**Product Information Sheet for NR-43520**

**Peptoclostridium difficile, Strain CD22**

**Catalog No. NR-43520**

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*).

Strain: CD22

Original Source: *Peptoclostridium difficile* (*P. difficile*), strain CD22 was isolated in January 2010 from the stool of an asymptomatic patient in Ann Arbor, Michigan, USA.

Comments: *P. difficile*, strain CD22 was deposited as a toxigenic strain and is part of a genome sequencing project at the Institute for Genome Sciences at the University of Maryland. PCR analysis has shown the presence of *P. difficile* toxins in strain CD22. The complete genome of *P. difficile*, strain CD22 is available (GenBank: AVGP00000000).

*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). 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.

**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-43520 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -80°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 24 to 72 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: *Peptoclostridium difficile*, Strain CD22, NR-43520.”

**Biosafety Level:**

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**Disclaimers:**

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References:

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