

Supplementary table 1. Optimal growth temperatures. G+C content and position in the x and y axes of figure 3 of the organisms analyzed. Thermophilic organisms (defined as species with an optimal growth Temperature higher than 60 °C) are shown in red.

Organism	Optimal growth T (°C)	%G+C _T	x axis position	y axis position
<i>Aeropyrum pernix K1</i>	90	57.1	-0.116	-0.220
<i>Agrobacterium tumefaciens</i>	26	59.8	-0.103	0.064
<i>Aquifex aeolicus</i>	95	43.5	0.108	-0.257
<i>Archaeoglobus fulgidus</i>	85	49.0	0.024	-0.241
<i>Bacillus halodurans C-125</i>	30	44.0	0.000	-0.074
<i>Bacillus subtilis</i>	30	43.8	0.025	-0.049
<i>Borrelia burgdorferi</i>	30	28.7	0.262	0.038
<i>Brucella melitensis</i>	37	58.0	-0.117	0.057
<i>Buchnera sp. APS</i>	18	27.3	0.267	0.098
<i>Campylobacter jejuni</i>	37	30.6	0.165	0.057
<i>Caulobacter crescentus</i>	30	67.5	-0.152	0.086
<i>Chlamydia trachomatis</i>	37	41.6	0.015	0.063
<i>Chlamydophila pneumoniae</i>	35	41.1	0.047	0.071
<i>Clostridium acetobutylicum ATCC824</i>	37	31.2	0.140	-0.065
<i>Corynebacterium glutamicum</i>	30	54.5	-0.134	0.037
<i>Deinococcus radiodurans</i>	30	67.4	-0.137	0.053
<i>Escherichia coli K12</i>	37	51.3	-0.080	0.064
<i>Escherichia coli O157</i>	37	51.1	-0.080	0.063
<i>Escherichia coli O157:H7:EDL933</i>	37	51.0	-0.082	0.065
<i>Fusobacterium nucleatum ATCC25586</i>		27.1	0.158	-0.067
<i>Haemophilus influenzae Rd</i>	37	38.4	-0.027	0.065
<i>Halobacterium sp. NRC-1</i>	37	68.5	-0.227	-0.100
<i>Helicobacter pylori 26695</i>	37	39.4	0.144	0.060
<i>Helicobacter pylori J99</i>	37	39.7	0.145	0.055
<i>Lactococcus lactis</i>	30	35.8	0.022	0.021
<i>Listeria innocua</i>	37	37.6	0.027	-0.036
<i>Mesorhizobium loti</i>	26	63.3	-0.116	0.077
<i>Methanobacterium thermoautotrophicum delta-H</i>	65	50.4	-0.013	-0.215
<i>Methanococcus jannaschii</i>	85	31.7	0.145	-0.237
<i>Methanopyrus kandleri AV19</i>	85	60.9	-0.089	-0.402
<i>Methanosarcina acetivorans</i>	37	44.6	0.004	-0.091
<i>Mycobacterium leprae TN</i>	37	60.0	-0.181	0.076
<i>Mycobacterium tuberculosis CDC1551</i>	37	65.5	-0.216	0.091
<i>Mycobacterium tuberculosis H37Rv</i>	37	65.6	-0.215	0.091
<i>Mycoplasma genitalium G37</i>	37	31.4	0.236	0.214
<i>Mycoplasma pneumoniae M129</i>	37	40.3	0.128	0.225
<i>Mycoplasma pulmonis UAB CTIP</i>	37	27.1	0.264	0.098
<i>Neisseria meningitidis MC58</i>	37	52.4	-0.048	0.085
<i>Neisseria meningitidis Z2491</i>	37	52.7	-0.063	0.081
<i>Nostoc sp. PCC 7120</i>	30	42.2	-0.062	0.057
<i>Pasteurella multocida PM70</i>	37	40.8	-0.039	0.073
<i>Pseudomonas aeruginosa PA01</i>	37	67.0	-0.103	0.062
<i>Pyrobaculum aerophilum</i>	100	51.7	-0.018	-0.168
<i>Pyrococcus abyssi</i>	97	44.9	0.052	-0.251
<i>Pyrococcus horikoshii OT3</i>	95	42.0	0.065	-0.259
<i>Ralstonia solanacearum</i>		67.3	-0.119	0.074
<i>Rickettsia conorii Malish 7</i>	37	32.4	0.176	0.112
<i>Rickettsia prowazekii MadridE</i>	37	30.1	0.209	0.116
<i>Salmonella enterica serovar typhimurium LT2</i>	37	52.8	-0.084	0.069

<i>Sinorhizobium meliloti</i> 1021	26	63.3	-0.121	0.050
<i>Staphylococcus aureus</i> N315	37	33.2	0.061	-0.021
<i>Streptococcus pneumoniae</i> TIGR4	37	40.3	0.000	0.007
<i>Streptococcus pyogenes</i> SF320	37	38.9	0.008	0.043
<i>Synechocystis</i> PCC6803	25	48.3	-0.072	0.079
<i>Thermoplasma acidophilum</i>	60	46.9	0.077	-0.084
<i>Thermoplasma volcanium</i>	60	40.9	0.115	-0.059
<i>Thermotoga maritima</i>	80	46.3	0.079	-0.206
<i>Treponema pallidum</i> subsp. <i>pallidum</i>	37	52.9	-0.121	0.026
<i>Ureaplasma urealyticum</i>	37	25.8	0.210	0.150
<i>Vibrio cholerae</i>	37	48.1	-0.061	0.063
<i>Xylella fastidiosa</i>	37	53.4	-0.088	0.101
<i>Yersinia pestis</i> CO92	37	48.3	-0.078	0.075