

Genomic DNA from Microbial Mock Community B (Staggered, Low Concentration), v5.2L, for 16S rRNA Gene Sequencing

Catalog No. HM-783D

Product Description: A mixture of genomic DNA from 20 bacterial strains containing staggered ribosomal RNA operon counts (1,000 – 1,000,000 operons per organism per µL). **Note: The label for HM-783D is incorrect. HM-783D contains genomic DNA from microbial mock community B and not microbial mock community A.**

Lot^{1,2}: 60304010

Manufacturing Date: 31AUG2011

TEST	SPECIFICATIONS	RESULTS
DNA Sequencing of Individual 16S Ribosomal RNA Genes from Mock Community B (~ 1500 base pairs)	Consistent with <i>Acinetobacter baumannii</i> Consistent with <i>Actinomyces odontolyticus</i> Consistent with <i>Bacillus cereus</i> Consistent with <i>Bacteroides vulgatus</i> Consistent with <i>Clostridium beijerinckii</i> Consistent with <i>Deinococcus radiodurans</i> Consistent with <i>Enterococcus faecalis</i> Consistent with <i>Escherichia coli</i> Consistent with <i>Helicobacter pylori</i> Consistent with <i>Lactobacillus gasseri</i> Consistent with <i>Listeria monocytogenes</i> Consistent with <i>Neisseria meningitidis</i> Consistent with <i>Propionibacterium acnes</i> Consistent with <i>Pseudomonas aeruginosa</i> Consistent with <i>Rhodobacter sphaeroides</i> Consistent with <i>Staphylococcus aureus</i> Consistent with <i>Staphylococcus epidermidis</i> Consistent with <i>Streptococcus agalactiae</i> Consistent with <i>Streptococcus mutans</i> Consistent with <i>Streptococcus pneumoniae</i>	Consistent with <i>Acinetobacter baumannii</i> [§] Consistent with <i>Actinomyces odontolyticus</i> [§] Consistent with <i>Bacillus cereus</i> [§] Consistent with <i>Bacteroides vulgatus</i> [§] Consistent with <i>Clostridium beijerinckii</i> [†] Consistent with <i>Deinococcus radiodurans</i> [§] Consistent with <i>Enterococcus faecalis</i> [§] Consistent with <i>Escherichia coli</i> [‡] Consistent with <i>Helicobacter pylori</i> [†] Consistent with <i>Lactobacillus gasseri</i> [†] Consistent with <i>Listeria monocytogenes</i> [§] Consistent with <i>Neisseria meningitidis</i> [†] Consistent with <i>Propionibacterium acnes</i> ^{§,3} Consistent with <i>Pseudomonas aeruginosa</i> [‡] Consistent with <i>Rhodobacter sphaeroides</i> [‡] Consistent with <i>Staphylococcus aureus</i> ^{§,4} Consistent with <i>Staphylococcus epidermidis</i> ^{§,4} Consistent with <i>Streptococcus agalactiae</i> [§] Consistent with <i>Streptococcus mutans</i> [§] Consistent with <i>Streptococcus pneumoniae</i> [§]
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)

