

***Peptoclostridium difficile*, Strain CD133**

**Catalog No. NR-43529**

**Product Description:** *Peptoclostridium difficile* (*P. difficile*; also referred to as *Clostridium difficile*), strain CD133 is a toxigenic strain isolated in March 2010 from the stool of a human patient diagnosed with an acute *Clostridium difficile* infection in Ann Arbor, Michigan, USA.

**Lot<sup>1</sup>: 63261378**

**Manufacturing Date: 15JAN2015**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Hemolysis <sup>2</sup> Motility (wet mount) Biochemical tests: Esculin hydrolysis Gelatin hydrolysis VITEK <sup>®</sup> MS (MALDI-TOF)	Gram-positive rods Report results  Report results Report results  Positive Positive Consistent with <i>P. difficile</i>	Gram-positive rods Irregular, slight peaked undulate, smooth and gray (Figure 1) Non-hemolytic Motile  Positive Positive Consistent with <i>P. difficile</i>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1450 base pairs)	Consistent with <i>P. difficile</i>	Consistent with <i>P. difficile</i> <sup>3</sup>
<b>PCR Assay of Extracted DNA</b> Presence of <i>P. difficile</i> -specific genes <sup>4</sup> Trioise phosphate isomerase ( <i>tpi</i> ) Presence of toxin genes <sup>4</sup> Toxin A ( <i>tcdA</i> ) Toxin B ( <i>tcdB</i> )	~ 230 base pairs amplicon  ~ 370 base pairs amplicon ~ 160 base pairs amplicon	~ 230 base pairs amplicon  ~ 370 base pairs amplicon ~ 160 base pairs amplicon
<b>Purity (post-freeze)</b> Anaerobic growth <sup>5</sup> Aerobic growth <sup>6</sup>	Growth consistent with <i>P. difficile</i> No growth	Growth consistent with <i>P. difficile</i> No growth
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>NR-43529 was produced by inoculation of the deposited material into Modified Reinforced Clostridial medium and incubated for 24 hours at 37°C in an anaerobic atmosphere (< 0.5% O<sub>2</sub>; Remel™ Anaero Pack-Anaero™ R681001). The material from the initial growth was passaged once in Modified Reinforced Clostridial medium for 24 hours under propagation conditions to produce this lot.

<sup>2</sup>23 hours on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions

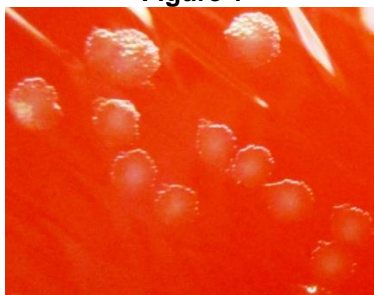
<sup>3</sup>≥ 99.7% identical to GenBank: AVHS01000113.1 (*P. difficile*, strain CD133)

<sup>4</sup>Lemee, L., et al. "Multiplex PCR Targeting *tpi* (Trioise Phosphate Isomerase), *tcdA* (Toxin A), and *tcdB* (Toxin B) Genes for Toxigenic Culture of *Clostridium difficile*." *J. Clin. Microbiol.* 42 (2004): 5710-5714. PubMed: 15583303.

<sup>5</sup>Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions.

<sup>6</sup>Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood in an aerobic atmosphere with 5% CO<sub>2</sub>.

**Figure 1**



Date: 28 MAY 2015

Signature: 

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