

Accession number	Genomic AT content (%)	ORF regional AU content						ORF regional secondary structure score						Genomic codon adaptation index			ORF regional codon adaptation index						Number of ORFs	Genome size (bp)	Organism		
		5' ORF		ORF Middle		3' ORF		Genomic secondary structure score		5' ORF		ORF Middle		3' ORF		Genomic codon adaptation index			5' ORF		ORF Middle					3' ORF	
		μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ	σ	μ				σ	μ
CP001131	25.16	30	7.69	25	4.5	27	7.95	-1108	679.9	-873.5	542.4	-1175	436.9	-1174	659.6	0.83	0.1	0.7	0.19	0.84	0.1	0.83	0.1	4436	5061632	Anaeromyxobacter sp. K	
CP000251	25.09	30	7.91	25	4.6	27	8.12	-1109	673.8	-878.1	549.8	-1168	429.3	-1158	658.6	0.83	0.12	0.69	0.21	0.85	0.12	0.84	0.12	4345	5013479	Anaeromyxobacter dehalogenans 2CP-C	
CP001359	25.28	30	7.69	25	4.5	27	7.95	-1105	673.1	-868.6	533.3	-1162	435.3	-1150	650.3	0.82	0.1	0.71	0.19	0.84	0.1	0.83	0.1	4450	5029329	Anaeromyxobacter dehalogenans 2CP-1	
CP000750	25.56	27	7.11	25	3.9	27	6.95	-1094	624.2	-972	566.9	-1167	390.9	-1152	613.5	0.81	0.13	0.67	0.19	0.83	0.13	0.82	0.13	4466	4761183	Kineococcus radiotolerans SRS30216	
CP001630	26.29	30	6.56	26	3.5	29	6.58	-1020	629.9	-851.7	539.5	-1095	396.6	-991.6	565.4	0.81	0.1	0.64	0.19	0.83	0.1	0.82	0.1	6832	8248144	Actinosynnema mirum DSM 43827	
CP000769	26.47	32	7.35	26	3.8	27	7.44	-1013	602.1	-823.2	485.9	-1079	343.2	-1007	552.8	0.8	0.11	0.68	0.2	0.81	0.11	0.8	0.11	4460	5277990	Anaeromyxobacter sp. Fw109-5	
CP001618	26.88	30	6.35	26	3.2	27	6.07	-1040	576	-904.7	527.2	-1117	325.6	-1034	561.7	0.79	0.07	0.68	0.17	0.8	0.07	0.79	0.07	4182	4669183	Beutenbergia cavernae DSM 12333	
AM711867	27.34	30	7.43	27	3.9	27	7.17	-983.5	565.5	-851.1	543.2	-1087	335	-1058	569.3	0.83	0.11	0.71	0.19	0.84	0.11	0.83	0.11	2974	3297891	Clavibacter michiganensis subsp. michiganensis NCPPB 382	
CP001628	27.00	30	7.67	26	3.9	27	7.07	-973.4	556.4	-826.8	526.9	-1058	339.1	-1013	563.7	0.79	0.11	0.71	0.18	0.8	0.11	0.79	0.11	2226	2501097	Micrococcus luteus NCTC 2665	
CT573213	27.17	32	7.88	27	4.2	29	7.75	-1030	645.7	-878	572.1	-1094	388.4	-989.9	586.5	0.74	0.12	0.62	0.17	0.76	0.12	0.75	0.12	6582	7497934	Frankia alni ACN14a	
AM849034	27.44	30	7.72	27	4.1	27	7.27	-956.2	557.7	-847.5	543.7	-1026	345.7	-1024	556.5	0.82	0.13	0.69	0.21	0.84	0.13	0.83	0.13	2922	3258645	Clavibacter michiganensis subsp. sepedonicus	
CP000943	28.42	32	8.5	27	5.4	29	8.85	-929.2	560.2	-795	483.3	-1016	353.6	-1011	570.2	0.82	0.14	0.67	0.2	0.84	0.14	0.83	0.14	6556	7659055	Methylobacterium sp. 4-46	
AL645882	27.88	32	6.98	27	3.7	29	6.96	-943.1	570.7	-772.6	495.9	-1023	344.2	-934.5	537	0.75	0.1	0.59	0.18	0.77	0.11	0.76	0.1	7706	8667507	Streptomyces coelicolor A3(2)	
AP009493	27.77	32	7.34	27	3.7	29	7.11	-920.7	553.2	-745.4	488.9	-989.1	323.4	-959.1	529.7	0.76	0.1	0.59	0.18	0.78	0.1	0.77	0.1	7110	8545929	Streptomyces griseus subsp. griseus NBRC 13350	
CP001643	27.95	32	7.04	27	3.5	29	6.6	-924	538.7	-773.4	496.8	-999.2	305.9	-958.9	519	0.79	0.09	0.65	0.18	0.8	0.09	0.79	0.09	3055	3614992	Brachyobacterium faecium DSM 4810	
CP001001	28.50	32	7.44	28	4.3	29	7.67	-940.8	522.2	-777.4	458	-1020	325.8	-980.2	521.6	0.78	0.11	0.64	0.19	0.8	0.11	0.79	0.11	5637	6077833	Methylobacterium radiotolerans JCM 2831	
CP001686	28.37	32	6.94	28	3.6	29	6.72	-927.3	534.3	-801.1	496.8	-994.5	330.8	-923.8	524.3	0.76	0.11	0.67	0.17	0.77	0.11	0.76	0.11	2517	2785024	Kytococcus sedentarius DSM 20547	
AM420293	28.85	32	6.33	28	3.2	31	6.52	-962.5	564.6	-789.7	499.5	-1061	345.8	-939.5	509.5	0.77	0.1	0.64	0.17	0.79	0.1	0.78	0.1	7072	8212805	Saccharopolyspora erythraea NRRL 2338	
CP000747	28.65	32	7.16	28	3.3	29	7.09	-915.4	506.4	-762	432.8	-993.3	294.3	-908.4	454.6	0.77	0.09	0.62	0.2	0.79	0.09	0.78	0.1	3523	3996255	Phenyllobacterium zincinum HLK1	
CP000386	29.52	34	8.35	28	5.1	31	8.27	-831.3	545	-662.6	519.1	-907.3	370	-798.6	513.6	0.83	0.13	0.65	0.2	0.85	0.14	0.84	0.13	3139	3225748	Rubrobacter xylanophilus DSM 9941	
CP000820	28.85	32	7.74	28	4.1	31	7.72	-948.3	600.1	-797.2	520.1	-1023	345.3	-927.1	559.7	0.73	0.11	0.6	0.17	0.74	0.11	0.73	0.11	7160	8982042	Frankia sp. EAN1pec	
AP009152	28.84	34	7.79	28	3.8	29	7.23	-914.8	532.2	-788.1	496.5	-977.7	317.7	-970.7	517.4	0.76	0.11	0.59	0.18	0.77	0.11	0.76	0.11	2342	2697540	Kocuria rhizophila DC2201	
CP001737	29.08	32	7.32	28	3.9	29	7.35	-996.8	601	-862.2	539.3	-1088	379	-1015	590.8	0.74	0.1	0.61	0.17	0.75	0.11	0.74	0.1	5200	6060298	Nakamurella multiparita DSM 44233	
AP006618	29.17	34	7.02	29	3.5	31	7	-963.3	575	-766.3	484.4	-1040	344.3	-927.4	518.1	0.74	0.1	0.59	0.17	0.75	0.1	0.74	0.1	5680	6021225	Nocardia farcinica IFM 10152	
BA000030	29.28	34	6.82	29	3.4	31	6.65	-866.1	525.3	-772.7	452.1	-939.5	300.7	-840.5	482.9	0.74	0.09	0.59	0.17	0.76	0.09	0.75	0.09	7565	9025608	Streptomyces avermitilis MA-4680	
CP000613	29.54	34	7.76	29	4	29	7.78	-891.2	541.8	-711	464.6	-960	336	-922.9	506.8	0.75	0.1	0.61	0.17	0.76	0.11	0.75	0.11	3925	4355548	Rhodospirillum centenum SW	
CP000249	29.92	34	7.53	29	3.7	31	7.61	-886.8	553	-754	502	-961.4	315.7	-880.4	523.8	0.71	0.08	0.6	0.15	0.72	0.09	0.71	0.08	4487	5433628	Frankia sp. Ccl3	
CP001700	30.23	34	6.92	29	3.2	33	6.82	-860.8	561.8	-712.4	462	-963.6	333.5	-779.8	482.3	0.73	0.11	0.6	0.17	0.75	0.11	0.74	0.11	8848	10467782	Catenulispora acidiphila DSM 44928	
CP001029	30.61	34	7.34	29	4.2	31	7.47	-832.2	468.7	-679.6	399.1	-911.4	285.3	-823	431.2	0.75	0.1	0.63	0.17	0.77	0.11	0.76	0.1	5273	5800441	Methylobacterium populi BJ001	
CP001349	31.14	34	7.73	30	5.2	31	8.46	-811.4	464.6	-685.8	402.9	-889.2	294.8	-802.9	433.9	0.77	0.13	0.66	0.17	0.78	0.13	0.77	0.13	7183	7772460	Methylobacterium nodulans ORS 2060	
CP000850	30.48	34	6.97	30	3.6	31	6.99	-897.2	553.9	-759.2	477.8	-951.6	350.6	-875.3	510.4	0.7	0.08	0.64	0.15	0.71	0.08	0.7	0.08	4905	5786361	Salinispora arenicola CNS-205	
AP008226	30.48	36	6.46	30	3.3	33	6.7	-993.5	632.1	-774.5	469.5	-1082	395	-900.7	523.8	0.73	0.09	0.63	0.17	0.74	0.09	0.73	0.09	1954	1849742	Thermus thermophilus HB8	
CP000667	30.54	34	7.08	30	3.4	31	7.02	-882.7	551.9	-735.5	465.7	-944.8	401.5	-865.6	507.8	0.7	0.08	0.61	0.15	0.71	0.08	0.7	0.08	4524	5183331	Salinispora tropica CNB-440	
AE017221	30.56	36	6.52	30	3.3	33	6.79	-1004	642.5	-781.9	494.3	-1090	400.7	-910.7	549.3	0.73	0.08	0.63	0.18	0.74	0.08	0.73	0.08	1965	1894877	Thermus thermophilus HB27	
CP001510	31.29	34	7.02	30	3.8	31	7.32	-802.7	448.4	-674.9	384.8	-890.1	267.1	-798	408.2	0.73	0.1	0.64	0.16	0.75	0.1	0.74	0.1	4891	5511322	Methylobacterium extorquens AM1	
AE019558	30.70	34	7.53	30	3.6	33	7.5	-928	563	-780.8	476.6	-1022	332.3	-868.8	489.6	0.72	0.09	0.56	0.17	0.74	0.1	0.72	0.1	4346	4829781	Mycobacterium avium subsp. paratuberculosis K-10	
CP000655	30.80	36	7.74	30	3.3	31	7.67	-892.8	556.1	-724.1	469.5	-976.8	343.8	-871.7	509.4	0.73	0.11	0.59	0.18	0.74	0.11	0.73	0.11	3810	4044195	Methylubium petroleiphilum PM1	
AP006840	31.33	36	7.78	30	4.3	33	7.97	-792.7	469	-605.6	392.8	-858.2	296.1	-744.1	408.6	0.73	0.11	0.58	0.18	0.75	0.11	0.74	0.11	3311	3566135	Symbiobacterium thermophilum IAM 14863	
CP000512	31.47	36	8.88	30	4.9	33	9.18	-826.5	518.2	-632.1	440.5	-909.4	323.4	-815.5	498.8	0.73	0.12	0.58	0.18	0.75	0.13	0.74	0.12	4706	5352772	Acidovorax citrulli AAC00-1	
CP001013	31.10	36	7.61	30	4	33	7.77	-923.7	571.7	-679.5	466.3	-1016	352	-863.7	489.2	0.74	0.11	0.56	0.17	0.76	0.11	0.74	0.11	4334	4909403	Leptothrix cholodnii SP-6	
CP001298	31.79	36	7.29	30	4.3	31	7.67	-785.7	442.8	-646.4	371.5	-868.1	269.9	-776.7	407.3	0.74	0.11	0.63	0.17	0.75	0.11	0.74	0.11	5121	5777908	Methylobacterium chloromethanicum CM4	
CP000908	31.82	36	7.47	30	4.3	31	7.79	-787	446.7	-649.4	373.6	-870.6	263.9	-782.7	406.6	0.74	0.11	0.61	0.17	0.75	0.11	0.74	0.11	4818	5471154	Methylobacterium extorquens PA1	
CP000479	31.01	34	7.32	30	3.8	33	7.61	-921.5	556.3	-781.7	474.3	-1003	335.7	-859.8	495.2	0.72	0.1	0.6	0.16	0.73	0.1	0.72	0.1	5002	5475491	Mycobacterium avium 104	
CP000699	31.60	36	7.73	30	3.9	33	7.7	-851.6	501.4	-661.4	410.6	-942.9	294.1	-786.7	427.4	0.76	0.11	0.59	0.19	0.79	0.11	0.77	0.11	4837	5382261	Sphingomonas wittichii RW1	
CP000113	31.11	36	7.08	31	3.3	33	7.05	-784.9	449.1	-633.1	394.4	-836.1	265	-781.5	419.5	0.72	0.09	0.57	0.16	0.73	0.1	0.72	0.1	7216	9139763	Myxococcus xanthus DK 1622	
FP103042	31.91	34	7.2	31	4.3	33	7.91	-780.2	441.6	-655	372	-856.5	273	-775.1	405.4	0.73	0.12	0.63									

CP000088	32.50	36	6.89	32	3.4	33	6.89	-774.6	465.5	-638.8	385.5	-834.2	290.2	-780.8	438.1	0.72	0.09	0.58	0.15	0.73	0.09	0.72	0.09	3105	3642249	Thermobifida fusca YX
CP000480	32.60	36	6.68	32	3.1	36	6.7	-840.6	480.8	-707.6	407.6	-922.6	280.1	-770.3	415.2	0.71	0.09	0.6	0.15	0.73	0.09	0.72	0.09	6572	6988209	Mycobacterium smegmatis str. MC2 155
CP000884	33.52	41	8.39	32	5.2	36	8.57	-798.8	494.2	-614	408.2	-885.3	310.3	-761.6	457.9	0.7	0.12	0.52	0.17	0.72	0.13	0.71	0.13	6024	6767514	Delftia acidovorans SPH-1
AL646052	32.96	39	8.21	32	4.5	36	8.35	-815.7	533.2	-623.7	428.2	-898.3	337.6	-783.4	509.4	0.73	0.12	0.55	0.16	0.75	0.13	0.73	0.12	3416	3716413	Ralstonia solanacearum GM1000
CP001189	33.62	39	8.8	32	5.3	36	9.25	-743.6	495.1	-610.2	411.7	-822.3	322.8	-714.5	436.8	0.76	0.12	0.6	0.17	0.78	0.12	0.76	0.12	3447	3887492	Glucanacetobacter diazotrophicus PAI 5
CP001392	33.17	39	8.16	32	4.3	36	8.29	-811.1	513.2	-614.6	409.1	-901.7	331.7	-771.8	476.7	0.7	0.11	0.56	0.16	0.72	0.11	0.71	0.11	3468	3796573	Diaphorobacter sp. TPSY
AP009384	32.68	36	7.77	32	3.4	33	7.48	-756.6	441.5	-625.5	372.6	-815.4	243	-764.5	390	0.73	0.09	0.59	0.18	0.75	0.09	0.73	0.09	4695	5369772	Azorhizobium caulinodans ORS 571
CP001197	32.89	39	8.23	32	4.6	36	8.29	-777.3	495.5	-616.5	434.4	-850	282.7	-722.4	436.5	0.7	0.1	0.56	0.16	0.71	0.1	0.7	0.1	3164	4040304	Desulfivibrio vulgaris str. 'Miyazaki F'
CP001683	32.68	36	6.15	32	2.9	36	6.16	-800.6	469	-664.5	396.2	-855.9	292.4	-749.9	418.3	0.72	0.07	0.64	0.13	0.73	0.07	0.73	0.07	3812	4308349	Saccharomonospora viridis DSM 43017
AE005673	32.79	36	7.15	32	3.3	36	7.18	-780.1	445.8	-652.8	377.3	-840.6	252.1	-752.1	376.9	0.69	0.12	0.56	0.18	0.71	0.12	0.7	0.12	3684	4016947	Caulobacter crescentus CB15
CP001340	32.83	36	7.05	32	3.4	36	7.17	-780	445.5	-644.6	373.2	-840.9	255.7	-752.1	379.2	0.69	0.12	0.55	0.18	0.71	0.12	0.69	0.12	3810	4042929	Caulobacter crescentus NA1000
CP000744	33.55	39	7.68	32	4.7	36	8.16	-759.4	480.7	-573.1	381.1	-849.6	309.3	-727.4	440.9	0.7	0.12	0.55	0.17	0.72	0.12	0.71	0.12	6079	6588339	Pseudomonas aeruginosa PA7
AE004091	33.44	39	7.45	32	3.9	36	7.72	-737.2	458.3	-537.8	365.4	-815	281.4	-705.9	405.5	0.7	0.1	0.55	0.17	0.71	0.1	0.7	0.1	5551	6264404	Pseudomonas aeruginosa PAO1
CP000359	33.36	39	7.48	32	3.8	33	7.32	-705	417.3	-585.7	357	-764.7	247.9	-673.1	384.3	0.67	0.06	0.58	0.14	0.68	0.07	0.67	0.06	2327	2467205	Deinococcus geothermalis DSM 11300
CP000438	33.71	41	7.49	32	4.3	36	7.99	-750.6	472.7	-566.1	381.7	-833.4	296.9	-727.1	424.7	0.7	0.11	0.55	0.17	0.72	0.11	0.7	0.11	5858	6537648	Pseudomonas aeruginosa UCBPP-PA14
FM209186	33.70	39	7.4	32	4.1	36	7.76	-752.6	469.7	-569.3	379.1	-829.5	292.1	-727.7	422.2	0.7	0.11	0.55	0.17	0.71	0.11	0.7	0.11	5914	6601757	Pseudomonas aeruginosa LESB58
CP000539	33.83	41	8.44	32	4.7	36	8.46	-784.9	497.8	-620	393.5	-869.9	319.1	-733.2	454.4	0.7	0.12	0.55	0.16	0.71	0.12	0.7	0.12	3998	4448856	Acidovorax sp. JS42
CP000159	33.78	39	8.19	33	4.2	36	7.9	-688.6	417.8	-529.1	360.1	-750.9	245.3	-659.4	374.4	0.74	0.1	0.58	0.17	0.75	0.1	0.74	0.1	2778	3551823	Salinibacter ruber DSM 13855
CP001111	33.70	39	6.98	33	3.1	36	6.96	-794.3	483.1	-620.6	401.7	-868.8	296.6	-790.1	434.2	0.69	0.1	0.56	0.16	0.71	0.1	0.7	0.1	4027	4573969	Stenotrophomonas maltophilia R551-3
AM743169	33.68	39	7.28	33	3.6	36	7.21	-796.8	485	-631.6	410.7	-869.2	298	-770.9	435	0.69	0.12	0.56	0.17	0.7	0.12	0.69	0.12	4376	4851126	Stenotrophomonas maltophilia K279a
CP001157	34.32	41	8.25	33	5.3	36	8.7	-734.6	501.1	-556	366.3	-814	302.8	-688.6	420.8	0.69	0.12	0.57	0.16	0.71	0.13	0.7	0.12	4769	5365318	Azotobacter vinelandii DJ
CP001341	33.72	39	7.37	33	3.3	36	7.27	-729.6	434	-592	387	-790.3	250.3	-715.1	411.8	0.68	0.08	0.57	0.14	0.69	0.08	0.68	0.08	3869	4395357	Arthrobacter chlorophenicus A6
