ATCC 35296 = DSM 3052 = OCM 3 = 743B	Clostridiaceae	1	5262222	4254	80	28	4	509	7619
Alkaliphilus metalliredigens QYMF	QYMF	Clostridiaceae	1	4929566	4625	106	30	8	578	8000
Clostridium difficile R20291	R20291	Clostridiaceae	1	4191339	3534	65	27	6	280	7216
Clostridium botulinum F str. 230613	230613 = Type F	Clostridiaceae	2	4010614	3527	66	27	5	598	6331
Clostridium perfringens ATCC 13124	ATCC 13124 = NCTC 8237 = Type A	Clostridiaceae	1	3256683	2876	93	23	3	566	5421
Clostridium botulinum A str. Hall	Hall = ATCC 3502 = NCTC 13319 = Type A sub_strain Los Alamos	Clostridiaceae	1	3760560	3404	81	24	8	763	6588
Clostridium acetobutylicum ATCC 824	DSM 792 = JCM 1419 = LMG 5710 = ATCC 824 = VKM B-1787	Clostridiaceae	2	4132880	3849	73	33	2	408	7063
Clostridium cellulolyticum H10	ATCC 35319 = DSM 5812 = JCM 6584 = H10	Clostridiaceae	1	4068724	3390	63	24	2	271	6264
Clostridium botulinum A str. ATCC 3502	Hall = ATCC 3502 = NCTC 13319 = Type A sub_strain Sanger	Clostridiaceae	2	3903260	3669	80	27	5	747	6721
Clostridium ljungdahlii DSM 13528	ATCC 55383 = DSM 13528 = PETC	Clostridiaceae	1	4630065	4184	72	27	7	816	7955
Clostridium botulinum H04402 065	H04402 065 = Type A5	Clostridiaceae	1	3919740	3716	72	21	0	778	7025

Clostridium saccharolyticum WM1	ATCC 35040 = DSM 2544 = NRCC 2533 = WM1	Clostridiaceae	1	4662871	4154	68	18	4	500	7850
Clostridium novyi NT	NT	Clostridiaceae	1	2547720	2325	81	29	5	499	4876
Clostridium botulinum A str. ATCC 19397	ATCC 19397 = Type A	Clostridiaceae	1	3863450	3551	81	24	2	678	6659
Clostridium botulinum A2 str. Kyoto	Kyoto = Type A2	Clostridiaceae	1	4155278	3878	80	20	6	627	6880
Clostridium botulinum A3 str. Loch Maree	Loch Maree = Type A3	Clostridiaceae	2	4259691	3983	81	27	7	674	7036
Clostridium kluveri NBRC 12016	NBRC 12016	Clostridiaceae	2	3955303	3523	61	20	6	295	6591
Clostridium botulinum F str. Langeland	Langeland = NCTC 10281 = Type F	Clostridiaceae	2	4012918	3655	81	27	8	652	6771
Clostridium difficile 630	630	Clostridiaceae	2	4298133	3857	87	32	6	1004	7417
Clostridium botulinum Ba4 str. 657	657 = Type Ba4	Clostridiaceae	3	4257769	4003	82	27	7	649	6850
Clostridium botulinum E3 str. Alaska E43	Alaska E43 = Type E3	Clostridiaceae	1	3659644	3257	79	34	4	682	6078
Clostridium botulinum B1 str. Okra	Okra = Type B1	Clostridiaceae	2	4107013	3846	82	27	4	667	6922
Clostridium phytofermentans ISDg	ATCC 700394 = DSM 18823 = ISDg	Clostridiaceae	1	4847594	3902	61	25	3	506	7527
Clostridium thermocellum DSM 1313	DSM 1313 = LMG 6656 = LQ8	Clostridiaceae	1	3561619	2911	56	12	4	388	5679
Clostridium thermocellum ATCC 27405	ATCC 27405 = DSM 1237	Clostridiaceae	1	3843301	3191	56	12	7	538	6075
Clostridium botulinum B str. Eklund 17B	Eklund 17B = Type B	Clostridiaceae	2	3847969	3475	77	34	5	657	6161
Fingoldia magna ATCC 29328	ATCC 29328	Clostridiales Family XI. Incertae Sedis	2	1986740	1813	48	12	3	187	3582
Anaerococcus prevotii DSM 20548	ATCC 9321 = DSM 20548 = JCM 6508 = PC1	Clostridiales Family XI. Incertae Sedis	2	1998633	1806	48	12	3	282	3792
Symbiobacterium thermophilum IAM 14863	IAM 14863 = T	Clostridiales Family XVIII. Incertae Sedis	1	3566135	3336	99	18	4	321	6397
Thermaerobacter marianensis DSM 12885	ATCC 700841 = DSM 12885 = JCM 10246 = 7p75a	Clostridiales Family XVII. Incertae Sedis	1	2844696	2327	51	6	3	507	4833
Colwellia psychrerythraea 34H	34H = ATCC BAA-681	Colwelliaceae	1	5373180	4910	88	28	4	827	8547

Comamonas testosteroni CNB-2	CNB-2	Comamonadaceae	1	5373643	4803	79	9	4	343	9140
Verminephrobacter eiseniae EF01-2	EF01-2	Comamonadaceae	2	5597943	4947	47	9	4	798	9203
Polaromonas sp. JS666	JS666 = ATCC BAA-500	Comamonadaceae	3	5898676	5453	44	3	2	940	9701
Alicyclophilus denitrificans BC	JCM 14587 = BC	Comamonadaceae	3	4835713	4542	53	9	4	598	8457
Polaromonas naphthalenivorans CJ2	CJ2	Comamonadaceae	9	5366143	4929	51	6	4	844	8681
Acidovorax avenae subsp. avenae ATCC 19860	ATCC 19860 = DSM 7227 = JCM 20985 = NCPPB 1011	Comamonadaceae	1	5482170	4737	52	9	4	1002	9244
Acidovorax citrulli AAC00-1	AAC00-1	Comamonadaceae	1	5352772	4709	53	9	4	764	8468
Acidovorax sp. JS42	JS42	Comamonadaceae	3	4585154	4155	51	9	4	725	7820
Acidovorax ebreus TPSY	TPSY	Comamonadaceae	1	3796573	3479	53	12	4	572	7098
Rhodoferax ferrireducens T118	DSM 15236 = ATCC BAA-621 = T118	Comamonadaceae	2	4969784	4418	45	6	4	844	8851
Delftia acidovorans SPH-1	DSM 14801 = SPH-1	Comamonadaceae	1	6767514	6040	80	15	3	725	10857
Conexibacter woesei DSM 14684	DSM 14684 = JCM 11494 = NBRC 100937 = ID131577	Conexibacteraceae	1	6359369	5914	45	3	3	589	10360
Slackia heliotrinireducens DSM 20476	ATCC 29202 = DSM 20476 = NCTC 11029 = RHS 1	Coriobacteriaceae	1	3165038	2765	48	6	3	251	4990
Olsenella uli DSM 7084	ATCC 49627 = DSM 7084 = CIP 109912 = JCM 12494 = VPI D76D-27C	Coriobacteriaceae	1	2051896	1739	49	3	3	377	3790
Atopobium parvulum DSM 20469	ATCC 33793 = DSM 20469 = JCM 10300 = VPI 0546	Coriobacteriaceae	1	1543805	1353	45	4	4	252	3052
Eggerthella lenta DSM 2243	ATCC 25559 = DSM 2243 = JCM 9979 = NCTC 11813 = VPI 0255	Coriobacteriaceae	1	3632260	3070	48	9	4	346	5829
Cryptobacterium curtum DSM 15641	ATCC 700683 = DSM 15641 = 12-3	Coriobacteriaceae	1	1617804	1357	47	9	2	200	3147

Corynebacterium efficiens YS-314	DSM 44549 = NBRC 100395 = JCM 11189 = YS-314 = AJ 12310	Corynebacteriaceae	3	3219505	2998	56	15	4	369	5231
Corynebacterium jeikeium K411	K411	Corynebacteriaceae	2	2476822	2120	50	9	4	498	4209
Corynebacterium glutamicum R	R	Corynebacteriaceae	2	3363299	3080	58	18	4	280	5224
Corynebacterium kroppenstedtii DSM 44385	DSM 44385 = CCUG 35717	Corynebacteriaceae	1	2446804	2018	46	9	3	510	4018
Corynebacterium glutamicum ATCC 13032	NCIMB 10025 = DSM 20300 = ATCC 13032 = LMG 3730 = JCM 1318 sub_strain Nakagawa	Corynebacteriaceae	1	3309401	3102	60	19	2	848	5440
Corynebacterium aurimucosum ATCC 700975	ATCC 700975 = DSM 44827 = CN-1	Corynebacteriaceae	1	2790189	2531	54	12	3	618	4710
Corynebacterium urealyticum DSM 7109	ATCC 43042 = DSM 7109	Corynebacteriaceae	1	2369219	2024	51	9	3	410	3989
Corynebacterium pseudotuberculosis FRC41	FRC41	Corynebacteriaceae	1	2337913	2110	49	12	3	570	4182
Corynebacterium glutamicum ATCC 13032	NCIMB 10025 = DSM 20300 = ATCC 13032 = LMG 3730 = JCM 1318 sub_strain Kalinowski	Corynebacteriaceae	1	3282708	3058	60	18	3	855	5478
Corynebacterium pseudotuberculosis I19	I19	Corynebacteriaceae	1	2337730	2066	49	12	0	241	4041
Corynebacterium pseudotuberculosis C231	C231	Corynebacteriaceae	1	2328208	2053	48	12	3	188	4011
Corynebacterium pseudotuberculosis 1002	1002	Corynebacteriaceae	1	2335112	2057	48	12	3	190	4009
Corynebacterium diphtheriae NCTC 13129	NCTC 13129 = ATCC 700971	Corynebacteriaceae	1	2488635	2317	54	15	3	399	4222
Coxiella burnetii RSA 493	Nine Mile phase I = RSA 493	Coxiellaceae	2	2032674	1853	42	3	5	619	3582
Coxiella burnetii Dugway 5J108-111	Dugway 5J108-111	Coxiellaceae	2	2212937	2046	42	3	5	642	3686
Coxiella burnetii CbuK_Q154	Q154 = CbuK_) = CbuK_Q154	Coxiellaceae	2	2102380	1947	42	3	5	619	3598

Coxiella burnetii CbuG_Q212	Q212 = CbuG_) = CbuG_Q212	Coxiellaceae	1	2008870	1871	42	3	5	611	3549
Coxiella burnetii RSA 331	RSA 331 = Henzerling II	Coxiellaceae	2	2053744	1975	41	5	3	466	3497
Stigmatella aurantiaca DW4/3-1	DW4/3-1	Cystobacteraceae	1	10260756	8352	49	6	0	1068	12830
Cytophaga hutchinsonii ATCC 33406	ATCC 33406 = NCIMB 9469	Cytophagaceae	1	4433218	3785	39	9	3	920	5843
Dyadobacter fermentans DSM 18053	ATCC 700827 = DSM 18053 = NS114	Cytophagaceae	1	6967790	5719	38	12	2	560	9282
Leadbetterella byssophila DSM 17132	DSM 17132 = KACC 11308 = 4M15	Cytophagaceae	1	4059653	3465	42	9	2	547	6003
Spirosoma linguale DSM 74	ATCC 33905 = DSM 74 = LMG 10896	Cytophagaceae	9	8491258	6938	49	11	3	606	10367
Calditerrivibrio nitroreducens DSM 19672	DSM 19672 = NBRC 101217 = Yu37-1	Deferribacteraceae	2	2216552	2100	41	6	3	475	4852
Deferribacter desulfuricans SSM1	DSM 14783 = JCM 11476 = NBRC 101012 = SSM1	Deferribacteraceae	2	2542933	2389	43	6	3	592	5165
Denitrovibrio acetiphilus DSM 12809	DSM 12809 = N2460	Deferribacteraceae	1	3222077	2964	42	6	4	423	6320
Deinococcus radiodurans R1	LMG 4051 = NBRC 15346 = JCM 16871 = DSM 20539 = R1 = NCIMB 9279 = VKM B- 1422 = ATCC 13939	Deinococcaceae	4	3284156	3103	49	9	4	364	5347
Deinococcus geothermalis DSM 11300	DSM 11300	Deinococcaceae	2	3041332	2849	48	12	3	519	5687
Deinococcus proteolyticus MRP	ATCC 35074 = DSM 20540 = JCM 6276 = NBRC 101906 = NCIMB 13154 = VKM Ac- 1939 = CCM 2703	Deinococcaceae	5	2886836	2656	47	9	2	559	4719
Deinococcus deserti VCD115	VCD115 = DSM 17065 = LMG 22923	Deinococcaceae	4	3855329	3459	48	12	3	288	6322

Deinococcus maricopensis DSM 21211	DSM 21211 = LMG 22137 = NRRL B-23946 = LB-34	Deinococcaceae	1	3498530	3264	52	12	2	715	5971
Brachybacterium faecium DSM 4810	ATCC 43885 = DSM 4810 = NCIB 9860	Dermabacteraceae	1	3614992	3068	50	9	2	343	6004
Kytococcus sedentarius DSM 20547	ATCC 14392 = DSM 20547 = CCM 314 = 541	Dermacoccaceae	1	2785024	2554	47	6	3	276	4787
Desulfarculus baarsii DSM 2075	ATCC 33931 = DSM 2075 = VKM B-1802 = 2st14	Desulfarculaceae	1	3655731	3277	46	3	3	466	6509
Desulfococcus oleovorans Hxd3	DSM 6200 = Hxd3	Desulfobacteraceae	1	3944167	3265	47	3	4	429	6134
Desulfatibacillum alkenivorans AK-01	AK-01	Desulfobacteraceae	1	6517073	5255	56	6	4	581	9397
Desulfobacterium autotrophicum HRM2	ATCC 43914 = DSM 3382 = HRM2	Desulfobacteraceae	1	5589073	4871	50	19	4	1258	9448
Desulfotalea psychrophila LSv54	LSv54 = DSM 12343	Desulfobulbaceae	3	3659634	3236	65	22	5	298	5948
Desulfurivibrio alkaliphilus AHT2	DSM 19089 = UNIQEM U267 = AHT2	Desulfobulbaceae	1	3097763	2620	47	6	4	436	5652
Desulfohalobium retbaense DSM 5692	DSM 5692	Desulfohalobiaceae	1	2864304	2479	50	6	4	378	5336
Desulfomicrobium baculatum DSM 4028	DSM 4028 = VKM B-1378 4028	Desulfomicrobiaceae	1	3942657	3436	64	7	4	506	7190
Desulfovibrio vulgaris RCH1	RCH1	Desulfovibrionaceae	2	3734357	3221	67	16	4	405	6320
Desulfovibrio desulfuricans subsp. desulfuricans str. ATCC 27774	ATCC 27774 = DSM 6949	Desulfovibrionaceae	1	2873437	2356	52	12	4	402	4939
Desulfovibrio salexigens DSM 2638	ATCC 14822 = DSM 2638 = NCIB 8403 = VKM B-1763	Desulfovibrionaceae	1	4289847	3807	89	15	4	478	7505
Desulfovibrio alaskensis G20	G20	Desulfovibrionaceae	1	3730232	3775	66	12	6	634	6500
Desulfovibrio vulgaris str. Hildenborough	Hildenborough = ATCC 29579 = NCIMB 8303	Desulfovibrionaceae	2	3773159	3531	68	15	4	505	6329
Desulfovibrio vulgaris str. 'Miyazaki F'	Miyazaki F = DSM 19637	Desulfovibrionaceae	1	4040304	3180	64	12	4	456	6562
Desulfovibrio vulgaris DP4	DP4	Desulfovibrionaceae	2	3661391	3091	68	15	4	566	6339

Desulfovibrio aespoensis Aspo-2	ATCC 700646 = DSM 10631 = Aspo-2	Desulfovibrionaceae	1	3629109	3304	53	6	4	423	6459
Lawsonia intracellularis PHE/MN1-00	PHE/MN1-00	Desulfovibrionaceae	4	1719014	1342	43	6	4	203	3073
Desulfovibrio magneticus RS-1	ATCC 700980 = DSM 13731 = RS-1	Desulfovibrionaceae	3	5315620	4704	51	9	4	256	8333
Thermovibrio ammonificans HB-1	DSM 15698 = JCM 12110 = HB-1	Desulfurobacteriaceae	2	1759526	1813	46	9	3	329	3718
Desulfurobacterium thermolithotrophum DSM 11699	DSM 11699 = BSA	Desulfurobacteriaceae	1	1541968	1509	43	6	2	417	3628
Dictyoglomus turgidum DSM 6724	Z-1310 = DSM 6724	Dictyoglomaceae	1	1855560	1744	46	6	2	345	3889
Dictyoglomus thermophilum H-6- 12	ATCC 35947 = DSM 3960 = H-6-12	Dictyoglomaceae	1	1959987	1913	46	6	4	486	4058
Thioalkalivibrio sp. K90mix	K90mix	Ectothiorhodospiraceae	1	2744800	2575	48	3	4	475	5564
Thioalkalivibrio sulfidophilus HL- EbGr7	HL-EbGR7	Ectothiorhodospiraceae	1	3464554	3283	44	3	4	516	6319
Halorhodospira halophila SL1	DSM 244 = SL1	Ectothiorhodospiraceae	1	2678452	2407	46	6	4	642	5656
Alkalilimnicola ehrichii MLHE-1	MLHE-1	Ectothiorhodospiraceae	1	3275944	2865	48	6	5	677	6257
Elusimicrobium minutum Pei191	Pei191	Elusimicrobiaceae	1	1643562	1529	45	3	2	268	2951
Escherichia coli KO11FL	ATCC 55124 = KO11	Enterobacteriaceae	3	5029323	4653	86	22	4	854	9998
Proteus mirabilis	HI4320	Enterobacteriaceae	2	4099895	3739	83	22	21	919	7638
Dickeya dadantii Ech703	Ech703	Enterobacteriaceae	1	4679450	3970	74	22	4	743	9094
Yersinia pestis CO92	CO-92	Enterobacteriaceae	4	4829855	4195	70	19	101	969	9123
Pantoea vagans C9-1	C9-1	Enterobacteriaceae	4	4888338	4591	77	22	0	1508	9429
Escherichia fergusonii ATCC 35469	ATCC 35469 = DSM 13698 = CDC 0568-73	Enterobacteriaceae	2	4643861	4373	87	22	56	1282	9496
Yersinia enterocolitica subsp. palearctica 105.5R(r)	105.5R(r = 105.5R(r)	Enterobacteriaceae	2	4621811	4021	71	22	0	480	9152
Pantoea sp. At-9b	At-9b	Enterobacteriaceae	6	6312783	5770	81	22	4	857	11789
Candidatus Blochmannia pennsylvanicus str. BPEN	BPEN	Enterobacteriaceae	1	791654	610	39	3	3	222	2098
Edwardsiella tarda EIB202	EIB202	Enterobacteriaceae	2	3804166	3589	95	25	21	416	7608
Escherichia coli APEC O1		Enterobacteriaceae	3	5497653	4893	93	22	59	608	10071

