

Genomic DNA from Microbial Mock Community B (Even, Low Concentration), v5.1L, for 16S rRNA Gene Sequencing

Catalog No. HM-782D

For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

HM-782D contains genomic DNA from 20 bacterial strains containing equimolar (Even) ribosomal RNA (rRNA) operon counts (100,000 copies per organism per µL). This mock community is recommended for 16S rRNA gene sequencing by Sanger or amplicon sequencing methods. The recommended amount to use per experiment is 1 µL.¹ The bacterial strains that DNA was extracted from are listed in Table 1.

Note: The label for HM-782D is incorrect. HM-782D contains genomic DNA from microbial mock community B and not microbial mock community A.

Table 1. Microbial Mock Community B

Organism	NCBI Reference Sequence
<i>Acinetobacter baumannii</i> , strain 5377	NC_009085
<i>Actinomyces odontolyticus</i> , strain 1A.21	NZ_AAYI02000000
<i>Bacillus cereus</i> , strain NRS 248	NC_003909
<i>Bacteroides vulgatus</i> , strain ATCC® 8482™	NC_009614
<i>Clostridium beijerinckii</i> , strain NCIMB 8052	NC_009617
<i>Deinococcus radiodurans</i> , strain R1 (smooth)	NC_001263, NC_001264
<i>Enterococcus faecalis</i> , strain OG1RF	NC_17316
<i>Escherichia coli</i> , strain K12, substrain MG1655	NC_000913
<i>Helicobacter pylori</i> , strain 26695	NC_000915
<i>Lactobacillus gasseri</i> , strain 63 AM	NC_008530
<i>Listeria monocytogenes</i> , strain EGDe	NC_003210
<i>Neisseria meningitidis</i> , strain MC58	NC_003112
<i>Propionibacterium acnes</i> , strain KPA171202	NC_006085
<i>Pseudomonas aeruginosa</i> , strain PAO1-LAC	NC_002516

Organism	NCBI Reference Sequence
<i>Rhodobacter sphaeroides</i> , strain ATH 2.4.1	NC_007493, NC_007494
<i>Staphylococcus aureus</i> , strain TCH1516	NC_010079
<i>Staphylococcus epidermidis</i> , FDA strain PCI 1200	NC_004461
<i>Streptococcus agalactiae</i> , strain 2603 V/R	NC_004116
<i>Streptococcus mutans</i> , strain UA159	NC_004350
<i>Streptococcus pneumoniae</i> , strain TIGR4	NC_003028

HM-782D has been qualified for PCR applications by amplification of approximately 1500 base pairs of the 16S rRNA gene.

Material Provided:

Each vial contains approximately 100 ng of the bacterial genomic DNA mixture suspended in 25 µL TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH ~ 7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening. Note: If the vial is dry, add 25 µL TE buffer and incubate overnight at 4°C with mixing to resolubilize the sample.

Packaging/Storage:

HM-782D was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: Genomic DNA from Microbial Mock Community B (Even, Low Concentration), v5.1L, for 16S RNA Gene Sequencing, HM-782D.”

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Highlander, S. K., Personal Communication.

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