

***Clostridium difficile*, Isolate 1**

Catalog No. NR-13427

Product Description: *Clostridium difficile* (*C. difficile*), isolate 1 was obtained from a human patient from the Mid-Atlantic region of the United States in 2008/2009.

Lot¹: 58807148

Manufacturing Date: 14JAN2010

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphology ^{3,4} Hemolysis ⁴ Obligate anaerobe Chartreuse fluorescence on anaerobic blood agar ⁵ Biochemical tests: RapID™ ANA II Panel Esculin hydrolysis Gelatin hydrolysis Catalase activity Lecithinase Lipase Nitrate reduction Hydrogen sulfide production	Gram-positive rod Report results Report results Positive Positive Consistent with <i>C. difficile</i> Positive Positive Negative Negative Negative Negative Negative Negative	Gram-positive rod Colony type 1: Irregular, flat, erose, opaque, glossy and gray (Figure 1) Colony type 2: Irregular, flat, erose, opaque, glossy and white (Figure 1) Non-hemolytic Positive Positive Consistent with <i>C. difficile</i> Positive Positive Negative Negative Negative Negative Negative Negative
Genotypic Analysis Sequencing of 16S Ribosomal RNA Gene (~ 1370 base pairs)	Consistent with <i>C. difficile</i>	Consistent with <i>C. difficile</i>
PCR Assay of Extracted DNA 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
Viability (post-freeze)⁴	Growth	Growth

¹The deposited material was inoculated into Modified Reinforced Clostridial Broth ([ATCC medium 2107](#)) and incubated for 48 hours at 37°C and anaerobic atmosphere (80% N₂:10% CO₂:10% H₂). The material from the initial growth was passaged three times in Modified Reinforced Clostridial Broth at 37°C and anaerobic atmosphere [80% N₂:10% CO₂:10% H₂]. NR-13427 was produced from the third passage.

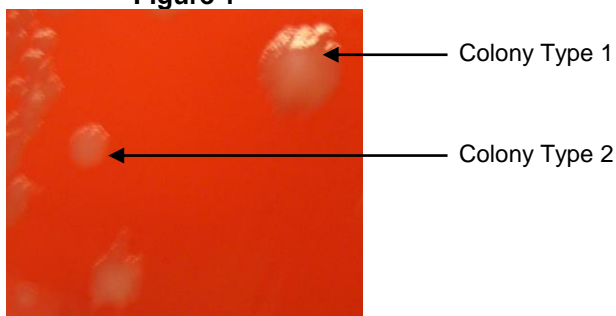
²Specifications described in Holdeman, L. V., E. P. Cato, and W. E. C. Moore, Eds. [Anaerobe Laboratory Manual](#). 4th ed., Blacksburg: Virginia Polytechnic Institute and State University, 1977.

³Two colony types were observed. Plating of the individual colony types showed that they reverted to the mixed colony type. The 16S gene of each colony type was sequenced and determined to be 100% identical.

⁴48 hours at 37°C and anaerobic atmosphere (80% N₂:10% CO₂:10% H₂) on Tryptic Soy Agar with 5% defibrinated sheep blood

⁵48 hours at 37°C and anaerobic atmosphere (80% N₂:10% CO₂:10% H₂) on CDC anaerobic blood agar

Figure 1



Date: 27 JUL 2010

Signature: Signature on File

Title: Technical Manager, BEI Authentication or designee

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