

***Clostridium difficile*, Isolate 2**

Catalog No. NR-13428

Product Description: *Clostridium difficile* (*C. difficile*), isolate 2 was obtained from a human patient from the Mid-Atlantic region of the United States in 2008/2009.

Lot¹: 59240092

Manufacturing Date: 26MAY2010

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphology ^{3,4} Obligate Anaerobe Hemolysis ⁴ Chartreuse fluorescence on anaerobic blood agar ⁴ Biochemical tests: RapID™ ANA II Panel Esculin hydrolysis Gelatin hydrolysis	Gram-positive rod Report results Positive Report results Positive Consistent with <i>C. difficile</i> Positive Positive	Gram-positive rod Colony type 1: Irregular, flat, undulate, opaque and gray (Figure 1) Colony type 2: Irregular, flat, undulate, opaque and white (Figure 1) Positive Non-hemolytic Positive Consistent with <i>C. difficile</i> Positive Positive
Genotypic Analysis Sequencing of 16S Ribosomal RNA Gene (~ 1400 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

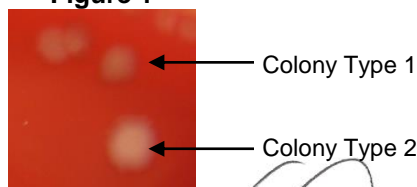
¹The deposited material was inoculated into Modified Reinforced Clostridial Broth ([ATCC medium 2107](#)) and incubated for 48 hours at 37°C and anaerobic atmosphere (80% N₂:10% CO₂:10% H₂). The material from the initial growth was passaged three times in Modified Reinforced Clostridial Broth at 37°C and anaerobic atmosphere [80% N₂:10% CO₂:10% H₂]. NR-13428 was produced from the fourth 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 consistent with *C. difficile*.

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

Figure 1



Date: 21 OCT 2010

Signature:

Title: Technical Manager, BEI Authentication or designee

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