TEST	SPECIFICATIONS	RESULTS
<p>Theoretical DNA Concentration for Individual Members of Mock Community B [based on number of ribosomal RNA (rRNA) operons input DNA]</p> <p><i>Acinetobacter baumannii</i> -10,000 operons <i>Actinomyces odontolyticus</i> -1,000 operons <i>Bacillus cereus</i> - 100,000 operons <i>Bacteroides vulgatus</i> - 1,000 operons <i>Clostridium beijerinckii</i> - 100,000 operons <i>Deinococcus radiodurans</i> - 1,000 operons <i>Enterococcus faecalis</i> - 1,000operons <i>Escherichia coli</i> - 1,000,000 operons <i>Helicobacter pylori</i> - 10,000 operons <i>Lactobacillus gasseri</i> - 10,000 operons <i>Listeria monocytogenes</i> - 10,000 operons <i>Neisseria meningitidis</i> - 10,000 operons <i>Propionibacterium acnes</i> - 10,000 operons <i>Pseudomonas aeruginosa</i> - 100,000 operons <i>Rhodobacter sphaeroides</i> – 1,000,000 operons <i>Staphylococcus aureus</i> - 100,000 operons <i>Staphylococcus epidermidis</i> – 1,000,000 operons <i>Streptococcus agalactiae</i> - 100,000 operons <i>Streptococcus mutans</i> - 1,000,000 operons <i>Streptococcus pneumoniae</i> - 1,000 operons</p>	Report results	<p>8.2 pg/μL <i>Acinetobacter baumannii</i>[§] 1.0 pg/μL <i>Actinomyces odontolyticus</i>[§] 45 pg/μL <i>Bacillus cereus</i>[§] 0.8 pg/μL <i>Bacteroides vulgatus</i>[§] 44 pg/μL <i>Clostridium beijerinckii</i>[‡] 1.0 pg/μL <i>Deinococcus radiodurans</i>[§] 0.7 pg/μL <i>Enterococcus faecalis</i>[§] 680 pg/μL <i>Escherichia coli</i>[‡] 8.6 pg/μL <i>Helicobacter pylori</i>[‡] 3.2 pg/μL <i>Lactobacillus gasseri</i>[‡] 5.0 pg/μL <i>Listeria monocytogenes</i>[§] 5.8 pg/μL <i>Neisseria meningitidis</i>[‡] 8.8 pg/μL <i>Propionibacterium acnes</i>[§] 160 pg/μL <i>Pseudomonas aeruginosa</i>[‡]</p> <p>1400 pg/μL <i>Rhodobacter sphaeroides</i>[‡]</p> <p>59 pg/μL <i>Staphylococcus aureus</i>[§]</p> <p>510 pg/μL <i>Staphylococcus epidermidis</i>[§] 32 pg/μL <i>Streptococcus agalactiae</i>[§] 420 pg/μL <i>Streptococcus mutans</i>[§] 0.6 pg/μL <i>Streptococcus pneumoniae</i>[§]</p>
Total Amount of DNA per vial	≥ 5 ng per μL	5.5 ng per μL
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon (Figure 1)
OD₂₆₀/OD₂₈₀ Ratio	Report results	1.9
Bacterial Inactivation ⁵ 10% of total yield plated on Tryptic Soy agar with 5% sheep blood ⁵	No viable bacteria detected	No viable bacteria detected

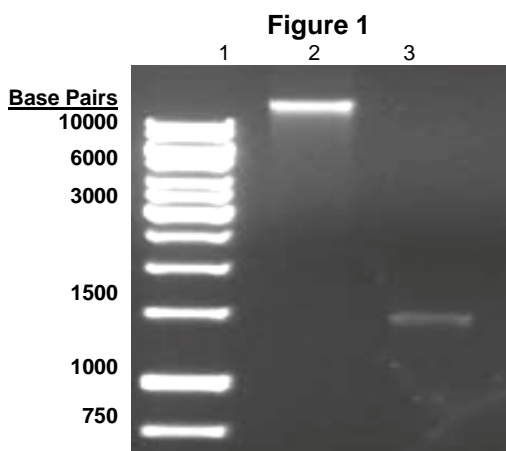
¹Preparation and QC testing (with the exception of Bacterial Inactivation) were performed by Baylor College of Medicine in Houston, Texas.

²Genomic DNA was extracted using the following methods: [§]SDS Lysis, CsCl, [‡]Modified SDS Lysis, CsCl, [‡]Triton Lysis, CsCl, and [†]Omega E.Z.N.A.[®] Bacterial DNA Kit.

³Also consistent with other *Propionibacterium* species

⁴Also consistent with other *Staphylococcus* species

⁵7 days at 37°C under both anaerobic atmosphere (80% N₂:10% CO₂:10% H₂) and aerobic atmospheric conditions



Lane 1: 1 Kb DNA Ladder (Fermentas, Cat. No. SM0311)
Lane 2: 100 ng of gDNA HM-783D
Lane 3: PCR of 16S ribosomal RNA gene from HM-783D

Date: 27 MAR 2015

Signature: 

Title: Technical Manager, BEI Authentication or designee

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