Certificate of Analysis for HM-88D

Genomic DNA from Clostridioides difficile, Strain NAP07 (CDC#2007054)

Catalog No. HM-88D

Product Description: Genomic DNA was extracted from a preparation of *Clostridioides difficile* (*C. difficile*), strain NAP07 (CDC#2007054) (Previously referred to as *Clostridium difficile*, this genus has been reclassified). Note: The genus designation on the vial label for lot 70009969 is incorrect. The correct genus designation is *Clostridioides difficile*.

Lot^{1,2}: 70009969 Manufacturing Date: 01FEB2018

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (~ 820 base pairs)	≥ 99% sequence identity to <i>C. difficile</i> , strain NAP07 (CDC#2007054) (GenBank: ADVM01000095.1)	99.8% sequence identity to <i>C. difficile</i> , strain NAP07 (CDC#2007054) (GenBank: ADVM01000095.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	0.7 to 1.5 μg in 25 to 100 μL per vial	0.9 μg in 28 μL per vial (32 μg/mL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
OD ₂₆₀ /OD ₂₈₀ Ratio	1.7 to 2.1	2.1
Bacterial Inactivation 10% of total yield plated on agar ^{3,4}	No viable bacteria detected	No viable bacteria detected

¹Quality control of HMP organisms used for DNA extraction is only performed to demonstrate that the material produced by BEI Resources is identical to the deposited material. It should not be considered a complete characterization of the deposited organism.

⁴An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

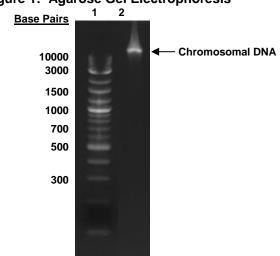


Figure 1: Agarose Gel Electrophoresis

Lane 1: New England Biolabs® Quick-Load® 2-Log DNA Ladder

Lane 2: 200 ng of HM-88D

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²The bacterial preparation used for extraction of genomic DNA was produced by culture of HM-88 lot 58989282. Genomic DNA was extracted using proprietary technology.

³14 days at 37°C in an anaerobic atmosphere (< 5% O₂; Remel™ Pack-Anaero™) on Tryptic Soy agar with 5% defibrinated sheep blood.



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30 APR 2018

Program Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC® to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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