

***Clostridium difficile*, Isolate 4**

**Catalog No. NR-13430**

**Product Description:** *Clostridium difficile* (*C. difficile*), isolate 4 was obtained from a human patient from the Mid-Atlantic region of the United States in 2008/2009.

**Lot<sup>1</sup>: 59062322**

**Manufacturing Date: 31MAR2010**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis<sup>2</sup></b> Cellular morphology Colony morphology <sup>3,4</sup>  Obligate anaerobe Hemolysis <sup>4</sup> Chartreuse fluorescence on anaerobic blood agar <sup>4</sup> 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, opaque and gray (Figure 1) Colony type 2: Irregular, flat, erose, opaque and white (Figure 1) Positive Non-hemolytic Positive  Consistent with <i>C. difficile</i> Positive Positive Negative Negative Negative Negative Negative
<b>Genotypic Analysis</b> Sequencing of 16S Ribosomal RNA Gene (~ 1350 base pairs)	Consistent with <i>C. difficile</i>	Consistent with <i>C. difficile</i>
<b>PCR Assay of Extracted DNA</b> 16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
<b>Viability (post-freeze)<sup>4</sup></b>	Growth	Growth

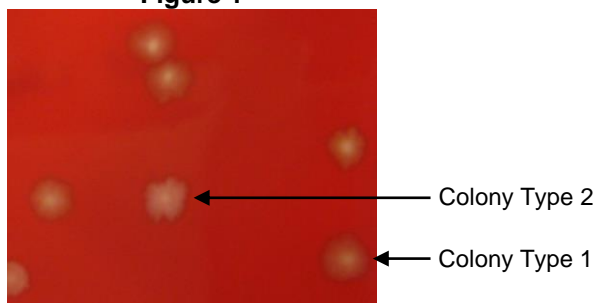
<sup>1</sup>NR-13430 was produced by inoculation of the deposited material into Modified Reinforced Clostridial Broth ([ATCC medium 2107](#)) and incubated for 48 hours at 37°C and anaerobic atmosphere (80% N<sub>2</sub>:10% CO<sub>2</sub>:10% H<sub>2</sub>). The material from the initial growth was passaged three times in Modified Reinforced Clostridial Broth at 37°C and anaerobic atmosphere [80% N<sub>2</sub>:10% CO<sub>2</sub>:10% H<sub>2</sub>]. NR-13430 was produced from the fourth passage.

<sup>2</sup>Specifications 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.

<sup>3</sup>Two colony types were observed. The 16S ribosomal RNA gene of each colony type was sequenced and found to be consistent with *C. difficile*.

<sup>4</sup>48 hours at 37°C and anaerobic atmosphere (80% N<sub>2</sub>:10% CO<sub>2</sub>:10% H<sub>2</sub>) on CDC anaerobic blood agar

**Figure 1**



**Date:** 21 OCT 2010

**Signature:** 

**Title:** Technical Manager, BEI Authentication or designee

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