CP000481	33.09	34	6.93	33	3.6	33	7.24	-767	471.2	-711.1	430.3	-820.4	272.9	-769.1	449.1	0.71	0.06	0.65	0.12	0.71	0.06	0.71	0.06	2154	2443540	Acidothermus cellulolyticus 11B
CP000250	33.96	39	7.33	33	3.6	36	7.72	-793.6	486.5	-618	379.8	-875.8	294	-743.1	425.9	0.73	0.1	0.57	0.17	0.75	0.1	0.74	0.1	4669	5331656	Rhodopseudomonas palustris HaA2
CP001339	34.94	41	7.75	33	4.7	38	7.92	-695.9	421.9	-540.7	366.9	-756.7	266.6	-605.7	356.6	0.69	0.12	0.57	0.16	0.71	0.13	0.7	0.12	3261	3464554	Thioalkalivibrio sp. HL-EbGR7
CP000116	33.93	41	8.15	33	4.2	36	8.36	-754.4	456.9	-595.1	388.3	-838.7	277.9	-700.2	406.6	0.73	0.1	0.6	0.17	0.74	0.11	0.73	0.1	2819	2909809	Thiobacillus denitrificans ATCC 25259
AM902716	34.52	41	8.48	33	4.6	36	8.95	-761.4	505.1	-586.3	380	-845.5	320.7	-707	470.3	0.7	0.11	0.56	0.15	0.72	0.11	0.7	0.11	5015	5287950	Bordetella petrii
AE016825	35.17	43	9.22	33	6.3	38	9.75	-746.7	516.8	-557.8	398.3	-829.9	346.2	-700.9	451.3	0.71	0.14	0.54	0.17	0.73	0.15	0.71	0.15	4405	4751080	Chromobacterium violaceum ATCC 12472
CP000830	33.98	41	7.97	33	4.1	36	8.27	-694.2	427	-567.8	370.5	-739.4	267.8	-682.1	413.5	0.74	0.09	0.61	0.16	0.75	0.1	0.74	0.09	3572	3789584	Dinoroseobacter shibae DFL 12
CU234118	34.49	39	7.18	33	3.4	36	7.34	-728.9	425.6	-589.7	352	-799.6	249.1	-688.5	373.2	0.73	0.1	0.59	0.16	0.75	0.1	0.73	0.1	6662	7456587	Bradyrhizobium sp. ORS278
AP007255	34.91	39	7.68	33	4.3	38	7.89	-719.1	440.1	-606.6	361.3	-792.6	266.6	-673.4	368.9	0.7	0.12	0.57	0.18	0.72	0.12	0.71	0.12	4500	4967148	Magnetospirillum magneticum AMB-1
CP000454	34.53	41	7.48	34	3.2	36	7.44	-698.2	415	-562.8	384.5	-758.9	234.4	-671.5	400.2	0.68	0.08	0.56	0.14	0.69	0.08	0.68	0.08	4141	4698945	Arthrobacter sp. FB24
CP000542	34.72	41	8.68	34	4.8	38	8.71	-761.5	503.5	-620.5	429.1	-838	308.6	-697.8	427.8	0.69	0.11	0.58	0.15	0.7	0.11	0.69	0.11	4901	5566749	Verminephrobacter eiseniae EF01-2
CP000230	34.55	39	8.61	34	4.4	36	8.63	-746	465.1	-591.5	380.8	-812	283.9	-722.2	406.6	0.71	0.08	0.58	0.16	0.72	0.09	0.71	0.08	3786	4352825	Rhodospirillum rubrum ATCC 11170
AE008922	34.93	39	7.72	34	4.1	36	7.76	-769.5	500.5	-622.1	434.9	-843.1	307.4	-740.3	477.2	0.69	0.1	0.56	0.16	0.71	0.1	0.7	0.1	4147	5076188	Xanthomonas campestris pv. campestris str. ATCC 33913
CP000356	34.50	39	7.78	34	3.9	36	8.01	-738.8	445.8	-619.5	389.8	-806.5	266.1	-687	399.3	0.72	0.09	0.63	0.16	0.74	0.1	0.73	0.09	3163	3345170	Sphingopyxis alaskensis RB2256
CP000050	35.04	39	7.82	34	4.3	36	7.78	-764.2	507.1	-610.9	449.4	-847.3	325.8	-738.5	469.7	0.69	0.1	0.55	0.16	0.71	0.11	0.7	0.11	4230	5148708	Xanthomonas campestris pv. campestris str. 8004
AM920689	34.96	39	7.81	34	4.6	36	8.11	-776.9	509.4	-609.7	437.2	-847.8	327.7	-741.8	467.9	0.69	0.11	0.55	0.16	0.7	0.12	0.69	0.11	4413	5079002	Xanthomonas campestris pv. campestris
CP000680	35.32	41	7.1	34	4.2	38	7.45	-714.8	443.3	-521.7	348	-777.1	276.8	-664.8	383.2	0.68	0.11	0.54	0.16	0.7	0.11	0.68	0.11	4586	5072807	Pseudomonas mendocina ymp
CP000301	35.04	41	7.49	34	4	36	8.08	-763.1	487.6	-593.8	391.1	-856.4	300.2	-719.9	420.9	0.73	0.1	0.56	0.15	0.75	0.1	0.73	0.1	4872	5513844	Rhodopseudomonas palustris BisB18
BX571963	34.96	41	7.02	34	3.2	36	7.53	-752.8	448.7	-619.7	367.7	-829.4	265.8	-726.7	385	0.71	0.09	0.57	0.16	0.73	0.09	0.71	0.09	4797	5459213	Rhodopseudomonas palustris CGA009
CP000854	34.27	39	7.09	34	3.4	36	7.33	-759.4	535.2	-646	384.9	-817.5	295	-717.5	420.1	0.68	0.06	0.6	0.13	0.69	0.06	0.68	0.06	5406	6636827	Mycobacterium marinum M
CP000248	34.85	39	6.68	34	3.3	36	6.95	-679.9	386.6	-571.9	334.3	-736.1	229.2	-656.2	343.2	0.71	0.09	0.62	0.15	0.72	0.09	0.71	0.09	3321	3561584	Novosphingobium aromaticivorans DSM 12444
CP001096	35.14	41	6.98	34	3.5	36	7.57	-744.6	447.2	-608	363.1	-821.5	272.7	-717.1	387.8	0.71	0.09	0.58	0.15	0.73	0.1	0.72	0.1	5195	5744041	Rhodopseudomonas palustris TIE-1
AL123456	34.39	39	7.13	34	3.5	36	7	-766	521.4	-661.8	395.9	-825.4	302.2	-713.9	404.4	0.66	0.06	0.61	0.12	0.67	0.06	0.67	0.06	3979	4411532	Mycobacterium tuberculosis H37Rv
CP000717	34.38	39	7.16	34	3.5	36	7.04	-766.3	522.3	-654.4	397.8	-820.5	301.1	-714.1	405	0.66	0.06	0.61	0.12	0.67	0.06	0.67	0.06	3938	4424435	Mycobacterium tuberculosis F11
CR555306	34.88	41	7.92	34	4.4	38	8.18	-712.8	434.1	-565.6	360	-771.3	272.5	-644.3	378.2	0.7	0.12	0.59	0.15	0.71	0.12	0.71	0.12	4072	4296230	Aromatoleum aromaticum EbN1
BX248333	34.37	39	7.12	34	3.5	36	7.02	-767.1	525.4																	

CP000967	36.37	39	7.72	35	3.8	38	7.52	-705.8	461.3	-596.1	404.8	-767.2	291.8	-655.1	415.1	0.67	0.09	0.61	0.15	0.69	0.09	0.68	0.09	4620	5240075	Xanthomonas oryzae pv. oryzae PXO99A
CP000076	36.70	43	7.63	35	4	40	7.72	-663.5	421.3	-493.4	329.8	-723.1	262.7	-624	366.5	0.67	0.1	0.51	0.16	0.69	0.1	0.68	0.1	6104	7074893	Pseudomonas fluorescens Pf-5
CP001715	35.89	43	7.67	35	3.8	38	7.75	-679.7	424.1	-541.6	368.3	-728	242.1	-660.9	393.1	0.67	0.07	0.6	0.13	0.68	0.07	0.68	0.07	4276	5058518	Candidatus Accumulobacter phosphatis clade IIA str. UW-1
CP001114	36.61	41	7.63	35	3.9	38	7.46	-633.7	369.6	-527.2	321.7	-686.7	227.6	-614.4	321.1	0.66	0.08	0.59	0.13	0.67	0.08	0.66	0.08	2585	2819842	Deinococcus deserti VCD115
AE017282	36.42	43	8.04	35	3.8	38	7.88	-638	391	-620.9	339.1	-685.5	233.3	-577.3	343.9	0.7	0.08	0.61	0.15	0.71	0.09	0.7	0.08	2931	3304561	Methylococcus capsulatus str. Bath
AE013598	36.31	39	7.78	36	3.6	38	7.53	-715.3	462.4	-610.5	392.1	-777.5	284	-665.1	419.2	0.67	0.09	0.55	0.15	0.69	0.09	0.68	0.09	4432	4941439	Xanthomonas oryzae pv. oryzae KACC10331
CP000529	37.47	46	8.82	35	5.5	40	9.13	-679.9	442.6	-507.3	349.3	-756.7	272.8	-598.1	370	0.69	0.11	0.54	0.15	0.71	0.11	0.7	0.11	4077	4410291	Polaromonas naphthalenivorans CJ2
CP001280	36.92	41	8.11	36	4.1	38	8.64	-655	384.8	-546.5	326	-717.4	219.9	-646	349.6	0.71	0.08	0.62	0.14	0.72	0.08	0.72	0.08	3790	4305430	Methylocella stivalensis BL2
BA000035	36.86	43	7.68	36	4.3	40	7.56	-674.4	407.3	-550.7	353.3	-732.6	243.4	-632.5	371	0.7	0.11	0.53	0.15	0.71	0.11	0.7	0.11	2935	3147090	Corynebacterium efficiens YS-314
CP001389	36.97	43	7.07	36	3.3	40	7.4	-629.5	362.1	-492.3	276.2	-683.7	198.8	-588.3	307.9	0.7	0.09	0.58	0.15	0.72	0.09	0.71	0.09	3615	3925702	Rhizobium sp. NGR234
CP001154	37.65	43	8.5	36	6.2	38	9.08	-672.8	451.8	-522.2	345.6	-734.1	314.5	-622.1	394.4	0.66	0.11	0.56	0.15	0.67	0.11	0.67	0.11	3074	3169329	Laribacter hongkongensis HLHK9
CP000157	36.93	41	7.28	36	3.6	38	7.38	-632.3	362.6	-546.2	320.8	-690.6	208.5	-590.7	314.4	0.72	0.08	0.65	0.13	0.73	0.09	0.72	0.08	2956	3052398	Erythrobacter litoralis HTCC2594
CP000527	36.99	43	7.48	36	4.2	40	7.57	-642.5	402.1	-530.5	353.2	-681.7	250.8	-606.1	378	0.7	0.09	0.63	0.14	0.71	0.09	0.7	0.09	2932	3462887	Desulfovibrio vulgaris DP4
ALS91688	37.27	43	6.86	36	3	40	7.26	-612.7	342.2	-492	277.4	-660.6	181.9	-585.4	297.1	0.71	0.07	0.61	0.13	0.72	0.08	0.71	0.07	3344	3654135	Sinorhizobium meliloti 1021
CP000462	38.45	46	8.59	36	5.3	40	8.9	-639.1	401.6	-479.5	301.8	-712	247.1	-616.2	356.5	0.69	0.1	0.5	0.15	0.71	0.1	0.69	0.1	4072	4744448	Aeromonas hydrophila subsp. hydrophila ATCC 7966
AE017285	36.86	43	7.8	36	5.2	40	7.95	-642.9	396.8	-528.4	346.5	-685.1	244.9	-593.1	362.5	0.69	0.1	0.63	0.14	0.7	0.1	0.69	0.1	3199	3570858	Desulfovibrio vulgaris str. Hildenborough
CP001275	36.35	39	6.16	36	3.4	38	6.32	-631.8	370.3	-541.9	334	-666.5	226.9	-593.4	329.2	0.72	0.05	0.7	0.11	0.72	0.06	0.72	0.06	1836	2003006	Thermomicrobium roseum DSM 5159
CP000316	37.53	46	8.07	36	4.2	40	8.5	-659.7	409.8	-519.1	337.7	-721.1	247.6	-597.5	360.4	0.68	0.09	0.56	0.14	0.69	0.09	0.68	0.09	4810	5200264	Polaromonas sp. JS666
CP001196	37.60	43	7.43	36	3.7	40	7.72	-637.1	382.6	-526.7	328.8	-696.7	234.3	-601.4	332.1	0.71	0.09	0.6	0.14	0.72	0.09	0.71	0.09	3542	3745629	Oligotropha carboxidovorans OM5
CP000449	37.27	43	7.07	36	3.4	38	7.4	-628.1	365.5	-517.6	317.1	-676.3	212.8	-603.7	334.7	0.68	0.08	0.6	0.13	0.69	0.08	0.68	0.08	3061	3368780	Maricaulis maris MCS10
CP001727	37.67	43	7.59	36	5.2	40	8.36	-610.6	369.1	-488.7	317.8	-654.4	230.3	-569.3	335.6	0.7	0.09	0.63	0.13	0.71	0.09	0.7	0.09	2835	3018755	Alicyclobacillus acidocaldarius subsp. acidocaldarius DSM 446
CP000926	38.06	43	7.1	36	4.1	40	7.32	-651.5	415.3	-505.1	336.3	-709.4	263.7	-597.8	350.6	0.66	0.09	0.57	0.14	0.67	0.1	0.66	0.1	5393	6078430	Pseudomonas putida GB-1
CP000774	37.67	43	7.37	37	3.8	40	7.53	-627.3	369.2	-538.6	328.7	-679	215.3	-599.2	336.8	0.73	0.09	0.64	0.14	0.74	0.09	0.73	0.09	3630	3914745	Parvibaculum lavamentivorans DS-1
BA000045	38.00	43	8.06	36	4.9	40	8.58	-629.4	397.2	-487	321.4	-693.2	239	-587.1	346.9	0.69	0.08	0.6	0.14	0.7	0.09	0.69	0.08	4408	4659019	Gloeobacter violaceus PCC 7421
CP000115	37.95	43	7.31	37	3.7	40	7.79	-611.5	365.7	-521	313.5	-665.1	213.7	-575.2	320.9	0.69	0.07	0.6	0.13	0.7	0.08	0.69	0.08	3118	3402093	Nitrobacter winogradskyi Nb-255
AE015451	38.48	43	7.32	37	4.1	40	7.35	-648.3	407.7	-513.7	330.7	-713.8	256.2	-595.3	354.6	0.66	0.09	0.56	0.14	0.67	0.1	0.66	0.09	5280	6181863	Pseudomonas putida KT2440
AP008957	37.69	41	6.49	37	2.7	40	6.39	-634.7	369.7	-540.7	319.9	-683.2	218.8	-590.4	333	0.7	0.06	0.63	0.11	0.71	0.06	0.7	0.06	6028	6516310	Rhodococcus erythropolis PR4
CP000712	38.14	43	7.25	37	3.8	40	7.25	-642.9	401.5	-496.7	327.8	-691.3	247.1	-591.3	354.4	0.66	0.09	0.56	0.14	0.67	0.09	0.66	0.09	5231	5959964	Pseudomonas putida F1
CP000319	38.29	43	7.47	37	4.2	40	7.9	-619	380.8	-524.6	315.1	-678.1	232.6	-585.4	329.8	0.69	0.09	0.6	0.13	0.71	0.09	0.7	0.09	3792	4406967	Nitrobacter hamburgensis X14
CP000264	37.67	43	7.44	37	3.5	40	7.35	-613.6	357.7	-516.1	312.3	-657.4	210.3	-583.5	323.2	0.67	0.07	0.65	0.13	0.73	0.07	0.72	0.07	4209	4317977	Jannaschia sp. CCS1
CP000474	37.66	41	7.11	37	2.7	40	6.83	-610.1	364.1	-527.5	336.6	-658.9	201.5	-575.4	341.8	0.68	0.06	0.62	0.12	0.68	0.07	0.68	0.07	4003	4597686	Arthrobacter aureus TC1
CR931997	38.60	43	7.33	37	4	40	7.68	-584.6	380.2	-485.5	316.5	-633	228.4	-549.3	369.8	0.65	0.09	0.56	0.13	0.66	0.1	0.65	0.09	2084	2462499	Corynebacterium jeikeium K411
CP001191	38.47	46	6.89	37	3.4	40	7.34	-582.4	349.7	-461	270.5	-633.4	197.7	-541.6	296.8	0.7	0.08	0.58	0.14	0.71	0.09	0.7	0.08	4303	4537948	Rhizobium leguminosarum bv. trifolii WSM2304
CP000158	38.07	43	7.47	37	3.8	40	7.75	-582.9	357.7	-505.5	306.3	-627.6	215	-576.8	326.5	0.72	0.08	0.64	0.13	0.73	0.08	0.73	0.08	3462	3705021	Hyphomonas neptunia ATCC 15444
CP000949	38.56	43	7.18	37	4.1	40	7.4	-629.5	393.7	-505.5	325.7	-685.5	251.3	-580.5	339.8	0.66	0.09	0.58	0.14	0.67	0.09	0.66	0.09	5167	5774330	Pseudomonas putida W619
CP001074	38.33	43	7.05	37	3.6	40	7.58	-587.3	351	-469.8	277.2	-635.4	199.1	-544.8	300.9	0.7	0.09	0.58	0.14	0.71	0.1	0.7	0.09	4337	4513324	Rhizobium etli CIAT 652
CP000473	38.10	43	7.76	37	3.5	42	7.99	-557	344	-468.8	274.3	-600.4	206.5	-498.2	306.5	0.7	0.08	0.58	0.13	0.71	0.08	0.7	0.08	7821	9965640	Candidatus Solibacter usitatus Ellin6076
AM167904	38.42	46	7.75	37	3.7	40	8.08	-612.7	387.4	-489.9	316.6	-662.8	244.8	-598.7	359.5	0.69	0.07	0.62	0.13	0.7	0.08	0.69	0.07	3344	3732255	Bordetella avium 197N
CP000860	39.15	46	8.46	37	5.3	42	8.94	-580.6	368.7	-454.4	309.3	-630.2	241	-496.1	320.1	0.68	0.08	0.6	0.12	0.69	0.08	0.68	0.08	2148	2349476	Candidatus Desulfuridus auxaxiator MP104C
CP000133	38.73	46	7.19	37	3.3	40	7.5	-572.9	342.2	-475	275.9	-623.7	185.8	-540.4	292.4	0.7	0.08	0.59	0.14	0.71	0.08	0.7	0.08	4030	4381608	Rhizobium etli CFN 42
CP001622	38.91	46	6.85	37	3.3	40	7.28	-569.3	337.4	-455	263	-622.1	191.4	-530.1	282.1	0.7	0.08	0.59	0.14	0.71	0.08	0.7	0.08	4511	4767043	Rhizobium leguminosarum bv. trifolii WSM1325
CP000009	38.93	43	7.41	38	4	40	7.78	-587.8	360.9	-524.9	312.7	-633.2	228.8	-600.3	338.6	0.71	0.08	0.63	0.13	0.72	0.08	0.71	0.08	2428	2702173	Gluconobacter oxydans 621H
AM236080	38.91	46	7	38	3.4	40	7.31	-571.4	336.2	-465.9	268.6	-622.8	191.2	-529.7	282.9	0.7	0.08	0.58	0.14	0.71	0.09	0.7	0.08	4694	5057142	Rhizobium leguminosarum bv. viciae 3841
CP000738	38.50	46	6.84	38	3	40	7.29	-578	321.4	-472.8	263.8	-622.4	174.6	-555.3	287	0.7	0.06	0.63	0.13	0.71	0.07	0.71	0.06	3510	3781904	Sinorhizobium medicae WSM419