Shigella flexneri 2a str. 2457T	2457T = ATCC 700930	Enterobacteriaceae	1	4599354	4105	98	22	58	801	10067
Erwinia pyrifoliae DSM 12163	DSM 12163 = CIP 106111 = Ep16/96	Enterobacteriaceae	5	4072827	4038	74	22	30	1252	7878
Shigella boydii Sb227	Sb227	Enterobacteriaceae	2	4646520	4291	91	22	54	612	9546
Yersinia pestis D182038	D182038	Enterobacteriaceae	4	4802263	3787	73	19	95	439	8612
Escherichia coli O157:H7 str. EDL933	EDL933 = ATCC 700927 = O157:H7 = EHEC	Enterobacteriaceae	2	5620522	5455	98	22	62	991	11575
Yersinia pseudotuberculosis IP 31758	IP 31758	Enterobacteriaceae	3	4935125	4324	86	22	47	1017	8606
Salmonella enterica subsp. enterica serovar Paratyphi A str. AKU_12601	AKU_12601	Enterobacteriaceae	2	4794508	4509	76	22	71	574	9302
Yersinia pestis Nepal516	Nepal516	Enterobacteriaceae	3	4646286	4095	72	21	98	1210	9060
Citrobacter koseri ATCC BAA-895	ATCC BAA-895 = CDC 4225-83 = SGSC4696	Enterobacteriaceae	3	4735357	5031	81	16	52	583	9790
Salmonella enterica subsp. enterica serovar Typhimurium str. D23580	D23580	Enterobacteriaceae	2	4996447	4640	88	22	83	864	9928
Shigella boydii CDC 3083-94	CDC 3083-94 = BS512	Enterobacteriaceae	5	4872570	4554	102	22	5	1189	9403
Yersinia pseudotuberculosis IP 32953	IP32953	Enterobacteriaceae	3	4840898	4116	85	21	38	1068	8824
Escherichia coli HS	HS	Enterobacteriaceae	1	4643538	4384	88	22	55	1318	9730
Rahnella sp. Y9602	Y9602	Enterobacteriaceae	3	5614252	5111	76	22	4	803	10557
Pantoea ananatis LMG 20103	LMG 20103	Enterobacteriaceae	1	4703373	4241	68	22	18	463	8999
Yersinia pestis biovar Microtus str. 91001	91001	Enterobacteriaceae	5	4803217	4149	72	22	83	849	9028
Erwinia tasmaniensis	DSM 17950 = Et1/99	Enterobacteriaceae	6	4067864	3696	81	22	26	854	7710
Salmonella enterica subsp. enterica serovar Gallinarum str. 287/91	287/91 = NCTC 13346	Enterobacteriaceae	1	4658697	4271	75	22	66	875	9091
Salmonella enterica subsp. enterica serovar Typhi str. Ty2	ATCC 700931 = Ty2	Enterobacteriaceae	1	4791961	4329	78	22	89	975	9646
Escherichia coli SE11	SE11	Enterobacteriaceae	7	5155626	5002	86	21	63	598	9962

Escherichia coli 536	536 = UPEC	Enterobacteriaceae	1	4938920	4686	81	22	54	1256	10015
Salmonella enterica subsp. enterica serovar Agona str. SL483	SL483	Enterobacteriaceae	2	4836638	4614	85	21	56	1271	9541
Yersinia pseudotuberculosis PB1/+	PB1/+	Enterobacteriaceae	2	4765431	4237	83	14	34	807	8754
Buchnera aphidicola str. Bp (Baizongia pistaciae)	Bp	Enterobacteriaceae	2	618379	507	32	3	3	297	1981
Escherichia coli 042	042 = EAEC	Enterobacteriaceae	2	5355323	5028	92	22	69	1183	10298
Yersinia enterocolitica subsp. enterocolitica 8081	8081	Enterobacteriaceae	2	4683620	4136	82	22	38	684	9127
Escherichia coli O103:H2 str. 12009	12009 = EHEC	Enterobacteriaceae	2	5524860	5349	98	22	73	575	10400
Yersinia pestis Angola	Angola	Enterobacteriaceae	3	4687014	4045	70	22	7	963	8659
Escherichia coli SMS-3-5	SMS-3-5 = SECEC	Enterobacteriaceae	5	5215377	4913	90	22	70	1394	10390
Escherichia coli 55989	UMN026 = ExPEC	Enterobacteriaceae	3	5358200	5099	88	22	75	1281	10571
Serratia proteamaculans 568	568	Enterobacteriaceae	2	5495657	4942	85	21	30	977	10708
Erwinia billingiae	Eb661	Enterobacteriaceae	3	5372268	4931	77	21	0	903	10074
Erwinia amylovora CFBP1430	CFBP1430	Enterobacteriaceae	2	3833832	3735	77	22	24	1237	7551
Pectobacterium carotovorum subsp. carotovorum PC1	PC1	Enterobacteriaceae	1	4862913	4246	78	22	3	773	9314
Dickeya dadantii 3937	3937	Enterobacteriaceae	1	4922802	4570	75	22	19	1703	9687
Erwinia pyrifoliae	Ep1/96	Enterobacteriaceae	5	4072846	3755	75	22	0	803	7694
Escherichia coli ATCC 8739	ATCC 8739 = DSM 1576 = Crooks	Enterobacteriaceae	1	4746218	4200	87	23	4	970	9837
Photobacterium luminescens subsp. laumondii TTO1	TT01	Enterobacteriaceae	1	5688987	4897	85	22	32	564	8529
Buchnera aphidicola str. TLW03 (Acyrtosiphon pisum)	TLW03	Enterobacteriaceae	1	641770	573	32	3	0	214	1954
Buchnera aphidicola str. APS (Acyrtosiphon pisum)	Tokyo 1998	Enterobacteriaceae	3	655725	572	32	3	3	345	2261

Buchnera aphidicola str. Sg (Schizaphis graminum)		Enterobacteriaceae	3	654174	561	32	3	3	330	2185
Escherichia coli BL21(DE3)	B = BL21-DE3 sub_strain JGI	Enterobacteriaceae	1	4570938	4228	86	22	4	1613	10083
Enterobacter cloacae subsp. cloacae ATCC 13047	ATCC 13047 = DSM 30054 = NBRC 13535 = NCDC 279-56	Enterobacteriaceae	3	5598796	5518	84	25	48	523	11079
Salmonella enterica subsp. enterica serovar Enteritidis str. P125109	P125109	Enterobacteriaceae	1	4685848	4313	84	22	67	906	9566
Escherichia coli 55989	IAI1	Enterobacteriaceae	1	4700560	4437	86	22	56	1222	9734
Enterobacter sp. 638	638	Enterobacteriaceae	2	4676461	4240	84	22	45	1006	9398
Candidatus Hamiltonella defensa 5AT (Acyrthosiphon pisum)	5AT	Enterobacteriaceae	2	2169363	2155	43	9	38	262	3785
Salmonella enterica subsp. enterica serovar Typhimurium str. LT2	ATCC 700720 = SGSC1412 = LT2	Enterobacteriaceae	2	4951371	4558	85	22	12	1356	10832
Xenorhabdus bovienii SS-2004	SS-2004	Enterobacteriaceae	1	4225498	4356	83	29	18	954	7646
Erwinia sp. Ejp617	Ejp617	Enterobacteriaceae	6	3957675	3672	75	22	0	424	7576
Salmonella enterica subsp. enterica serovar Typhimurium str. 14028S	14028s = SGSC 2262	Enterobacteriaceae	2	4964097	5467	85	22	11	549	10012
Yersinia pestis KIM 10	KIM5	Enterobacteriaceae	1	4600755	4104	73	24	88	840	8844
Pectobacterium atrosepticum SCRI1043	ATCC BAA-672 = SCRI 1043	Enterobacteriaceae	1	5064019	4491	76	22	26	1103	9562
Salmonella enterica subsp. enterica serovar Newport str. SL254	SL254	Enterobacteriaceae	3	5007719	4805	86	22	47	1295	9766
Buchnera aphidicola str. LL01 (Acyrthosiphon pisum)	LL01	Enterobacteriaceae	1	641799	577	32	3	0	214	1976
Escherichia coli O83:H1 str. NRG 857C	NRG 857C = AIEC	Enterobacteriaceae	2	4894879	4582	84	22	0	847	10156

Buchnera aphidicola str. Tuc7 (Acyrtosiphon pisum)	Tuc7	Enterobacteriaceae	1	641895	553	32	3	2	288	2005
Escherichia coli BW2952	K12 = MC4100 = BW2952	Enterobacteriaceae	1	4578159	4084	88	22	62	600	9518
Escherichia coli 55989	IAI39 = ExPEC	Enterobacteriaceae	1	5132068	4875	88	22	57	1283	10387
Buchnera aphidicola str. JF99 (Acyrtosiphon pisum)	JF99	Enterobacteriaceae	1	641716	590	32	3	0	224	2038
Yersinia pestis D106004	D106004	Enterobacteriaceae	4	4812922	3781	69	20	93	447	8604
Cronobacter sakazakii ATCC BAA-894	ATCC BAA-894	Enterobacteriaceae	3	4530777	4442	80	16	37	533	8480
Enterobacter cloacae SCF1	SCF1	Enterobacteriaceae	1	4814049	4399	82	22	4	846	10133
Escherichia coli O157:H7 str. Sakai	Sakai = O157:H7 = RIMD 0509952 = EHEC	Enterobacteriaceae	3	5594477	5463	105	22	4	983	11531
Escherichia coli E24377A	E24377A = ETEC	Enterobacteriaceae	7	5249288	4997	91	21	67	1308	10010
Shigella flexneri 2a str. 301	301	Enterobacteriaceae	2	4828821	4663	97	22	74	805	10711
Salmonella enterica subsp. enterica serovar Typhimurium str. SL1344	SL1344	Enterobacteriaceae	1	4878012	4512	86	22	0	843	9880
Citrobacter rodentium ICC168	ICC168	Enterobacteriaceae	4	5444283	5086	86	22	51	1088	10203
Salmonella enterica subsp. enterica serovar Choleraesuis str. SC-B67	SC-B67	Enterobacteriaceae	3	4944000	4669	85	22	81	633	9656
Klebsiella variicola At-22	At-22	Enterobacteriaceae	1	5458505	5057	85	25	4	957	11302
Shigella flexneri 2002017	2002017	Enterobacteriaceae	6	4894492	4706	101	22	63	501	9760
Candidatus Blochmannia floridanus		Enterobacteriaceae	1	705557	589	37	3	3	353	2027
Salmonella enterica subsp. enterica serovar Paratyphi B str. SPB7	ATCC BAA-1250 = SPB7	Enterobacteriaceae	1	4858887	5601	84	22	5	584	9539
Photorhabdus asymbiotica	2 = ATCC 43949 = 3105-77) = 3105-77	Enterobacteriaceae	2	5094138	4422	94	21	24	844	8063

Salmonella enterica subsp. arizonae serovar 62:z4,z23:--	ATCC BAA-731 = CDC346-86 = RSK2980	Enterobacteriaceae	1	4600800	4510	83	19	6	540	8945
Escherichia coli O6	UPEC = O6:H1 = ATCC 700928 = CFT073	Enterobacteriaceae	1	5231428	5385	89	21	76	1280	10922
Cronobacter turicensis z3032	DSM 18703 = LMG 23827 = z3032	Enterobacteriaceae	4	4599092	4455	84	22	36	1440	9273
Escherichia coli O157:H7 str. EC4115	EC4115 = EHEC	Enterobacteriaceae	3	5704171	5477	110	22	56	1331	10188
Escherichia coli str. K-12 substr. MG1655	K12 = MG1655 = ATCC 47076	Enterobacteriaceae	1	4639675	4321	89	22	64	1583	14698
Escherichia coli str. K-12 substr. W3110	K12 = ATCC 27325 = DSM 5911 = W3110	Enterobacteriaceae	1	4646332	4306	86	22	2	1582	14636
Escherichia coli BL21(DE3)	B = BL21-DE3 sub_strain Korea	Enterobacteriaceae	1	4558953	4159	85	22	56	1652	10052
Escherichia coli BL21	B = BL21-DE3 sub_strain Austria	Enterobacteriaceae	1	4558947	4273	85	22	56	1655	10202
Yersinia pseudotuberculosis YPIII	YPIII	Enterobacteriaceae	1	4689441	4192	84	14	43	814	8554
Salmonella enterica subsp. enterica serovar Heidelberg str. SL476	SL476	Enterobacteriaceae	3	4983515	4779	86	19	50	1296	9746
Pectobacterium wasabiae WPP163	WPP163	Enterobacteriaceae	1	5063892	4437	75	22	4	748	9177
Candidatus Blochmannia vafer str. BVAF	BVAF	Enterobacteriaceae	1	722593	587	37	3	2	174	2017
Escherichia coli ETEC H10407	H10407 = ETEC	Enterobacteriaceae	5	5325888	4955	89	21	0	556	10315
Xenorhabdus nematophila ATCC 19061	ATCC 19061 = DSM 3370 = LMG 1036 = NCIB 9965 = AN6	Enterobacteriaceae	1	4432590	4560	79	29	18	972	7654
Escherichia coli 55989	S88 = ExPEC	Enterobacteriaceae	2	5166121	4976	91	22	61	1267	10228
Shigella flexneri 5 str. 8401	8401	Enterobacteriaceae	1	4574284	4119	97	22	58	589	9413
Escherichia coli O26:H11 str. 11368	11368 = EHEC	Enterobacteriaceae	5	5855531	5789	101	22	76	581	10751
Salmonella enterica subsp. enterica serovar Typhi str. CT18	CT18	Enterobacteriaceae	3	5133713	4964	80	22	92	1000	9954

Klebsiella pneumoniae 342	342	Enterobacteriaceae	3	5920257	5768	88	25	49	1439	11636
Escherichia coli O111:H- str. 11128	11128 = EHEC	Enterobacteriaceae	6	5766081	5726	110	22	77	576	10696
Escherichia coli B str. REL606	B = REL606	Enterobacteriaceae	1	4629812	4209	85	22	57	1160	9863
Salmonella enterica subsp. enterica serovar Schwarzengrund str. CVM19633	CVM19633	Enterobacteriaceae	3	4823887	4627	84	19	45	1269	9577
Escherichia coli UM146	UM146	Enterobacteriaceae	2	5107563	4783	86	22	0	845	10296
Yersinia pestis Z176003	Z176003	Enterobacteriaceae	4	4725788	3693	67	20	97	453	8601
Escherichia coli 55989	55989 = EAEC	Enterobacteriaceae	2	5227344	5010	94	22	70	1238	10336
Shigella dysenteriae Sd197	Sd97 = Sd197	Enterobacteriaceae	2	4551958	4501	85	22	58	592	10332
Escherichia coli DH1	ATCC 33849 = DSM 4235 = NCIB 12045 = K12 = DH1	Enterobacteriaceae	1	4630707	4160	88	22	4	931	9825
Buchnera aphidicola str. Cc (Cinara cedri)		Enterobacteriaceae	2	422434	365	31	3	3	195	1277
Escherichia coli str. K-12 substr. DH10B	K12 = DH10B	Enterobacteriaceae	1	4686137	4192	86	22	12	603	9515
Dickeya zeae Ech1591	Ech1591	Enterobacteriaceae	1	4813854	4163	74	22	4	718	9018
Sodalis glossinidius str. 'morsitans'	morsitans	Enterobacteriaceae	4	4292502	2516	69	22	35	425	5453
Erwinia amylovora ATCC 49946	ATCC 49946 = CCPPB 0273 = Ea273 = 27-3	Enterobacteriaceae	3	3905604	3611	78	22	25	856	7507
Yersinia enterocolitica subsp. palearctica Y11	DSM 13030 = CIP 106945 = Y11	Enterobacteriaceae	2	4625880	4459	70	22	0	1048	9621
Escherichia coli ABU 83972	ABU 83972	Enterobacteriaceae	2	5132961	4796	88	22	0	1123	10368
Escherichia coli SE15	SE15	Enterobacteriaceae	2	4839683	4488	84	22	57	557	10018
Escherichia coli O55:H7 str. CB9615	CB9615 = EPEC	Enterobacteriaceae	2	5452353	5121	100	22	54	564	10252
Yersinia pestis Antiqua	Antiqua	Enterobacteriaceae	4	4879836	4365	68	21	103	890	9537
Escherichia coli O157:H7 str. TW14359	TW14359 = EHEC	Enterobacteriaceae	2	5622737	5373	106	22	63	579	10507
Escherichia coli O127:H6 str. E2348/69	E2348/69 = EPEC	Enterobacteriaceae	3	5069678	4821	92	22	65	599	9904
Escherichia coli 55989	ED1a	Enterobacteriaceae	2	5329142	5248	91	22	61	1261	10258

Dickeya dadantii Ech586	Ech586	Enterobacteriaceae	1	4818394	4144	76	22	4	752	9092
Escherichia coli UTI89	UTI89 = UPEC	Enterobacteriaceae	2	5179971	5212	88	22	59	1680	10446
Salmonella enterica subsp. enterica serovar Dublin str. CT_02021853	CT_02021853	Enterobacteriaceae	2	4917459	4617	83	21	48	1262	9420
Escherichia coli W	ATCC 9637 = CCM 2024 = DSM 1116 = NCIMB 8666 = NRRL B-766 = W = NCIB 8666	Enterobacteriaceae	3	5008864	4697	87	22	71	869	10082
Salmonella enterica subsp. enterica serovar Typhimurium str. ST4/74	avr-74	Enterobacteriaceae	4	5067451	4842	84	22	0	542	10061
Buchnera aphidicola str. JF98 (Acyrtosiphon pisum)	JF98	Enterobacteriaceae	1	641771	477	32	3	0	159	1512
Escherichia coli IHE3034	IHE3034 = ExPEC	Enterobacteriaceae	1	5108383	4757	97	21	59	1291	10019
Buchnera aphidicola str. 5A (Acyrtosiphon pisum)	5A	Enterobacteriaceae	1	642122	555	32	3	2	289	2023
Yersinia pestis biovar Medievalis str. Harbin 35	Harbin 35	Enterobacteriaceae	4	4709501	4436	72	22	19	1081	8794
Klebsiella pneumoniae subsp. pneumoniae MGH 78578	ATCC 700721 = MGH 78578	Enterobacteriaceae	6	5694894	5185	86	25	46	622	11239
Salmonella enterica subsp. enterica serovar Paratyphi A str. ATCC 9150	SARB42 = ATCC 9150	Enterobacteriaceae	1	4585229	4094	82	22	67	631	9212
Salmonella enterica subsp. enterica serovar Paratyphi C strain RKS4594	RKS4594	Enterobacteriaceae	2	4888494	4640	82	22	68	548	9418
Yersinia pestis Pestoides F	Pestoides F	Enterobacteriaceae	3	4725862	4070	72	21	93	866	8889
Edwardsiella ictaluri 93-146	93-146	Enterobacteriaceae	1	3812315	3784	94	17	23	975	7478
Wigglesworthia glossinidia endosymbiont of Glossina brevipalpis		Enterobacteriaceae	2	703004	612	34	6	2	217	2066

