Table 2. Estimating the number of essential genes in prokaryotic microorganisms

Model organism	Genome size (Mbp)	No. of essential genes ^a	Evidence	Refs.
M. genitalium G37	0.58	382	In vivo	[22]
E. coli K12 BW25113	ND	303	In vivo	[69]
B. subtilis 168	4.21	271	In vivo	[70]
NA/comparative genomics	NA	206	In silico	[71]
NA/extrapolation	0.090	167	In silico	[72]

NA, not applicable; ND, not determined.

^aEssentiality was assigned if the knockout of a single gene could not be rescued under precisely defined environmental conditions.