CP001661	39.53	50	7.65	37	5.1	42	8.35	-569.7	381.4	-407	275.8	-625.2	215.2	-498.9	321.9	0.71	0.1	0.55	0.14	0.73	0.11	0.71	0.11	4047	4745806	Geobacter sp. M21
AM181176	39.50	46	7.43	38	4.2	42	7.44	-613.7	390.2	-463.1	301.7	-667	238.2	-547.8	315	0.67	0.09	0.56	0.14	0.68	0.1	0.68	0.09	5900	6722539	Pseudomonas fluorescens SBW25
CP000094	39.48	46	7.28	38	4.2	42	7.49	-600.2	394.6	-463.3	313.4	-657.6	245	-559.1	319.6	0.68	0.1	0.57	0.14	0.69	0.1	0.68	0.1	5711	6438405	Pseudomonas fluorescens Pf0-1
CP001124	39.73	50	7.48	38	4.8	44	8.34	-554.2	368.6																	

CP000075	40.77	48	7.27	39	4.2	42	7.48	-565.4	345.4	-444	276.4	-611.9	203.1	-525.3	295.3	0.68	0.08	0.58	0.13	0.69	0.08	0.68	0.08	5083	6093698	<i>Pseudomonas syringae</i> pv. <i>syringae</i> B728a
AE017283	39.99	43	6.62	39	3.4	40	6.76	-566.3	345.4	-533.6	321	-614.1	218	-572.6	318.2	0.7	0.06	0.67	0.1	0.7	0.06	0.7	0.06	2292	2560265	<i>Propionibacterium acnes</i> KPA171202
CP000644	41.49	48	8	39	5.4	44	8.49	-561.7	341.3	-442.4	275.6	-615.4	210.6	-526	303.8	0.68	0.09	0.57	0.13	0.69	0.09	0.68	0.09	4063	4702402	<i>Aeromonas salmonicida</i> subsp. <i>salmonicida</i> A449
CP001629	41.35	50	8.93	39	6.2	44	9.45	-537.6	332.1	-422.6	274.2	-578.6	197.9	-483.3	291.9	0.7	0.09	0.6	0.13	0.71	0.1	0.7	0.09	3404	3942657	<i>Desulfotomobacterium baculatum</i> DSM 4028
CP000478	40.05	48	8	39	3.9	42	8.31	-548.4	320.6	-454	273.4	-585.5	171.5	-523.1	279.6	0.73	0.06	0.65	0.12	0.74	0.07	0.73	0.06	4057	4990251	<i>Syntrophobacter fumaroxidans</i> MPOB
CP000394	40.93	46	8.19	39	4.7	42	8.11	-547	344.5	-492.4	288	-596.7	225.2	-533.3	296.3	0.69	0.06	0.64	0.12	0.7	0.06	0.7	0.06	2398	2708355	<i>Granulibacter thebesiensis</i> CGDNIH1
AL450380	42.20	43	7.28	40	3.3	42	7.28	-564.2	372.7	-558	330.4	-665.6	245.7	-555.7	329.3	0.7	0.04	0.67	0.09	0.7	0.04	0.7	0.04	1601	3268203	<i>Mycobacterium leprae</i> TN
FM211192	42.20	43	7.29	40	3.3	42	7.29	-564.2	373.5	-556.9	330.5	-665.7	245.7	-556	329.3	0.7	0.04	0.67	0.09	0.7	0.04	0.7	0.04	1600	3268071	<i>Mycobacterium leprae</i> Br4923
CP000089	40.75	46	7.67	40	4.5	44	7.94	-563.2	368.4	-464.4	305.8	-609.5	231.7	-513.1	316.3	0.67	0.09	0.61	0.13	0.68	0.1	0.67	0.09	4166	4501104	<i>Dechloromonas aromatica</i> RCB
CP001132	41.15	46	8.54	40	5.3	42	8.54	-541.2	336.4	-462.7	288.2	-585.7	209.9	-501.5	294.4	0.71	0.07	0.67	0.12	0.72	0.07	0.72	0.07	2795	2885038	<i>Acidithiobacillus ferrooxidans</i> ATCC 53993
CP000240	41.55	46	7.11	40	4	42	7.18	-554.9	348.4	-464.6	299.2	-602.5	213.8	-547.8	322	0.68	0.06	0.62	0.11	0.69	0.06	0.68	0.06	2726	3046682	<i>Synechococcus</i> sp. JA-2-3B'a(2-13)
CP000362	41.03	48	7.42	40	3.3	42	7.58	-547.6	324.4	-460.6	281.2	-593.2	195.1	-529.9	293.5	0.73	0.05	0.67	0.12	0.74	0.05	0.73	0.05	3803	4133097	<i>Roseobacter denitrificans</i> OCh 114
AE016853	41.60	48	7.29	40	4.2	44	7.39	-550.6	345	-447.7	276	-600.6	206.8	-510	290.6	0.68	0.08	0.6	0.12	0.69	0.08	0.68	0.08	5367	6397126	<i>Pseudomonas syringae</i> pv. <i>tomato</i> str. DC3000
CP001219	41.23	46	8.66	40	5.4	44	8.63	-545.7	335.5	-471	294.4	-586.9	210.6	-503.8	292.2	0.71	0.07	0.67	0.12	0.72	0.07	0.71	0.07	3001	2982397	<i>Acidithiobacillus ferrooxidans</i> ATCC 23270
CP001600	42.56	50	9.6	40	6.9	44	10.3	-525	367	-425.9	306.2	-576.5	261.5	-523.6	348.2	0.69	0.09	0.59	0.13	0.7	0.09	0.69	0.09	3461	3812315	<i>Edwardsiella ictaluri</i> 93-146
AP006725	42.32	50	8.84	40	6	47	9.49	-533.2	351.8	-407.1	243.7	-585.5	215.4	-501.5	294.2	0.7	0.09	0.56	0.14	0.72	0.09	0.71	0.09	4848	5248520	<i>Klebsiella pneumoniae</i> NTUH-K2044
CP000058	41.98	48	7.1	41	3.8	44	7.19	-545.2	332.6	-449.3	270.2	-588.7	196.5	-511.4	285.3	0.68	0.07	0.61	0.12	0.69	0.07	0.68	0.07	4066	5928787	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> 1448A
CP001358	41.93	50	8.82	41	4.9	44	9.13	-550.1	340	-451.5	282.2	-591.1	203	-500.3	300.7	0.67	0.06	0.63	0.11	0.67	0.07	0.67	0.06	2334	2873437	<i>Desulfovibrio desulfuricans</i> subsp. <i>desulfuricans</i> str. ATCC 27774
CP000360	41.62	48	7.1	41	2.8	44	7.18	-506.6	320.1	-438.1	263.3	-543.4	201.1	-470.9	281.5	0.71	0.06	0.63	0.12	0.72	0.06	0.71	0.06	4774	5650368	<i>Candidatus Koribacter versatilis</i> Ellin345
CP000964	42.71	50	8.64	41	6.1	47	9.52	-523.8	351.3	-412.3	249.9	-570.5	226.8	-490.3	294.1	0.71	0.09	0.58	0.13	0.72	0.09	0.71	0.09	5199	5641239	<i>Klebsiella pneumoniae</i> 342
CP001734	42.46	48	8.47	41	5.3	44	8.96	-536.3	323.9	-430.8	272.8	-571.9	188.2	-503.9	291.6	0.73	0.07	0.67	0.12	0.73	0.07	0.73	0.07	2444	2864304	<i>Desulfohalobium retbaense</i> DSM 5692
CP001016	42.94	46	7.76	41	4.3	44	8.28	-511.7	294.3	-438.2	249.6	-555.9	171.3	-496.7	263.6	0.72	0.06	0.68	0.11	0.73	0.07	0.72	0.06	3558	4170153	<i>Beijerinckia indica</i> subsp. <i>indica</i> ATCC 9039
CP000930	43.02	48	8.36	41	6	47	8.98	-503.1	330	-423.8	272.4	-549.4	206.2	-453.1	266.6	0.72	0.06	0.68	0.11	0.73	0.08	0.72	0.08	2784	3075407	<i>Heliobacterium modesticaldum</i> Ice1
CP000096	42.67	50	7.47	41	4	47	8.22	-480.6	315.2	-387.5	283.2	-525.7	197.5	-437.9	302.5	0.72	0.07	0.65	0.12	0.73	0.07	0.72	0.07	2082	2364842	<i>Pelodictyon luteolum</i> DSM 273
CP001706	41.58	43	6.95	41	3.4	42	6.53	-562.5	432.9	-507.1	418.3	-601.1	310.6	-551.8	415.4	0.76	0.05	0.75	0.09	0.77	0.05	0.77	0.05	2481	2749646	<i>Jonesia denitrificans</i> DSM 20603
CP001226	41.61	43	8.41	41	3.1	44	8.05	-903.4	544.6	-1036	555.1	-1019	377.6	-1008	519.2	0.67	0.03	0.66	0.1	0.67	0.04	0.67	0.04	162	143795	<i>Candidatus Hodgkinia cicadicola</i> Dsem
CP000859	43.83	52	8.79	41	6.1	47	9.51	-532.7	329.2	-414.7	258.2	-589.9	186.7	-453.6	267.2	0.69	0.08	0.6	0.13	0.7	0.09	0.7	0.09	3260	3944167	<i>Desulfococcus oleovorans</i> Hxd3
CP000112	42.16	48	8.71	41	5	44	9.16	-548.6	362.2	-465.8	322.5	-576.5	241.6	-525.2	340.3	0.69	0.07	0.65	0.12	0.7	0.07	0.69	0.07	3510	3730232	<i>Desulfovibrio desulfuricans</i> subsp. <i>desulfuricans</i> str. G20
CP000783	43.23	50	8.79	41	6.1	47	9.41	-519.1	343	-423.1	253.6	-560	211.7	-499.7	293.8	0.69	0.09	0.58	0.13	0.7	0.09	0.7	0.09	4143	4368373	<i>Cronobacter sakazakii</i> ATCC BAA-894
CP001620	42.54	46	7.14	42	3.7	44	7.23	-521.1	348.4	-463.4	314.7	-552.3	219.9	-492.7	311.7	0.66	0.05	0.71	0.09	0.77	0.05	0.76	0.05	1993	2446804	<i>Corynebacterium kroppenstedtii</i> DSM 44385
CP000514	42.73	48	7.1	42	3.7	44	7.4	-492.4	314.9	-402.2	285.5	-528	192.9	-471.2	286.7	0.7	0.07	0.63	0.12	0.7	0.07	0.7	0.07	3853	4326849	<i>Marinobacter aquaeolei</i> VT8
AE006470	43.47	50	8.08	42	5.6	49	8.61	-488.8	323.3	-396.7	262.8	-526.3	203.8	-441.4	285.7	0.71	0.09	0.61	0.12	0.72	0.09	0.71	0.09	2051	2154946	<i>Chlorobium tepidum</i> TLS
CP001099	44.20	52	7.68	42	5.7	49	8.38	-494.3	323.6	-388.4	266.1	-529	203.6	-428.5	269.8	0.72	0.09	0.63	0.12	0.73	0.09	0.72	0.09	2037	2289249	<i>Chlorobaculum parvum</i> NCIB 8327
CP000232	44.21	50	9.31	42	6.5	49	9.82	-514.1	329.8	-412.2	274.3	-574.1	198.8	-466.9	272.8	0.71	0.07	0.66	0.12	0.71	0.07	0.71	0.07	2459	2628784	<i>Moorella thermoacetica</i> ATCC 39073
CP001074	44.24	50	8.54	42	4.8	47	9.22	-503.2	333.6	-411.1	282.4	-535.5	214.4	-497.4	329.2	0.7	0.07	0.62	0.12	0.71	0.07	0.7	0.07	2115	2664102	<i>Akkermansia muciniphila</i> ATCC BAA-835
CP001364	43.32	48	7.35	42	4.3	44	7.54	-528.9	362	-444.3	284.3	-573.7	233.5	-481.6	310	0.74	0.05	0.7	0.1	0.74	0.05	0.74	0.05	4099	5268950	<i>Chloroflexus</i> sp. Y-400-II
CP000909	43.30	50	7.02	43	3.8	44	7.36	-529.4	363.9	-433.7	264.9	-567.9	207.1	-476.9	303.9	0.74	0.04	0.7	0.1	0.74	0.04	0.74	0.04	3849	5258541	<i>Chloroflexus aurantiacus</i> J-10-II
AP008231	44.52	46	6.98	43	4.2	44	7.42	-508.1	293.8	-433.6	254	-556.3	169.6	-498.9	268	0.77	0.04	0.74	0.1	0.77	0.05	0.77	0.04	2502	2696255	<i>Synechococcus elongatus</i> PCC 6301
CP000100	44.53	46	7.04	43	4.3	44	7.5	-507.8	288.3	-442.1	251.7	-555.2	164.9	-488.8	268.9	0.77	0.05	0.74	0.1	0.77	0.05	0.77	0.05	2581	2695903	<i>Synechococcus elongatus</i> PCC 7942
CP000826	44.93	52	8.15	43	4.8	47	8.45	-500.6	324.7	-398.8	245.1	-548.6	207.8	-472.9	270.7	0.69	0.07	0.6	0.12	0.7	0.07	0.69	0.07	4869	5448853	<i>Serratia proteamaculans</i> 568
CP000284	44.28	50	7.92	43	4.5	47	8.26	-491.6	303.9	-412.8	253.4	-529.1	186.4	-462.2	266.3	0.7	0.06	0.63	0.11	0.71	0.07	0.7	0.06	2745	2971517	<i>Methylobacillus flagellatus</i> KT
CP001337	43.57	48	7.16	43	4.1	47	7.43	-519.6	393.4	-446.4	287.9	-560.7	238.5	-484	316.3	0.77	0.04	0.75	0.1	0.77	0.04	0.77	0.04	3703	4684931	<i>Chloroflexus aggregans</i> DSM 9485
CP000910	43.73	46	7.3	43	2.9	44	7.02	-497.5	301.8	-456.9	270.2	-535.9	187.1	-486.4	273.3	0.77	0.03	0.76	0.08	0.77	0.04	0.77	0.03	3393	3155250	<i>Renibacterium salmoninarum</i> ATCC 33209
AP008232	45.30	52	8.84	43	5.5	47	9.65	-488	317.6	-407.9	244.3	-539.7	187.9	-484.6	294.5	0.7	0.06	0.63	0.11	0.71	0.07	0.7	0.06	2428	4171146	<i>Sodalis glossinidius</i> str. 'morsitans'
CP001654	44.98	52	8.63	43	6	47	9.25	-501.3	361.2	-401.7	278	-543.6	252.4	-490.5	318.5	0.7	0.07	0.63	0.11	0.71	0.08	0.71	0.07	3922	4679450	<i>Dickeya dadantii</i> Ech703
CP001674	45.14	52	8.57	43	6.3	49	9.3	-494.4	310.9	-395	244	-533.2	191.7	-460.9	273.7	0.69	0.07	0.62	0.12	0.7	0.07	0.7	0.07	2781	2995511	<i>Methylovorus</i> sp. SIP3-4

CP000435	47.55	48	8.2	46	5.6	49	8.4	-477.8	299.7	-457.2	278.2	-505.9	210.8	-457.7	276.6	0.81	0.03	0.8	0.07	0.81	0.04	0.81	0.03	2686	2606748	Synechococcus sp. CC9311
AM889136	48.05	52	9.39	45	6.5	51	9.48	-485.7	344.6	-429.3	301.3	-520.3	247.7	-465.2	289.3	0.72	0.08	0.68	0.12	0.72	0.08	0.72	0.08	1841	2145295	Neisseria meningitidis alpha14
AL157959	48.19	52	9.54	45	7.1	51	9.78	-481.6	350.9	-411.5	298.1	-507.3	252.3	-459	287.4	0.72	0.08	0.69	0.12	0.72	0.09	0.72	0.08	1894	2184406	Neisseria meningitidis ZF491
AP008937	48.53	55	8.27	45	5.7	53	8.37	-469	302.1	-377	229	-519	193.2	-411.6	244.6	0.76	0.08	0.69	0.11	0.77	0.08	0.76	0.08	1828	2098685	Lactobacillus fermentum IFO 3956
AM421808	48.38	55	9.53	46	7.1	51	9.89	-482.1	347	-420.6	294.9	-515.3	248.8	-473.4	288.1	0.72	0.08	0.69	0.12	0.73	0.08	0.72	0.08	1900	2194961	Neisseria meningitidis FAM18
AM933173	47.80	55	8.37	46	5.4	51	8.89	-439.2	285.2	-375.3	215.9	-470.9	184.4	-430.6	238.8	0.69	0.06	0.64	0.11	0.7	0.06	0.69	0.06	3937	4658697	Salmonella enterica subsp. enterica serovar Gallinarum str. 287/91
AE006468	47.78	55	8.3	46	5.5	51	9.01	-438.3	278.4	-373.9	213.2	-469.3	172.9	-418.5	233	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4401	4857432	Salmonella enterica subsp. enterica serovar Typhimurium str. LT2
CP001113	47.78	55	8.54	46	5.7	51	9.06	-438	276.8	-372.1	212.5	-464.9	173.7	-417.9	231.2	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4342	4827641	Salmonella enterica subsp. enterica serovar Newport str. SL254
AM933172	47.83	55	8.37	46	5.5	51	8.96	-435.5	276.8	-371.5	211.3	-463.7	172.4	-419.8	232.8	0.69	0.06	0.64	0.11	0.7	0.06	0.69	0.06	4175	4685848	Salmonella enterica subsp. enterica serovar Enteritidis str.
CP000026	47.84	55	8.5	46	5.6	51	9	-434.1	282.4	-368.3	216.8	-467.8	184.2	-413.2	230.2	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4029	4585229	Salmonella enterica subsp. enterica serovar Paratyphi A str. ATCC 4585229
FM200053	47.82	55	8.55	46	5.6	51	8.95	-434.1	282.2	-371.4	215.7	-466.6	181.9	-412.9	228.8	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4022	0	Salmonella enterica subsp. enterica serovar Paratyphi A str.
AE002098	48.47	55	9.73	46	7.6	51	10.4	-485.9	350.4	-415.1	292.3	-511.4	254.5	-462.2	301.9	0.72	0.09	0.7	0.12	0.72	0.09	0.72	0.09	2010	2272360	Neisseria meningitidis MC58
CP001138	47.92	55	8.7	46	6	51	9.16	-433.8	280.1	-371.4	211.3	-464.1	174.2	-420.5	231.4	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4292	4798660	Salmonella enterica subsp. enterica serovar Agona str. SL483
BA000043	47.91	52	8.83	46	6.2	51	9.66	-449.1	299.4	-365	250	-481.8	194.5	-431.1	271.8	0.74	0.07	0.71	0.12	0.75	0.08	0.74	0.07	3437	3544776	Geobacillus kaustophilus HTA426
CP000381	48.30	52	9.84	46	7.1	51	9.87	-480.4	347.2	-419.3	299.9	-508.2	250.9	-461.1	292.7	0.72	0.08	0.68	0.12	0.72	0.09	0.72	0.08	1966	2153416	Neisseria meningitidis 053442
CP001127	47.83	55	8.37	46	5.7	51	9.01	-435.5	276.7	-371.5	211.1	-466.5	174.5	-417.7	232.5	0.69	0.06	0.65	0.11	0.7	0.06	0.7	0.06	4223	4709075	Salmonella enterica subsp. enterica serovar Schwarzengrund str.