Candidatus <i>Riesia pediculicola</i> USDA	USDA	Enterobacteriaceae	2	582127	556	33	6	1	271	1576
<i>Shigella sonnei</i> Ss046	Ss046	Enterobacteriaceae	2	5039661	4464	97	22	56	655	10320
<i>Edwardsiella tarda</i> FL6-60	FL6-60	Enterobacteriaceae	2	3728801	3256	95	25	0	1044	7619
<i>Enterococcus faecalis</i> 62	62	Enterococcaceae	4	3100313	3027	55	12	0	679	5721
<i>Enterococcus faecalis</i> V583	V583 = ATCC 700802	Enterococcaceae	4	3359974	3265	68	12	20	335	5702
<i>Mesoplasma florum</i> L1	ATCC 33453 = NCTC 11704 = L1 = NBRC 100688	Entomoplasmataceae	1	793224	683	29	6	3	107	1643
<i>Erythrobacter litoralis</i> HTCC2594	HTCC2594	Erythrobacteraceae	1	3052398	3011	44	1	4	280	5201
<i>Eubacterium limosum</i> KIST612	KIST612	Eubacteriaceae	1	4276902	4509	58	16	0	256	7171
<i>Eubacterium rectale</i> ATCC 33656	ATCC 33656 = VPI 0990	Eubacteriaceae	1	3449685	3626	57	15	5	228	5621
<i>Eubacterium eligens</i> ATCC 27750	ATCC 27750 = VPI C15-48	Eubacteriaceae	3	2831389	2765	47	15	3	249	4946
<i>Ferrimonas balearica</i> DSM 9799	DSM 9799 = CCM 4581 = PAT	Ferrimonadaceae	1	4279159	3782	121	22	1	832	7766
<i>Fibrobacter succinogenes</i> subsp. <i>succinogenes</i> S85	ATCC 19169 = S85 sub_strain JCVI	Fibrobacteraceae	1	3843004	2871	58	9	3	499	4538
<i>Fibrobacter succinogenes</i> subsp. <i>succinogenes</i> S85	ATCC 19169 = S85 sub_strain JGI	Fibrobacteraceae	1	3842635	3085	58	9	2	522	4843
<i>Marivirga tractuosa</i> DSM 4126	ATCC 23168 = DSM 4126 = NBRC 15989 = NCIMB 1408 = VKM B-1430 = H-43	Flammeovirgaceae	2	4516490	3757	41	6	2	535	6003
<i>Croceibacter atlanticus</i> HTCC2559	ATCC BAA-628 = HTCC2559 = KCTC 12090	Flavobacteriaceae	1	2952962	2702	36	4	3	210	4613
<i>Weeksellia virosa</i> DSM 16922	ATCC 43766 = DSM 16922 = JCM 21250 = NBRC 16016 = NCTC 11634 = CL345/78	Flavobacteriaceae	1	2272954	2049	59	15	2	472	3764
<i>Flavobacterium psychrophilum</i> JIP02/86	JIP02/86 = ATCC 49511	Flavobacteriaceae	1	2861988	2432	49	18	3	661	4261

Gramella forsetii KT0803	KT0803	Flavobacteriaceae	1	3798465	3584	44	9	3	992	5782
Cellulophaga lytica DSM 7489	ATCC 23178 = DSM 7489 = JCM 8516 = NBRC 14961 = NCIMB 1423 = VKM B- 1433 = Cy 120	Flavobacteriaceae	1	3765936	3284	41	12	2	646	5638
Maribacter sp. HTCC2170	HTCC2170 = KCCM 42371	Flavobacteriaceae	1	3868304	3411	38	6	0	226	5569
Flavobacteriaceae bacterium 3519-10	3519-10	Flavobacteriaceae	1	2768102	2534	42	6	3	611	4400
Capnocytophaga ochracea DSM 7271	ATCC 27872 = DSM 7271 = JCM 12966 = VPI 2845	Flavobacteriaceae	1	2612925	2171	47	12	3	322	3746
Cellulophaga algicola DSM 14237	DSM 14237 = IC166 = ACAM 630	Flavobacteriaceae	1	4888353	4163	45	15	2	758	6391
Zunongwangia profunda SM-A87	DSM 18752 = CCTCC AB 206139 = SM-A87	Flavobacteriaceae	1	5128187	4653	47	9	3	252	7286
Robiginitalea biformata HTCC2501	ATCC BAA- 864 = HTCC2501 = KCTC 12146	Flavobacteriaceae	1	3530383	3211	40	6	3	227	5203
Riemerella anatipestifer DSM 15868	ATCC 11845 = DSM 15868 = JCM 9532 = NCTC 11014	Flavobacteriaceae	1	2155121	1972	40	9	2	381	3546
Flavobacterium johnsoniae UW101	ATCC 17061 = DSM 2064 = UW101	Flavobacteriaceae	1	6096872	5017	62	18	3	597	7824
Francisella tularensis subsp. holarctica FTNF002-00	FTNF002-00 = FTA	Francisellaceae	1	1890909	1580	38	10	3	520	3439
Francisella novicida U112	U112	Francisellaceae	1	1910031	1719	38	10	4	257	3765
Francisella philomiragia subsp. philomiragia ATCC 25017	ATCC 25017	Francisellaceae	2	2049711	1915	39	9	4	422	4168
Francisella tularensis subsp. holarctica LVS	LVS	Francisellaceae	1	1895994	1961	38	9	4	369	3694
Francisella tularensis subsp. tularensis FSC198	FSC 198	Francisellaceae	1	1892616	1795	38	10	4	598	3458
Francisella tularensis subsp. tularensis SCHU S4	SCHU S4 = Schu 4	Francisellaceae	1	1892775	1793	38	10	4	600	3469

Francisella tularensis subsp. tularensis WY96-3418	WY96-3418	Francisellaceae	1	1898476	1634	38	10	4	588	3471
Francisella tularensis subsp. tularensis NE061598	NE061598	Francisellaceae	1	1892681	1836	38	10	4	280	3606
Francisella tularensis subsp. holarctica OSU18	OSU18	Francisellaceae	1	1895727	1555	38	10	2	574	3330
Francisella tularensis subsp. mediasiatica FSC147	FSC147	Francisellaceae	1	1893886	1406	38	9	4	413	3244
Frankia sp. Cc13	Cc13	Frankiaceae	1	5433628	4499	46	6	6	695	7411
Frankia sp. EAN1pec	EAN1pec	Frankiaceae	1	8982042	7191	47	9	3	635	11386
Frankia alni ACN14a	ACN14a	Frankiaceae	1	7497934	6721	46	6	3	1513	9706
Frankia sp. Eu11c	Eu11c	Frankiaceae	1	8815781	7083	46	9	3	569	11664
Leptotrichia buccalis C-1013-b	ATCC 14201 = DSM 1135 = JCM 12969 = NCTC 10249	Fusobacteriaceae	1	2465610	2220	46	15	3	348	4022
Fusobacterium nucleatum subsp. nucleatum ATCC 25586	JCM 8532 = LMG 13131 = CIP 101130 = ATCC 25586	Fusobacteriaceae	1	2174500	2068	47	15	4	675	4020
Ilyobacter polytropus DSM 2926	DSM 2926 = CuHBU1	Fusobacteriaceae	3	3132314	2880	79	26	3	644	5917
Sebaldella termitidis ATCC 33386	ATCC 33386 = NCTC 11300	Fusobacteriaceae	1	4418842	4083	40	13	4	485	6352
Streptobacillus moniliformis DSM 12112	ATCC 14647 = DSM 12112 = NCTC 10651 = 9901	Fusobacteriaceae	1	1662578	1434	39	16	3	240	2939
Sideroxydans lithotrophicus ES-1	ES-1	Gallionellaceae	1	3003656	2980	44	6	4	473	6042
Gallionella capsiferiformans ES-2	ES-2	Gallionellaceae	1	3162471	2894	51	9	4	456	6053
Gemmatimonas aurantiaca T-27	T-27 = DSM 14586 = JCM 11422 = NBRC 100505	Gemmatimonadaceae	1	4636964	3935	48	3	3	729	6915
Geobacter uraniireducens Rf4	Rf4	Geobacteraceae	1	5136364	4357	49	6	4	743	8412
Geobacter metallireducens GS-15	GS-15 = ATCC 53774 = DSM 7210	Geobacteraceae	2	4011182	3532	50	6	4	682	7316
Geobacter sp. M21	M21	Geobacteraceae	1	4745806	4080	58	12	5	587	8079

Geobacter bemidjiensis Bem	Bem = ATCC BAA-1014 = DSM 16622	Geobacteraceae	1	4615150	4057	59	12	5	362	8057
Geobacter sulfurreducens PCA	ATCC 51573 = DSM 12127 = PCA	Geobacteraceae	1	3814139	3447	49	6	4	557	7038
Geobacter sp. M18	M18	Geobacteraceae	1	5277406	4434	59	12	6	571	8752
Geobacter lovleyi SZ	ATCC BAA-1151 = DSM 17278 = SZ	Geobacteraceae	2	3994874	3685	45	6	2	548	7396
Geobacter sulfurreducens KN400	DL-1 = KN400	Geobacteraceae	1	3714272	3328	49	6	4	311	6944
Geobacter sp. FRC-32	FRC-32	Geobacteraceae	1	4304501	3798	49	8	5	564	7412
Geodermatophilus obscurus DSM 43160	ATCC 25078 = DSM 43160 = JCM 3152 = G-20	Geodermatophilaceae	1	5322497	4811	48	9	2	537	7955
Stackebrandtia nassauensis DSM 44728	DSM 44728 = NRRL B-16338 = NBRC 102104 = LLR-40K- 21	Glycomycetaceae	1	6841557	6379	47	6	2	579	10494
Gordonia bronchialis DSM 43247	ATCC 25592 = DSM 43247 = JCM 3198 = NCTC 10667	Gordoniaceae	1	5208602	4616	49	6	3	548	7869
Hahella chejuensis KCTC 2396	KCTC 2396	Hahellaceae	1	7215267	6781	67	15	4	654	10724
Halanaerobium praevalens DSM 2228	ATCC 33744 = DSM 2228 = GSL	Halanaerobiaceae	1	2309262	2068	55	12	3	431	4794
Halanaerobium hydrogeniformans	sapolanicus	Halanaerobiaceae	1	2613117	2295	57	12	4	387	5204
Halothermothrix orenii H 168	H 168 = OCM 544 = DSM 9562	Halanaerobiaceae	1	2578146	2342	56	11	3	606	5074
Acetohalobium arabaticum DSM 5501	ATCC 49924 = DSM 5501 = Z-7288	Halobacteroidaceae	1	2469596	2282	67	15	4	536	5009
Halomonas elongata DSM 2581	ATCC 33173 = DSM 2581 = NBRC 15536 = NCIMB 2198 = 1H9	Halomonadaceae	1	4061296	3474	68	12	0	1201	7668
Chromohalobacter salexigens DSM 3043	DSM 3043 = ATCC BAA-138 = NCIMB 13768	Halomonadaceae	1	3696649	3298	69	15	6	794	7143
Halothiobacillus neapolitanus c2	ATCC 23641 = c2	Halothiobacillaceae	1	2582886	2357	43	6	3	463	5130
Helicobacter felis ATCC 49179	ATCC 49179 = NCTC 12436 = CS1	Helicobacteraceae	1	1672681	1668	0	0	0	319	3251

Helicobacter pylori Lithuania75	Lithuania75	Helicobacteraceae	2	1640673	1565	36	6	0	291	3138
Helicobacter pylori G27	G27	Helicobacteraceae	2	1663013	1504	36	7	4	212	3077
Wolinella succinogenes DSM 1740	DSMZ 1740	Helicobacteraceae	1	2110355	2044	40	9	4	394	4592
Helicobacter pylori F57	F57	Helicobacteraceae	1	1609006	1520	36	6	1	210	3179
Helicobacter pylori India7	India7	Helicobacteraceae	1	1675918	1600	36	2	0	289	3164
Sulfurimonas autotrophica DSM 16294	ATCC BAA-671 = DSM 16294 = JCM 11897 = OK10	Helicobacteraceae	1	2153198	2158	43	12	0	471	4464
Helicobacter pylori HPAG1	HPAG1	Helicobacteraceae	2	1605736	1544	36	6	4	618	3270
Helicobacter pylori SJM180	SJM180	Helicobacteraceae	1	1658051	1581	36	6	0	297	3169
Helicobacter pylori Cuz20	Cuz20	Helicobacteraceae	1	1635449	1564	36	6	0	270	3181
Helicobacter pylori 908	908	Helicobacteraceae	1	1549666	1595	36	3	0	442	3236
Helicobacter pylori F32	F32	Helicobacteraceae	1	1578824	1490	36	6	1	208	3172
Helicobacter hepaticus ATCC 51449	3B1 = ATCC 51449	Helicobacteraceae	1	1799146	1875	37	3	3	420	3458
Helicobacter pylori J99	J99	Helicobacteraceae	1	1643831	1491	36	6	4	338	3332
Helicobacter pylori 35A	35A	Helicobacteraceae	1	1566655	1470	36	6	5	548	3170
Helicobacter mustelae 12198	ATCC 43772 = LMG 18044 = NCTC 12198 = 12198	Helicobacteraceae	1	1578097	1428	38	2	2	362	3153
Helicobacter pylori F30	F30	Helicobacteraceae	1	1570564	1479	36	6	1	210	3174
Helicobacter acinonychis str. Sheeba	Sheeba	Helicobacteraceae	2	1557588	1618	36	6	4	509	3229
Sulfuricurvum kujiense DSM 16994	ATCC BAA-921 = DSM 16994 = JCM 11577 = YK-1	Helicobacteraceae	5	2819357	2798	50	9	2	485	5577
Helicobacter pylori 26695	26695 = ATCC 700392	Helicobacteraceae	1	1667867	1569	36	7	4	341	3368
Helicobacter pylori v225d	v225d	Helicobacteraceae	2	1595604	1550	36	6	3	327	3078
Helicobacter pylori B38	B38	Helicobacteraceae	1	1576758	1527	36	7	4	487	3137
Helicobacter pylori P12	P12	Helicobacteraceae	2	1684038	1579	36	6	4	227	3140
Helicobacter pylori 52	52	Helicobacteraceae	1	1568826	1405	36	6	4	206	3039
Helicobacter pylori B8	B8	Helicobacteraceae	2	1680029	1720	36	6	4	539	3269

Helicobacter pylori Gambia94/24	Gambia94/24	Helicobacteraceae	2	1712468	1605	36	6	0	290	3144
Sulfurimonas denitrificans DSM 1251	ATCC 33889 = DSM 1251	Helicobacteraceae	1	2201561	2096	45	12	3	495	4539
Helicobacter pylori PeCan4	PeCan4	Helicobacteraceae	2	1638269	1563	36	6	0	272	3163
Helicobacter pylori Shi470	Shi470	Helicobacteraceae	1	1608548	1569	36	6	4	293	3098
Helicobacter pylori 51	51	Helicobacteraceae	1	1589954	1415	36	6	4	209	3098
Helicobacter pylori F16	F16	Helicobacteraceae	1	1575399	1500	36	6	1	207	3172
Helicobacter pylori SouthAfrica7	SouthAfrica7	Helicobacteraceae	2	1679829	1572	36	6	0	288	3182
Helicobacter pylori Sat464	Sat464	Helicobacteraceae	2	1567570	1508	36	6	0	269	3150
Heliobacterium modesticaldum Ice1	ATCC 51547 = Ice1	Heliobacteriaceae	1	3075407	3000	104	25	6	284	5496
Herpetosiphon aurantiacus DSM 785	ATCC 23779 = DSM 785	Herpetosiphonaceae	3	6785430	5278	51	15	2	529	8670
Thiobacillus denitrificans ATCC 25259	ATCC 25259	Hydrogenophilaceae	1	2909809	2827	43	6	4	507	5944
Sulfurihydrogenibiu m sp. YO3AOP1	YO3AOP1	Hydrogenothermaceae	1	1838442	1721	40	9	3	345	3894
Sulfurihydrogenibiu m azorense Az-Fu1	Az-Fu1 = DSM 15241 = OCM 825	Hydrogenothermaceae	1	1640877	1725	39	4	4	503	3851
Persephonella marina EX-H1	DSM 14350 = EX-H1	Hydrogenothermaceae	2	1983966	2051	38	4	3	549	4259
Hyphomicrobium denitrificans ATCC 51888	ATCC 51888 = DSM 1869 = NCIB 11706 = TK 0415	Hyphomicrobiaceae	1	3638969	3512	46	3	3	466	6028
Rhodomicrobium vannielii ATCC 17100	ATCC 17100 = ATH 3.1.1 = DSM 162 = LMG 4299	Hyphomicrobiaceae	1	4014469	3565	49	6	3	517	6613
Hirschia baltica ATCC 49814	ATCC 49814 = DSM 5838 = IFAM 1418	Hyphomonadaceae	2	3540114	3187	38	6	3	498	6015
Maricaulis maris MCS10	MCS10	Hyphomonadaceae	1	3368780	3063	45	6	5	603	5793
Hyphomonas neptunium ATCC 15444	ATCC 15444	Hyphomonadaceae	1	3705021	3505	43	3	5	714	6350
Idiomarina loihiensis L2TR	L2-TR = DSM 15497 = ATCC BAA-735	Idiomarinaceae	1	2839318	2628	56	12	2	361	5906
Intrasporangium calvum DSM 43043	ATCC 23552 = DSM 43043 = JCM 3097 = NBRC 12989	Intrasporangiaceae	1	4024382	3563	49	6	2	685	6511

	= 7 KIP									
<i>Jonesia denitrificans</i> DSM 20603	ATCC 14870 = DSM 20603 = CIP 55134	Jonesiaceae	1	2749646	2511	55	22	3	422	4879
<i>Kineococcus radiotolerans</i> SRS30216	ATCC BAA- 149 = DSM 14245 = SRS30216	Kineosporiaceae	3	4956672	4681	49	12	3	504	7834
<i>Haliangium ochraceum</i> DSM 14365	DSM 14365 = JCM 11303 = SMP-2	Kofleriaceae	1	9446314	6719	46	6	3	601	10353
<i>Butyrivibrio proteoclasticus</i> B316	ATCC 51982 = DSM 14932 = B316	Lachnospiraceae	4	4404886	3811	50	18	0	671	6242
<i>Lactobacillus casei</i> ATCC 334	ATCC 334	Lactobacillaceae	2	2924325	2771	59	16	7	420	5149
<i>Lactobacillus brevis</i> ATCC 367	ATCC 367 = JCM 1170	Lactobacillaceae	3	2340228	2218	65	16	6	325	4260
<i>Pediococcus pentosaceus</i> ATCC 25745	ATCC 25745 = 183-1w	Lactobacillaceae	1	1832387	1755	55	16	4	351	3788
<i>Lactobacillus sakei</i> subsp. <i>sakei</i> 23K	23K	Lactobacillaceae	1	1884661	1883	63	21	4	495	3874
<i>Lactobacillus fermentum</i> CECT 5716	CECT 5716	Lactobacillaceae	1	2100449	1051	54	20	5	221	2555
<i>Lactobacillus acidophilus</i> NCFM	NCFM/NCK 56/N2	Lactobacillaceae	1	1993560	1862	61	13	3	483	3964
<i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> ND02	ND02	Lactobacillaceae	2	2131976	2018	94	27	0	198	4068
<i>Lactobacillus casei</i> BL23	BL23	Lactobacillaceae	1	3079196	3042	60	15	7	676	5540
<i>Lactobacillus plantarum</i> JDM1	JDM1	Lactobacillaceae	1	3197759	2948	62	16	4	280	5732
<i>Lactobacillus fermentum</i> IFO 3956	NBRC 3956 = LMG 18251	Lactobacillaceae	1	2098685	1843	54	15	4	233	4017
<i>Lactobacillus plantarum</i> subsp. <i>plantarum</i> ST-III	ST-III	Lactobacillaceae	2	3307936	3038	64	15	0	270	5683
<i>Lactobacillus reuteri</i> F275	JCM 1112	Lactobacillaceae	1	2039414	1820	63	18	4	226	3843
<i>Lactobacillus reuteri</i> F275	DSM 20016	Lactobacillaceae	1	1999618	1900	68	18	4	419	3864
<i>Lactobacillus amylovorus</i> GRL 1112	GRL 1112	Lactobacillaceae	1	2067702	2054	60	12	0	221	3909
<i>Lactobacillus rhamnosus</i> Lc 705	Lc 705	Lactobacillaceae	2	3033106	2992	61	15	8	242	5446
<i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i> ATCC 11842	ATCC 11842 = DSM 20081	Lactobacillaceae	1	1864998	2085	95	27	3	409	3314

