

Table 1. Genome sizes of wild type and engineered prokaryotic microbes

Organism	Lifestyle	Metabolism	Genome size (Mbp)	No. of predicted proteins	Genome reduction (%)	Refs
Wild type strains						
<i>Corynebacterium glutamicum</i>	Heterotrophic free living	Prototroph	3.31	2993	NA	[63]
<i>Prochlorococcus marinus</i>	Autotrophic free living	Prototroph	1.75	1884	NA	[64]
<i>Pelagibacter ubique</i>	Heterotrophic free living	Prototroph	1.31	1354	NA	[64]
<i>Vesicomysocius okutanii</i>	Autotrophic symbiont	Auxotroph	1.02	975	NA	[64]
<i>Mycoplasma mycoides</i> Capri GM12	Heterotrophic symbiont	Auxotroph	1.08	830	NA	[63]
<i>Mycoplasma pneumoniae</i>	Heterotrophic symbiont	Auxotroph	0.82	688	NA	[64]
<i>Mycoplasma genitalium</i> G37	Heterotrophic symbiont	Auxotroph	0.58	475	NA	[65]
<i>Nanoarchaeum equitans</i> ^a	Heterotrophic symbiont	Auxotroph	0.49	540	NA	[63]
<i>Buchnera aphidicola</i> sp. <i>Cinara cedri</i> ^a	Heterotrophic symbiont	Auxotroph	0.43	357	NA	[66]
<i>Candidatus Hodgkinia cicadicola</i> ^a	Heterotrophic symbiont	Auxotroph	0.14	169	NA	[67]
Wild type strains and corresponding genome reduced derivatives						
<i>Streptomyces avermitilis</i>	Heterotrophic free living	Prototroph	9.12	7676	NA	[63]
<i>Streptomyces avermitilis</i> SUKA17	Heterotrophic free living	Prototroph			18.5	[30]
<i>Pseudomonas putida</i> KT2440	Heterotrophic free living	Prototroph	6.18	5350	NA	[63]
<i>Pseudomonas putida</i> TEC 1	Heterotrophic free living	Prototroph			7.4	[31]
<i>Escherichia coli</i> K12 MG1655	Heterotrophic free living	Prototroph	4.64	4146	NA	[63]
<i>Escherichia coli</i> MG1655 D16	Heterotrophic free living	Prototroph			29.7	[68]
<i>Escherichia coli</i> MG1655 MGF-01	Heterotrophic free living	Prototroph			21.7	[28]
<i>Bacillus subtilis</i> 168	Heterotrophic free living	Prototroph	4.21	4280	NA	[63]
<i>Bacillus subtilis</i> 168 MGB874	Heterotrophic free living	Prototroph			20.7	[29]

NA, not applicable; ND, not determined.

^aObligate symbiont.