AL513382	47.91	55	8.46	46	5.7	51	8.97	-438.6	284.5	-374.5	220.6	-467.5	184.1	-422.7	240.9	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4324	4809037	Salmonella enterica subsp. enterica serovar Typhi str. CT18
CP001120	47.91	55	8.47	46	5.7	51	9.1	-436.6	276.2	-371	214.4	-465.1	173	-421.4	230.4	0.69	0.06	0.65	0.11	0.7	0.06	0.7	0.06	4380	4888768	Salmonella enterica subsp. enterica serovar Heidelberg str. SL476
AE014613	47.95	55	8.45	46	5.6	51	8.96	-440.1	291.7	-374.3	222.2	-471.9	192.7	-427.1	237.6	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4251	4791961	Salmonella enterica subsp. enterica serovar Typhi str. Ty2
CP001144	47.82	55	8.47	46	5.7	51	9.02	-435	276.6	-373.5	214.9	-463.4	173.2	-419.1	231.6	0.69	0.06	0.64	0.11	0.7	0.06	0.7	0.06	4251	4842908	Salmonella enterica subsp. enterica serovar Dublin str. CT_02021853
CP000607	47.01	52	7.28	46	3.5	49	7.79	-428.2	301.9	-360.6	267.8	-453.2	206.4	-392.2	288	0.8	0.04	0.78	0.1	0.81	0.04	0.81	0.04	1750	1966858	Chlorobium phaeovibrioides DSM 265
CP001657	48.07	55	8.13	46	5.2	51	8.46	-435.7	282.8	-366.8	226.1	-466.1	176	-415.3	237.6	0.71	0.06	0.66	0.11	0.72	0.06	0.72	0.06	4195	4862913	Pectobacterium carotovorum subsp. carotovorum PC1
AE017220	47.84	55	8.55	46	5.8	51	9.03	-436.9	276.3	-378.2	215.2	-461.2	173.8	-419.1	231.5	0.69	0.06	0.64	0.11	0.7	0.06	0.69	0.06	4351	4755700	Salmonella enterica subsp. enterica serovar Choleraesuis str.
CP000857	47.84	55	8.75	46	5.8	51	9.05	-450.3	283.2	-389	222.6	-476.3	185.9	-424.5	235.2	0.69	0.06	0.65	0.11	0.7	0.06	0.7	0.06	4395	4833080	Salmonella enterica subsp. enterica serovar Paratyphi C strain
CP000886	47.89	55	8.81	46	6.1	51	9.22	-435	280.3	-379.9	219.9	-463.1	184.8	-412.4	230.5	0.69	0.06	0.65	0.11	0.7	0.07	0.7	0.06	4792	4858887	Salmonella enterica subsp. enterica serovar Paratyphi B str. SPB7
AE000520	47.22	50	8.35	47	4.6	49	8.39	-468	371.2	-446.9	404.3	-517.7	276.6	-470.1	343	0.79	0.03	0.79	0.08	0.79	0.03	0.79	0.03	1000	1138011	Treponema pallidum subsp. pallidum str. Nichols
CP000805	47.22	50	8.36	47	4.6	49	8.42	-468.2	371.4	-445.2	405.5	-520	276.9	-470.5	345	0.79	0.03	0.78	0.08	0.79	0.03	0.79	0.03	996	1139457	Treponema pallidum subsp. pallidum SS14
CP000941	48.08	50	8.41	47	5.1	49	8.23	-459.9	411.8	-386.9	325.9	-492.5	302.8	-433.7	371.1	0.8	0.04	0.78	0.08	0.8	0.04	0.8	0.04	2042	2475130	Xylella fastidiosa M12
AE003849	47.33	50	9.02	47	6.2	49	9.09	-560.5	408.7	-491.9	349.4	-604	324.6	-537.1	381.6	0.78	0.04	0.77	0.09	0.79	0.05	0.79	0.04	2645	2679306	Xylella fastidiosa 9a5c
CP000880	48.62	55	8.96	47	6.2	51	9.26	-428.2	277.4	-379.8	217.7	-456	174.6	-411.4	230.8	0.7	0.06	0.66	0.11	0.7	0.06	0.7	0.06	4358	4600800	Salmonella enterica subsp. arizonae serovar 62:z4,z23:--
CP000934	48.01	52	8.56	47	5.2	51	8.8	-459.4	295.7	-401.9	248.8	-502.4	183	-449.5	261.5	0.72	0.05	0.68	0.1	0.72	0.05	0.72	0.05	3587	4576573	Cellvibrio japonicus Ueda107
CP001011	48.24	52	8.79	47	5.5	49	8.51	-455.3	421.4	-375.6	362.5	-485.3	304.1	-415.7	357.8	0.79	0.04	0.78	0.09	0.79	0.04	0.79	0.04	2136	2535690	Xylella fastidiosa M23
AE009442	48.22	52	8.85	47	5.2	49	8.47	-456.8	417.7	-381.2	362	-485.9	297.8	-419.3	353.9	0.79	0.04	0.78	0.09	0.8	0.04	0.8	0.04	2030	2519802	Xylella fastidiosa Tecumela1
CP001619	48.46	57	8.13	47	4.3	53	8.93	-419.4	261.4	-359.9	212.8	-447.6	141.9	-383.6	223.9	0.72	0.05	0.65	0.1	0.73	0.06	0.73	0.06	5665	6967790	Dyadobacter fermentans DSM 18053
CR954253	50.28	59	8.4	47	5.4	56	8.52	-445.5	275.1	-340.3	214	-490.6	177.1	-406.3	222.3	0.71	0.08	0.63	0.11	0.72	0.08	0.71	0.08	1507	1864998	Lactobacillus delbrueckii subsp. bulgaricus ATCC 11842
CP000412	50.31	57	8.61	47	5.7	56	8.73	-444.2	274.3	-348.1	212.9	-486	171.7	-409.2	220	0.71	0.08	0.64	0.11	0.72	0.08	0.71	0.08	1633	1856951	Lactobacillus delbrueckii subsp. bulgaricus ATCC BAA-365
CP001063	48.67	52	8.16	47	4.3	51	8.17	-435.3	270.7	-385.9	218.8	-455.8	167.3	-418.4	217.9	0.71	0.06	0.68	0.1	0.71	0.06	0.71	0.06	4092	4615997	Shigella boydii CDC 3083-94
CP000038	48.99	52	8.15	47	4.3	51	8.19	-430.2	266.3	-374.8	216.6	-460	157.5	-420.1	221.7	0.71	0.06	0.68	0.11	0.72	0.06	0.71	0.06	4192	4825265	Shigella sonnei Ss046
CP000036	48.79	52	8.3	47	4.2	53	8.13	-432.8	272	-394	225.2	-459.7	165.7	-413.3	226.6	0.71	0.06	0.67	0.11	0.72	0.06	0.71	0.06	4109	4519823	Shigella boydii Sb227
AE014073	49.09	52	8.2	47	4.1	51	7.88	-425.8	265.2	-376.3	215.8	-452.7	161.4	-418.4	220	0.71	0.06	0.67	0.11	0.72	0.06	0.71	0.06	4030	4599354	Shigella flexneri 2a str. 2457T
AE005674	49.11	55	8.04	47	4.3	53	8.04	-424.5	264.2	-368.4	214.6	-448.6	158.7	-414.2	218.7	0.71	0.06	0.68	0.11	0.72	0.06	0.71	0.06	4156	4607203	Shigella flexneri 2a str. 301
BX548175	49.26	48	8.14	47	5.3	51	7.97	-385.9	279	-380.8	254.5	-407	201.8	-363.3	254.9	0.81	0.03	0.81	0.07	0.81	0.03	0.81	0.03	2627	2410873	Prochlorococcus marinus str. MIT 9313
CP000034	48.75	52	7.93	47	4.1	53	8.66	-426.3	272	-388.1	219.8	-454	176.4	-403.1	213	0.7	0.06	0.68	0.1	0.71	0.06	0.7	0.06	4242	4369232	Shigella dysenteriae Sd197
BX950851	49.03	55	8.27	47	5.5	51	8.43	-425	269.6	-361.6	218.9	-452.8	169.8	-404.4	228.3	0.73	0.05	0.69	0.1	0.73	0.05	0.73	0.05	4448	5064019	Pectobacterium atropoticum SCRI1043
CP000266	49.08	52	8.27	47	4.2	51	8.01	-426.2	264.6	-384.9	217.7	-448.6	158.4	-404.7	221.5	0.71	0.06	0.68	0.1	0.72	0.06	0.71	0.06	4093	4574284	Shigella flexneri 5 str. 8401
AP009048	49.20	55	7.93	47	4.9	51	8.19	-432.3	269.1	-371.6	216.9	-459.8	166.6	-419	225.5	0.71	0.06	0.67	0.1	0.72	0.06	0.71	0.06	4187	4646332	Escherichia coli str. K-12 substr. W3110
CP000819	49.23	55	8.01	47	5	51	8.33	-428.2	266.9	-373	215.9	-457.8	164.6	-414.8	221.8	0.71	0.06	0.67	0.11	0.7						

CP000247	49.48	55	8.28	48	5.4	53	8.53	-424.1	264.6	-365.6	211.1	-450.7	163.4	-413.3	221.6	0.72	0.06	0.68	0.1	0.72	0.06	0.72	0.06	4594	4938920	Escherichia coli 536
CP000252	48.54	57	8.61	48	6.2	53	9.38	-431.9	264.8	-357.7	228.2	-460.6	163.2	-390.5	232.6	0.74	0.05	0.7	0.1	0.74	0.06	0.74	0.05	3158	3179300	Syntrophus aciditrophicus SB
AE014075	49.52	55	8.41	48	5.4	53	8.59	-424.1	268.1	-376.2	216.7	-449.7	163.7	-413.2	223.4	0.72	0.05	0.67	0.1	0.72	0.06	0.72	0.06	5131	5231428	Escherichia coli CFT073
CP001614	49.11	55	8.14	48	4.8	51	8.52	-434	271.1	-377.6	229.7	-467	161.9	-418.1	236	0.74	0.04	0.72	0.08	0.74	0.04	0.74	0.04	4093	5193164	Teredinibacter turnerae T7901
CP000243	49.40	55	8.28	48	5.2	53	8.51	-426.7	266.5	-371.1	215.8	-451.1	164.6	-414.6	221.4	0.72	0.06	0.67	0.11	0.72	0.06	0.72	0.06	4956	5065741	Escherichia coli UT189
AL954747	49.28	55	8.33	48	4.5	53	8.33	-396.6	262.4	-350.6	216.7	-427.1	149.6	-372.6	215.1	0.76	0.04	0.73	0.09	0.76	0.04	0.76	0.04	2459	2812094	Nitrosomonas europaea ATCC 19718
CP001682	49.09	52	7.13	48	3.5	51	7.17	-426.3	280.9	-366.5	221.6	-459.4	179.8	-413	252	0.79	0.04	0.77	0.09	0.79	0.04	0.79	0.04	1341	1617804	Cryptobacterium curtum DSM 15641
CP000951	50.37	55	7.94	48	4.4	51	7.96	-431.9	274.5	-382.3	240.3	-466.2	157.2	-418	245.9	0.74	0.04	0.72	0.09	0.74	0.04	0.74	0.04	2770	3008047	Synechococcus sp. PCC 7002
CP001656	49.72	57	7.67	48	4.7	53	8.43	-380.5	247.6	-305.1	193	-401.5	139.5	-356.9	209.8	0.76	0.05	0.73	0.09	0.77	0.05	0.77	0.05	6146	7184930	Paenibacillus sp. JDR-2
CP000875	49.28	52	7.23	49	4.2	51	7.83	-498.6	321.6	-420.3	256.9	-534.8	173.7	-474.3	262.2	0.69	0.04	0.65	0.1	0.69	0.04	0.69	0.04	4970	6346587	Herpetosiphon aurantiacus ATCC 23779
BX842601	49.35	57	7.31	48	3.1	53	7.87	-446.3	263.5	-391.2	227.6	-476	155.7	-433.2	244.1	0.73	0.05	0.64	0.11	0.74	0.05	0.74	0.05	3516	3782950	Bdellovibrio bacteriovorus HD100
CP000127	49.68	55	8.68	49	4.8	53	8.65	-409	270.3	-361.2	233.6	-438.1	170.3	-382.6	245.1	0.77	0.03	0.76	0.07	0.77	0.03	0.77	0.03	2969	3481691	Nitrosococcus oceanii ATCC 19707
CJ928158	50.06	55	8.12	49	5	53	8.3	-418.4	258.2	-367.6	211.6	-447.7	158.3	-410	217.1	0.73	0.05	0.69	0.1	0.73	0.06	0.73	0.05	4223	4588711	Escherichia fergusonii ATCC 35469
CP001108	49.90	57	7.01	49	4.2	53	8.19	-397.6	272.8	-345.1	240.2	-420.9	183.6	-381	257.1	0.81	0.04	0.78	0.09	0.81	0.04	0.81	0.04	2239	2512923	Prosthecochloris aestuarii DSM 271
CP000557	50.99	55	8.5	49	5.8	53	9.19	-401.1	266.9	-330.6	232.8	-421.6	167.7	-388.4	244.9	0.75	0.05	0.74	0.1	0.75	0.05	0.75	0.05	3389	3550319	Geobacillus thermodinitrificans NG80-2
CP000027	51.15	57	7.85	50	4.2	53	8.29	-431	253.3	-362.6	217.3	-455.1	153.2	-397.9	221.5	0.73	0.05	0.72	0.09	0.74	0.05	0.73	0.05	1510	1469720	Dehalococcoides ethenogenes 195
CP001087	51.15	59	8.41	49	5.2	56	8.69	-443.9	264.2	-363.9	228.7	-471.3	153.3	-405.1	239.6	0.76	0.04	0.73	0.09	0.76	0.04	0.76	0.04	4835	5589073	Desulfobacterium autotrophicum HRM2
CP001166	50.97	57	8.02	50	5.6	53	8.54	-416.4	261.2	-363.2	207.7	-445.3	172.6	-404.3	216.6	0.74	0.06	0.71	0.11	0.74	0.06	0.74	0.06	3111	3471292	Tolulomas auensis DSM 9187
CP000030	50.24	52	7.2	50	3	51	7.98	-382.3	284.2	-344	309.8	-394.5	184.2	-393.2	294.9	0.82	0.02	0.82	0.06	0.83	0.02	0.82	0.02	947	1197687	Anaplasma marginale str. St. Maries
AE015924	51.71	57	7.62	50	4.9	56	8.32	-396.9	250.2	-365.3	221.8	-421.7	137.3	-374.3	226.1	0.82	0.04	0.79	0.08	0.82	0.04	0.82	0.04	1849	2343476	Porphyromonas gingivalis W83
CP001079	50.23	52	7.28	50	2.9	51	7.97	-383.2	285.5	-333.7	314.5	-394.9	182.4	-393.2	299.2	0.82	0.02	0.83	0.06	0.83	0.02	0.83	0.02	941	1202435	Anaplasma marginale str. Florida
AP009380	51.64	57	7.52	50	4.8	56	8.24	-391.1	249.9	-355.6	237.1	-416.1	153.4	-364.6	238.7	0.81	0.04	0.79	0.08	0.82	0.04	0.82	0.04	1972	2354886	Porphyromonas gingivalis ATCC 33277
CP001101	51.07	57	7.04	50	4.2	53	7.94	-399.7	259.8	-341.7	217.8	-426.5	158.4	-360.4	231.7	0.83	0.03	0.81	0.08	0.83	0.03	0.83	0.03	2425	2736403	Chlorobium phaeoacetales BS1
CP001615	51.54	57	7.2	50	4.3	56	7.45	-399.8	230.6	-317.6	196.3	-422.3	130.8	-405.2	211	0.74	0.04	0.73	0.09	0.74	0.04	0.74	0.04	2991	2999895	Exiguobacterium sp. AT1b
CP000469	51.95	57	7.38	50	4.1	56	7.77	-410.5	257.4	-347.3	202.8	-437	144.1	-400.2	212.9	0.75	0.04	0.73	0.09	0.76	0.04	0.75	0.04	4099	4972204	Shewanella sp. ANA-3
BX571656	51.54	55	7.44	50	3.6	56	7.53	-465.5	316	-427.6	296.5	-503.6	181.6	-450.8	311.8	0.73	0.03	0.71	0.09	0.74	0.04	0.74	0.04	2038	2110355	Wolinella succinigenes DSM 1740
CP000446	52.11	57	7.38	50	3.8	56	7.61	-410.5	241.8	-347.5	204.4	-440.2	138.9	-397.5	216.3	0.75	0.03	0.72	0.09	0.75	0.04	0.75	0.03	3909	4706287	Shewanella sp. MR-4
CP000492	51.65	57	7.56	50	4.6	56	8.32	-389.4	260.7	-345.4	222.4	-415.1	163.6	-364.4	235.2	0.8	0.03	0.79	0.08	0.8	0.03	0.8	0.03	2643	3133902	Chlorobium phaeoacetales DSM 266
CP000308	52.30	57	8.36	51	5	53	8.41	-404.4	261.2	-362.4	208.4	-431.1	155	-376.5	220.7	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	4112	4702289	Yersinia pestis Antiqua
CP000668	52.36	57	8.24	51	4.9	53	8.41	-375.8	245.4	-328.2	197.7	-399.3	150.9	-359	214.4	0.77	0.04	0.74	0.09	0.77	0.04	0.77	0.04	3809	4517345	Yersinia pestis Pestoides F
BX936398	52.39	57	8.34	51	5.1	56	8.44	-412	270.2	-367	206.9	-442.8	155.6	-394.5	232.2	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	3885	4744671	Yersinia pseudotuberculosis IP 32953
AL590842	52.36	57	8.29	51	5.1	53	8.46	-408.6	252.9	-364.3	205.4	-440	154.2	-388	216.2	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	3854	4653728	Yersinia pestis CO92
AE009952	52.36	57	8.61	51	5.1	53	8.47	-411.6	256.6	-372.3	221.6	-442.2	169.2	-391.9	222.1	0.77	0.04	0.74	0.09	0.77	0.04	0.77	0.04	3998	4600755	Yersinia pestis KIM
CP000720	52.46	57	8.38	51	5.1	56	8.47	-399.6	252.3	-349.7	206.6	-427.8	154.9	-381	215.9	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	3911	4723306	Yersinia pseudotuberculosis IP 31758
CP000450	51.51	57	8.83	51	4.9	56	8.37	-403.6	248.8	-355.7	233.6	-438.1	159.9	-375.9	224.9	0.77	0.03	0.76	0.08	0.77	0.03	0.77	0.03	2425	2661057	Nitrosomonas eutropha C91
CP001048	52.47	57	8.57	51	5.4	56	8.56	-411.9	268.5	-364.7	208.1	-441.7	159.5	-392.8	232.5	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	4009	4695619	Yersinia pseudotuberculosis PB1/+
CP000901	52.40	57	8.14	51	4.9	53	8.37	-390.3	256.7	-350.7	201.5	-419.4	153.8	-371.6	220.1	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	3599	4504254	Yersinia pestis Angola
CP000950	52.47	57	8.35	51	5.2	56	8.51	-400.9	250.8	-352.5	203.9	-429.7	157	-382.2	212.7	0.77	0.04	0.75	0.09	0.77	0.04	0.77	0.04	4051	4689441	Yersinia pseudotuberculosis YPIII
CP000305	52.42	57	8.27	51	5	53	8.46	-397.5	255.2	-355.3	210.2	-428.2	153	-380	213.7	0.77	0.04	0.74	0.09	0.77	0.04	0.77	0.04	3939	4534590	Yersinia pestis Nepal516
CP001110	51.92	57	7.34	51	5	56	8.18	-389.5	254.1	-337.2	210.2	-411.7	160	-358	234.3	0.81	0.03	0.79	0.08	0.81	0.03	0.81	0.03	2676	3018238	Pelodictyon phaeoacetales BU-1
AE017042	52.35	57	8.48	51	5.2	53	8.45	-408.8	251.2	-363.5	205	-434.5	153.5	-395.2	218.4	0.77	0.04	0.74	0.09	0.77	0.04	0.77	0.04	3884	4595065	Yersinia pestis biovar Microtus str. 91001
AM286415	52.73	57	8.4	51	4.8	56	8.26	-405.6	270.1	-362.9	213.2	-429.4	162.2	-382.3	236.5	0.76	0.04	0.74	0.09	0.77	0.04	0.77	0.04	3964	4615899	Yersinia enterocolitica subsp. enterocolitica 8081