Lactobacillus rhamnosus GG	ATCC 53103 = GG sub_strain Tokyo	Lactobacillaceae	1	3005051	2834	56	15	7	229	5263
Lactobacillus helveticus DPC 4571	DPC 4571	Lactobacillaceae	1	2080931	1610	61	12	6	199	3637
Lactobacillus casei str. Zhang	Zhang	Lactobacillaceae	2	2898335	2848	59	15	3	244	5269
Lactobacillus gasseri ATCC 33323	ATCC 33323 = DSM 20243	Lactobacillaceae	1	1894360	1755	78	19	3	293	3621
Lactobacillus salivarius CECT 5713	CECT 5713	Lactobacillaceae	4	2136138	1552	85	35	5	610	3603
Lactobacillus delbrueckii subsp. bulgaricus ATCC BAA-365	ATCC BAA-365	Lactobacillaceae	1	1856951	1721	98	28	3	308	3416
Lactobacillus plantarum WCFS1	WCFS1 = ATCC BAA-793 = NCIMB 8826	Lactobacillaceae	4	3348625	3100	70	15	4	293	1838
Lactobacillus crispatus ST1	ST1	Lactobacillaceae	1	2043161	2024	64	12	3	176	4063
Lactobacillus johnsonii FI9785	FI9785	Lactobacillaceae	3	1785116	1737	55	12	3	473	3668
Lactobacillus johnsonii NCC 533	NCC 533	Lactobacillaceae	1	1992676	1821	79	18	3	204	3756
Lactobacillus salivarius UCC118	UCC118	Lactobacillaceae	4	2133977	2014	78	21	5	630	3945
Lactobacillus rhamnosus GG	ATCC 53103 = GG sub_strain Helsinki	Lactobacillaceae	1	3010111	2944	57	15	7	245	5297
Legionella pneumophila 2300/99 Alcoy	2300/99 Alcoy	Legionellaceae	1	3516334	3191	43	9	7	674	5500
Legionella pneumophila subsp. pneumophila str. Philadelphia 1	Philadelphia 1 = ATCC 33152 = DSM 7513	Legionellaceae	1	3397754	2942	43	9	9	697	5431
Legionella pneumophila str. Paris	Paris	Legionellaceae	2	3635495	3218	43	9	8	322	5438
Legionella pneumophila str. Lens	Lens	Legionellaceae	2	3405519	3001	43	9	10	324	5151
Legionella pneumophila str. Corby	Corby	Legionellaceae	1	3576470	3204	44	9	7	304	5394
Legionella longbeachae NSW150	NSW150	Legionellaceae	2	4149158	3657	37	12	6	605	5798
Leptospira interrogans serovar Copenhageni str. Fiocruz L1-130	Fiocruz L1-130	Leptospiraceae	2	4627366	3659	37	5	2	303	5366

Leptospira biflexa serovar Patoc strain 'Patoc 1 (Ames)'	Patoc 1 = Ames	Leptospiraceae	3	3956089	3600	35	6	3	262	5962
Leptospira interrogans serovar Lai str. 56601	56601	Leptospiraceae	2	4698134	3707	37	5	2	307	5580
Leptospira borgpetersenii serovar Hardjo-ovis L550	L550	Leptospiraceae	2	3931782	2945	37	5	2	265	5179
Leptospira borgpetersenii serovar Hardjo-ovis JB197	JB197	Leptospiraceae	2	3876235	2880	37	5	2	261	5007
Leptospira biflexa serovar Patoc strain 'Patoc 1 (Paris)'	Patoc 1 = ATCC 23582 = Paris	Leptospiraceae	3	3951448	3726	35	6	3	946	6021
Leuconostoc kimchii IMSNU 11154	IMSNU 11154 = KCTC 2386 = IH25	Leuconostocaceae	6	2101787	2130	68	12	11	282	4187
Oenococcus oeni PSU-1	BAA-331 = PSU-1	Leuconostocaceae	1	1780517	1691	43	7	3	327	3552
Leuconostoc mesenteroides subsp. mesenteroides ATCC 8293	ATCC 8293 = NCDO 523	Leuconostocaceae	2	2075763	2005	71	12	9	406	4122
Leuconostoc gasicomitatum LMG 18811	DSM 15947 = CECT 5767 = JCM 12535 = LMG 18811 = TB1-10	Leuconostocaceae	1	1954080	1912	67	12	5	157	3892
Leuconostoc citreum KM20	KM20	Leuconostocaceae	5	1896614	1822	70	12	12	495	3946
Listeria monocytogenes EGD-e	EGD-e = ATCC BAA-679	Listeriaceae	1	2944528	2852	67	18	47	412	5949
Listeria monocytogenes L99	L99	Listeriaceae	1	2979198	2925	67	18	0	900	5970
Listeria seeligeri serovar 1/2b str. SLCC3954	ATCC 35967 = DSM 20751 = CIP 100100 = SLCC 3954	Listeriaceae	1	2797636	2722	67	18	27	856	5723
Listeria innocua Clip11262	CLIP 11262	Listeriaceae	2	3093113	3058	66	18	41	397	5947
Listeria welshimeri serovar 6b str. SLCC5334	ATCC 35897 = DSM 20650 = SLCC5334	Listeriaceae	1	2814130	2780	66	18	31	797	5711
Listeria monocytogenes HCC23	HCC23	Listeriaceae	1	2976212	2974	67	18	38	705	5864
Listeria monocytogenes 08-5578	aoû-78	Listeriaceae	2	3109342	3088	58	15	49	324	6054

Listeria monocytogenes serotype 4b str. CLIP 80459	Clip81459	Listeriaceae	1	2912690	2790	67	18	43	343	5827
Listeria monocytogenes serotype 4b str. F2365	F2365	Listeriaceae	1	2905187	2821	67	18	43	603	5807
Listeria monocytogenes 08-5923	aoû-23	Listeriaceae	1	2999054	2966	58	15	49	324	5961
Methylophilum inferorum V4	V4	Methylophilaceae	1	2287145	2472	46	3	3	234	4092
Methylobacterium extorquens PA1	PA1	Methylobacteriaceae	1	5471154	4829	58	15	2	611	8559
Methylobacterium nodulans ORS 2060	ORS2060 = LMG 21967	Methylobacteriaceae	8	8839022	8309	73	21	6	758	11928
Methylobacterium populi BJ001	ATCC BAA-705 = NCIMB 13946 = BJ001	Methylobacteriaceae	3	5848997	5365	58	15	2	617	9114
Methylobacterium sp. 4-46	avr-46	Methylobacteriaceae	3	7737025	6692	63	18	1	724	11260
Methylobacterium chloromethanicum CM4	CM4 = NCIMB 13688	Methylobacteriaceae	3	6180732	5516	61	15	3	649	9251
Methylobacterium extorquens DM4	DM4 = DSM 5838 = )	Methylobacteriaceae	3	6123851	5929	58	15	8	1172	9436
Methylobacterium radiotolerans JCM 2831	ATCC 27329 = DSM 1819 = JCM 2831	Methylobacteriaceae	9	6899110	6431	60	19	4	689	10654
Methylococcus capsulatus str. Bath	Bath = NCIMB 11132	Methylococcaceae	1	3304561	2960	46	6	4	654	6135
Methylothera versatilis 301	301	Methylophilaceae	1	3059871	2764	47	9	3	479	6032
Methylothera mobilis JLW8	JLW8 = ATCC BAA-1282 = DSM 17540	Methylophilaceae	1	2547570	2338	46	6	3	443	5416
Methylobacillus flagellatus KT	KT = ATCC 51484 = DSM 6875	Methylophilaceae	1	2971517	2753	46	6	4	669	6119
Methylovorus sp. MP688	MP688	Methylophilaceae	1	2862391	2712	46	7	0	325	5819
Methylovorus glucosetrophus SIP3-4	SIP3-4	Methylophilaceae	3	3082007	2910	48	6	3	471	6038
Clavibacter michiganensis subsp. michiganensis NCPPB 382	NCPPB 382	Microbacteriaceae	3	3395237	3108	45	2	4	729	5608
Microbacterium testaceum StLB037	StLB037	Microbacteriaceae	1	3982034	3676	45	6	0	255	6840
Clavibacter michiganensis subsp. sepedonicus	ATCC 33113 = JCM 9667	Microbacteriaceae	3	3403786	3230	45	6	3	428	5359

<i>Leifsonia xyli</i> subsp. <i>xyli</i> str. CTCB07	CTCB07	Microbacteriaceae	1	2584158	2030	45	3	3	255	3891
<i>Arthrobacter phenanthrenivorans</i> Sphe3	DSM 18606 = JCM 16027 = LMG 23796 = Sphe3	Micrococcaceae	3	4535320	4131	50	12	3	611	7396
<i>Rothia dentocariosa</i> ATCC 17931	ATCC 17931 = CDC X599 = XDIA	Micrococcaceae	1	2506025	2217	49	10	6	649	3831
<i>Arthrobacter chlorophenolicus</i> A6	A6 = ATCC 700700 = DSM 12829 = JCM 12360	Micrococcaceae	3	4980870	4590	88	15	3	574	7568
<i>Micrococcus luteus</i> NCTC 2665	ATCC 4698 = DSM 20030 = JCM 1464 = NBRC 3333 = NCIMB 9278 = NCTC 2665 = VKM Ac-2230	Micrococcaceae	1	2501097	2236	48	5	3	310	4491
<i>Renibacterium salmoninarum</i> ATCC 33209	ATCC 33209 = DSM 20767 = JCM 11484 = NBRC 15589 = NCIMB 2235	Micrococcaceae	1	3155250	3507	45	6	5	253	6135
<i>Arthrobacter aurescens</i> TC1	TC1	Micrococcaceae	3	5226648	4588	54	18	3	708	7915
<i>Arthrobacter</i> sp. FB24	FB24	Micrococcaceae	4	5070478	4506	51	15	3	776	7990
<i>Rothia mucilaginosa</i> DY-18	DY-18	Micrococcaceae	1	2264603	1992	49	11	3	201	3572
<i>Arthrobacter arilaitensis</i> Re117	DSM 16368 = CIP 108037 = JCM 13566 = Re117	Micrococcaceae	3	3918192	3439	64	18	0	1074	6276
<i>Kocuria rhizophila</i> DC2201	ATCC 9341 = DSM 348 = NBRC 103217 = DC2201	Micrococcaceae	1	2697540	2356	46	9	2	795	4640
<i>Micromonospora</i> sp. L5	L5	Micromonosporaceae	1	6962533	6150	53	9	3	592	10222
<i>Salinispora arenicola</i> CNS-205	CNS-205	Micromonosporaceae	1	5786361	4917	52	9	2	561	8193
<i>Micromonospora aurantiaca</i> ATCC 27029	ATCC 27029 = DSM 43813 = JCM 10878 = NBRC 16125 = INA 9442	Micromonosporaceae	1	7025559	6222	52	9	3	567	9927
<i>Salinispora tropica</i> CNB-440	ATCC BAA-916 = DSM 44818 = CNB-440	Micromonosporaceae	1	5183331	4536	50	9	3	686	7744

Acinetobacter baumannii TCDC-AB0715	TCDC-AB0715	Moraxellaceae	3	4210417	3949	42	12	0	340	6868
Moraxella catarrhalis RH4	RH4	Moraxellaceae	1	1863286	1886	50	12	4	750	3901
Psychrobacter arcticus 273-4	DSM 17307 = 273-4	Moraxellaceae	1	2650701	2147	49	12	4	632	4512
Acinetobacter baumannii	AYE	Moraxellaceae	5	4048735	3779	72	18	8	1028	6954
Acinetobacter baumannii AB0057	AB0057	Moraxellaceae	2	4059242	3801	73	18	5	815	6769
Acinetobacter sp. DR1	JCM 1667 = KCTC 23045 = DR1	Moraxellaceae	1	4152543	3874	71	18	5	446	7160
Acinetobacter calcoaceticus PHEA-2	PHEA-2	Moraxellaceae	1	3862530	3599	69	6	0	328	6966
Acinetobacter baumannii ATCC 17978	ATCC 17978 = NCDC KC 755	Moraxellaceae	3	4001457	3803	69	15	5	337	6802
Psychrobacter cryohalolentis K5	K5	Moraxellaceae	1	3059876	2467	48	12	4	633	5251
Acinetobacter baumannii AB307-0294	AB307-0294	Moraxellaceae	1	3760981	3458	73	18	5	779	6510
Acinetobacter sp. ADP1	ADP1	Moraxellaceae	1	3598621	3280	76	21	5	995	6421
Acinetobacter baumannii ACICU	ACICU	Moraxellaceae	3	3996761	3759	64	18	5	367	6821
Acinetobacter baumannii 1656-2	1656-2	Moraxellaceae	3	4023106	3824	71	18	0	335	6797
Acinetobacter baumannii SDF	SDF	Moraxellaceae	4	3477996	3571	64	15	6	794	6004
Psychrobacter sp. PRwf-1	PRwf-1	Moraxellaceae	3	2995049	2385	57	15	4	595	5066
Mycobacterium tuberculosis CDC1551	Oshkosh = CDC 1551	Mycobacteriaceae	1	4403837	4212	45	3	3	1240	11102
Mycobacterium bovis BCG str. Tokyo 172	BCG = Tokyo 172 = ATCC 35737 = TMC 1019	Mycobacteriaceae	1	4371711	3970	45	3	2	790	6572
Mycobacterium smegmatis str. MC2 155	ATCC 700084 = mc(2 = mc(2)155	Mycobacteriaceae	1	6988209	6718	47	6	3	1233	11284
Mycobacterium tuberculosis KZN 1435	KZN 1435 = MDR	Mycobacteriaceae	1	4398250	4060	45	3	3	303	6523
Mycobacterium leprae TN	TN	Mycobacteriaceae	1	3268203	2711	45	3	3	433	3553
Mycobacterium bovis BCG str. Pasteur 1173P2	BCG = Pasteur 1173P2	Mycobacteriaceae	1	4374522	3970	47	3	3	1305	6685
Mycobacterium avium 104	104	Mycobacteriaceae	1	5475491	5120	46	3	3	851	8134
Mycobacterium sp. KMS	KMS	Mycobacteriaceae	3	6256079	5975	48	6	3	811	9846
Mycobacterium marinum M	ATCC BAA-535 = M	Mycobacteriaceae	2	6660144	5452	46	3	2	375	8762

Mycobacterium abscessus	ATCC 19977 = DSM 44196	Mycobacteriaceae	2	5090491	4942	47	3	3	340	7738
Mycobacterium sp. Spyr1	Spyr1	Mycobacteriaceae	3	5783292	5349	47	6	2	645	9141
Mycobacterium ulcerans Agy99	Agy99	Mycobacteriaceae	2	5805761	4241	45	3	3	357	7465
Mycobacterium tuberculosis H37Ra	ATCC 25177 = H37Ra	Mycobacteriaceae	1	4419977	4032	45	3	3	386	6644
Mycobacterium sp. JLS	JLS	Mycobacteriaceae	1	6048425	5739	48	6	2	823	9771
Mycobacterium avium subsp. paratuberculosis K-10	ATCC BAA-968 = K-10	Mycobacteriaceae	1	4829781	4350	45	3	3	404	7341
Mycobacterium tuberculosis H37Rv	ATCC 25618 = H37Rv	Mycobacteriaceae	1	4411532	3991	45	3	3	1431	12142
Mycobacterium tuberculosis F11	F11	Mycobacteriaceae	1	4424435	3942	45	3	3	310	6615
Mycobacterium sp. MCS	MCS	Mycobacteriaceae	2	5920523	5616	48	6	2	812	9434
Mycobacterium bovis AF2122/97	AF2122/97 = ATCC BAA-935	Mycobacteriaceae	1	4345492	3935	45	3	3	1317	7125
Mycobacterium leprae Br4923	Br4923	Mycobacteriaceae	1	3268071	2711	45	3	3	317	3318
Mycobacterium gilvum PYR-GCK	ATCC 700033 = PYR-GCK = PYR-GCK)	Mycobacteriaceae	4	5982829	5579	47	6	3	770	9291
Mycobacterium vanbaalenii PYR-1	DSM 7251 = PYR-1	Mycobacteriaceae	1	6491865	5979	49	6	3	812	9940
Mycoplasma gallisepticum str. R(high)	R(high = passage 156 = high = R = passage156	Mycoplasmataceae	1	1012027	766	32	7	3	191	1541
Mycoplasma haemofelis str. Langford 1	Langford 1	Mycoplasmataceae	1	1147259	1545	31	2	0	132	966
Mycoplasma leachii PG50	DSM 21131 = NCTC 10133 = N29 = PG50	Mycoplasmataceae	1	1008951	882	30	6	5	181	1732
Mycoplasma bovis PG45	ATCC 25523 = PG45	Mycoplasmataceae	1	1003404	765	34	6	2	165	1573
Mycoplasma penetrans HF-2	HF-2	Mycoplasmataceae	1	1358633	1037	30	3	3	124	1869
Mycoplasma crocodyli MP145	ATCC 51981 = MP145	Mycoplasmataceae	1	934379	689	34	6	3	234	1520
Mycoplasma agalactiae	PG2	Mycoplasmataceae	1	877438	756	34	6	2	81	1427
Mycoplasma mycoides subsp. mycoides SC str. Gladysdale	Gladysdale	Mycoplasmataceae	1	1193808	1095	30	6	4	195	2072
Mycoplasma arthritidis 158L3-1	158L3-1	Mycoplasmataceae	1	820453	631	32	3	3	78	1270

