

Table 1. Genomic substitution rates (U) per generation in bacteria

Species	Genome size, bp	Substitution rate*	Generations per year [†]	U [‡]
<i>E. coli</i>	4.7×10^6	4.5×10^{-9}	100–300	0.0001–0.0002
<i>Buchnera</i>	6.6×10^5	8.2×10^{-9}	30–50	0.0001–0.0002

*Substitution rates are calculated per synonymous site per year based on externally calibrated divergence times.

[†]Generation times are based on those reported for natural populations of *E. coli* (37–39) and *Buchnera* (19, 40–42).

[‡]Laboratory studies of *E. coli* and other DNA-based microbes yield an average genomic mutation rate of 0.003 (20, 22).