CP000828	52.75	55	7.26	51	4.2	56	7.29	-407.2	239.8	-371.7	208.2	-434.4	143.6	-399.3	215.5	0.8	0.03	0.79	0.07	0.8	0.03	0.8	0.03	5727	6503724	Acaryochloris marina MBIC11017
CP001022	52.28	59	7.35	51	4.4	56	7.59	-394.1	227.9	-305.1	192	-416.6	126.4	-382.8	204.7	0.78	0.04	0.75	0.1	0.79	0.05	0.78	0.04	2989	3034136	Exiguobacterium sibiricum 255-15
CP000688	52.83	59	7.43	51	3.8	56	7.84	-398	233.9	-343.2	208.7	-423.2	141	-366.2	207.7	0.74	0.04	0.73	0.09	0.75	0.04	0.75	0.04	1358	1341892	Dehalococcoides sp. BAV1
CP001336	52.46	59	7.53	51	5	56	8.4	-398.1	248.4	-325.1	205.8	-427	143.1	-361	217.4	0.76	0.03	0.75	0.08	0.76	0.04	0.76	0.04	4800	5279134	Desulfibacterium hafniense DCB-2
AP008230	52.64	59	8.17	51	5.1	56	8.54	-367.4	239.7	-302.4	209.6	-395.1	138	-328.3	209.6	0.76	0.04	0.75	0.08	0.77	0.04	0.77	0.04	5053	5727534	Desulfibacterium hafniense Y51
AJ965256	52.97	59	7.5	51	3.9	5																				

CP000702	53.90	57	6.79	53	3.4	56	6.57	-380	243.8	-347.6	250	-405.9	120	-366.8	245.5	0.78	0.04	0.78	0.09	0.79	0.04	0.79	0.04	1779	1823511	Thermotoga petrophila RKU-1
CP000282	54.17	59	7.99	53	3.7	58	8.08	-395.6	270.2	-347.4	226.5	-418.2	159.5	-390.8	234	0.76	0.04	0.75	0.09	0.76	0.04	0.76	0.04	4005	5057531	Saccharophagus degradans 2-40
BX072543	53.69	55	7.69	53	3.3	53	7.52	-395.1	273.6	-382.9	264.8	-414.7	170.9	-371	231.9	0.76	0.02	0.75	0.07	0.76	0.03	0.76	0.03	776	925938	Tropheryma whipplei TW08/27
CP000969	53.82	57	6.78	53	3.5	56	6.64	-385.3	245.8	-347.1	252.9	-415.2	122.8	-364.7	246	0.78	0.04	0.78	0.09	0.79	0.04	0.79	0.04	1816	1877693	Thermotoga sp. RQ2
CP000302	54.85	59	7.56	53	3.9	58	7.57	-386.7	226.7	-324.2	190.9	-411.9	124.6	-373.5	201.9	0.73	0.03	0.73	0.07	0.73	0.03	0.73	0.03	3746	4545906	Shewanella denitrificans OS217
CP001699	54.77	59	6.99	53	3.5	60	7.58	-348	214.2	-320.1	182.3	-368	119	-328.9	192.4	0.74	0.04	0.71	0.09	0.75	0.04	0.74	0.04	7087	9127347	Chitinophaga pinensis DSM 2588
CP000140	54.94	64	7.54	53	5.6	62	8.71	-356.9	235	-316.9	186	-381.9	147.9	-331.8	197.9	0.76	0.04	0.71	0.08	0.77	0.05	0.76	0.04	3846	4811379	Parabacteroides distasonis ATCC 8503
CP000746	55.08	61	7.66	53	4.4	60	8.4	-381.9	228.3	-332.7	192.6	-404.5	135.5	-381	197.4	0.74	0.04	0.72	0.1	0.74	0.04	0.74	0.04	2072	2319663	Actinobacillus succinogenis 130Z
CP001721	54.31	57	7.27	54	4.9	56	8.06	-393.1	244.6	-354.2	204.5	-424	151.3	-387.2	218.3	0.71	0.06	0.7	0.1	0.72	0.07	0.71	0.06	1344	1543805	Atopobium parvulum DSM 20469
CP001617	55.34	61	7.51	54	4	58	8.08	-385.6	243.9	-321.2	203	-414.1	158.3	-354.9	211.5	0.76	0.04	0.78	0.09	0.76	0.04	0.76	0.04	2911	3197759	Lactobacillus plantarum JDM1
CP001100	54.96	61	7.64	53	4.9	60	8.53	-400.6	230.3	-357.3	186.6	-423.1	121.4	-384.5	199.4	0.74	0.03	0.72	0.08	0.75	0.04	0.74	0.03	2701	3293456	Chloroherpeton thalassium ATCC 35110
CP001010	54.44	57	7.4	54	3.1	56	7.4	-392.6	231	-362.6	211.8	-411.8	146.2	-387.9	202.2	0.75	0.04	0.74	0.08	0.75	0.04	0.75	0.04	1453	1560469	Polynucleobacter necessarius subsp. necessarius STIR1
AL935263	55.53	61	7.48	54	4.2	58	8.19	-384.6	243.9	-325	197.7	-413.2	155.1	-355.5	212.4	0.76	0.04	0.78	0.09	0.76	0.04	0.76	0.04	2986	3308274	Lactobacillus plantarum WCF51
CP001678	54.77	57	7.1	54	3.2	58	7.42	-381.9	240.6	-352.5	216.9	-406.3	155.4	-383.3	214.1	0.75	0.03	0.75	0.07	0.75	0.03	0.75	0.03	3085	3455622	Hirschia baltica ATCC 49814
CP001103	55.12	59	7.11	54	3.3	58	7.11	-372.3	205.9	-340.5	183.7	-392.1	112.3	-367	182.2	0.8	0.03	0.81	0.07	0.8	0.03	0.8	0.03	3853	4412282	Alteromonas macleodii 'Deep ecotype'
CP000851	55.34	59	6.83	54	3.4	58	6.89	-383.1	223.5	-327.3	190.6	-405.3	125.7	-374.4	197.5	0.8	0.03	0.8	0.08	0.8	0.03	0.8	0.03	4221	5174581	Shewanella paaleana ATCC 700345
CP000931	55.41	59	7.09	54	3.5	58	7.08	-380.6	223.2	-331.2	191.5	-400.2	129.7	-373.1	197.7	0.8	0.03	0.8	0.08	0.8	0.03	0.8	0.03	4254	5226917	Shewanella halifaxensis HAW-EB4
CP000448	55.13	61	8.25	54	4.8	58	8.51	-358.9	224	-301.1	207.6	-381	126.1	-330.3	202.5	0.76	0.03	0.76	0.07	0.76	0.03	0.76	0.03	2500	2936195	Syntrophomonas wolfei subsp. wolfei str. Goettingen
CP000767	55.46	61	8.36	54	5.2	60	8.88	-355.6	219	-324.4	200.7	-380.4	121.7	-326.7	196.7	0.75	0.03	0.74	0.08	0.75	0.03	0.75	0.03	1830	1971264	Campylobacter curvus 525.92
AP006627	55.25	59	7.38	54	4.2	58	7.59	-359.9	219.5	-305.3	205.1	-381.3	122.1	-359	206.9	0.78	0.03	0.79	0.08	0.78	0.03	0.78	0.03	4069	4303871	Bacillus clausii KSM-K16
CP000388	55.38	59	7	54	3	58	7.24	-373.8	214	-325.8	189.4	-398.6	113.1	-359.7	190.3	0.78	0.03	0.78	0.08	0.78	0.03	0.78	0.03	4277	5187005	Pseudoalteromonas atlantica T6c
CP000108	55.72	59	7.69	54	5.5	58	8.15	-416.3	262.3	-358.3	217.2	-424.6	155.9	-390.9	231.2	0.74	0.04	0.73	0.1	0.74	0.04	0.74	0.04	2000	2572079	Chlorobium chlorochromatii CaD3
CP000655	55.17	59	7.28	54	2.9	58	7.45	-381.4	223.9	-346.7	201.7	-404.1	134	-382.7	198.2	0.76	0.03	0.76	0.08	0.76	0.04	0.76	0.03	2076	2159490	Polynucleobacter necessarius subsp. asymbioticus QLW-P1DMWA-1
AP009179	56.13	61	7.95	54	5.5	60	8.25	-363	219.2	-308.1	194.6	-386	124	-337.4	201.5	0.8	0.03	0.79	0.08	0.8	0.03	0.8	0.03	2436	2562277	Sulfurovum sp. NBC37-1
CP000503	55.37	59	7.3	54	3.8	58	7.32	-383.7	228.1	-343.7	201.3	-404	142.4	-377.2	201.3	0.75	0.03	0.75	0.08	0.75	0.03	0.75	0.03	4030	4708380	Shewanella sp. W3-18-1
CP000681	55.55	59	7.27	55	3.8	58	7.38	-378.6	222.8	-341.2	193.5	-399.4	136.7	-381.1	200.7	0.74	0.03	0.74	0.08	0.75	0.03	0.75	0.03	3960	4659220	Shewanella putrefaciens CN-32
CP000975	54.52	59	8.7	54	5	58	8.82	-425.4	290.8	-399.1	272	-464.7	173.2	-432	286.8	0.76	0.03	0.76	0.07	0.75	0.03	0.76	0.03	2212	2287145	Methylacidiphilum infernum V4
CP000387	56.60	64	7.88	55	4.7	60	7.67	-363.9	227.1	-309.2	197.3	-386.7	139.2	-330.5	195.9	0.78	0.03	0.79	0.08	0.78	0.03	0.78	0.03	2225	2388435	Streptococcus sanguinis SK36
CP000513	55.60	61	8.32	55	4.2	60	8.6	-388.9	255.6	-341.7	214.6	-412.4	160.3	-365.7	213.7	0.72	0.05	0.69	0.11	0.72	0.06	0.72	0.06	1262	1389350	Dichelobacter nodosus VCS1703A
CP000082	57.20	59	7.06	55	3.4	60	7.49	-372.6	232.2	-329.3	193.1	-400.9	129.5	-360.4	198.6	0.78	0.04	0.78	0.09	0.78	0.04	0.78	0.04	2113	2650701	Psychrobacter arcticus 273-4
CP001145	55.23	59	6.55	55	2.9	58	6.64	-372.5	229.4	-346.4	225.5	-394.8	140.9	-344.5	208.9	0.82	0.02	0.84	0.06	0.82	0.02	0.82	0.02	1403	1424912	Coprothermobacter proteolyticus DSM 5265
CP000961	56.30	61	7.24	55	3.5	60	8.86	-372.8	246.8	-324.2	192.8	-389	133.9	-363.4	200.3	0.78	0.02	0.79	0.07	0.78	0.03	0.78	0.02	4863	5935403	Shewanella woodyi ATCC 51908
BA000004	56.31	61	7.08	55	3.7	60	7.21	-348.4	214.4	-301.6	203.1	-367.1	119.8	-347.4	199.5	0.8	0.02	0.81	0.07	0.8	0.03	0.8	0.02	3952	4202352	Bacillus halodurans C-125
CP000323	57.71	61	7.26	55	3.3	60	7.57	-366.4	218.9	-331.8	190	-392.8	128.3	-355.4	194.5	0.77	0.04	0.78	0.09	0.78	0.04	0.78	0.04	2467	3059876	Psychrobacter cryohalolentis K5
CR626927	56.81	64	7.94	55	5.8	62	8.7	-351.8	223	-325.1	193	-379.1	142.3	-314.8	192.4	0.79	0.03	0.79	0.07	0.79	0.03	0.79	0.03	4147	5205140	Bacteroides fragilis NCTC 9343
CP001707	56.31	61	7.13	55	3.6	60	7.34	-368.2	220.7	-334.7	189.5	-390.7	136.8	-351	202.2	0.77	0.03	0.78	0.08	0.77	0.03	0.77	0.03	2615	2852073	Kangiella korensis DSM 16069
AE015928	57.16	64	7.98	55	5.4	62	8.31	-350.2	221.8	-326.3	185	-372.2	131.2	-316.3	191.4	0.79	0.03	0.78	0.08	0.79	0.03	0.79	0.03	4773	6260361	Bacteroides thetaiotaomicron VPI-5482
AP006841	56.73	64	7.87	55	5.9	62	8.73	-351.1	232.6	-328.6	193.9	-373.5	207.3	-318.9	250.1	0.79	0.03	0.79	0.07	0.8	0.04	0.8	0.03	4577	5277274	Bacteroides fragilis YCH46
AL009126	56.49	61	7.64	55	4.8	62	8	-342.6	209	-291.6	187.7	-352.6	115.1	-360.9	205.5	0.79	0.02	0.81	0.07	0.79	0.03	0.79	0.03	4107	4215606	Bacillus subtilis subsp. subtilis str. 168
CP000472	56.71	61	7.18	56	3.3	60	6.95	-374.4	216	-328.8	191.7	-393.4	128.4	-373	194.3	0.77	0.03	0.78	0.07	0.77	0.03	0.77	0.03	4541	5396476	Shewanella piezotolerans WP3
CP000109	56.87	61	7.06	56	3.5	60	7.32	-385	232.6	-339	203.6	-407.6	150.3	-376.2	202.5	0.77	0.03	0.77	0.09	0.77	0.03	0.77	0.03	2193	2427734	Thiomicrospira crunigena XCL-2
AE000657	56.52	59	7.46	56	3.9	60	7.36	-355.4	245.6	-350.1	221.8	-393	121.7	-350.8	227.7	0.76	0.04	0.75	0.1	0.76	0.04	0.76	0.04	1521	1551335	Aquifex aeolicus VF5
BX470251	57.17	61	8.61	56	6	60	8.69	-363.1	236.3	-331.7	203.5	-378.1	161	-352.5	206.7	0.77	0.04	0.78	0.08	0.77	0.04	0.77	0.04	4643	5688987	Photorhabdus luminescens subsp. laumondii TTO1
CP001673	57.31	64	8.05	56	4.2	62	8.43	-356.3	200.9	-342	177.6	-379.2	106.6	-345	183.7	0.8	0.02	0.79	0.08	0.81	0.03	0.81	0.02	2444	2768102	Flavobacteriaceae bacterium 3519-10
AE016827	57.46	64	7.9	56	4.3	62	8.28	-362.1	209.8	-334.5	184.9	-378.9	117.3	-368	189.8	0.73	0.04	0.71	0.11	0.73	0.04	0.73	0.04	2139	2314078	Mannheimia succiniciproducens MBEL55E
AE016828	57.34	61	8.57	56	5	60	8.94	-363.3	227.4	-341.3	201.8	-389.5	144.9	-372.7	217.5	0.76	0.03	0.75	0.09	0.76	0.04	0.76	0.04	1669	1995281	Coxiella burnetii RSA 493
CP001019	57.37	61	8.68	56	4.8	60	8.93	-352.5	226.7	-339.5	198.3	-372.9	145	-355.6	212.1	0.76	0.04	0.75	0.09	0.76	0.04	0.76	0.04	1706	2008870	Coxiella burnetii CbuG_Q212
CP000890	57.24	61	8.58	56	5.1																					

CP000922	58.22	61	7.56	58	4.3	62	7.84	-352.7	220.5	-325.9	231.5	-367.8	127.3	-372.4	216.6	0.75	0.04	0.74	0.11	0.75	0.05	0.75	0.04	2784	2846746	Anoxybacillus flavithermus WK1
CR936503	58.74	64	7.29	58	3.5	62	7.26	-370.4	223.5	-318	185.3	-387.7	136.7	-354.7	193.5	0.72	0.05	0.74	0.11	0.72	0.05	0.72	0.05	1836	1884661	Lactobacillus sakei subsp. sakei 23K
AM946016	58.70	64	7.17	57	4.5	62	7.3	-349.4	218.6	-295.6	187.9	-366.9	132.6	-332.1	195.5	0.73	0.04	0.76	0.08	0.73	0.04	0.73	0.04	1801	2007491	Streptococcus suis P1/7
FM252032	58.94	66	7.14	58	4.5	62	7.38	-364.1	218.5	-310.7	194.8	-385.1	131.8	-346.1	200.7	0.73	0.04	0.76	0.08	0.73	0.04	0.73	0.04	1910	2146229	Streptococcus suis BM407
FM252031	58.89	66	7.17	58	4.5	62	7.37	-347.6	217.1	-291.7	186.2	-362.6	131.3	-329.2	195	0.73	0.04	0.76	0.08	0.73	0.04	0.73	0.04	1874	2095898	Streptococcus suis SC84
CP000407	58.89	64	7.86	58	4.7	62	7.67	-347.7	218.3	-308.1	202.3	-360	134.6	-328.5	196.8	0.73	0.04	0.75	0.09	0.73	0.04	0.73	0.04	2074	2096309	Streptococcus suis 05ZYH33
CP000813	58.71	64	7.11	58	3.8	62	7.19	-336	206.5	-286.1	189.4	-346.1	117	-361.9	200.8	0.75	0.03	0.77	0.08	0.75	0.03	0.75	0.03	3621	3704465	Bacillus pumilus SAFR-03
CP001431	58.73	61	7.19	58	3.3	60	7.04	-338.7	231.3	-329.6	240.1	-362.6	173.4	-327.5	237.2	0.76	0.02	0.78	0.07	0.76	0.03	0.76	0.02	820	879977	Neorickettsia risticii str. Illinois
CP000408	58.89	64	7.78	58	4.7	62	7.52	-347.7	217.2	-304.4	194	-360.5	132.9	-331.9	192.7	0.73	0.04	0.75	0.09	0.73	0.04	0.73	0.04	2086	2095698	Streptococcus suis 98HAH33
AM884176	58.67	61	7.05	58	2.5	62	6.85	-371.5	251.3	-340.7	222.6	-380.4	164.3	-375.3	251.3	0.7	0.03	0.7	0.08	0.69	0.03	0.7	0.03	870	1038842	Chlamydia trachomatis 434/Bu
CP000921	60.23	66	7.46	58	4.6	64	7.32	-364.4	219.2	-310.8	194	-383.7	136.1	-348	199.2	0.73	0.04	0.76	0.09	0.73	0.05	0.73	0.05	1951	2112148	Streptococcus pneumoniae Taiwan19F-14
FM872308	58.70	61	7.01	58	2.5	62	6.74	-371	251.2	-339.4	220	-377.8	163.1	-372.2	246.7	0.69	0.03	0.7	0.08	0.69	0.03	0.69	0.03	871	1044352	Chlamydia trachomatis B/Jal210/OT
CP000051	58.70	61	7.01	58	2.6	61	6.88	-371	251.6	-341.1	223.8	-382.6	165.5	-378.7	250.4	0.7	0.03	0.7	0.08	0.69	0.03	0.7	0.03	908	1044459	Chlamydia trachomatis A/HAR-13
CP000410	60.29	66	7.46	58	4.7	64	7.27	-363.9	217.5	-316.4	194.1	-383.5	130.9	-352.6	202.5	0.72	0.04	0.76	0.09	0.72	0.04	0.72	0.04	1857	2046115	Streptococcus pneumoniae D39
AE001273	58.69	61	7.09	58	2.5	62	6.77	-370.6	251.7	-338.3	223.4	-379.7	163.8	-382	249.4	0.7	0.03	0.7	0.08	0.69	0.03	0.7	0.03	890	1042519	Chlamydia trachomatis D/UW-3/CX
CP000237	58.92	61	7.03	58	3.4	60	7.21	-337.8	228.3	-345.9	240.5	-362.5	172.4	-337.2	235.2	0.76	0.02	0.77	0.07	0.76	0.03	0.76	0.03	819	859006	Neorickettsia sennetsu str. Miyayama
AM884177	58.67	61	7.03	58	2.5	62	6.85	-371.5	251.4	-340.8	222.4	-380.6	164.4	-376.4	252.9	0.7	0.03	0.7	0.08	0.69	0.03	0.7	0.03	870	1038869	Chlamydia trachomatis L2b/UCh-1/proctitis
CR543861	59.57	61	7.37	58	4.2	62	7.72	-372.8	209.2	-341.9	176.4	-388.1	122.4	-378.6	181.8	0.72	0.03	0.72	0.1	0.72	0.04	0.72	0.03	3246	3598621	Acinetobacter sp. ADP1
CP001634	58.45	64	6.89	58	3.5	62	7.07	-360.8	215.5	-318	221.3	-381.5	118.9	-330.9	202.4	0.77	0.03	0.78	0.07	0.77	0.03	0.77	0.03	2082	2302126	Kosmotoga olearia TBF 19.5.1
CP000920	60.25	66	7.36	58	4.7	64	7.29	-362.4	217.4	-317.7	195.6	-383.1	136.6	-349.5	203.9	0.72	0.04	0.76	0.09	0.73	0.05	0.73	0.04	1978	2111882	Streptococcus pneumoniae P1031
CP001015	60.35	66	7.45	58	4.7	64	7.45	-357.5	214.2	-314.6	192.6	-373.2	132.4	-346.6	200.7	0.73	0.04	0.76	0.08	0.73	0.05	0.73	0.04	2027	2078953	Streptococcus pneumoniae G54
CP000919	60.26	66	7.51	58	4.7	64	7.38	-357.8	217.3	-313.9	193.8	-374.1	136.9	-347.9	203.6	0.73	0.04	0.76	0.09	0.72	0.05	0.73	0.04	2020	2120234	Streptococcus pneumoniae JJA