<i>Mycoplasma gallisepticum</i> str. F	F	Mycoplasmataceae	1	977612	756	32	7	3	196	1574
<i>Mycoplasma conjunctivae</i>	ATCC 25834 = HRC/581 = NCTC 10147	Mycoplasmataceae	1	846214	696	28	3	3	70	1349
<i>Mycoplasma agalactiae</i> 5632	5632	Mycoplasmataceae	1	1006702	825	34	6	2	80	1501
<i>Mycoplasma mobile</i> 163K	163K = NCTC 11711 = ATCC 43663	Mycoplasmataceae	1	777079	635	28	3	3	239	1435
<i>Mycoplasma hyopneumoniae</i> 7448	7448	Mycoplasmataceae	1	920079	698	30	3	2	178	1392
<i>Mycoplasma hyopneumoniae</i> 232	232	Mycoplasmataceae	1	892758	691	30	3	3	156	1372
<i>Mycoplasma pneumoniae</i> FH	ATCC 15531 = NBRC 14401 = NCTC 10119 = FH	Mycoplasmataceae	1	811088	629	36	3	3	151	1320
<i>Mycoplasma hyorhinis</i> HUB-1	HUB-1	Mycoplasmataceae	1	839615	657	30	3	0	73	1475
<i>Mycoplasma suis</i>	KI_3806	Mycoplasmataceae	1	709270	809	32	3	0	80	808
<i>Mycoplasma hominis</i>	ATCC 23114 = NBRC 14850 = NCTC 10111 = PG21	Mycoplasmataceae	1	665445	536	33	7	3	69	1243
<i>Mycoplasma synoviae</i> 53	53	Mycoplasmataceae	1	799476	681	34	7	3	189	1409
<i>Ureaplasma parvum</i> serovar 3 str. ATCC 700970	ATCC 700970	Mycoplasmataceae	1	751719	611	30	6	3	117	1394
<i>Mycoplasma pneumoniae</i> M129	M129 = ATCC 29342	Mycoplasmataceae	1	816394	686	37	4	3	198	1713
<i>Mycoplasma pulmonis</i> UAB CTIP	UAB CTIP	Mycoplasmataceae	1	963879	782	29	3	3	206	1603
<i>Mycoplasma hyopneumoniae</i> 168	168	Mycoplasmataceae	1	925576	695	30	3	0	59	1347
<i>Mycoplasma mycoides</i> subsp. <i>mycoides</i> SC str. PG1	PG1	Mycoplasmataceae	1	1211703	1016	30	6	3	277	2029
<i>Mycoplasma hyopneumoniae</i> J	J = ATCC 25934 = NCTC 10110	Mycoplasmataceae	1	897405	674	30	3	2	182	1403
<i>Mycoplasma gallisepticum</i> str. R(low)	passage15 = R = clone2 = R(low)	Mycoplasmataceae	1	1012800	763	32	7	3	197	1557
<i>Ureaplasma parvum</i> serovar 3 str. ATCC 27815	ATCC 27815 = 27 = NCTC 11736	Mycoplasmataceae	1	751679	609	27	3	2	132	1353
<i>Mycoplasma fermentans</i> JER	JER	Mycoplasmataceae	1	977524	797	36	5	0	223	1631

Mycoplasma capricolum subsp. capricolum ATCC 27343	California kid = ATCC 27343 = NCTC 10154	Mycoplasmataceae	1	1010023	813	30	6	3	220	1651
Mycoplasma fermentans M64	M64	Mycoplasmataceae	1	1118751	1050	36	5	0	65	1699
Mycoplasma suis str. Illinois	Illinois	Mycoplasmataceae	1	742431	844	32	3	0	147	878
Mycoplasma genitalium G37	ATCC 33530 = NCTC 10195 = G-37	Mycoplasmataceae	1	580076	483	36	3	3	181	1500
Ureaplasma urealyticum serovar 10 str. ATCC 33699	ATCC 33699 = Western	Mycoplasmataceae	1	874478	646	27	6	3	132	1355
Anaeromyxobacter sp. K	K	Myxococcaceae	1	5061632	4457	49	6	4	586	8245
Myxococcus xanthus DK 1622	DK 1622	Myxococcaceae	1	9139763	7331	65	12	3	839	10996
Anaeromyxobacter sp. Fw109-5	Fw109-5	Myxococcaceae	1	5277990	4466	49	6	4	628	8305
Anaeromyxobacter dehalogenans 2CP-C	2CP-C	Myxococcaceae	1	5013479	4346	49	6	4	774	8140
Anaeromyxobacter dehalogenans 2CP-1	2CP-1 = ATCC BAA-258	Myxococcaceae	1	5029329	4473	49	6	4	578	8137
Nakamurella multipartita DSM 44233	ATCC 700099 = DSM 44233 = JCM 9543 = Y-104	Nakamurellaceae	1	6060298	5240	47	6	3	578	8856
Natranaerobius thermophilus JW/NM-WN-LF	ATCC BAA-1301 = DSM 18059 = JW/NM-WN-LF	Natranaerobiaceae	3	3191453	2906	51	12	3	402	5683
Nautilia profundicola AmH	ATCC BAA-1463 = DSM 18972 = AmH	Nautiliaceae	1	1676444	1730	46	12	4	443	3749
Neisseria meningitidis alpha710	alpha710	Neisseriaceae	1	2242947	2063	57	12	0	575	4164
Neisseria meningitidis alpha14	alpha14	Neisseriaceae	1	2145295	1921	58	12	6	615	4072
Chromobacterium violaceum ATCC 12472	NCIMB 9131 = ATCC 12472 = NBRC 12614 = DSM 30191 = NCTC 9757 = JCM 1249	Neisseriaceae	1	4751080	4407	98	24	4	1125	8568
Neisseria meningitidis FAM18	ATCC 700532 = FAM18	Neisseriaceae	1	2194961	1971	59	12	6	533	4114
Neisseria gonorrhoeae FA 1090	ATCC 700825 = FA 1090	Neisseriaceae	1	2153922	2002	54	12	6	460	3924

Neisseria meningitidis Z2491	Z2491	Neisseriaceae	1	2184406	1991	58	12	6	568	4161
Neisseria meningitidis MC58	MC58	Neisseriaceae	1	2272360	2065	59	12	6	565	4258
Laribacter hongkongensis HLHK9	HLHK9	Neisseriaceae	1	3169329	3238	77	21	8	823	6221
Neisseria meningitidis 8013	8013	Neisseriaceae	1	2277550	2125	59	12	6	642	4139
Neisseria meningitidis WUE 2594	WUE 2594	Neisseriaceae	1	2227255	2066	55	12	0	659	4118
Neisseria gonorrhoeae NCCP11945	NCCP11945	Neisseriaceae	2	2236178	2674	55	12	6	309	4154
Neisseria meningitidis 053442	53442	Neisseriaceae	1	2153416	2020	59	12	6	317	4071
Neisseria lactamica 020-06	020-06	Neisseriaceae	1	2220606	2018	59	12	0	514	4116
Nitrosospira multiformis ATCC 25196	ATCC 25196 = NCIMB 11849	Nitrosomonadaceae	4	3234309	2805	43	3	5	634	5727
Nitrosomonas europaea ATCC 19718	ATCC 19718 = NBRC 14298	Nitrosomonadaceae	1	2812094	2565	41	4	4	662	5370
Nitrosomonas eutropha C91	C91	Nitrosomonadaceae	3	2781824	2551	41	3	5	604	5439
Thermodesulfovibrio yellowstonii DSM 11347	ATCC 51303 = DSM 11347 = YP87	Nitrospiraceae	1	2003803	2033	47	3	4	525	4526
Nocardia farcinica IFM 10152	IFM 10152	Nocardiaceae	3	6292344	5946	53	9	2	386	9079
Rhodococcus equi 103S	103S	Nocardiaceae	2	5123780	4598	0	0	0	308	8065
Rhodococcus opacus B4	B4	Nocardiaceae	6	8834939	8203	49	12	2	1959	13140
Rhodococcus jostii RHA1	RHA1	Nocardiaceae	4	9702737	9145	52	12	3	1945	14262
Rhodococcus erythropolis PR4	PR4 = NBRC 100887	Nocardiaceae	4	6895538	6437	54	15	3	1562	10593
Nocardioides sp. JS614	BAA-499 = JS614	Nocardioideaceae	2	5293685	4909	46	6	3	828	8464
Kribbella flavida DSM 17836	DSM 17836 = JCM 10339 = NBRC 14399	Nocardioideaceae	1	7579488	6943	54	6	3	661	11693
Nocardioopsis dassonvillei subsp. dassonvillei DSM 43111	ATCC 23218 = DSM 43111 = IMRU 509 = JCM 7437 = NCTC 10488	Nocardioipsaceae	2	6543312	5497	60	15	3	638	9387
Thermobifida fusca YX	YX	Nocardioipsaceae	1	3642249	3110	52	12	3	605	5665
Anabaena variabilis ATCC 29413	ATCC 29413 = PCC 7937	Nostocaceae	5	7105752	5708	47	12	3	1420	9504

Nostoc sp. PCC 7120	PCC 7120 = UTEX 2576	Nostocaceae	7	7211789	6131	67	12	3	483	9397
Nostoc punctiforme PCC 73102	ATCC 29133 = PCC 73102	Nostocaceae	6	9059191	6690	88	12	3	1511	10702
'Nostoc azollae' 0708	708	Nostocaceae	3	5486145	3651	44	12	3	485	5597
Marinomonas sp. MWYL1	MWYL1	Oceanospirillaceae	1	5100344	4439	83	25	9	694	9111
Opitutus terrae PB90-1	DSM 11246 = PB90-1	Opitutaceae	1	5957605	4612	65	4	3	591	8198
Herminiimonas arsenicoxydans	ULPAs1	Oxalobacteraceae	1	3424307	3282	45	6	4	868	6535
Candidatus Zinderia insecticola CARI	CARI	Oxalobacteraceae	1	208564	206	25	3	1	27	664
Herbaspirillum seropedicae SmR1	SmR1	Oxalobacteraceae	1	5513887	4737	55	9	5	1403	10095
Janthinobacterium sp. Marseille	Marseille	Oxalobacteraceae	1	4110251	3697	46	6	4	854	7498
Paenibacillus polymyxa SC2	SC2	Paenibacillaceae	2	6241931	6033	154	42	0	379	9551
Paenibacillus sp. JDR-2	JDR-2	Paenibacillaceae	1	7184930	6213	87	35	4	696	11852
Paenibacillus polymyxa E681	E681	Paenibacillaceae	1	5394884	4805	91	36	0	1144	9062
Brevibacillus brevis NBRC 100599	47 = JCM 6285 = NBRC 100599	Paenibacillaceae	1	6296436	5949	127	44	3	1048	10087
Paenibacillus sp. Y412MC10	Y412MC10	Paenibacillaceae	1	7121665	6238	73	24	4	666	11536
Candidatus Protochlamydia amoebophila UWE25	UWE25	Parachlamydiaceae	1	2414465	2031	35	9	3	211	3201
Parvularcula bermudensis HTCC2503	ATCC BAA-594 = HTCC2503 = KCTC 12087	Parvularculaceae	1	2902643	2687	43	3	0	247	4955
Actinobacillus pleuropneumoniae serovar 5b str. L20	L20	Pasteurellaceae	1	2274482	2012	62	18	5	743	4975
Haemophilus influenzae R2866	R2866	Pasteurellaceae	1	1932306	1795	59	18	4	633	4457
Aggregatibacter actinomycetemcomitans D11S-1	D11S-1	Pasteurellaceae	1	2105764	2134	54	19	5	291	4694
Aggregatibacter aphrophilus NJ8700	NJ8700	Pasteurellaceae	1	2313035	2231	57	19	5	313	4812
Haemophilus ducreyi 35000HP	ATCC 700724 = 35000HP	Pasteurellaceae	1	1698955	1717	45	19	5	328	3625
Haemophilus parasuis SH0165	SH0165	Pasteurellaceae	1	2269156	2031	56	20	6	269	4617
Haemophilus influenzae Rd KW20	ATCC 51907 = DSM 11121 = KW20 = Rd	Pasteurellaceae	1	1830138	1707	18	18	5	721	5286

Haemophilus influenzae 86-028NP	86-028NP	Pasteurellaceae	1	1914490	1793	58	19	5	634	4342
Haemophilus influenzae PittGG	PittGG	Pasteurellaceae	1	1887192	1667	55	31	5	449	4034
Actinobacillus pleuropneumoniae serovar 3 str. JL03	JL0 = JL03	Pasteurellaceae	1	2242062	2036	63	19	5	345	4910
Haemophilus influenzae 10810	10810	Pasteurellaceae	1	1981535	1914	0	0	0	314	4498
Haemophilus parainfluenzae T3T1	T3T1	Pasteurellaceae	1	2086875	1993	0	0	0	316	4655
Haemophilus influenzae PittEE	PittEE	Pasteurellaceae	1	1813033	1619	58	27	5	492	4171
Actinobacillus pleuropneumoniae serovar 7 str. AP76	AP6 = AP76	Pasteurellaceae	4	2345435	2142	62	16	7	725	5172
Haemophilus somnus 2336	2336	Pasteurellaceae	1	2263857	1980	48	16	2	497	4452
Haemophilus influenzae R2846	R2846 = 12	Pasteurellaceae	1	1819370	1636	57	18	4	627	4387
Actinobacillus succinogenes 130Z	ATCC 55618 = 130Z	Pasteurellaceae	1	2319663	2079	60	19	5	545	5147
Haemophilus somnus 129PT	129Pt	Pasteurellaceae	2	2012878	1798	50	15	5	629	4242
Mannheimia succiniciproducens MBEL55E	MBEL55E	Pasteurellaceae	1	2314078	2382	60	19	5	384	5040
Pasteurella multocida subsp. multocida str. Pm70	Pm70	Pasteurellaceae	1	2257487	2015	56	19	5	463	4948
Pelobacter propionicus DSM 2379	DSM 2379	Pelobacteraceae	3	4241119	3804	53	12	4	711	7557
Pelobacter carbinolicus DSM 2380	DSM 2380 = Gra Bd 1	Pelobacteraceae	1	3665893	3353	54	6	3	619	6736
Thermincola potens JR	JR	Peptococcaceae	1	3157416	2949	54	9	4	437	5753
Pelotomaculum thermopropionicum SI	DSM 13744 = JCM 10971 = SI	Peptococcaceae	1	3025375	2918	51	6	5	269	5566
Desulfotomaculum acetoxidans DSM 771	ATCC 49208 = DSM 771 = VKM B-1644	Peptococcaceae	1	4545624	4068	68	30	3	478	6754
Desulfitobacterium hafniense Y51	Y51	Peptococcaceae	1	5727534	5058	59	18	9	425	9484
Desulfotomaculum reducens MI-1	MI-1	Peptococcaceae	1	3608104	3276	71	26	7	635	6453
Candidatus Desulforudis audaxviator MP104C	MP104C	Peptococcaceae	1	2349476	2157	45	6	2	388	4410
Desulfitobacterium hafniense DCB-2	DCB-2 = DSM 10664	Peptococcaceae	1	5279134	4884	74	15	4	583	9131
Filifactor alocis ATCC 35896	ATCC 35896 = D40 B5	Peptostreptococcaceae	1	1931012	1641	47	12	0	176	3239

Chelativorans sp. BNC1	BNC1	Phyllobacteriaceae	4	4935185	4543	52	6	3	673	8197
Mesorhizobium ciceri biovar biserrulae WSM1271	HAMBI 2942 = LMG 23838 = WSM1271	Phyllobacteriaceae	2	6690028	6264	52	6	4	675	11170
Parvibaculum lavamentivorans DS-1	DS-1 = DSM 13023 = NCIMB 13966	Phyllobacteriaceae	1	3914745	3636	45	2	4	553	6622
Mesorhizobium loti MAFF303099	MAFF303099	Phyllobacteriaceae	3	7596297	7280	50	6	5	497	12116
Thiomicrospira crunogena XCL-2	XCL-2	Piscirickettsiaceae	1	2427734	2196	43	9	7	569	5002
Planctomyces brasiliensis DSM 5305	ATCC 49424 = DSM 5305 = JCM 21570 = NBRC 103401 = IFAM 1448	Planctomycetaceae	1	6006602	4750	45	6	3	774	6626
Isosphaera pallida ATCC 43644	ATCC 43644 = DSM 9630 = IS1B	Planctomycetaceae	2	5529304	3722	48	9	3	485	5895
Planctomyces limnophilus DSM 3776	ATCC 43296 = DSM 3776 = IFAM 1008 = 290	Planctomycetaceae	2	5460085	4258	61	4	3	375	5854
Pirellula staleyii DSM 6068	ATCC 27377 = DSM 6068 = ICPB 4128	Planctomycetaceae	1	6196199	4717	46	3	3	461	6509
Pirellula sp.	SH1	Planctomycetaceae	1	7145576	7325	76	3	3	1180	7569
Sorangium cellulosum 'So ce 56'	So ce56	Polyangiaceae	1	13033779	9379	60	12	3	1921	13501
Parabacteroides distasonis ATCC 8503	ATCC 8503 = DSM 20701 = NCTC 11152	Porphyromonadaceae	1	4811379	3850	83	21	3	271	6826
Paludibacter propionigenes WB4	DSM 17365 = JCM 13257 = WB4	Porphyromonadaceae	1	3685504	3020	53	9	2	572	5536
Porphyromonas gingivalis W83	W83 = ATCC BAA-308	Porphyromonadaceae	1	2343476	1909	53	12	3	210	3488
Porphyromonas gingivalis ATCC 33277	ATCC 33277 = DSM 20709 = JCM 12257	Porphyromonadaceae	1	2354886	2090	53	12	3	190	3680
Prevotella ruminicola 23	ATCC 19189 = JCM 8958 = 23	Prevotellaceae	1	3619559	2763	55	12	3	522	5172
Prevotella melaninogenica ATCC 25845	ATCC 25845 = DSM 7089 = JCM 6325 = VPI 2381 = B282	Prevotellaceae	2	3168282	2296	50	13	3	447	3973
Prochlorococcus marinus str. MIT 9301	MIT 9301	Prochlorococcaceae	1	1641879	1907	37	2	5	622	3678

