**Peptoclostridium difficile, Strain CD160**

**Catalog No. NR-43516**

For research use only. Not for human use.

**Contributor:**
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**Manufacturer:**
BEI Resources

**Product Description:**
- **Bacteria Classification:** Peptostreptococcaceae, *Peptoclostridium*
- **Species:** Peptoclostridium difficile (also referred to as Clostridium difficile)\(^1\)
- **Strain:** CD160
- **Original Source:** Peptoclostridium difficile (P. difficile), strain CD160 was isolated in March 2010 from the stool of a patient with non-Clostridium difficile infection (CDI) diarrhea in Ann Arbor, Michigan, USA.\(^2\)
- **Comments:** P. difficile, strain CD160 was deposited as a non-toxigenic strain and is part of a genome sequencing project at the Institute for Genome Sciences at the University of Maryland.\(^2,3\) The complete genome of P. difficile, strain CD160 is available (GenBank: AVHW0000000).

*P. difficile* is a Gram-positive, spore-forming, obligate anaerobe that commonly inhabits the intestinal tract of various mammalian species, reptiles and birds, and may also be found in the environment. Pathogenic strains of *P. difficile* produce a potent cytotoxin (toxin B) and in most cases an enterotoxin (toxin A).\(^4\) It is the production of these toxins in the gut which ultimately leads to pseudomembranous colitis (PMC) and Clostridium difficile associated diarrhea (CDAD), which often occur as a complication of antibiotic therapy in elderly hospitalized patients.\(^5\)

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Modified Reinforced Clostridial medium supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**
NR-43516 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**
- **Media:** Modified Reinforced Clostridial medium or equivalent
- **Tryptic Soy agar with 5% defibrinated sheep blood or equivalent**
- **Incubation:**
  - Temperature: 37°C
  - Atmosphere: Anaerobic
- **Propagation:**
  1. Keep vial frozen until ready for use, then thaw.
  2. Transfer the entire thawed aliquot into a single tube of broth.
  3. Use several drops of the suspension to inoculate an agar slant and/or plate.
  4. Incubate the tube, slant and/or plate at 37°C for 1 to 3 days.

**Citation:**
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Peptoclostridium difficile, Strain CD160, NR-43516."

**Biosafety Level:**
2


**Disclaimers:**
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References:

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