

***Clostridium difficile*, Isolate 13**

Catalog No. NR-13553

Product Description: *Clostridium difficile* (*C. difficile*), isolate 13 was obtained from a human patient from the Mid-Atlantic region of the United States in 2008/2009.

Lot¹: 59147477

Manufacturing Date: 14APR2010

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphologies ^{3,4} Obligate Anaerobe Hemolysis ⁴ Chartreuse fluorescence on anaerobic blood agar ⁴ Biochemical tests: RapID™ ANA II Panel Esculin hydrolysis Gelatin hydrolysis Catalase activity Lecithinase Lipase Nitrate reduction	Gram-positive rod Report results Positive Report results Positive Consistent with <i>C. difficile</i> Positive Positive Negative Negative Negative Negative Negative	Gram-positive rod Colony type 1: Irregular, flat, erose, undulate, opaque, glistening and gray (Figure 1) Colony type 2: Irregular, flat, erose, undulate, opaque, glistening and white (Figure 1) Positive Non-hemolytic Positive Consistent with <i>C. difficile</i> Positive Positive 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>
Viability (post-freeze)⁴	Growth	Growth

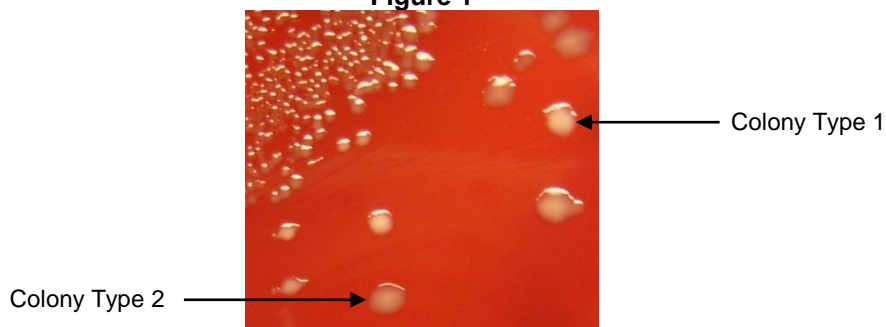
¹The deposited material was inoculated into Modified Reinforced Clostridial Broth ([ATCC medium 2107](#)) and incubated for 48 hours at 37°C and anaerobic atmosphere (80% N₂:10% CO₂:10% H₂). The material from the initial growth was passaged three times in Modified Reinforced Clostridial Broth at 37°C and anaerobic atmosphere [80% N₂:10% CO₂:10% H₂]. NR-13553 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 found 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: 10 MAY 2011

Signature:



Title: Technical Manager, BEI Authentication or designee

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