<i>Prochlorococcus marinus</i> str. MIT 9312	MIT 9312	Prochlorococcaceae	1	1709204	1962	39	3	6	480	3632
<i>Prochlorococcus marinus</i> str. MIT 9515	MIT 9515	Prochlorococcaceae	1	1704176	1906	37	3	5	627	3671
<i>Prochlorococcus marinus</i> str. MIT 9303	MIT 9303	Prochlorococcaceae	1	2682675	2997	43	6	7	682	4486
<i>Prochlorococcus marinus</i> str. NATL2A	NATL2A	Prochlorococcaceae	1	1842899	2163	38	3	6	490	3683
<i>Prochlorococcus marinus</i> subsp. <i>pastoris</i> str. CCMP1986	CCMP1986 = MED4	Prochlorococcaceae	1	1657990	1958	37	4	25	530	3609
<i>Prochlorococcus marinus</i> str. MIT 9211	MIT 9211	Prochlorococcaceae	1	1688963	1856	40	3	2	688	3710
<i>Prochlorococcus marinus</i> str. AS9601	AS9601	Prochlorococcaceae	1	1669886	1921	38	3	6	614	3659
<i>Prochlorococcus marinus</i> str. MIT 9313	MIT 9313	Prochlorococcaceae	1	2410873	2909	44	6	7	573	4235
<i>Prochlorococcus marinus</i> subsp. <i>marinus</i> str. CCMP1375	SS120 = SARG = CCMP1375	Prochlorococcaceae	1	1751080	1882	40	3	5	340	3674
<i>Prochlorococcus marinus</i> str. MIT 9215	MIT 9215	Prochlorococcaceae	1	1738790	1984	36	3	6	413	3656
<i>Prochlorococcus marinus</i> str. NATL1A	NATL1A	Prochlorococcaceae	1	1864731	2193	38	3	5	624	3728
<i>Xylanimonas cellulositica</i> DSM 15894	DSM 15894 = CECT 5975 = LMG 20990 = XIL07	Promicromonosporaceae	1	3742776	3337	52	9	3	465	6014
<i>Propionibacterium acnes</i> KPA171202	DSM 16379 = KPA171202	Propionibacteriaceae	1	2560265	2297	45	9	4	568	4620
<i>Propionibacterium freudenreichii</i> subsp. <i>shermanii</i> CIRM-BIA1	ATCC 9614 = CIP 103027 = CIRM-BIA1	Propionibacteriaceae	1	2616384	2428	45	6	3	748	4703
<i>Propionibacterium acnes</i> SK137	SK137	Propionibacteriaceae	1	2495334	2352	45	9	4	528	4599
<i>Pseudoalteromonas</i> sp. SM9913	SM9913	Pseudoalteromonadaceae	2	4037671	3712	62	25	0	729	7425
<i>Pseudoalteromonas haloplanktis</i> TAC125	TAC 125	Pseudoalteromonadaceae	2	3850272	3487	106	28	6	1019	7090
<i>Pseudoalteromonas atlantica</i> T6c	T6c = BAA-1087	Pseudoalteromonadaceae	1	5187005	4281	62	15	2	856	8518
<i>Pseudomonas putida</i> BIRD-1	BIRD-1	Pseudomonadaceae	1	5731541	4960	64	22	0	1119	10222
<i>Pseudomonas putida</i> F1	F1 = ATCC 700007	Pseudomonadaceae	1	5959964	5252	76	19	14	1015	10569
<i>Pseudomonas fluorescens</i> Pf0-1	Pf0-1	Pseudomonadaceae	1	6438405	5722	73	18	3	984	11153

<i>Pseudomonas syringae</i> pv. <i>syringae</i> B728a	B728a	Pseudomonadaceae	1	6093698	5136	64	16	17	958	10168
<i>Pseudomonas aeruginosa</i> UCBPP-PA14	UCBPP-PA14	Pseudomonadaceae	1	6537648	5892	59	13	18	522	11384
<i>Pseudomonas fluorescens</i> SBW25	SBW25	Pseudomonadaceae	2	7147633	6483	66	16	16	886	11893
<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> 1448A	1448A = Race 6	Pseudomonadaceae	3	6112448	5170	64	15	18	1060	10327
<i>Pseudomonas syringae</i> pv. <i>tomato</i> str. DC3000	DC3000	Pseudomonadaceae	3	6538260	5621	63	15	30	533	10620
<i>Pseudomonas fluorescens</i> Pf-5	Pf-5 = ATCC BAA-477	Pseudomonadaceae	1	7074893	6138	71	15	17	1247	10669
<i>Pseudomonas putida</i> KT2440	KT2440	Pseudomonadaceae	1	6181863	5350	74	21	14	532	10543
<i>Pseudomonas putida</i> W619	W619	Pseudomonadaceae	1	5774330	5182	75	22	3	798	10290
<i>Pseudomonas mendocina</i> ymp	ymp	Pseudomonadaceae	1	5072807	4594	67	12	15	913	9422
<i>Pseudomonas entomophila</i> L48	L48	Pseudomonadaceae	1	5888780	5166	78	22	15	1262	10137
<i>Pseudomonas putida</i> GB-1	GB-1	Pseudomonadaceae	1	6078430	5409	74	22	3	789	10802
<i>Pseudomonas stutzeri</i> A1501	A1501	Pseudomonadaceae	1	4567418	4128	61	8	15	414	8738
<i>Azotobacter vinelandii</i> DJ	DJ = ATCC BAA-1303	Pseudomonadaceae	1	5365318	5051	64	18	26	400	9365
<i>Cellvibrio japonicus</i> Ueda107	Ueda107	Pseudomonadaceae	1	4576573	3754	48	9	5	837	7349
<i>Pseudomonas aeruginosa</i> PA7	PA7	Pseudomonadaceae	1	6588339	6286	63	12	17	854	11473
<i>Pseudomonas aeruginosa</i> PAO1	LMG 12228 = ATCC 15692 = PRS 101 = 1C = PAO1	Pseudomonadaceae	1	6264404	5575	63	13	30	771	11690
<i>Pseudomonas aeruginosa</i> LESB58	LESB58	Pseudomonadaceae	1	6601757	5963	67	13	17	505	11396
<i>Amycolatopsis mediterranei</i> U32	U-32	Pseudonocardiaceae	1	10236715	9228	52	12	3	348	15530
<i>Saccharopolyspora erythraea</i> NRRL 2338	NRRL 23338	Pseudonocardiaceae	1	8212805	7198	50	16	3	1765	12294
<i>Saccharomonospora viridis</i> DSM 43017	ATCC 15386 = DSM 43017 = JCM 3036 = NBRC 12207 = P101	Pseudonocardiaceae	1	4308349	3828	47	9	3	402	6785

Thermobispora bispora DSM 43833	ATCC 19993 = DSM 43833 = CBS 139.67 = JCM 10125 = NBRC 14880 = R51	Pseudonocardiaceae	1	4189976	3546	53	10	3	493	6651
Psychromonas ingrahamii 37	37	Psychromonadaceae	1	4559598	3545	86	30	5	769	7374
Coraliomargarita akajimensis DSM 45221	DSM 45221 = IAM 15411 = JCM 23193 = KCTC 12865	Puniceicoccaceae	1	3750771	3120	46	6	4	425	5270
Agrobacterium radiobacter K84	K84 = ATCC BAA-868	Rhizobiaceae	5	7273300	6684	51	9	9	376	12397
Candidatus Liberibacter asiaticus str. psy62	psy62	Rhizobiaceae	1	1226704	1109	44	9	3	258	2592
Sinorhizobium meliloti 1021	1021	Rhizobiaceae	3	6691694	6234	54	9	9	1543	12205
Agrobacterium tumefaciens str. C58	C58 = ATCC 33970	Rhizobiaceae	4	5674258	5356	56	12	5	448	10044
Rhizobium leguminosarum bv. trifolii WSM1325	WSM1325	Rhizobiaceae	6	7418122	7001	51	9	4	723	12448
Rhizobium leguminosarum bv. viciae 3841	3841	Rhizobiaceae	7	7751309	7253	52	9	8	987	13072
Rhizobium leguminosarum bv. trifolii WSM2304	WSM2304	Rhizobiaceae	5	6872702	6415	53	9	3	770	11749
Sinorhizobium medicae WSM419	WSM419	Rhizobiaceae	4	6817576	6213	53	9	8	807	11401
Sinorhizobium fredii NGR234	NGR234	Rhizobiaceae	3	6891900	6366	53	9	19	1051	11979
Agrobacterium vitis S4	S4 = ATCC BAA-846	Rhizobiaceae	7	6320946	5389	54	12	16	363	10104
Rhizobium etli CFN 42	CFN 42 = ATCC 51251	Rhizobiaceae	7	6530228	6009	50	9	9	1047	11152
Rhizobium etli CIAT 652	CIAT 652	Rhizobiaceae	4	6448048	6104	51	9	9	1373	10713
Candidatus Liberibacter solanacearum CLso-ZC1	CLso-ZC1	Rhizobiaceae	1	1258278	1192	45	9	0	211	2645
Ruegeria sp. TM1040	TM1040	Rhodobacteraceae	3	4153699	3864	62	15	4	620	7295
Rhodobacter sphaeroides ATCC 17029	ATCC 17029 = ATH 2.4.9	Rhodobacteraceae	3	4489380	4132	55	12	3	777	8202
Dinoroseobacter shibae DFL 12	DFL 12	Rhodobacteraceae	6	4417868	4194	44	6	3	1118	7788
Rhodobacter sphaeroides KD131	KD131 = KCTC 12085	Rhodobacteraceae	4	4711139	4569	54	12	3	339	8449
Rhodobacter capsulatus SB 1003	ATCC BAA-309 = NBRC 16581 = SB1003	Rhodobacteraceae	2	3871920	3642	53	12	4	1322	7350

Rhodobacter sphaeroides 2.4.1	ATCC 17023 = 2.4.1 = NCIB 8253 = DSM 158	Rhodobacteraceae	5	4451915	4126	54	8	4	890	8103
Ketogulonicigenium vulgare Y25	Y25	Rhodobacteraceae	3	3288404	3213	59	15	0	249	6082
Ruegeria pomeroyi DSS-3	ATCC 700808 = DSS-3 = DSM 15171	Rhodobacteraceae	2	4601053	4252	53	9	3	747	8098
Jannaschia sp. CCS1	CCS1	Rhodobacteraceae	2	4404049	4283	42	3	4	667	7535
Roseobacter denitrificans OCh 114	OCh 114 = ATCC 33942 = )	Rhodobacteraceae	5	4331234	4142	38	3	3	1079	7619
Paracoccus denitrificans PD1222	Pd 1222	Rhodobacteraceae	3	5236194	5078	53	9	2	895	9262
Rhodobacter sphaeroides ATCC 17025	ATCC 17025 = ATH 2.4.3	Rhodobacteraceae	6	4557127	4333	54	12	3	772	8200
Thauera sp. MZ1T	MZ1T	Rhodocyclaceae	2	4574586	3978	58	12	3	596	8025
Azoarcus sp. BH72	BH72	Rhodocyclaceae	1	4376040	3989	56	8	4	1231	8437
Dechloromonas aromatica RCB	RCB	Rhodocyclaceae	1	4501104	4171	64	12	4	724	8529
Aromatoleum aromaticum EbN1	EbN1	Rhodocyclaceae	3	4727255	4597	58	12	3	677	7793
Magnetospirillum magneticum AMB-1	AMB-1 = ATCC 700264	Rhodospirillaceae	1	4967148	4559	50	4	3	315	8123
Azospirillum sp. B510	B510	Rhodospirillaceae	7	7599738	6309	79	26	3	989	12438
Rhodospirillum rubrum ATCC 11170	ATCC 11170 = NCIB 8255	Rhodospirillaceae	2	4406557	3841	55	12	6	1119	7905
Rhodospirillum centenum SW	ATCC 51521 = SW	Rhodospirillaceae	1	4355543	4036	52	11	6	916	7279
Rhodothermus marinus DSM 4252	ATCC 43812 = DSM 4252 = R-10	Rhodothermaceae	2	3386737	2863	45	3	3	488	5562
Salinibacter ruber DSM 13855	DSM 13855 = M31	Rhodothermaceae	2	3587328	2833	44	3	3	543	5474
Salinibacter ruber M8	M8	Rhodothermaceae	5	3832918	3257	43	2	3	775	5594
Rickettsia africae ESF-5	ESF-5	Rickettsiaceae	2	1290917	1041	33	3	3	292	2292
Rickettsia prowazekii str. Madrid E	Madrid E	Rickettsiaceae	1	1111523	832	33	3	3	246	2388
Rickettsia canadensis str. McKiel	McKiel	Rickettsiaceae	1	1159772	1093	33	2	3	248	2247
Rickettsia typhi str. Wilmington	Wilmington = ATCC VR-144	Rickettsiaceae	1	1111496	838	33	3	4	292	2268
Rickettsia peacockii str. Rustic	Rustic	Rickettsiaceae	2	1314898	947	34	3	3	196	2238
Rickettsia bellii OSU 85-389	OSU 85-389	Rickettsiaceae	1	1528980	1476	33	2	3	208	2544

<i>Rickettsia rickettsii</i> str. Iowa	Iowa	Rickettsiaceae	1	1268188	1384	34	3	3	365	2341
<i>Rickettsia bellii</i> RML369-C	RML369-C	Rickettsiaceae	1	1522076	1429	34	3	4	325	2787
<i>Rickettsia rickettsii</i> str. 'Sheila Smith'	Sheila Smith	Rickettsiaceae	1	1257710	1345	33	2	3	211	2293
<i>Orientia tsutsugamushi</i> str. Boryong	Boryong	Rickettsiaceae	1	2127051	2143	34	3	1	215	2103
<i>Rickettsia massiliae</i> MTU5	Mtu5	Rickettsiaceae	2	1376184	980	33	3	4	162	2301
<i>Orientia tsutsugamushi</i> str. Ikeda	Ikeda	Rickettsiaceae	1	2008987	1967	34	3	1	122	2819
<i>Rickettsia felis</i> URRWXCa2	ATCC VR-1525 = URRWXCa2	Rickettsiaceae	3	1587240	1510	33	3	4	330	2982
<i>Rickettsia akari</i> str. Hartford	Hartford	Rickettsiaceae	1	1231060	1259	32	2	3	216	2336
<i>Rickettsia conorii</i> str. Malish 7	ATCC VR-613 = Malish 7	Rickettsiaceae	1	1268755	1374	33	3	2	541	3397
<i>Rickettsia prowazekii</i> Rp22	Rp22	Rickettsiaceae	1	1111612	952	33	3	3	275	2243
<i>Rubrobacter xylanophilus</i> DSM 9941	DSM 9941 = NBRC 16129 9941	Rubrobacteraceae	1	3225748	3140	46	3	2	702	6081
<i>Ruminococcus albus</i> 7	ATCC 27210 = DSM 20455 = JCM 14654 = NCDO 2250 = 7	Ruminococcaceae	5	4482087	3872	74	12	4	394	5550
<i>Ethanoligenens harbinense</i> YUAN-3	DSM 18485 = JCM 12961 = CGMCC 1.5033 = YUAN-3	Ruminococcaceae	1	3008576	2701	62	9	4	380	5180
<i>Sanguibacter keddieii</i> DSM 10542	ATCC 51767 = DSM 10542 = NCFB 3025 = ST-74	Sanguibacteraceae	1	4253413	3710	51	12	3	344	6937
<i>Segniliparus rotundus</i> DSM 44985	ATCC BAA-972 = CDC 1076 = CIP 108378 = DSM 44985 = JCM 13578	Segniliparaceae	1	3157527	3006	47	3	3	408	4737
<i>Shewanella baltica</i> OS155	OS155 = ATCC BAA-1091	Shewanellaceae	5	5342896	4489	117	31	10	801	9081
<i>Shewanella</i> sp. ANA-3	ANA-3	Shewanellaceae	2	5251146	4360	103	27	12	729	8605
<i>Shewanella frigidimarina</i> NCIMB 400	NCIMB 400	Shewanellaceae	1	4845257	4029	96	28	11	801	8173
<i>Shewanella baltica</i> OS223	OS223	Shewanellaceae	4	5358884	4443	109	31	3	687	8598

Shewanella woodyi ATCC 51908	ATCC 51908 = MS32	Shewanellaceae	1	5935403	4880	126	32	3	739	9198
Shewanella baltica OS185	OS185	Shewanellaceae	2	5312910	4394	106	31	10	689	8517
Shewanella putrefaciens CN-32	CN-32 = ATCC BAA- 453	Shewanellaceae	1	4659220	3972	101	25	10	761	8104
Shewanella sp. MR-7	MR-7	Shewanellaceae	2	4799109	4014	103	27	10	785	8069
Shewanella oneidensis MR-1	MR-1	Shewanellaceae	2	5131416	4779	102	27	9	468	8400
Shewanella putrefaciens 200	200	Shewanellaceae	1	4840251	4179	101	25	6	629	8094
Shewanella baltica OS678	OS678	Shewanellaceae	2	5368767	4536	102	31	4	632	8646
Shewanella sp. W3- 18-1	W3-18-1	Shewanellaceae	1	4708380	4044	100	25	13	760	8135
Shewanella piezotolerans WP3	WP3 = JCM 13877	Shewanellaceae	1	5396476	4933	89	25	10	969	8882
Shewanella sediminis HAW-EB3	HAW-EB3	Shewanellaceae	1	5517674	4497	125	37	10	712	9022
Shewanella pealeana ATCC 700345	ATCC 700345 = ANG-SQ1	Shewanellaceae	1	5174581	4241	143	34	10	691	8381
Shewanella sp. MR-4	MR-4	Shewanellaceae	1	4706287	3924	101	27	10	788	8087
Shewanella amazonensis SB2B	ATCC BAA- 1098 = SB2B	Shewanellaceae	1	4306142	3645	101	25	10	764	7655
Shewanella halifaxensis HAW- EB4	HAW-EB4	Shewanellaceae	1	5226917	4278	125	30	3	712	8540
Shewanella violacea DSS12	JCM 10179 = CIP 106290 = LMG 19151 = DSS12	Shewanellaceae	1	4962103	4346	126	43	10	395	7822
Shewanella denitrificans OS217	OS217 = ATCC BAA- 1090 = DSM 15013	Shewanellaceae	1	4545906	3754	93	25	9	731	7543
Shewanella baltica OS195	OS195	Shewanellaceae	4	5547544	4688	104	31	3	695	8795
Shewanella loihica PV-4	ATCC BAA- 1088 = PV-4	Shewanellaceae	1	4602594	3859	95	25	8	777	7870
Candidatus Solibacter usitatus Ellin6076	Ellin6076	Solibacteraceae	1	9965640	7826	52	6	3	863	12255
Sphaerobacter thermophilus DSM 20745	DSM 20745 = S 6022	Sphaerobacteraceae	2	3993764	3485	50	6	4	496	6330
Pedobacter saltans DSM 12145	ATCC 51119 = DSM 12145 = JCM 21818 = LMG 10337 = NBRC 100064 = NCIMB 13643	Sphingobacteriaceae	1	4635236	3792	53	12	2	572	6522

