

## Composition of Even and Staggered Mock DNA Communities\*

Organism and Repository Number	16S Mass Calculations (gDNA in grams)			Even Mixture		Staggered Mixture	
	gDNA per copy (theoretical) <sup>a</sup>	gDNA per copy (qPCR) <sup>b</sup>	theoretical/qPCR	16S copies	gDNA mass	16S copies	gDNA mass
<i>Acinetobacter baumannii</i> ATCC 17978	8.16E-16	1.60E-15	0.51	100000	1.60E-10	10000	1.60E-11
<i>Actinomyces odontolyticus</i> ATCC 17982	1.00E-15	7.82E-16	1.28	100000	7.82E-11	1000	7.82E-13
<i>Bacillus cereus</i> ATCC 10987	4.47E-16	3.73E-16	1.20	100000	3.73E-11	100000	3.73E-11
<i>Bacteroides vulgatus</i> ATCC 8482	7.57E-16	1.52E-15	0.50	100000	1.52E-10	1000	1.52E-12
<i>Candida albicans</i> ATCC MY-2876	2.92E-14	NA <sup>d</sup>	NA <sup>d</sup>	1120 <sup>c</sup>	3.27E-11	1000 <sup>c</sup>	2.92E-11
<i>Clostridium beijerinckii</i> ATCC 51743	4.40E-16	3.81E-16	1.15	100000	3.81E-11	100000	3.81E-11
<i>Deinococcus radiodurans</i> DSM 20539	1.05E-15	1.76E-14	0.06	100000	1.76E-09	1000	1.76E-11
<i>Enterococcus faecalis</i> ATCC 47077	8.25E-16	2.22E-16	3.72	100000	2.22E-11	1000	2.22E-13
<i>Escherichia coli</i> ATCC 700926	6.81E-16	2.71E-16	2.51	100000	2.71E-11	1000000	2.71E-10
<i>Helicobacter pylori</i> ATCC 700392	8.55E-16	4.50E-16	1.90	100000	4.50E-11	10000	4.50E-12
<i>Lactobacillus gasseri</i> DSM 20243	3.25E-16	1.53E-16	2.12	100000	1.53E-11	10000	1.53E-12
<i>Listeria monocytogenes</i> ATCC BAA-679	5.03E-16	3.98E-16	1.27	100000	3.98E-11	10000	3.98E-12
<i>Methanobrevibacter smithii</i> ATCC 35061	9.50E-16	NA <sup>d</sup>	NA <sup>d</sup>	100000	9.50E-11	1000000	9.50E-10
<i>Neisseria meningitidis</i> ATCC BAA-335	5.83E-16	6.87E-16	0.85	100000	6.87E-11	10000	6.87E-12
<i>Propionibacterium acnes</i> DSM16379	8.76E-16	1.39E-15	0.63	100000	1.39E-10	10000	1.39E-11
<i>Pseudomonas aeruginosa</i> ATCC 47085	1.61E-15	1.80E-15	0.90	100000	1.80E-10	100000	1.80E-10
<i>Rhodobacter sphaeroides</i> ATCC 17023	1.41E-15	1.30E-15	1.09	100000	1.30E-10	1000000	1.30E-09
<i>Staphylococcus aureus</i> ATCC BAA-1718	5.89E-16	6.97E-16	0.85	100000	6.97E-11	100000	6.97E-11
<i>Staphylococcus epidermidis</i> ATCC 12228	5.13E-16	1.31E-15	0.39	100000	1.31E-10	1000000	1.31E-09
<i>Streptococcus agalactiae</i> ATCC BAA-611	3.17E-16	1.83E-16	1.73	100000	1.83E-11	100000	1.83E-11
<i>Streptococcus mutans</i> ATCC 700610	4.17E-16	4.70E-16	0.89	100000	4.70E-11	1000000	4.70E-10
<i>Streptococcus pneumoniae</i> ATCC BAA-334	5.54E-16	8.11E-16	0.68	100000	8.11E-11	1000	8.11E-13

\*values reported in grams

<sup>a</sup>Theoretical gDNA per 16S copy calculation is based on the number of rRNA operons and molecular weight of each genome using the ACGT method.

<sup>b</sup>qPCR 16S copy value is based on Taqman qPCR using primers 340F: 5'-TCCTACGGGAGGCAGCAGT-3'; 805R: 5'-GGACTACCAGGTATCTAATCCTGTT-3'; and Taqman 5'-(FAM)-CGTATTACCGCGGCTGCTGGCAC-(TAMRA)-3' using *E. coli* MG1655 DNA for construction of the standard curve.

<sup>c</sup>18S rRNA copies

<sup>d</sup>NA, not applicable