Table 5. Thermophilic and mesophilic prokaryotes included in this study

Domain	Species	OGT	AG%	GC%
A	*Crenarchaeota*			
A	*Aeropyrum pernix K1*	95°C	52.468	57.648
A	*Sulfolobus solfataricus P2*	80°C	56.023	36.552
A	*Pyrobaculum aerophilum IM2*	104°C	54.652	52.031
A	*Euryarchaeota*			
A	*Archaeoglobus fulgidus DSM4304*	83°C	56.042	49.416
A	*Methanobacterium thermoautotrophicum delta H*	65°C	54.985	50.656
A	*Methanococcus jannaschii DSM2661*	85°C	58.933	31.958
A	*Pyrococcus horikoshii shinkaj OT3*	95°C	56.048	42.395
A	*Pyrococcus abyssi GE5*	103°C	57.243	45.229
A	*Pyrococcus furiosus DSM 3638*	102°C	57.318	41.153
A	*Thermoplasma acidophilum DSM 1728*	60°C	54.466	47.355
A	*Thermoplasma volcanium GSS1*	60°C	54.968	41.217
B	*Aquificae*			
B	*Aquifex aeolicus VF5*	96°C	56.898	43.768
B	*Firmicutes*			
B	*Thermoanaerobacter tengcongensis MB4(T)*	80°C	57.786	37.878
B	*Thermotogales*			
B	*Thermotoga maritima MSB8*	80°C	55.544	46.446
A	***Halobacteria***			
A	*Halobacterium sp. NRC-1*	37°C	51.075	67.479
A	***Methanosarcinale***s			
A	*Methanosarcina acetivorans* str. C2A,	35°C	49.939	45.239
B	***Actinobacteria***			
B	*Mycobacterium tuberculosis H37Rv*	37°C	50.409	66.021
B	*Mycobacterium tuberculosis CDC1551*	37°C	50.401	65.929
B	*Mycobacterium leprae TN*	37°C	50.325	58.91
B	***Bacteroidetes***			
B	*Porphyromonas gingivalis W83*	37°C	51.631	49.334
B	***Chlamydiae***			
B	*Chlamydia trachomatis serovar D*	37°C	49.985	41.725
B	*Chlamydia muridarum strain Nigg*	37°C	50.039	40.753
B	*Chlamydia pneumoniae CWL029*	35°C	50.031	41.419
B	*Chlamydia pneumoniae AR39*	35°C	50.045	41.384
B	*Chlamydia pneumoniae J138*	35°C	50.03	41.429
B	***Chlorobi***			
B	*Chlorobium tepidum TLS*	47°C	50.671	57.783
B	***Cyanobacteria***			
B	*Synechocystis sp. PCC6803*	25°C	50.464	48.681
B	*Nostoc sp. PCC 7120*	26°C	51.568	42.411
B	***Deinococcus-Thermus***			
B	*Deinococcus radiodurans R1*	30°C	50.168	67.365
B	***Firmicutes***			
B	*Bacillus subtilis 168*	30°C	54.042	44.365
B	*Bacillus halodurans C-125*	30°C	53.773	44.424
B	*Listeria innocua CLIP 11262*	37°C	54.572	37.926
B	*Listeria monocytogenes EGD-e*	37°C	54.402	38.535
B	*Staphylococcus aureus COL*	37°C	54.958	33.536
B	*Staphylococcus aureus N315*	37°C	54.905	33.665
B	*Staphylococcus aureus Mu50*	37°C	54.916	33.671
B	*Enterococcus faecalis V583*	37°C	54.251	37.978
B	*Lactococcus lactis subsp. lactis IL1403*	30°C	52.901	36.267

Domain	Species	OGT	AG%	GC%
B	*Streptococcus pneumoniae TIGR4*	37°C	52.189	40.558
B	*Streptococcus pneumoniae R6*	37°C	52.271	40.626
B	*Streptococcus pyogenes SF370 serotype M1*	37°C	52.170	39.210
B	*Mycoplasma genitalium G-37*	37°C	52.973	31.618
B	*Mycoplasma pneumoniae M129*	37°C	52.314	40.839
B	*Ureaplasma urealyticum parvum biovar serovar 3*	37°C	54.157	25.766
B	*Mycoplasma pulmonis UAB CTIP*	37°C	54.805	27.340
B	***Proteobacteria***			
B	*Caulobacter crescentus CB15*	37°C	49.500	67.809
B	*Brucella melitensis 16M*	35°C	49.808	58.401
B	*Mesorhizobium loti MAFF303099*	27°C	49.662	63.366
B	*Sinorhizobium meliloti 1021*	27°C	49.631	62.972
B	*Agrobacterium tumefaciens C58 Cereon*	26°C	49.424	59.849
B	*Agrobacterium tumefaciens C58 UWash*	26°C	49.374	59.885
B	*Rickettsia prowazekii Madrid E*	35°C	53.978	30.481
B	*Rickettsia conorii Malish 7*	33°C	54.179	32.926
B	*Neisseria meningitidis MC58*	37°C	51.388	52.957
B	*Neisseria meningitidis serogroup A Z2491*	37°C	51.313	53.325
B	*Campylobacter jejuni NCTC 11168*	43°C	54.291	30.888
B	*Helicobacter pylori 26695*	37°C	53.667	39.626
B	*Helicobacter pylori J99*	37°C	53.669	39.975
B	*Yersinia pestis KIM*	28°C	51.343	49.013
B	*Escherichia coli K12-MG1655*	37°C	51.385	51.95
B	*Escherichia coli O157:H7 EDL933*	37°C	51.766	51.61
B	*Escherichia coli O157:H7 VT2-Sakai*	37°C	51.813	51.73
B	*Salmonella typhimurium LT2 SGSC1412*	37°C	51.471	53.494
B	*Salmonella enterica serovar Typhi CT18*	37°C	51.429	53.38
B	*Buchnera sp. APS*	18°C	54.051	27.504
B	*Haemophilus influenzae KW20*	37°C	52.371	38.872
B	*Pasteurella multocida PM70*	37°C	52.11	41.153
B	*Vibrio cholerae El Tor N16961*	37°C	51.295	48.225
B	*Xylella fastidiosa 9a5c*	26°C	50.262	53.833
B	*Magnetococcus sp. MC-1*	—	51.053	54.873
B	***Spirochaetales***	—	—	—
B	*Borrelia burgdorferi B31*	37°C	55.321	28.877
B	*Treponema pallidum Nichols*	37°C	50.813	52.707

OGT, optimal growth temperature; A, *Archaea* domain; B, *Bacteria* domain; AG%, average percentage of adenine plus guanine (purines) in the whole mRNAs of the organisms; and GC%, average guanine plus cytosine percentage in the whole mRNAs the organisms.