Pedobacter heparinus DSM 2366	ATCC 13125 = DSM 2366 = NCIB 9290	Sphingobacteriaceae	1	5167383	4252	45	7	3	477	7506
Sphingobium japonicum UT26S	NBRC 101211 = UT26S	Sphingomonadaceae	5	4424862	4394	55	9	3	980	7551
Zymomonas mobilis subsp. mobilis NCIMB 11163	NCIB 11163	Sphingomonadaceae	4	2223520	1884	51	9	3	380	4166
Zymomonas mobilis subsp. mobilis ZM4	CP4 = ZM4 = ATCC 31821	Sphingomonadaceae	2	2097354	1780	51	9	5	434	4134
Sphingomonas wittichii RW1	RW1 = DSM 6014 = JCM 10273	Sphingomonadaceae	3	5915246	5345	48	6	7	880	9840
Sphingopyxis alaskensis RB2256		Sphingomonadaceae	2	3373713	3195	45	3	4	609	6063
Novosphingobium aromaticivorans DSM 12444	DSM 12444	Sphingomonadaceae	3	4233314	3937	57	9	8	690	7234
Borrelia garinii PBi	PBi	Spirochaetaceae	40	1226933	1270	31	5	3	126	1989
Borrelia turicatae 91E135	9,10E+136	Spirochaetaceae	1	917330	818	32	2	3	269	1983
Treponema pallidum subsp. pallidum str. Chicago	Chicago	Spirochaetaceae	1	1139281	982	45	6	3	175	2089
Treponema pallidum subsp. pallidum str. Nichols	Nichols	Spirochaetaceae	1	1138011	1028	45	6	4	183	2346
Treponema pallidum subsp. pallidum SS14	SS14	Spirochaetaceae	1	1139457	1028	45	6	4	118	2148
Spirochaeta smaragdinae DSM 11293	DSM 11293 = JCM 15392 = SEBR 4228	Spirochaetaceae	1	4653970	4219	48	6	3	478	8200
Borrelia hermsii DAH	DAH	Spirochaetaceae	1	922307	819	32	2	3	257	1973
Borrelia duttonii Ly	Ly	Spirochaetaceae	17	1574881	1305	32	3	3	258	2156
Borrelia recurrentis A1	A1	Spirochaetaceae	8	1242163	990	32	3	3	251	2000
Treponema denticola ATCC 35405	ATCC 35405 = DSM 14222 = CIP 103919	Spirochaetaceae	1	2843201	2767	44	6	3	290	4045
Borrelia burgdorferi N40	N40	Spirochaetaceae	17	1339539	1242	33	5	0	194	2039
Borrelia afzelii PKo	PKo	Spirochaetaceae	12	1232503	1263	33	5	3	202	2027
Borrelia burgdorferi B31	DSM 4680 = B31 = CIP 102532 = ATCC 35210	Spirochaetaceae	22	1519856	1639	18	5	3	180	2163
Spirochaeta thermophila DSM 6192	ATCC 49972 = DSM 6192 = RI 19.B1	Spirochaetaceae	1	2472645	2203	46	6	0	391	4611

Borrelia burgdorferi ZS7	ZS7	Spirochaetaceae	15	1345494	1239	33	3	3	189	1969
Borrelia burgdorferi JD1	JD1	Spirochaetaceae	21	1531091	1458	33	5	0	193	2043
Staphylococcus aureus subsp. aureus ECT-R 2	ECT-R 2	Staphylococcaceae	3	2759052	2520	60	16	0	679	5357
Staphylococcus aureus subsp. aureus ED133	ED133	Staphylococcaceae	1	2832478	2653	59	16	10	312	5212
Staphylococcus aureus subsp. aureus JKD6159	JKD6159	Staphylococcaceae	2	2832165	2577	55	16	7	317	5266
Staphylococcus aureus subsp. aureus USA300_FPR3757	USA300	Staphylococcaceae	4	2917469	2607	53	16	11	744	5596
Staphylococcus aureus subsp. aureus NCTC 8325	NCTC 8325	Staphylococcaceae	1	2821361	2892	61	16	8	610	5544
Staphylococcus aureus subsp. aureus ST398	MRSA ST398 = isolate S0385	Staphylococcaceae	4	2885367	2710	59	19	9	676	5379
Staphylococcus aureus subsp. aureus TCH60	TCH60	Staphylococcaceae	2	2827166	2700	59	19	12	882	5453
Staphylococcus aureus subsp. aureus Mu3	Mu3 = ATCC 700698	Staphylococcaceae	1	2880168	2703	61	16	9	361	5444
Staphylococcus pseudintermedius ED99	ED99	Staphylococcaceae	1	2572216	2356	58	16	6	712	5104
Staphylococcus lugdunensis HKU09-01	HKU09-01	Staphylococcaceae	1	2658366	2490	61	19	4	666	5224
Staphylococcus haemolyticus JCSC1435	JCSC1435	Staphylococcaceae	4	2697861	2692	59	16	5	428	5419
Macrococcus caseolyticus JCSC5402	JCSC5402	Staphylococcaceae	9	2219737	2061	48	13	6	268	4299
Staphylococcus aureus subsp. aureus MSSA476	MSSA476	Staphylococcaceae	2	2820454	2646	60	19	8	602	5602
Staphylococcus aureus subsp. aureus Mu50	Mu50 = ATCC 700699	Staphylococcaceae	2	2903636	2737	60	16	9	545	5851
Staphylococcus epidermidis RP62A	ATCC 35984 = RP62A	Staphylococcaceae	2	2643840	2526	61	19	7	618	5170
Staphylococcus aureus subsp. aureus JH9	JH9	Staphylococcaceae	2	2937129	2730	59	19	9	611	5501
Staphylococcus carnosus subsp. carnosus TM300	TM300	Staphylococcaceae	1	2566424	2462	60	15	7	662	5089
Staphylococcus aureus RF122	bovine RF122 = ET3-1	Staphylococcaceae	1	2742531	2587	60	16	8	745	5337

Staphylococcus aureus subsp. aureus MRSA252	MRSA252	Staphylococcaceae	1	2902619	2741	60	16	9	612	5746
Staphylococcus aureus subsp. aureus COL	COL	Staphylococcaceae	2	2813862	2679	53	19	8	652	5614
Staphylococcus pseudintermedius HKU10-03	HKU10-03	Staphylococcaceae	1	2617381	2450	59	19	1	708	5190
Staphylococcus aureus subsp. aureus str. Newman	Newman	Staphylococcaceae	1	2878897	2627	56	16	8	365	5396
Staphylococcus aureus subsp. aureus USA300_TCH1516	USA300 = TCH1516	Staphylococcaceae	2	2899956	2689	60	16	3	850	5257
Staphylococcus aureus subsp. aureus str. JKD6008	JKD6008	Staphylococcaceae	1	2924344	2680	82	16	8	310	5362
Staphylococcus aureus subsp. aureus JH1	JH1	Staphylococcaceae	2	2936936	2784	60	19	9	519	5482
Staphylococcus epidermidis ATCC 12228	ATCC 12228	Staphylococcaceae	7	2564615	2479	60	16	9	494	5174
Staphylococcus aureus subsp. aureus N315	N315	Staphylococcaceae	2	2839469	2628	62	16	9	558	5789
Staphylococcus aureus subsp. aureus ED98	ED98	Staphylococcaceae	4	2847542	2689	62	16	5	315	5281
Staphylococcus aureus 04-02981	04-02981	Staphylococcaceae	1	2821452	2650	63	17	9	763	5464
Staphylococcus aureus subsp. aureus TW20	TW20 = 0582	Staphylococcaceae	3	3075806	2854	60	16	9	496	5541
Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305	ATCC 15305 = DSM 20229	Staphylococcaceae	3	2577899	2512	60	20	8	419	5076
Staphylococcus aureus subsp. aureus MW2	MW2	Staphylococcaceae	2	2841116	2663	60	19	8	540	5635
Streptococcus pneumoniae INV200	INV200	Streptococcaceae	1	2093317	2046	0	0	0	428	4073
Lactococcus lactis subsp. cremoris MG1363	MG1363	Streptococcaceae	1	2529478	2515	62	7	4	709	4741
Streptococcus dysgalactiae subsp. equisimilis ATCC 12394	ATCC 12394 = D166B	Streptococcaceae	1	2159491	2056	57	15	0	289	4176
Streptococcus suis 98HAH33	98HAH33	Streptococcaceae	1	2095698	2189	56	12	5	225	4281
Streptococcus pneumoniae AP200	AP200	Streptococcaceae	1	2130580	2216	56	12	0	242	4365

Streptococcus pneumoniae ATCC 700669	ATCC 700669 = Spain 23F-1	Streptococcaceae	1	2221315	2134	58	12	5	444	4188
Streptococcus pyogenes MGAS10270	MGAS10270	Streptococcaceae	1	1928252	1987	63	18	6	666	3878
Streptococcus pneumoniae OXC141	OXC141	Streptococcaceae	1	2036867	1972	0	0	0	418	3993
Streptococcus equi subsp. zooepidemicus MGCS10565	MGCS10565	Streptococcaceae	1	2024171	1893	57	15	9	216	3853
Streptococcus uberis 0140J	ATCC BAA-854 = 0140J	Streptococcaceae	1	1852352	1825	59	15	4	448	3936
Streptococcus thermophilus ND03	ND03	Streptococcaceae	1	1831949	1919	56	15	0	226	3867
Lactococcus lactis subsp. cremoris SK11	SK11	Streptococcaceae	6	2598348	2504	62	20	15	437	4809
Streptococcus pneumoniae CGSP14	CGSP14	Streptococcaceae	1	2209198	2206	58	12	5	241	4238
Streptococcus pneumoniae R6	ATCC BAA-255 = R6	Streptococcaceae	1	2038615	2043	58	12	3	557	4240
Streptococcus pneumoniae P1031	P1031	Streptococcaceae	1	2111882	2073	58	12	7	487	4062
Streptococcus pyogenes MGAS10750	MGAS10750	Streptococcaceae	1	1937111	1977	63	18	5	663	3913
Streptococcus suis SC84	SC84	Streptococcaceae	1	2095898	1981	56	12	5	427	4069
Streptococcus pyogenes MGAS315	ATCC BAA-595 = MGAS315	Streptococcaceae	1	1900521	1866	67	12	4	274	3703
Streptococcus pyogenes NZ131	NZ131	Streptococcaceae	1	1815785	1703	66	18	5	452	3669
Streptococcus pyogenes MGAS2096	MGAS2096	Streptococcaceae	1	1860355	1896	63	18	4	662	3889
Streptococcus pyogenes MGAS6180	MGAS6180	Streptococcaceae	1	1897573	1894	65	18	6	644	3819
Streptococcus pneumoniae G54	G54	Streptococcaceae	1	2078953	2115	58	12	5	465	4187
Streptococcus agalactiae A909	A909 = CDC SS700 = ATCC 27591	Streptococcaceae	1	2127839	1996	80	21	6	437	4160
Streptococcus pyogenes MGAS8232	MGAS8232	Streptococcaceae	1	1895017	1845	67	12	4	274	3717
Lactococcus lactis subsp. lactis II1403	II1403	Streptococcaceae	1	2365589	2266	61	19	4	530	4541
Streptococcus pneumoniae INV104	INV04 = INV104	Streptococcaceae	1	2142122	1935	0	0	0	433	4078
Streptococcus pyogenes MGAS10394	ATCC BAA-946 = MGAS10394	Streptococcaceae	1	1899877	1886	67	18	5	666	3871

Streptococcus pyogenes MGAS5005	MGAS5005 = ATCC BAA-947	Streptococcaceae	1	1838554	1858	67	18	4	680	3860
Lactococcus lactis subsp. cremoris NZ9000	NZ9000	Streptococcaceae	1	2530294	2510	65	19	4	339	4764
Streptococcus equi subsp. equi 4047	4047	Streptococcaceae	1	2253793	2120	66	18	9	402	4082
Streptococcus pneumoniae Taiwan19F-14	Taiwan19F-14	Streptococcaceae	1	2112148	2044	58	12	7	495	4089
Streptococcus pneumoniae TCH8431/19A	TCH8431	Streptococcaceae	1	2088772	2275	58	12	10	691	4340
Streptococcus suis 05ZYH33	05ZYH33	Streptococcaceae	1	2096309	2184	56	12	5	220	4338
Streptococcus pneumoniae TIGR4	TIGR4 = ATCC BAA-334	Streptococcaceae	1	2160842	2126	58	12	4	463	4350
Streptococcus equi subsp. zooepidemicus	H70	Streptococcaceae	1	2149868	1959	57	15	8	234	3957
Streptococcus pneumoniae 670-6B	670-6B	Streptococcaceae	1	2240045	2366	59	12	0	509	4397
Streptococcus mutans NN2025	NN2025	Streptococcaceae	1	2013587	1895	65	15	4	243	4107
Streptococcus mitis B6	B6	Streptococcaceae	1	2146611	2016	61	12	5	455	4129
Streptococcus pyogenes M1 GAS	SF370 = ATCC 700294	Streptococcaceae	1	1852441	1699	60	12	5	572	3712
Streptococcus mutans UA159	ATCC 700610 = UA159	Streptococcaceae	1	2030921	1961	65	15	5	457	4166
Streptococcus suis GZ1	GZ1	Streptococcaceae	1	2038034	1978	49	12	5	218	4077
Streptococcus pyogenes MGAS9429	MGAS9429	Streptococcaceae	1	1836467	1877	67	18	4	636	3765
Streptococcus thermophilus LMG 18311	ATCC BAA-250 = LMG 18311	Streptococcaceae	1	1796846	1885	67	18	4	252	3427
Streptococcus suis BM407	BM407	Streptococcaceae	2	2170808	2053	56	12	5	435	4147
Streptococcus suis P1/7	P1/7	Streptococcaceae	1	2007491	1906	56	12	5	230	3941
Streptococcus pneumoniae Hungary19A-6	Hungary19A-6	Streptococcaceae	1	2245615	2155	55	12	3	500	4202
Streptococcus thermophilus CNRZ1066	CNRZ 1066	Streptococcaceae	1	1796226	1912	67	18	4	251	3415
Streptococcus thermophilus LMD-9	ATCC BAA-491 = LMD-9	Streptococcaceae	3	1864178	1716	67	19	4	371	3563
Streptococcus suis JS14	JS14	Streptococcaceae	1	2137435	2066	62	12	0	228	4172
Streptococcus agalactiae 2603V/R	2603 V/R = ATCC BAA-611	Streptococcaceae	1	2160267	2124	80	16	5	274	4168

Streptococcus pyogenes SSI-1	SSI-1	Streptococcaceae	1	1894275	1861	57	10	4	275	3660
Lactococcus lactis subsp. lactis KF147	KF147	Streptococcaceae	2	2635654	2575	68	19	4	860	4936
Streptococcus agalactiae NEM316	NEM316	Streptococcaceae	1	2211485	2127	80	21	5	283	4105
Streptococcus gordonii str. Challis substr. CH1	Challis = ATCC 35105 = CH1 = DL1 = V288	Streptococcaceae	1	2196662	2051	59	12	4	641	4211
Streptococcus pneumoniae JJA	JJA	Streptococcaceae	1	2120234	2123	58	12	5	491	4130
Streptococcus gallolyticus UCN34	UCN34	Streptococcaceae	1	2350911	2260	71	18	4	253	4635
Streptococcus sanguinis SK36	SK36	Streptococcaceae	1	2388435	2270	61	12	4	722	4523
Streptococcus dysgalactiae subsp. equisimilis GGS_124	GGs_124	Streptococcaceae	1	2106340	2100	57	15	5	632	4357
Streptococcus pneumoniae D39	D39 = NCTC 7466	Streptococcaceae	2	2049276	1918	58	12	5	494	3988
Streptococcus pyogenes str. Manfredo	Manfredo	Streptococcaceae	1	1841271	1816	66	18	4	419	3613
Streptococcus pneumoniae 70585	70585	Streptococcaceae	1	2184682	2202	58	12	7	519	4229
Streptomyces griseus subsp. griseus NBRC 13350	JCM 4626 = NBRC 13350	Streptomycetaceae	1	8545929	7138	66	18	3	376	11768
Streptomyces scabiei 87.22	87.22	Streptomycetaceae	1	10148695	8806	75	18	3	356	13602
Streptomyces avermitilis MA-4680	DSM 46492 = NRRL 8165 = NCIMB 12804 = ATCC 31267 = JCM 5070	Streptomycetaceae	2	9119895	7676	68	18	2	445	12476
Kitasatospora setae KM-6054	ATCC 33774 = DSM 43861 = JCM 3304 = KCC A-0304 = NBRC 14216 = KM-6054	Streptomycetaceae	1	8783278	7569	74	27	3	1326	11842
Streptomyces coelicolor A3(2)	ATCC BAA-471 = M145 = A3(2)	Streptomycetaceae	3	9054847	8211	65	18	3	566	13215
Streptomyces bingchenggensis BCW-1	BCW-1	Streptomycetaceae	1	11936683	10022	66	18	3	532	16293
Streptomyces flavogriseus ATCC 33331	ATCC 33331 = DSM 40990 = IAF-45CD	Streptomycetaceae	1	7337497	6298	67	18	3	632	10719

Streptosporangium roseum DSM 43021	ATCC 12428 = DSM 43021 = JCM 3005 = NI 9100	Streptosporangiaceae	1	10341314	8945	62	24	3	799	14889
Thermanaerovibrio acidaminovorans DSM 6589	ATCC 49978 = DSM 6589 = Su883	Synergistaceae	1	1848474	1738	50	9	4	348	4048
Aminobacterium colombiense DSM 12261	DSM 12261 = ALA-1	Synergistaceae	1	1980592	1876	46	9	3	345	3962
Syntrophus aciditrophicus SB	SB	Syntrophaceae	1	3179300	3168	48	3	4	791	5762
Syntrophobacter fumaroxidans MPOB	DSM 10017 = MPOB	Syntrophobacteraceae	1	4990251	4064	51	6	4	709	7524
Syntrophomonas wolfei subsp. wolfei str. Goettingen	Goettingen	Syntrophomonadaceae	1	2936195	2504	46	19	6	482	4960
Syntrophothermus lipocalidus DSM 12680	DSM 12680 = TGB-C1	Syntrophomonadaceae	1	2405559	2313	46	6	4	430	4666
Meiothermus ruber DSM 1279	ATCC 35948 = DSM 1279 = VKM B-1258 = 21	Thermaceae	1	3097457	3014	47	6	3	496	5337
Thermus thermophilus HB27	HB27 = ATCC BAA-163 = DSM 7039	Thermaceae	2	2127482	2210	47	6	3	680	4440
Thermus thermophilus HB8	HB8 = ATCC 27634 = DSM 579	Thermaceae	3	2116056	2239	47	6	3	313	4441
Thermus scotoductus SA-01	ATCC 700910 = SA-01	Thermaceae	2	2355186	2461	47	6	0	607	4752
Meiothermus silvanus DSM 9946	ATCC 700542 = DSM 9946 = VI-R2	Thermaceae	1	3249394	3072	47	6	3	475	5619
Oceanithermus profundus DSM 14977	DSM 14977 = NBRC 100410 = VKM B-2274 = 506	Thermaceae	2	2439291	2373	46	6	2	501	4634
Thermoanaerobacter italicus Ab9	DSM 9252 = Ab9	Thermoanaerobacteraceae	1	2451061	2270	54	12	5	422	4995
Thermoanaerobacter mathranii subsp. mathranii str. A3	DSM 11426 = CIP 108742 = A3	Thermoanaerobacteraceae	1	2306092	2159	59	12	5	392	4729
Thermoanaerobacter sp. X514	X514	Thermoanaerobacteraceae	1	2457259	2349	54	16	3	440	5090
Thermoanaerobacter brockii subsp. finni AKO-1	ATCC 43586 = DSM 3389 = AKO-1	Thermoanaerobacteraceae	1	2344824	2209	56	11	5	402	4839
Carboxydothermus hydrogenoformans Z-2901	Z-2901 = DSM 6008	Thermoanaerobacteraceae	1	2401520	2620	50	12	6	530	5042