CP000918	60.27	66	7.51	58	4.7	64	7.35	-362	217.8	-325.4	197.3	-382.4	136.9	-353.8	204.3	0.73	0.04	0.76	0.09	0.72	0.04	0.73	0.04	2090	2184682	Streptococcus pneumoniae 70585
FM211187	60.51	66	7.47	58	4.8	64	7.42	-356.4	216.8	-304.8	192.4	-371.4	132.8	-343.4	202.4	0.73	0.04	0.77	0.08	0.73	0.04	0.73	0.04	1964	2221315	Streptococcus pneumoniae ATCC 700669
AE004439	59.60	64	7.02	58	3.5	62	7.32	-367.7	221.5	-338.6	189.6	-386.4	127.1	-379.7	188.1	0.7	0.04	0.7	0.11	0.7	0.05	0.7	0.05	2011	2257487	Pasteurella multocida subsp. multocida str. Pm70
CP000936	60.37	66	7.34	58	4.7	64	7.37	-360.6	216.5	-316.3	194.5	-381.2	134.8	-349.2	203.4	0.73	0.04	0.76	0.09	0.73	0.05	0.73	0.04	2059	2245615	Streptococcus pneumoniae Hungary19A-6
AE005672	60.30	66	7.42	58	4.8	64	7.25	-361.5	215.7	-317.2	198.7	-381.2	133.1	-352	204.1	0.73	0.04	0.76	0.09	0.73	0.05	0.73	0.04	1973	2160842	Streptococcus pneumoniae TRG4
AE007317	60.28	66	7.54	58	4.8	64	7.32	-363.8	217.5	-318.8	196.5	-382.8	134.1	-356.3	204.6	0.72	0.04	0.75	0.09	0.72	0.05	0.73	0.04	2015	2038615	Streptococcus pneumoniae R6
CP000725	59.49	66	7.54	58	4.8	64	7.74	-360.4	217.9	-322.1	191.5	-378.8	135.3	-350	191.9	0.74	0.04	0.77	0.08	0.74	0.04	0.74	0.04	2002	2196662	Streptococcus gordonii str. Challis substr. CH1
CP001033	60.54	66	7.44	59	4.8	64	7.58	-360.9	214.6	-318.6	192.3	-380.4	131.5	-349.3	202.3	0.73	0.04	0.76	0.09	0.73	0.04	0.73	0.04	2100	2209198	Streptococcus pneumoniae CGSP14
CP000510	59.91	64	7.45	59	4	62	8.04	-356.4	209.1	-316.2	175.9	-373.8	114.5	-353.2	185.9	0.72	0.04	0.74	0.09	0.72	0.04	0.72	0.04	3534	4559598	Psychromonas ingrahamii 37
CP001227	59.67	64	9.82	59	6.5	62	9.22	-362.2	220.6	-345.5	206.7	-383.1	127.1	-360.6	197.6	0.74	0.04	0.75	0.09	0.75	0.05	0.75	0.05	1889	2110331	Candidatus Hamiltonella defensa 5AT (Acyrtosiphon pisum)
CP001321	60.61	64	7.37	59	4.2	64	7.67	-371.3	222.5	-352	188.7	-382.9	125.4	-366.7	203.9	0.72	0.05	0.74	0.1	0.72	0.05	0.72	0.05	1957	2269156	Haemophilus parasuis SH0165
AE002161	59.43	61	7.67	59	3	62	7.53	-374.1	240.9	-344.3	209.8	-390.5	147.2	-369.1	222.2	0.71	0.03	0.73	0.08	0.71	0.03	0.71	0.03	1053	1229853	Chlamydomphila pneumoniae AR39
BA000008	59.42	61	7.66	59	2.8	62	7.5	-368.3	242.2	-337.3	210.7	-386.7	146.3	-365.7	225.1	0.71	0.03	0.73	0.08	0.71	0.03	0.71	0.03	1065	1226565	Chlamydomphila pneumoniae J138
AE001363	59.42	61	7.6	59	2.9	62	7.51	-368.6	242.1	-336	209.7	-386.8	145.7	-366.2	219.9	0.71	0.03	0.73	0.08	0.71	0.03	0.71	0.03	1048	1230230	Chlamydomphila pneumoniae CWL029
AE009440	59.42	61	7.74	59	3.4	62	7.6	-368.4	242	-345.2	216.4	-388.1	150.2	-367.8	226.5	0.71	0.03	0.73	0.08	0.71	0.03	0.71	0.03	1109	1225935	Chlamydomphila pneumoniae TW-183
AE002160	59.66	61	6.98	59	2.6	62	6.86	-379	258.6	-351.1	232.1	-394.9	171	-400.3	256.3	0.69	0.03	0.68	0.09	0.69	0.03	0.69	0.03	882	1072950	Chlamydia muridarum Nigg
CP001055	60.05	68	8.75	59	3.9	67	9.2	-376.9	211.8	-341.6	191.1	-392.8	111	-371.4	187.7	0.77	0.04	0.8	0.1	0.77	0.04	0.77	0.04	2131	1643562	Elusimicrobium minutum Pei191
CP001632	60.41	68	7.43	59	4.6	67	7.54	-358.2	238.7	-337.8	191.9	-374.9	148.5	-336.2	201.2	0.75	0.04	0.77	0.08	0.75	0.04	0.75	0.04	2134	2612925	Capnocytophaga ochracea DSM 7271
AM942759	61.10	64	8.35	59	4.9	63	8.31	-364.2	205.4	-339.5	175.6	-377.6	117.6	-365.3	182.7	0.7	0.05	0.69	0.11	0.7	0.05	0.7	0.05	3582	4063606	Proteus mirabilis HI4320
CP000792	60.57	66	7.96	59	5.2	64	8.21	-346.5	208.2	-316.3	195.5	-361	112.6	-343.7	201.2	0.73	0.03	0.74	0.09	0.73	0.04	0.73	0.04	1945	2052007	Campylobacter concisus 13826
AM260525	61.14	64	7.82	59	4.1	62	8.1	-339.6	231.5	-314.6	212.6	-361.7	155.2	-334.3	208.9	0.7	0.04	0.7	0.1	0.7	0.05	0.7	0.04	2095	2619061	Bartonella tribocorum CIP 105476
BX897700	61.20	64	7.77	59	3	62	7.33	-350.6	236.1	-321.8	207.4	-376.1	154.8	-355.6	213	0.69	0.04	0.68	0.1	0.69	0.04	0.69	0.04	1138	1581384	Bartonella quintana str. Toulouse
AP010935	60.42	66	6.76	59	3.7	64	6.85	-358.5	210	-315.9	176.9	-372.8	119.9	-355.9	194.9	0.72	0.04	0.75	0.09	0.72	0.04	0.72	0.04	2058	2106340	Streptococcus dysgalactiae subsp. equisimilis GGS_124
U00089	59.99	64	7.73	59	5	64	7.93	-404.7	226.9	-386.2	205.8	-415.2	113.8	-385.7	202.1	0.72	0.03	0.73	0.09	0.73	0.04	0.73	0.03	685	816394	Mycoplasma pneumoniae M129
CP001701	60.18	61	7.8	59	5.4	64	7.78	-372.9	223.9	-343.6	204.3	-393.5	124.2	-375.3	203.7	0.69	0.05	0.69	0.1	0.69	0.05	0.69	0.05	4218	4669813	Cyanotheca sp. PCC 8802
CP001287	60.24	61	7.86	59																						

AE015925	60.78	64	7.25	60	2.6	62	7.17	-367.7	229.9	-347	210.7	-388.2	133	-371.1	210.3	0.68	0.03	0.69	0.09	0.68	0.03	0.68	0.03	974	1173390	<i>Chlamydomypha caviae</i> GPIC
CP000705	61.13	66	7.15	60	3.4	64	7.28	-352.6	205.7	-312.1	176.6	-365.7	116	-325.2	191.9	0.71	0.04	0.74	0.1	0.71	0.05	0.71	0.04	1884	1999618	<i>Lactobacillus reuteri</i> DSM 20016
CP001217	61.19	66	7.34	60	3.9	64	7.26	-390.1	253.3	-367.7	258.5	-422.2	144	-389.5	244.7	0.71	0.03	0.71	0.1	0.71	0.04	0.71	0.03	1544	1673813	<i>Helicobacter pylori</i> P12
CP000524	61.76	64	7.68	60	3.7	64	7.55	-384.3	246.8	-355.3	232.9	-415.9	169.7	-381.1	218.9	0.69	0.04	0.68	0.11	0.69	0.05	0.69	0.04	1185	1445021	<i>Bartonella bacilliformis</i> KC583
CP001291	61.39	64	7.76	60	4.7	64	7.94	-371.7	236.4	-345.6	209.1	-389.5	132.2	-381.7	218.3	0.69	0.05	0.67	0.11	0.69	0.05	0.69	0.05	5098	5942652	<i>Cyanothece</i> sp. PCC 7424
AM295007	61.37	66	6.75	60	3.8	64	7.18	-359.7	210	-318.6	180.9	-376.1	119.9	-340.8	195.5	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1712	1841271	<i>Streptococcus pyogenes</i> str. Manfreda
CP000003	61.31	66	6.85	60	4	64	7.13	-357.9	210.8	-317.7	187.8	-375.5	124.9	-356.1	198.6	0.71	0.04	0.73	0.1	0.71	0.05	0.71	0.04	1830	1899877	<i>Streptococcus pyogenes</i> MGAS10394
AE000492	61.49	66	6.83	61	3.8	64	7.25	-362.7	209.9	-326.2	182.2	-383.7	121.1	-358.8	194.3	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1682	1852441	<i>Streptococcus pyogenes</i> M1 GAS
CP000261	61.27	66	7.16	60	4.1	64	7.26	-361.2	211.3	-320.9	191	-382.6	126.1	-357.2	196.3	0.71	0.04	0.73	0.1	0.72	0.05	0.72	0.05	1831	1860355	<i>Streptococcus pyogenes</i> MGAS2096
CP000829	61.43	66	6.88	61	3.9	64	7.11	-363.8	212.6	-324.9	184.7	-386	121.9	-359.2	194.5	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1684	1815785	<i>Streptococcus pyogenes</i> NZ131
CP000017	61.47	66	6.98	61	3.9	64	7.2	-360.8	209	-324.7	182.5	-382.1	126.5	-353.3	196.2	0.71	0.04	0.74	0.1	0.71	0.04	0.71	0.04	1796	1838554	<i>Streptococcus pyogenes</i> MGAS5005
CP000383	61.15	66	7.45	60	4.3	67	8.16	-347.8	200.1	-335.7	168.9	-360.8	101.4	-344.5	173.8	0.73	0.03	0.73	0.09	0.73	0.03	0.73	0.03	3785	4433218	<i>Cytophaga hutchinsonii</i> ATCC 33406
AE009949	61.45	66	6.82	60	3.9	64	7.26	-359.5	209.4	-323.5	180.8	-379.6	120.5	-347.8	192.6	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1806	1895017	<i>Streptococcus pyogenes</i> MGAS8232
AE014074	61.41	66	7.02	61	3.9	64	7.17	-358.8	209.1	-317.7	185.2	-373.3	121.6	-342.3	191.8	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1851	1900521	<i>Streptococcus pyogenes</i> MGAS315
BA000034	61.45	66	7.02	61	3.8	64	7.14	-362.9	210	-323.6	195.4	-379.1	121.6	-347.8	195.1	0.71	0.04	0.74	0.09	0.71	0.04	0.71	0.04	1817	1894275	<i>Streptococcus pyogenes</i> SSI-1
CP000259	61.46	66	6.81	61	4	64	7.14	-363.6	210.6	-323.4	189.5	-385.7	125.8	-362.7	193.6	0.71	0.04	0.73	0.1	0.71	0.05	0.71	0.04	1785	1836467	<i>Streptococcus pyogenes</i> MGAS9429
CP000260	61.57	66	6.94	61	4.1	64	7.08	-360.3	212.5	-320.3	189.8	-379.7	126.7	-356.8	193.4	0.71	0.04	0.73	0.1	0.71	0.05	0.71	0.04	1906	1928252	<i>Streptococcus pyogenes</i> MGAS10270
CP000056	61.65	66	6.96	61	4.1	64	7.21	-358.8	214	-316.3	185.5	-376.9	126.7	-352.6	197.4	0.71	0.04	0.73	0.1	0.71	0.04	0.71	0.04	1832	1897573	<i>Streptococcus pyogenes</i> MGAS6180
CR628336	61.63	66	7.27	61	3.4	64	7.71	-347.9	200.6	-319.2	176.9	-364.9	113	-349.1	179.3	0.74	0.03	0.75	0.09	0.73	0.03	0.74	0.03	3012	3503610	<i>Legionella pneumophila</i> str. Paris
CR628337	61.58	66	7.28	61	3.5	64	7.67	-350	200	-319.8	177	-366.4	115.6	-352.9	180	0.74	0.03	0.75	0.09	0.73	0.03	0.74	0.03	2863	3345687	<i>Legionella pneumophila</i> str. Lens
CP000675	61.52	66	7.42	61	3.6	64	7.64	-350.4	199.4	-325	178.9	-367.8	115.9	-351.2	176.9	0.74	0.03	0.75	0.08	0.74	0.03	0.74	0.03	3131	3576470	<i>Legionella pneumophila</i> str. Corby
CP001098	62.12	66	8.7	61	4.8	67	8.71	-346	215.1	-284.7	204.7	-364.3	126.3	-321.5	190.5	0.73	0.03	0.74	0.09	0.73	0.03	0.73	0.03	2325	2578146	<i>Halothrix orei</i> H 168
CP000262	61.68	66	6.97	61	4.2	64	7.15	-363.5	213	-320.3	191.6	-382.6	124	-372.8	195.7	0.71	0.04	0.73	0.09	0.71	0.05	0.71	0.04	1908	1937111	<i>Streptococcus pyogenes</i> MGAS10750
CP000878	61.99	61	7.92	61	4.1	64	7.78	-349.6	210.5	-364.2	202.3	-356.8	136.3	-360	192.2	0.72	0.04	0.7	0.1	0.72	0.04	0.72	0.04	1813	1688963	<i>Prochlorococcus marinus</i> str. MIT 9211
L42023	61.85	66	7.45	61	3.7	67	7.21	-352.5	249.4	-341.1	182.5	-366.6	116.1	-366.1	177	0.71	0.05	0.71	0.12	0.71	0.05	0.71	0.05	1687	1830138	<i>Haemophilus influenzae</i> Rd KW20
AE017354	61.73	66	7.36	61	3.5	64	7.63	-350.4	199.3	-325.7	175.2	-368.2	112.1	-352.6	178.5	0.73	0.03	0.74	0.09	0.73	0.03	0.73	0.03	2926	3397754	<i>Legionella pneumophila</i> subsp. pneumophila str. Philadelphia 1
CP000057	61.84	66	7.26	61	3.7	67	7.4	-358.5	219.5	-347.8	264.6	-372.8	115.4	-364.9	179	0.71	0.05	0.71	0.11	0.71	0.06	0.71	0.05	1772	1914490	<i>Haemophilus influenzae</i> 86-028NP
CP000083	61.99	66	7.15	61	3.3	64	7.11	-356.6	198.3	-322.1	174.1	-371.8	113.7	-353.2	178.2	0.69	0.04	0.7	0.1	0.69	0.05	0.69	0.04	4518	5373180	<i>Collwellia psychroerythraea</i> 34H
CP000411	62.11	68	7.7	61	4.3	67	7.93	-367.4	213.8	-324.5	183.6	-385.1	123.5	-363.5	191.9	0.74	0.03	0.76	0.1	0.74	0.04	0.74	0.03	1639	1780517	<i>Oenococcus oeni</i> PSU-1
CP001175	61.81	66	7.23	61	3.7	67	7.6	-323.1	207.1	-264.1	181.7	-332.9	120.9	-329.6	188.1	0.71	0.04	0.73	0.1	0.71	0.05	0.72	0.04	2919	2976212	<i>Listeria monocytogenes</i> HCC23
FM242711	61.94	66	7.11	61	3.6	67	7.39	-314.2	202.8	-268.7	182	-332.4	117.2	-335.4	191.2	0.71	0.04	0.73	0.1	0.71	0.04	0.71	0.04	2762	2912690	<i>Listeria monocytogenes</i> Clip80459
CP000671	61.96	66	7.32	61	3.8	67	7.44	-360	206.1	-344.9	186.1	-371.8	120.4	-371.8	182.8	0.71	0.05	0.72	0.11	0.71	0.06	0.71	0.06	1571	1813033	<i>Haemophilus influenzae</i> PittEE
CP000672	61.99	66	7.37	61	3.9	67	7.27	-349.7	283.5	-331.7	368.9	-357.8	134.5	-353.4	181.9	0.71	0.05	0.71	0.11	0.71	0.06	0.71	0.05	1604	1887192	<i>Haemophilus influenzae</i> PittGG
AM260522	61.82	66	7.41	61	3.8	64	7.47	-392.4	250	-375.2	238.3	-415.2	150.2	-394.6	230.6	0.71	0.04	0.71	0.1	0.72	0.04	0.71	0.04	1552	1553927	<i>Helicobacter acinonychis</i> str. Sheeba
AE017143	61.78	66	7.37	61	4.1	64	7.54	-380.2	213.2	-350.8	189.6	-403.3	138.8	-393.3	187.2	0.7	0.06	0.71	0.12	0.7	0.06	0.7	0.06	1591	1698955	<i>Haemophilus ducreyi</i> 35000HP
AE017262	61.96	66	7.22	61	3.7	67	7.43	-314.6	202.6	-272.9	181.8	-333.5	119.9	-338.2	189.8	0.71	0.04	0.73	0.1	0.71	0.04	0.71	0.04	2765	2905187	<i>Listeria monocytogenes</i> str. 4b F2365
AL591824	62.02	66	7.13	61	3.6	67	7.37	-314.9	201.1	-270.1	180	-332.7	117.3	-334.6	186.8	0.71	0.04	0.73	0.11	0.71	0.04	0.71	0.04	2840	2944528	<i>Listeria monocytogenes</i> EGD-e
CP000812	61.30	64	6.71	61	2.6	62	6.85	-335.7	197.8	-327.1	216.7	-351.8	106.2	-335.4	196.1	0.73	0.03	0.73	0.09	0.73	0.03	0.73	0.03	2038	2135342	<i>Thermotoga lettingae</i> TMO
CP000414	62.29	66	7.37	61	3.4	64	7.3	-360.4	207.1	-314	175.6	-379.6	126.9	-349.8	182.8	0.68	0.04	0.71	0.1	0.68	0.04	0.68	0.04	1935	2038396	<i>Leuconostoc mesenteroides</i> subsp. <i>mesenteroides</i> ATCC 8293
CP001104	62.29	66	7.63	61	4	64	7.73	-302	205.1	-264.9	195.8	-318.9	139.3	-283.1	184.5	0.71	0.06	0.71	0.12	0.71	0.07	0.71	0.06	1965	2144190	<i>Eubacterium eligens</i> ATCC 27750
AE017226	62.13	68	8.99	61	5.7	67	9.12	-355.4	217	-332.2	209.5	-377.7	116.7	-348	190.4	0.77	0.04	0.8	0.08	0.76	0.04	0.77	0.04	2582	2843201	<i>Trponema denticola</i> ATCC 35405
CP000817	62.71	66	7.27	62	3.8	64	7.38	-341.8	197	-306.1	183.2	-351.9	115.9	-350.6	186.4	0.7	0.04	0.72	0.1	0.7	0.05	0.7	0.04	4349	4639821	<i>Lysinibacillus sphaericus</i> C3-41
CP001348	62.60	68	7.69	62	3.9	67	8	-317.1	183.3	-278.2	173.2	-330.6	99.04	-307.6	168.8	0.74	0.03	0.79	0.08	0.74	0.04	0.75	0.03	3348	4068724	<i>Clostridium cellulolyticum</i> H10
AL592022	62.56	66	7.22	62	3.5	67	7.45	-310.9	199.1	-266.9	184.1	-325.4	113.4	-329.4	187.9	0.71	0.04	0.72	0.11	0.71	0.05	0.71	0.04	2957	3011208	<i>Listeria innocua</i> Clip11262
CP000422	62.64	68	7.14	62	3.5	67	7.5	-349.2	198.4	-300.1	183.2	-364.1	119	-350.3	180.8	0.69	0.04	0.73	0.1	0.69	0.04	0.7	0.04	1722	1832387	<i>Pediococcus pentosaceus</i> ATCC 25745
AE016830	62.47	66	7.3	62	4.5	67	7.62	-342	212.8	-282.3	189.5	-353.1	124.1	-345	198.3	0.71	0.05	0.73	0.11	0.71	0.06	0.71	0.06	3010	3218031	<i>Enterococcus faecalis</i> V583
CP000947	62.62	66	7.4	62	3.9	67	7.74	-367.3	289.																	

