

***Peptoclostridium difficile*, Strain CD170**

Catalog No. NR-43536

Product Description: *Peptoclostridium difficile* (*P. difficile*; also referred to as *Clostridium difficile*), strain CD170 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.

Lot¹: 63283047

Manufacturing Date: 28JAN2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Hemolysis ² Motility (wet mount) Biochemical tests: Esculin hydrolysis Gelatin hydrolysis VITEK [®] MS (MALDI-TOF)	Gram-positive rods Report results Report results Report results Positive Positive Consistent with <i>P. difficile</i>	Gram-positive rods Irregular, low convex, undulate, rugose and gray (Figure 1) Non-hemolytic Motile Positive Positive Consistent with <i>P. difficile</i>
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 700 base pairs)	Consistent with <i>P. difficile</i>	Consistent with <i>P. difficile</i> ³
PCR Assay of Extracted DNA Presence of <i>P. difficile</i> -specific genes ⁴ Triose phosphate isomerase (<i>tpi</i>) Presence of toxin genes ⁴ Toxin A (<i>tcdA</i>) Toxin B (<i>tcdB</i>)	~ 230 base pairs amplicon ~ 369 base pairs amplicon ~ 160 base pairs amplicon	~ 230 base pairs amplicon ~ 369 base pairs amplicon ~ 160 base pairs amplicon
Purity (post-freeze) Anaerobic growth ⁵ Aerobic growth ⁶	Growth consistent with <i>P. difficile</i> No growth	Growth consistent with <i>P. difficile</i> No growth
Viability (post-freeze)²	Growth	Growth

¹NR-43536 was produced by inoculation of the deposited material into Modified Reinforced Clostridial medium and incubated for 23 hours at 37°C in an anaerobic atmosphere (< 0.5% O₂; Remel™ Anaero Pack-Anaero™). The material from the initial growth was passaged once in Modified Reinforced Clostridial medium for 21 hours under propagation conditions to produce this lot.

²48 hours on Tryptic Soy agar with 5% defibrinated sheep blood under propagation conditions

³≥ 99.1% identical to GenBank: AVIA010000028.1 (*P. difficile*, strain CD170)

⁴Lemee, L., et al. "Multiplex PCR Targeting *tpi* (Triose 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.

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

⁶Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood in an aerobic atmosphere with 5% CO₂.

Figure 1



Date: 15 APR 2015

Signature: 

BEI Resources Authentication

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

ATCC[®] is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