Thermoanaerobacter tengcongensis MB4	NBRC 100824 = MB4 = DSM 15242 = JCM 11007	Thermoanaerobacteraceae	1	2689445	2588	55	12	8	336	5336
Thermoanaerobacter sp. X513	X513	Thermoanaerobacteraceae	1	2456520	2331	56	12	5	411	5048
Moorella thermoacetica ATCC 39073	ATCC 39073	Thermoanaerobacteraceae	1	2628784	2463	51	3	6	571	5197
Ammonifex degensii KC4	DSM 10501 = KC4	Thermoanaerobacteraceae	1	2129237	2052	48	6	4	361	4111
Thermoanaerobacter pseudethanolicus ATCC 33223	ATCC 33223 = 39E	Thermoanaerobacteraceae	1	2362816	2243	56	16	3	428	4914
Caldicellulosiruptor saccharolyticus DSM 8903	ATCC 43494 = DSM 8903	Thermoanaerobacterales Family III. Incertae Sedis	1	2970275	2679	46	9	7	505	5204
Caldicellulosiruptor bescii DSM 6725	DSM 6725 = Z-1320	Thermoanaerobacterales Family III. Incertae Sedis	3	2931662	2666	47	9	4	409	4818
Caldicellulosiruptor owensensis OL	ATCC 700167 = DSM 13100 = OL	Thermoanaerobacterales Family III. Incertae Sedis	1	2428903	2147	46	9	4	349	4447
Caldicellulosiruptor hydrothermalis 108	DSM 18901 = VKM B-2411 = 108	Thermoanaerobacterales Family III. Incertae Sedis	1	2770676	2546	48	9	4	356	5117
Thermosediminibacter oceani DSM 16646	ATCC BAA-1034 = DSM 16646 = JW/IW-1228P	Thermoanaerobacterales Family III. Incertae Sedis	1	2280035	2197	51	9	4	459	4746
Caldicellulosiruptor kristjanssonii 177R1B	ATCC 700853 = DSM 12137 = I77R1B	Thermoanaerobacterales Family III. Incertae Sedis	2	2802443	2482	47	9	4	357	4736
Thermoanaerobacterium thermosaccharolyticum DSM 571	ATCC 7956 = DSM 571 = NCIB 9385 = NCA 3814	Thermoanaerobacterales Family III. Incertae Sedis	1	2785752	2601	57	12	5	410	5298
Caldicellulosiruptor kronotskyensis 2002	DSM 18902 = VKM B-2412 = 2002	Thermoanaerobacterales Family III. Incertae Sedis	1	2843785	2466	47	9	4	379	5002
Caldicellulosiruptor obsidiansis OB47	ATCC BAA-2073 = strain OB47	Thermoanaerobacterales Family III. Incertae Sedis	1	2532343	2188	46	9	4	352	4433
Coprothermobacter proteolyticus DSM 5265	ATCC 35245 = DSM 5265 = BT	Thermodesulfofiaceae	1	1424912	1482	47	6	5	433	3110
Thermomicrobium roseum DSM 5159	ATCC 27502 = DSM 5159 = P-2	Thermomicrobiaceae	2	2920744	2859	47	6	2	567	5002
Thermomonospora curvata DSM 43183	ATCC 19995 = DSM 43183 = JCM 3096 = NCIMB 10081	Thermomonosporaceae	1	5639016	4890	61	12	3	551	7905
Thermotoga lettingiae TMO	ATCC BAA-301 = DSM 14385 =	Thermotogaceae	1	2135342	2040	46	3	4	335	4436

	TMO									
<i>Thermotoga naphthophila</i> RKU-10	ATCC BAA-489 = DSM 13996 = JCM 10882 = RKU-10	Thermotogaceae	1	1809823	1768	46	3	3	335	3978
<i>Thermotoga maritima</i> MSB8	JCM 10099 = DSM 3109 = ATCC 43589 = MSB8	Thermotogaceae	1	1860725	1853	46	3	3	343	4169
<i>Thermotoga petrophila</i> RKU-1	RKU-1 = ATCC BAA-488 = DSM 13995	Thermotogaceae	1	1823511	1785	46	3	3	431	4012
<i>Thermotoga neapolitana</i> DSM 4359	ATCC 49049 = DSM 4359 = NS-E	Thermotogaceae	1	1884562	1937	48	3	3	220	4122
<i>Petrotoga mobilis</i> SJ95	DSM 10674 = SJ95	Thermotogaceae	1	2169548	1898	48	6	3	363	4180
<i>Fervidobacterium nodosum</i> Rt17-B1	ATCC 35602 = DSM 5306 = Rt17-B1	Thermotogaceae	1	1948941	1750	50	6	5	299	3764
<i>Thermosipho africanus</i> TCF52B	TCF52B	Thermotogaceae	1	2016657	1956	48	9	5	200	3988
<i>Thermotoga</i> sp. RQ2	RQ2	Thermotogaceae	1	1877693	1819	46	3	3	356	4099
<i>Thermosipho melanesiensis</i> BI429	BI429 = DSM 12029	Thermotogaceae	1	1915238	1879	50	12	5	306	3807
<i>Kosmotoga olearia</i> TBF 19.5.1	TBF 19.5.1	Thermotogaceae	1	2302126	2118	46	6	3	310	4199
<i>Truepera radiovictrix</i> DSM 17093	DSM 17093 = CIP 108686 = LMG 22925 = RQ-24	Trueperaceae	1	3260398	2945	45	6	2	473	5582
<i>Tsukamurella paurometabola</i> DSM 20162	ATCC 8368 = DSM 20162 = JCM 10117 = NBRC 16120 = NCTC 13040	Tsukamurellaceae	2	4479724	4242	48	6	3	516	7347
<i>Veillonella parvula</i> DSM 2008	ATCC 10790 = DSM 2008 = JCM 12972 = Te3	Veillonellaceae	1	2132142	1844	48	12	4	237	3910
<i>Akkermansia muciniphila</i> ATCC BAA-835	ATCC BAA-835	Verrucomicrobiaceae	1	2664102	2138	53	9	2	395	3946
<i>Vibrio parahaemolyticus</i> RIMD 2210633	RIMD 2210633	Vibrionaceae	2	5165770	4832	126	34	20	551	9291
<i>Vibrio fischeri</i> ES114	ATCC 700601 = ES114	Vibrionaceae	3	4273718	3823	118	37	13	1252	8138
<i>Vibrio vulnificus</i> YJ016	YJ016	Vibrionaceae	3	5260086	5028	112	28	9	531	9222

Vibrio cholerae O395	ATCC 39541 = Ogawa 395 = O395 sub_strain Nankai/TED A	Vibrionaceae	2	4135300	3934	96	25	19	822	7777
Vibrio cholerae O395	ATCC 39541 = Ogawa 395 = O395 sub_strain TIGR	Vibrionaceae	2	4132319	3871	96	24	19	831	7848
Vibrio splendidus LGP32	Mel32 = LGP32) = LGP32	Vibrionaceae	2	4974818	4434	114	26	28	450	8744
Aliivibrio salmonicida LFI1238	LFI1238	Vibrionaceae	6	4655660	4226	105	37	14	830	7587
Vibrio harveyi ATCC BAA-1116	ATCC BAA-1116 = BB120	Vibrionaceae	3	6058377	6064	121	24	18	458	10163
Vibrio fischeri MJ11	MJ11	Vibrionaceae	3	4503336	4039	124	12	12	938	8018
Photobacterium profundum	SS9	Vibrionaceae	3	6403280	5480	164	45	15	517	10334
Vibrio cholerae O1 biovar El Tor str. N16961	ATCC 39315 = El Tor Inaba N16961	Vibrionaceae	2	4033464	3829	98	24	18	601	7808
Vibrio cholerae MJ-1236	MJ-1236	Vibrionaceae	2	4236368	3774	98	22	18	874	8054
Vibrio sp. Ex25	Ex25	Vibrionaceae	2	5089025	4518	124	34	18	1062	9459
Vibrio vulnificus CMCP6	CMCP6	Vibrionaceae	2	5126696	4433	111	28	18	1104	9177
Vibrio cholerae M66-2	M66-2	Vibrionaceae	2	3938905	3693	97	22	18	790	7649
Waddlia chondrophila WSU 86-1044	ATCC VR-1470 = WSU 86-1044	Waddliaceae	2	2131905	1956	37	6	4	564	3549
Starkeya novella DSM 506	ATCC 8093 = DSM 506 = CCM 1077 = IAM 12100 = NBRC 12443 = NCIB 9113	Xanthobacteraceae	1	4765023	4431	46	3	3	640	8424
Xanthobacter autotrophicus Py2	ATCC BAA-1158 = Py2	Xanthobacteraceae	2	5625098	5035	51	6	5	634	8949
Azorhizobium caulinodans ORS 571	ATCC 43989 = DSM 5975 = ORS 571	Xanthobacteraceae	1	5369772	4717	53	9	7	348	9132
Xanthomonas oryzae pv. oryzae PXO99A	PXO99A	Xanthomonadaceae	1	5240075	4988	54	6	5	366	8277
Xanthomonas oryzae pv. oryzae MAFF 311018	MAFF 311018	Xanthomonadaceae	1	4940217	4372	53	6	4	392	7888
Xanthomonas axonopodis pv. citri str. 306	306	Xanthomonadaceae	3	5274174	4425	54	6	2	445	8250
Xanthomonas campestris pv. campestris	B100	Xanthomonadaceae	1	5079002	4510	54	6	4	1200	8268

<i>Xylella fastidiosa</i> Temecula1	Temecula1 = ATCC 700964	Xanthomonadaceae	2	2521148	2036	49	6	5	379	4228
<i>Xanthomonas oryzae</i> pv. <i>oryzae</i> KACC10331	KXO85 = KACC10331	Xanthomonadaceae	1	4941439	4540	50	6	4	370	7681
<i>Stenotrophomonas</i> <i>maltophilia</i> K279a	K279a	Xanthomonadaceae	1	4851126	4421	74	12	5	660	8351
<i>Xanthomonas</i> <i>campestris</i> pv. <i>campestris</i> str. 8004	8004	Xanthomonadaceae	1	5148708	4273	54	6	4	422	8056
<i>Xylella fastidiosa</i> M23	M23	Xanthomonadaceae	2	2573987	2201	50	6	3	464	4284
<i>Xanthomonas</i> <i>campestris</i> pv. <i>campestris</i> str. ATCC 33913	ATCC 33913 = NCPPB 528 = LMG 568	Xanthomonadaceae	1	5076188	4181	53	6	2	456	8136
<i>Xanthomonas</i> <i>euvesicatoria</i>	85-10	Xanthomonadaceae	5	5420152	4726	56	4	4	871	8582
<i>Stenotrophomonas</i> <i>maltophilia</i> R551-3	R551-3	Xanthomonadaceae	1	4573969	4039	73	13	4	613	7912
<i>Xylella fastidiosa</i> 9a5c	9a5c	Xanthomonadaceae	3	2731750	2832	49	6	5	386	4385
<i>Xylella fastidiosa</i> subsp. <i>fastidiosa</i> GB514	GB514	Xanthomonadaceae	2	2517383	2216	49	6	0	384	4107
<i>Xanthomonas</i> <i>albilineans</i> GPE PC73	GPE PC73 = CFBP 7063	Xanthomonadaceae	4	3852299	3208	51	6	4	777	6471
<i>Xylella fastidiosa</i> M12	M12	Xanthomonadaceae	1	2475130	2104	50	6	3	437	4196
<i>Pseudoxanthomonas</i> <i>suwonensis</i> 11-1	11-jan	Xanthomonadaceae	1	3419049	3070	52	6	4	533	6322
<i>Synechocystis</i> sp. PCC 6803	ATCC 27184 = PCC 6803 = N-1		5	3947019	3564	43	6	2	573	6757
<i>Baumannia</i> <i>cicadellinicola</i> str. Hc ( <i>Homalodisca</i> <i>coagulata</i> )			1	686194	595	39	6	3	344	2079
<i>Cyanothece</i> sp. PCC 7424	ATCC 29155 = PCC 7424) = PCC 7424		7	6554169	5710	44	9	4	616	8365
<i>Dehalogenimonas</i> <i>lykanthroporepellens</i> BL-DC-9	ATCC BAA- 1523 = JCM 15061 = BL- DC-9		1	1686510	1659	47	3	2	270	3494
<i>Synechococcus</i> sp. JA-2-3B'a(2-13)	JA-2-3B'a(2- 13 = JA-2- 3B'a(2-13)		1	3046682	2863	45	6	8	597	5162
<i>Synechococcus</i> <i>elongatus</i>	BP-1		1	2593857	2475	42	3	4	348	4960
Candidatus <i>Sulcia</i> <i>muelleri</i> SMDSEM	SMDSEM		1	276984	242	28	3	2	38	773
<i>Cyanothece</i> sp. PCC 8802	RF-2 = PCC 8802) = PCC 8802		5	4803347	4444	42	6	3	538	7072

Exiguobacterium sp. AT1b	ATCC BAA-1283 = AT1b		1	2999895	3020	68	27	3	463	5748
Cyanothece sp. PCC 7425	PCC 7425 = ATCC 29141		4	5786110	5327	47	6	4	592	8162
Trichodesmium erythraeum IMS101	IMS101		1	7750108	4451	38	5	10	660	7051
Leptothrix cholodnii SP-6	SP-6 = ATCC 51168 = LMG 8142 = )		1	4909403	4363	50	7	3	680	8766
Thiomonas intermedia K12	K12		1	3396378	3106	45	3	4	491	6419
Synechococcus elongatus PCC 6301	ATCC 27144 = PCC 6301 = SAUG 1402/1		1	2696255	2525	45	6	2	335	5006
Candidatus Pelagibacter ubique HTCC1062	HTCC1062		1	1308759	1354	32	3	1	537	3182
Candidatus Cloacamonas acidaminovorans			1	2246820	1816	46	6	4	554	3321
Dehalococcoides sp. GT	GT		1	1360154	1417	46	3	2	257	2886
Dehalococcoides ethenogenes 195	195		1	1469720	1580	46	3	3	298	3127
Synechococcus sp. WH 7803	WH7803		1	2366980	2533	44	6	6	614	4617
Candidatus Carsonella ruddii PV	PV		1	159662	182	28	3	0	17	481
Sulfurovum sp. NBC37-1	NBC37-1		1	2562277	2465	44	9	3	568	4608
Candidatus Amoebophilus asiaticus 5a2	5a2		1	1884364	1336	35	3	3	107	2339
Candidatus Accumolibacter phosphatis clade IIA str. UW-1	UW-1		4	5306133	4562	49	6	3	607	8414
Tropheryma whipplei str. Twist	Twist		1	927303	808	49	3	4	313	1999
Dehalococcoides sp. BAV1	BAV1		1	1341892	1371	46	3	3	344	2906
Synechococcus sp. CC9311	CC9311		1	2606748	2892	44	6	7	699	4748
Candidatus Vesicomysocius okutanii HA	HA		1	1022154	939	35	3	3	435	2676
Synechococcus sp. CC9605	CC9605		1	2510659	2638	45	6	6	450	4430
Candidatus Ruthia magnifica str. Cm (Calyptogena magnifica)			1	1160782	976	36	3	4	409	2749
Synechococcus sp. JA-3-3Ab	JA-3-3Ab		1	2932766	2760	47	6	8	590	5059
Candidatus Sulcia muelleri DMIN	DMIN		1	243933	226	31	3	1	118	747

<i>Thermobaculum terrenum</i> ATCC BAA-798	ATCC BAA-798 = YNP1 BAA-798		2	3101581	2832	51	6	3	415	5488
<i>Magnetococcus</i> sp. MC-1	MC-1		1	4719581	3716	45	9	3	622	6905
<i>Acaryochloris marina</i> MBIC11017	MBIC 11017		10	8361599	8383	69	6	8	387	10375
<i>Teredinibacter turnerae</i> T7901	ATCC 39867 = T7901		1	5193164	4255	40	9	3	838	7857
<i>Candidatus Sulcia muelleri</i> CARI	CARI		1	276511	246	29	3	2	45	825
<i>Tropheryma whipplei</i> TW08/27	TW08/27		1	925938	784	51	3	4	257	1983
<i>Exiguobacterium sibiricum</i> 255-15	DSM 17290 = JCM 13490 = 255-15		3	3040786	3015	69	27	2	501	5807
<i>Candidatus Azobacteroides pseudotrichonymphae</i> genomovar. CFP2			5	1224919	852	38	4	3	163	2256
<i>Chitinophaga pinensis</i> DSM 2588	ATCC 43595 = DSM 2588 = NCIB 11800 = UQM 2034		1	9127347	7192	77	18	3	647	11369
<i>Nitratifactor salsuginis</i> DSM 16511	DSM 16511 = JCM 12458 = E9137-1		1	2101285	2088	45	6	3	450	4035
<i>Candidatus Hodgkinia cicadicola</i> Dsem	Dsem		1	143795	169	15	3	0	9	394
<i>Candidatus Koribacter versatilis</i> Ellin345	Ellin345		1	5650368	4777	47	3	4	756	8031
<i>cyanobacterium</i> UCYN-A			1	1443806	1199	36	6	5	237	2933
<i>Thiomonas</i> sp. 3As	3As		2	3785534	3695	43	3	4	1028	7081
<i>Dehalococcoides</i> sp. CBDB1	CBDB1		1	1395502	1458	47	3	3	293	3016
<i>Cyanothece</i> sp. ATCC 51142	ATCC 51142		6	5460377	5304	43	8	3	360	7613
uncultured Termite group 1 bacterium phylotype Rs-D17			4	1148570	776	45	3	1	171	2133
<i>Candidatus Puniceispirillum marinum</i> IMCC1322	IMCC1322		1	2753527	2546	36	3	4	1686	5988
<i>Cyanothece</i> sp. PCC 7822	PCC 7822		7	7841948	6642	47	9	4	575	9290
<i>Cyanothece</i> sp. PCC 8801	PCC 8801 = RF-1 = PCC 8801)		4	4787694	4367	43	6	4	561	7115
<i>Nitratiruptor</i> sp. SB155-2	SB155-2		1	1877931	1856	45	9	3	152	976
<i>Synechococcus</i> sp. WH 8102	WH8102		1	2434428	2524	44	8	7	637	4554

Candidatus Sulcia muelleri GWSS	GWSS		1	245530	227	31	3	2	43	738
Methylibium petroleiphilum PM1	PM1		2	4643639	4449	69	3	4	1037	8248
Synechococcus sp. RCC307	RCC307		1	2224914	2535	42	3	7	609	4583
Clostridiales genomsp. BVAB3 str. UPII9-5	UPII9-5		1	1809746	1567	45	6	3	293	3067
Microcystis aeruginosa NIES-843	NIES-843		1	5842795	6311	42	6	4	387	7316
Dehalococcoides sp. VS	VS		1	1413462	1438	47	3	2	172	3080
Synechococcus elongatus PCC 7942	PCC 7942		2	2742269	2661	44	6	6	598	5223
Gloeobacter violaceus PCC 7421	PCC 7421		1	4659019	4431	45	3	2	380	7020
Synechococcus sp. CC9902	CC9902		1	2234828	2304	45	6	8	536	4340
Synechococcus sp. PCC 7002	ATCC 27264 = PCC 7002 = PR-6		7	3409935	3187	44	6	6	341	5764