AE005176	64.67	68	7.45	64	3.7	69	7.31	-365.1	201.4	-329.4	178.4	-382.8	117.3	-381.4	185.7	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	2257	2365589	Lactococcus lactis subsp. lactis I1403
AE017334	64.62	68	6.97	64	3.7	67	7.16	-310.4	210.3	-271.1	190.7	-315.1	132.8	-346.4	207.3	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	4975	5227419	Bacillus anthracis str. 'Ames Ancestor'
CP001177	64.41	68	6.99	64	3.7	67	7.19	-312.3	208.9	-273.4	194.1	-316.7	133.6	-348.1	207.1	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5199	5269030	Bacillus cereus AH187
CP000903	64.44	68	7.07	64	3.7	67	7.25	-311.2	208	-270.5	192.9	-313.7	132.3	-346.1	206.7	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5038	5262775	Bacillus weihenstephanensis KBAB4
CP000553	65.02	64	8.62	64	4.6	67	8.06	-353.3	205.9	-364.3	186.2	-366	128.3	-361.5	185.9	0.7	0.04	0.69	0.12	0.7	0.05	0.7	0.05	2033	1864731	Prochlorococcus marinus str. NATL1A
CP000095	64.88	64	8.49	64	4.6	67	7.97	-351.3	203.5	-361	186.5	-360.8	128.7	-359.4	190.6	0.7	0.04	0.69	0.12	0.7	0.05	0.7	0.05	2007	1842899	Prochlorococcus marinus str. NATL2A
BA000028	64.32	68	6.93	64	3.4	67	7.06	-314.4	189.7	-277.8	176.3	-322.9	107	-313.5	173	0.7	0.04	0.72	0.11	0.7	0.04	0.7	0.04	3464	3630528	Oceanobacillus iheyensis HTE831
AE009948	64.35	68	6.82	64	3.7	69	7.01	-340.3	202	-309.2	182.6	-351.3	122	-342.1	189.9	0.69	0.05	0.71	0.11	0.69	0.05	0.69	0.05	2042	2160267	Streptococcus agalactiae 2603V/R
CP000227	64.44	68	7.18	64	3.7	67	7.32	-311	209.7	-275.6	193.5	-314.5	127.5	-351.1	209.3	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5012	5214195	Bacillus cereus Q1
CP001215	64.62	68	6.94	64	3.7	67	7.18	-286.4	196.1	-247.5	178.2	-285.8	121.1	-315.4	196.8	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5329	5230115	Bacillus anthracis str. CDC 684
CP001407	64.56	68	6.9	64	3.7	67	7.3	-312.8	208.1	-276	188.7	-315.9	127.4	-349.4	208.4	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5182	5269628	Bacillus cereus 03BB102
AE017194	64.42	68	7.12	64	3.9	67	7.37	-312.9	208.5	-280.3	195.8	-318.4	133.7	-350.3	209.7	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	5196	5224283	Bacillus cereus ATCC 10987
AE016879	64.62	68	6.97	64	3.7	67	7.18	-310.4	210.3	-271.7	190.8	-314.9	133.2	-345.4	206.9	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	5069	5227293	Bacillus anthracis str. Ames
CP000001	64.65	68	6.98	64	3.6	67	7.28	-311.9	206.4	-274.3	192.7	-316.2	124.5	-347	209	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	5131	5300915	Bacillus cereus E33L
AE017225	64.62	68	6.93	64	3.6	67	7.17	-310.4	211.4	-273.7	190.6	-315.2	131.7	-344.6	206.3	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	5276	5228663	Bacillus anthracis str. Sterne
CP000485	64.57	68	7.07	64	3.5	67	7.19	-313.1	208.3	-282.7	196.7	-318.1	127.1	-349.4	207.3	0.7	0.04	0.69	0.12	0.7	0.05	0.7	0.05	4735	5257091	Bacillus thuringiensis str. Al Hakam
CP000114	64.38	68	6.89	64	3.6	69	6.91	-343.5	203.7	-307.7	181.3	-356.1	116.7	-348.5	191.8	0.69	0.05	0.72	0.1	0.69	0.05	0.69	0.05	1962	2127839	Streptococcus agalactiae A909
AL732656	64.37	68	6.68	64	3.7	69	7.21	-342.2	203.6	-305.5	183.5	-353.6	116.3	-345.6	194.9	0.69	0.05	0.72	0.1	0.69	0.05	0.69	0.05	2074	2211485	Streptococcus agalactiae NEM316
AE017355	64.59	68	7.01	64	3.7	67	7.24	-312.3	208.8	-276.8	192.6	-314.4	126.6	-349	210.1	0.7	0.05	0.7	0.11	0.7	0.05	0.7	0.05	5116	5237682	Bacillus thuringiensis serovar konkukian str. 97-27
BX908798	65.28	66	7.42	64	3.6	67	7.62	-367	207.5	-337.4	193	-378	116.7	-378.5	189.4	0.68	0.05	0.68	0.11	0.68	0.05	0.68	0.05	2029	2414465	Candidatus Protochlamydia amoebophila UWE25
CP000176	64.70	68	6.91	64	3.7	67	7.28	-312.3	206.5	-276.9	193.4	-317.6	131.9	-348.5	207	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5193	5419036	Bacillus cereus B4264
AE016877	64.72	68	7.09	64	3.7	67	7.33	-313.3	207	-277.8	193	-318.5	129.8	-348.6	208.5	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5152	5411809	Bacillus cereus ATCC 14579
CP001283	64.60	68	6.9	64	3.7	67	7.21	-310.7	207.2	-270.6	191.6	-313.7	129.3	-346.8	207.9	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5235	5302683	Bacillus cereus AH820
CP001186	64.74	68	6.96	64	3.7	67	7.19	-312.9	205.6	-277.9	191.1	-316.8	129.6	-346.4	206	0.7	0.05	0.71	0.11	0.7	0.05	0.7	0.05	5234	5387334	Bacillus cereus G942
CP000679	64.75	68	7.19	64	3.8	67	7.18	-354.6	211.8	-337.2	214.1	-375.4	119.2	-362.9	212.1	0.73	0.03	0.75	0.09	0.73	0.04	0.73	0.04	2674	2970275	Caldiocellulosruptor sacharolyticus DSM 8903
CP001393	64.83	68	7.47	64	4.2	67	7.39	-339.1	249.5	-307.8	206.5	-358.9	122.4	-343.5	213.2	0.73	0.04	0.75	0.09	0.73	0.04	0.74	0.04	2614	2919718	Anaerocellum thermophilum DSM 6725
CP000413	64.74	68	7.23	64	3.3	69	7.36	-341.9	201.8	-314.5	195.6	-358.7	119.8	-339.6	182.5	0.69	0.05	0.7	0.12	0.69	0.05	0.69	0.05	1724	1894360	Lactobacillus gasserii ATCC 33323
CP001391	64.84	68	7.31	64	3	67	7.16	-303.3	189.7	-284.2	173.2	-309.5	102	-304.6	172.5	0.73	0.03	0.76	0.1	0.73	0.04	0.73	0.03	1135	1445873	Wolbachia sp. wRI
CP000488	65.97	68	6.93	64	3.3	69	7.22	-367.3	212.5	-359.4	185.2	-382.3	130.2	-355.1	191.3	0.69	0.04	0.69	0.11	0.69	0.04	0.7	0.04	974	1160782	Candidatus Ruthia magnifica str. Cm (Calyptogenia magnifica)
AM295250	65.37	68	7.14	64	3.3	69	7.18	-317.6	215.1	-275.1	160	-327.5	101.5	-311.4	164.4	0.7	0.05	0.69	0.12	0.7	0.05	0.7	0.05	2427	2566424	Staphylococcus carnosus subsp. carnosus TM300
AE017196	64.77	68	7.63	64	3.5	67	7.3	-312.2	190.6	-308.9	183	-323.9	110.9	-314.5	178.7	0.74	0.04	0.76	0.1	0.74	0.04	0.74	0.04	1116	1267782	Wolbachia endosymbiont of Drosophila melanogaster
CP000771	65.01	68	7.11	65	3.4	69	7.22	-310.8	192.8	-282.6	203.9	-324.2	105.6	-303.2	177	0.73	0.04	0.73	0.1	0.73	0.04	0.73	0.04	1748	1948941	Fervidobacterium nodosum Rt17-B1
CP000033	65.29	68	7.39	65	3.7	69	7.37	-355.3	202.6	-326.4	190.7	-367.1	123.3	-350.3	179	0.69	0.05	0.7	0.12	0.69	0.05	0.69	0.05	1813	1993560	Lactobacillus acidophilus NCFM
CP001130	65.15	68	7.26	65	3.6	69	7.08	-361	208.9	-352.3	206	-377.4	120	-354	191.2	0.71	0.03	0.71	0.1	0.71	0.04	0.71	0.04	1607	1559514	Hydrogenobaculum sp. Y04AA51
AE017198	65.39	68	7.02	65	3.3	69	7.27	-346.1	200.5	-314.4	191	-359.6	116.2	-344.9	189	0.69	0.04	0.72	0.12	0.69	0.05	0.7	0.05	1818	1992676	Lactobacillus johnsonii NCC 533
AE017321	65.82	68	7.11	65	3.2	69	7.11	-288.4	170.2	-266.9	172	-298.3	100.8	-283.7	176.3	0.73	0.03	0.76	0.1	0.73	0.04	0.73	0.04	803	1080084	Wolbachia endosymbiont strain TRS of Brugia malayi
CP000153	65.54	71	7.25	65	3.5	69	7.11	-346.2	202.6	-325.1	186.2	-363.7	107	-348.8	190.2	0.75	0.04	0.77	0.11	0.76	0.04	0.76	0.04	2094	2201561	Sulfurimonas denitrificans DSM 1251
CP000685	65.89	71	7.12	65	4.2	71	7.26	-338.7	209.3	-332	177.8	-345.5	91.79	-351.8	186.6	0.72	0.06	0.7	0.11	0.72	0.06	0.72	0.06	5007	6096872	Flavobacterium johnsoniae UW101
CP000924	65.49	68	7.58	65	4.2	69	7.4	-315.5	207.9	-290.6	211.1	-327.1	121.6	-338.4	209.2	0.73	0.05	0.73	0.1	0.73	0.05	0.73	0.05	2223	2362816	Thermoanaerobacter pseudethanolicus ATCC 33223
AM999887	65.81	68	7.01	65	3.1	67	6.87	-302.7	184.8	-299.1	177.9	-323.4	110	-323.1	176.8	0.74	0.04	0.76	0.1	0.74	0.04	0.74	0.04	1267	1482455	Wolbachia endosymbiont of Culex quinquefasciatus Pel
CP000923	65.48	68	7.61	65	4.2	69	7.54	-337.8	210.8	-326.1	211.6	-357	122.2	-356.2	208.5	0.73	0.05	0.74	0.1	0.73	0.06	0.73	0.05	2331	2457259	Thermoanaerobacter sp. X514
CP000238	66.76	68	7.69	65	3.5	69	7.31	-364.8	185.6	-343.1	161	-374.4	89.38	-377	159.1	0.68	0.05	0.67	0.12	0.69	0.05	0.69	0.05	589	686194	Baumannia cicadellinicola str. Hc (Homalodiscia coagulata)
AP008934	66.76	71	6.91	66	3.4	71	7.03	-327.8	185.7	-294.3	170	-335.2	108	-318.1	162.5	0.69	0.05	0.71	0.12	0.69	0.05	0.69	0.05	2399	2516575	Staphylococcus saprophyticus subsp. saprophyticus ATCC 15305
CP000879	65.88	71	7.1	66	3.5	69	7.15	-323.2	202.2	-308.6	194.2	-339.1	103	-318.4	205.6	0.72	0.04	0.74	0.09	0.73	0.04	0.73	0.04	1891	2169548	Petrogona mobilis SJ95
CP001251	66.04	71	7.23	66	3.2	69	6.99	-342.8	233.1	-333.7	239.3	-361	139.4	-358.3	229.7	0.72	0.03	0.74	0.11	0.72	0.03	0.72	0.03	1733	1855560	Dictyoglomus turgidum DSM 6724
CP001147	65.87	71	7.41	66	3.8	69	7.14	-336.4	197.7	-328.7	191.4	-351.7	109.1	-325.6	191.9	0.71	0.05	0.71	0.11	0.71	0.05	0.71	0.05	1999	2003803	Thermodesulfobaculum yellowstonii DSM 11347
CP000487	66.69	68	7.74	66	3.8	71	7.67	-321.2	193.6	-315	189.2	-328.9	112.8	-325.4	189.7	0.72	0.04	0.73	0.1	0.72	0.04	0.72	0.04	1686	1773615	Campylobacter fetus subsp. fetus 82-40
AP010656	67.34	68	6.92	66	3	71	6.9																			

CP000937	67.43	73	6.94	67	3.4	71	6.79	-341.3	201	-327.6	185.6	-351.5	124.4	-339.7	186.5	0.72	0.04	0.77	0.11	0.72	0.04	0.73	0.04	1904	2045775	Francisella philomiragia subsp. philomiragia ATCC 25017
AJ749949	67.74	71	6.83	67	3.6	71	7.14	-348.4	198.7	-341.8	178.9	-363.9	121.8	-353.8	177.4	0.72	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1590	1892819	Francisella tularensis subsp. tularensis SCHU S4
AM286280	67.74	71	6.82	67	3.6	71	7.14	-348.3	198.5	-342	179	-363.9	122	-354.2	177.2	0.72	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1592	1892616	Francisella tularensis subsp. tularensis FSC198
CP000029	67.85	71	6.87	67	3.5	71	6.91	-328.9	217.7	-288	166.2	-333.4	101.1	-315.6	163.8	0.7	0.05	0.72	0.12	0.7	0.05	0.7	0.05	2331	2616530	Staphylococcus epidermidis RP62A
CP000608	67.73	71	6.82	67	3.6	71	7	-341.5	195.6	-322.3	182.9	-354.9	118.9	-341	174.4	0.72	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1601	1898476	Francisella tularensis subsp. tularensis WY96-3418
AP009247	68.41	71	6.81	67	3.3	71	7.05	-360.1	214.8	-345.8	187.7	-375	140.9	-362.9	195.7	0.69	0.04	0.69	0.11	0.69	0.04	0.69	0.04	933	1022154	Candidatus Vesicomosocius okutanii HA
CP000437	67.84	71	6.9	67	3.7	71	7.06	-353.3	196.6	-343.9	181.8	-366.1	119.8	-353.1	182.6	0.71	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1518	1895727	Francisella tularensis subsp. holarctica OSU18
CP001227	67.44	73	7.83	67	4	71	8.01	-316.3	179.6	-308.3	155.2	-328.6	92.97	-311.4	161.3	0.72	0.04	0.75	0.11	0.72	0.05	0.72	0.04	924	1288492	Rickettsia peacockii str. Rustic
CP000803	67.84	71	6.9	67	3.6	71	7	-353.6	196.5	-344.7	182.3	-366.9	116.8	-354.2	181.9	0.72	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1546	1890909	Francisella tularensis subsp. holarctica FTNF002-00
AM233362	67.85	71	6.81	67	3.6	71	7.08	-353	196.4	-345.1	182	-365.8	117.7	-351.5	180.4	0.72	0.04	0.75	0.11	0.72	0.04	0.72	0.04	1743	1895994	Francisella tularensis subsp. holarctica LVS
CP001229	67.25	71	6.97	67	3.8	71	6.74	-332.6	207.1	-322.6	200.8	-347.8	115.4	-323.5	196.9	0.73	0.04	0.72	0.11	0.73	0.05	0.73	0.04	1701	1640877	Sulfurihydrogenibium azorense Az-Fu1
AP008971	67.69	73	7.06	67	3.9	71	6.84	-315.2	192.4	-283.8	182.6	-324.3	117.5	-314.3	180.1	0.74	0.06	0.78	0.11	0.74	0.06	0.74	0.06	1623	1797577	Finegoldia magna ATCC 29328
CP000683	67.46	73	8.68	67	3.9	71	8.11	-329.8	183.2	-347.3	171.7	-341.1	97.68	-328.5	169	0.72	0.04	0.74	0.13	0.72	0.05	0.72	0.04	963	1360898	Rickettsia massiliae MTU5
CP001612	67.60	71	7.94	68	4.2	71	8.03	-328.1	183.9	-325.9	165.3	-333.7	102.6	-327.9	167.4	0.72	0.04	0.74	0.12	0.72	0.05	0.72	0.05	1012	1278540	Rickettsia africana ESF-5
CP000848	67.53	71	8.03	68	4.9	71	7.96	-328.4	182.8	-324.2	171.4	-337.1	118	-327.8	164.8	0.72	0.05	0.74	0.11	0.72	0.06	0.72	0.06	1219	1257710	Rickettsia rickettsii str. 'Sheila Smith'
CP000673	67.98	71	8.1	67	5.4	71	8.44	-309.4	193.4	-275.8	184.7	-311.9	115.6	-312.7	183.7	0.73	0.08	0.75	0.12	0.73	0.08	0.73	0.08	3815	3964618	Clostridium kluyveri DSM 555
AE015450	68.55	75	7.36	68	3.4	71	6.84	-392.2	209.9	-363	182.4	-410.2	95.54	-386.9	182.9	0.68	0.04	0.67	0.12	0.68	0.05	0.68	0.04	725	996422	Mycoplasma gallisepticum R
CP000016	70.44	71	8.03	68	3.3	73	7.72	-357.2	208.6	-353.3	183.9	-352.9	120.4	-359.9	180.8	0.7	0.03	0.7	0.12	0.7	0.04	0.7	0.04	607	791654	Candidatus Blochmannia pennsylvanicus str. BPEN
AP009049	68.01	71	7.79	68	5.2	71	8.28	-310.6	193.7	-281.9	193	-313.4	111.5	-313.7	183.8	0.73	0.07	0.74	0.12	0.73	0.08	0.73	0.07	3466	3896121	Clostridium kluyveri NBRC 12016
AE006914	67.56	71	8.21	68	4.6	71	8.01	-328.5	183.2	-327	168.2	-328.7	111.2	-320.5	170.4	0.72	0.05	0.73	0.12	0.72	0.06	0.72	0.06	1372	1268755	Rickettsia conorii str. Malish 7
CP000766	67.55	71	8.29	68	4.8	71	7.99	-328	182.6	-324.6	169.9	-335.9	115.8	-329.2	163.1	0.71	0.05	0.74	0.12	0.72	0.06	0.72	0.06	1232	1268175	Rickettsia rickettsii str. Iowa
CP000896	68.07	71	6.77	68	3	71	6.82	-350.3	185.1	-300	162.2	-360.4	90.56	-336	164	0.68	0.05	0.71	0.12	0.69	0.05	0.69	0.05	1367	1496992	Acholeplasma laidlawii PG-8A
CP000053	67.55	71	8.17	68	4.1	71	8.11	-326.6	183.4	-327.6	162.7	-332.4	98.1	-316.6	157.7	0.72	0.05	0.73	0.12	0.72	0.05	0.72	0.05	1385	1485148	Rickettsia felis URRWXCal2
CP000847	67.67	71	7.91	68	4.4	69	7.98	-329.2	182.2	-332.2	169.9	-337.9	110.3	-323.9	166.6	0.72	0.05	0.75	0.11	0.72	0.06	0.72	0.05	1131	1231060	Rickettsia akari str. Hartford
CP000576	68.66	71	8.33	68	4.5	71	7.88	-358	195.5	-370.9	183.3	-366	110.8	-378.2	179.8	0.71	0.04	0.71	0.12	0.71	0.05	0.71	0.04	1808	1641879	Prochlorococcus marinus str. MIT 9301
CP000111	68.79	71	8.4	68	4.6	73	7.92	-358.3	196.5	-375.6	185.5	-367.8	115.2	-378	185	0.71	0.04	0.71	0.12	0.71	0.05	0.71	0.04	1851	1709204	Prochlorococcus marinus str. MIT 9312
CP001080	67.97	71	7.11	68	3.7	71	7.09	-312.9	194.1	-291.9	176.7	-324	123.7	-297.3	184.1	0.71	0.04	0.72	0.11	0.71	0.04	0.71	0.04	1709	1838442	Sulfurihydrogenibium sp. YO3AOP1
CP000551	68.68	71	8.44	68	4.5	73	7.99	-358.2	194.9	-372.3	180.8	-371	109.8	-378.5	185.1	0.7	0.04	0.71	0.12	0.71	0.05	0.71	0.05	1814	1669886	Prochlorococcus marinus str. AS9601
CP001047	69.29	71	6.65	68	3.6	73	6.55	-343.7	188.2	-320.6	168.7	-374	95.84	-345.7	179.5	0.7	0.04	0.71	0.11	0.7	0.04	0.7	0.04	622	820453	Mycoplasma arthritis 158L3-1
CP000825	68.85	71	8.34	68	4.6	71	7.91	-357.7	196.9	-368.4	181.6	-364.5	113.5	-383.4	191.2	0.71	0.04	0.71	0.12	0.71	0.05	0.71	0.05	1887	1738790	Prochlorococcus marinus str. MIT 9215
CP000087	68.35	73	7.85	68	4.2	71	8.2	-324.1	183.8	-320.1	160.5	-333.9	96.92	-318	168	0.72	0.05	0.74	0.12	0.72	0.06	0.72	0.06	1420	1522076	Rickettsia bellii RML369-C
CP000849	68.37	73	7.87	68	4.4	71	8.16	-331.5	184.1	-332.6	167.7	-337.9	102.1	-330.4	172	0.72	0.05	0.75	0.12	0.72	0.06	0.72	0.06	1419	1528980	Rickettsia bellii OSU 85-389
AE001437	69.07	73	7	68	3.5	73	6.89	-305	192.9	-283.8	194.9	-312.6	119	-323.8	191.4	0.74	0.05	0.75	0.12	0.74	0.05	0.74	0.05	3651	3940880	Clostridium acetobutylicum ATCC 824
CP000409	68.95	73	7.72	68	4.3	71	7.61	-331.2	179.8	-326	159	-340.1	107.2	-323.4	170.9	0.71	0.05	0.74	0.12	0.71	0.05	0.71	0.05	964	1159772	Rickettsia canadensis str. McKiel
L43967	68.31	71	6.16	69	3.9	71	6.72	-397.5	210.9	-366.9	184.6	-419.8	102.7	-382.2	185.2	0.68	0.05	0.67	0.12	0.68	0.05	0.68	0.05	473	580076	Mycoplasma genitalium G37
BX548174	69.20	71	8.38	68	4.5	73	7.8	-356.2	193.2	-368.3	179.3	-361.1	109.7	-381.4	180	0.71	0.04	0.71	0.13	0.71	0.05	0.71	0.05	1840	1657990	Prochlorococcus marinus subsp. pastoris str. CCMP1986
CP000552	69.21	71	8.58	68	4.6	73	7.88	-353.3	194.5	-371.7	183.2	-364.1	109.1	-378.9	184.3	0.71	0.04	0.72	0.12	0.71	0.05	0.71	0.05	1827	1704176	Prochlorococcus marinus str. MIT 9515
CP000236	69.90	71	6.95	69	3.5	71	7.11	-338.8	239.5	-356.6	221.4	-357.4	175	-365.3	226.2	0.72	0.05	0.73	0.12	0.72	0.06	0.72	0.05	941	1176248	Ehrlichia chaffeensis str. Arkansas
AP008981	69.49	71	6.82	69	3.5	71	7.29	-326.6	182	-326.8	179.5	-337.3	113.2	-325.6	170.6	0.72	0.05	0.71	0.11	0.73	0.06	0.72	0.06	1898	2008987	Orientia tsutsugamushi str. Ikeda
CP000716	68.60	71	7.56	69	3.7	71	7.04	-323.4	220.6	-299.6	237.9	-335.3	142.7	-321.9	231.9	0.72	0.04	0.73	0.11	0.72	0.04	0.72	0.04	1866	1915238	Thermosiphon melanesiensis BI429
CP000538	69.38	73	7.49	69	3.9	73	7.19	-369.6	223.1	-359.3	216	-385.2	138.7	-396.2	220	0.72	0.04	0.74	0.12	0.72	0.05	0.72	0.04	1617	1616554	Campylobacter jejuni subsp. jejuni 81-176
CP000107	71.04	71	6.76	69	3.1	73	6.93	-328	239.5	-315.7	229.8	-323.7	166.9	-337.8	216.5	0.73	0.04	0.73	0.12	0.73	0.05	0.73	0.05	922	1315030	Ehrlichia canis str. Jake
AM494475	69.47	71	6.56	69	3.2	71	6.62	-319.8	182.9	-324.9	182.1	-342.2	113.9	-342.9	167.3	0.72	0.05	0.72	0.12	0.72	0.05	0.72	0.05	1167	2127051	Orientia tsutsugamushi str. Boryong
CP000721	70.14	73	6.82	69	3.5	73	6.91	-306.9	189	-268.2	179.9	-309.1	108.1	-301.8	173	0.73	0.05	0.76	0.12	0.72	0.05	0.73	0.05	5010	6000632	Clostridium beijerinckii NCIMB 8052
AL111168	69.45	73	7.45	69	3.8	73	7.26	-369.3	223.6	-360.8	218.1	-385.6	136.4	-389	216.8	0.72	0.04	0.75	0.12	0.72	0.04	0.72	0.04	1603	1641481	Campylobacter jejuni subsp. jejuni NCTC 11168
CP001685	70.35	75	7.56	69	4.5	73	7.53	-290.6	203	-243	193	-297.5	125.5	-276.2	202.9	0.72	0.05	0.77	0.11	0.71	0.06	0.72	0.05	2199	2465610	Leptotrichia buccalis DSM 1135
CP000814	69.46	73	7.51	69	3.8	73	7.18	-368.1	223.8	-357	218.4	-385	136.2	-401.7	220.5	0.72	0.04	0.74	0.12	0.72	0.04	0.72	0.04	1606	1628115	Campylobacter jejuni subsp. jejuni 81116
CP001185																										

CP000728	71.69	75	7.32	71	4.1	76	7.43	-315.9	198.6	-274	191.5	-310.5	117.2	-316.6	181.5	0.73	0.06	0.74	0.13	0.73	0.06	0.73	0.06	3509	3995387	Clostridium botulinum F str. Langeland
CP000726	71.79	75	7.31	71	4.1	76	7.53	-315.7	198.2	-273.7	190.2	-311.3	117.7	-320.2	182.3	0.73	0.06	0.73	0.13	0.73	0.06	0.73	0.06	3421	3863450	Clostridium botulinum A str. ATCC 19397
CP000939	71.66	73	7.36	71	4.2	76	7.44	-318.3	198.8	-279	190.1	-312.1	117.7	-321	181.5	0.73	0.06	0.74	0.13	0.73	0.07	0.73	0.06	3519	3958233	Clostridium botulinum B1 str. Okra
CP001581	71.79	73	7.56	71	4.4	76	7.65	-315	198.3	-275.9	191.9	-307.4	117.6	-316.4	181.9	0.73	0.07	0.74	0.13	0.73	0.07	0.73	0.07	3737	4155278	Clostridium botulinum A2 str. Kyoto
AE015927	71.25	73	7.38	71	3.8	76	7.09	-300.4	189.6	-281.1	195.1	-307.5	100.9	-320	185.2	0.73	0.05	0.7	0.13	0.73	0.05	0.73	0.05	2373	2799251	Clostridium tetani E88
AP006628	72.24	75	8.65	71	4.7	76	7.77	-384.1	246.3	-379.9	220.4	-384.9	163.8	-371.9	258	0.7	0.06	0.71	0.13	0.7	0.06	0.7	0.06	746	853092	Onion yellows phytoplasma OY-M
CP001083	71.78	75	7.41	71	4.2	76	7.53	-316.9	197.9	-283.4	190.2	-312.7	118.1	-318.2	182.9	0.73	0.06	0.73	0.13	0.73	0.07	0.73	0.06	3633	3977794	Clostridium botulinum Ba4 str. 657
BX248583	72.62	75	7.41	71	3.4	76	7.25	-401.3	264.3	-419.8	259.8	-415.7	169.7	-466.1	252.9	0.73	0.05	0.73	0.13	0.73	0.05	0.73	0.05	581	705557	Candidatus Blochmannia floridanus
CP001205	71.46	75	7.89	71	3.9	76	7.27	-357.2	239.2	-350.5	247.5	-353.8	164.2	-365.3	250.9	0.71	0.04	0.73	0.11	0.71	0.04	0.71	0.04	794	906707	Borrelia burgdorferi ZS7
AE000783	71.41	75	7.76	71	3.9	76	7.34	-356.6	239.1	-349.6	250.1	-355.7	163.8	-365.3	248.4	0.71	0.04	0.72	0.11	0.71	0.04	0.71	0.04	821	910724	Borrelia burgdorferi B31
AM422018	72.58	75	8.51	71	4.5	78	7.73	-411.2	261.6	-393.5	244.3	-420	168.8	-419.5	253.2	0.7	0.06	0.72	0.13	0.7	0.07	0.7	0.06	679	879959	Candidatus Phytoplasma australiense
FM864216	71.46	75	6.89	71	4.1	76	7.35	-387.9	258.1	-375.4	173.8	-401.9	154.6	-400	238.1	0.7	0.04	0.73	0.11	0.7	0.05	0.7	0.04	663	846214	Mycoplasma conjunctivae
CP001357	72.94	77	8.35	71	4.5	76	7.41	-329.7	200.2	-337.4	179.8	-328.5	117.4	-356.1	177.3	0.73	0.05	0.74	0.13	0.73	0.05	0.73	0.05	2566	3000694	Brachyspira hyodysenteriae WA1
CP001056	72.49	75	7.09	72	3.8	76	7.06	-318.6	195.9	-281.9	188.8	-316.6	117.2	-324	186.7	0.74	0.05	0.75	0.13	0.74	0.05	0.74	0.05	3380	3800327	Clostridium botulinum B str. Eklund 17B
CP001078	72.64	75	7.1	72	3.7	76	6.99	-322.5	196.3	-284.5	186.5	-318.9	116.4	-330.7	185.4	0.74	0.05	0.75	0.13	0.74	0.05	0.75	0.05	3175	3659644	Clostridium botulinum E3 str. Alaska E43
CP000061	73.11	75	8.48	72	5.3	76	7.44	-408.4	243.7	-408.1	213.7	-420.1	164.8	-422.7	242.8	0.7	0.06	0.71	0.13	0.71	0.07	0.7	0.06	669	706569	Aster yellows witches'-broom phytoplasma AYWB
CP000976	72.41	75	7.61	72	3.8	76	7.07	-341.4	252.1	-328	247.6	-327.2	195.8	-336.5	252.4	0.73	0.04	0.71	0.12	0.73	0.05	0.73	0.05	819	931674	Borrelia duttonii Ly
CP001158	73.71	75	8.56	72	3.8	78	7.89	-379.1	212.1	-384.8	186.3	-376.4	97.13	-416.7	187	0.72	0.04	0.74	0.13	0.72	0.04	0.72	0.04	551	641895	Buchnera aphidicola str. Tuc7 (Acyrtosiphon pisum)
CP000993	72.48	75	7.74	72	3.8	76	7.22	-338.5	251.5	-326.1	246.6	-329.9	195.9	-336.5	251.9	0.73	0.04	0.71	0.12	0.73	0.05	0.73	0.05	799	930981	Borrelia recurrentis A1
CP001161	73.71	75	8.57	72	3.8	78	7.91	-379.6	212	-385.9	186.1	-375.8	97.38	-417.1	188.3	0.72	0.04	0.74	0.13	0.72	0.04	0.72	0.04	553	642122	Buchnera aphidicola str. 5A (Acyrtosiphon pisum)
BA000003	73.69	75	8.6	72	3.9	78	7.97	-379.1	211.6	-385.6	186.1	-375.2	97.74	-417.3	190.4	0.72	0.04	0.74	0.13	0.72	0.04	0.72	0.04	562	640681	Buchnera aphidicola str. APS (Acyrtosiphon pisum)
AL445566	73.36	75	6.84	73	4.2	76	6.75	-405.5	215.2	-381.7	194.4	-424	109.9	-406.3	203.8	0.71	0.04	0.7	0.13	0.71	0.05	0.71	0.05	774	963879	Mycoplasma pulmonis UAB CTIP
AE009951	72.85	75	7.22	73	4	78	7.14	-322.9	198	-287.8	209.5	-335.1	123.1	-309.1	192.2	0.76	0.05	0.76	0.15	0.76	0.06	0.76	0.06	2043	2174500	Fusobacterium nucleatum subsp. nucleatum ATCC 25586
CP000361	72.95	75	6.95	73	3.6	76	6.52	-361	197.3	-354.9	188.1	-376.3	112	-398.1	196.9	0.76	0.05	0.73	0.14	0.76	0.05	0.76	0.05	2247	2341251	Arcobacter butzleri RM4018
AE017263	72.98	75	6.91	73	4	78	7.01	-351	180.9	-305.5	162.5	-364.9	87.95	-359.7	181.4	0.73	0.05	0.75	0.14	0.73	0.06	0.73	0.05	678	793224	Mesoplasma florum L1
AE016826	74.66	75	7.92	73	3.5	78	7.47	-376.6	224.1	-356.8	204.9	-374.1	140.9	-380.5	213.2	0.72	0.04	0.74	0.13	0.72	0.04	0.72	0.04	502	615980	Buchnera aphidicola str. Bp (Baizongia pistaciae)
CP001184	74.23	77	7.01	74	4	78	7.25	-410.5	197.4	-380.3	177.6	-415.8	114.6	-396.6	182.3	0.71	0.06	0.7	0.15	0.72	0.06	0.72	0.06	640	874478	Ureaplasma urealyticum serovar 10 str. ATCC 33699
BA000026	74.28	77	6.29	74	3.7	78	6.83	-395.8	193.1	-368.4	175.9	-405	101	-405.9	182.4	0.74	0.06	0.73	0.14	0.75	0.06	0.75	0.06	1036	1358633	Mycoplasma penetrans HF-2
AE013218	74.67	75	8.29	73	4.1	78	8	-392.9	223.3	-394.2	192	-385.1	106.6	-454.7	208.3	0.73	0.04	0.74	0.14	0.74	0.04	0.74	0.04	543	641454	Buchnera aphidicola str. Sg (Schizaphis graminum)
CP000942	74.50	77	7.1	74	4.1	78	7.3	-404.6	192.8	-364.2	180	-411.3	96.24	-402.3	179.8	0.71	0.05	0.71	0.14	0.71	0.05	0.71	0.05	604	751679	Ureaplasma parvum serovar 3 str. ATCC 27815
AF222894	74.50	75	7.11	74	4.1	78	7.3	-404.7	192.6	-364.8	180.6	-410.5	96.65	-401	179.5	0.71	0.05	0.7	0.14	0.71	0.05	0.71	0.05	607	751719	Ureaplasma parvum serovar 3 str. ATCC 700970
AE017308	75.05	77	6.55	75	3.8	78	6.6	-404.8	203.6	-357	190.2	-420.8	105.9	-412.9	198.2	0.72	0.05	0.71	0.14	0.73	0.05	0.73	0.05	631	777079	Mycoplasma mobile 163K
BX293980	76.03	77	6.7	76	3.9	78	6.95	-381.1	205.5	-359.4	197.1	-396.9	108	-395.2	194.7	0.75	0.07	0.7	0.16	0.76	0.07	0.76	0.07	998	1211703	Mycoplasma mycoides subsp. mycoides SC str. PG1
CP000123	76.23	77	6.32	76	4.2	80	6.95	-390.6	206.7	-362.1	181.7	-408	108	-389.4	194.3	0.75	0.06	0.72	0.15	0.76	0.06	0.76	0.06	804	1010023	Mycoplasma capricolum subsp. capricolum ATCC 27343
BA000021	77.52	80	8.67	76	4.3	82	8.01	-404.4	238.2	-430.4	206.8	-395.8	105	-462.3	221.4	0.75	0.05	0.77	0.15	0.75	0.05	0.75	0.05	607	697724	Wigglesworthia glossinidia endosymbiont of Glossina brevipalpis
CU469464	78.61	80	8.21	77	4.2	82	7.68	-458.8	239	-435.6	234.8	-451.1	121.6	-501.7	230.5	0.73	0.06	0.73	0.15	0.74	0.06	0.74	0.06	478	601943	Candidatus Phytoplasma mali
CP001605	77.40	80	8.37	78	4.8	82	8.32	-464	298.3	-456.3	286.6	-500.5	164.6	-497.5	282.8	0.76	0.05	0.76	0.16	0.75	0.06	0.76	0.05	241	276984	Candidatus Sulcia muelleri SMDSEM
CP000770	77.56	80	8.62	78	4.9	84	8.05	-446	284.4	-464.5	246	-460.5	130.8	-491.1	244.6	0.77	0.04	0.8	0.15	0.78	0.05	0.78	0.05	224	245530	Candidatus Sulcia muelleri GWSS
CP000263	79.90	80	8.26	78	4.8	84	8.64	-445.4	275.1	-427.1	242.8	-437.9	134.3	-502.5	260.5	0.78	0.05	0.79	0.14	0.79	0.05	0.79	0.05	355	416380	Buchnera aphidicola str. Cc (Cinara cedri)
AP009180	83.44	86	7.18	86	5.2	87	6.19	-558.3	326.4	-590.1	322	-630.8	195.2	-595.9	276.6	0.79	0.04	0.82	0.13	0.79	0.05	0.79	0.05	177	159662	Candidatus Carsonella ruddii PV