Product Information Sheet for NR-52260

Bacillus cereus, Strain NRRL B-569

Catalog No. NR-52260
(Derived from ATCC® 10876™)

For research use only. Not for use in humans.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:
Bacteria Classification: *Bacillaceae, Bacillus*
Species: *Bacillus cereus*
Strain: NRRL B-569
Original Source: *Bacillus cereus (B. cereus)*, strain NRRL B-569 was isolated in 1944 from a contaminated flask by Dr. Kenneth B. Raper. *B. cereus*, strain NRRL B-569 was deposited at ATCC® in 1963 by Dr. William C. Haynes, USDA, Agricultural Research Service, Peoria, Illinois.[1]
Comments: This strain reportedly has enterotoxin activity and contains a 650 kb plasmid.[2,3] The complete genome of *B. cereus*, strain NRRL B-569 has been sequenced (GenBank: ACLT00000000).

B. cereus is a Gram-positive, spore-forming, facultative aerobe. This organism is a ubiquitous opportunistic pathogen that can cause food poisoning in infected individuals. There are two forms of food poisoning that occur. The early onset (emetic) disease is caused by a small, stable dodecadepsipeptide cerulide whereas the late onset (diarrheal) disease is caused by heat-labile enterotoxins.[4,5] Most *B. cereus* strains produce β-lactamases and are resistant to β-lactam antimicrobial agents.[6]

Material Provided:
Each vial contains approximately 0.5 mL of bacterial culture in Nutrient broth supplemented with 10% glycerol.

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

Packaging/Storage:
NR-52260 was packaged aseptically in 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:
Nutrient broth or Tryptic Soy broth or equivalent
Nutrient agar or Tryptic Soy agar or equivalent
Incubation:
Temperature: 30°C
Atmosphere: Aerobic

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 30°C for 1 day.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Bacillus cereus,* Strain NRRL B-569, NR-52260."

Biosafety Level: 1
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

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2. Carlson, C. R., et al. "Genotypic Diversity among *Bacillus cereus* and *Bacillus thuringiensis* Strains." Appl. Environ. Microbiol. 60 (1994): 1719–1725. PubMed: 16349267.
3. Carlson, C. R., et al. "Physical Maps of the Genomes of Three *Bacillus cereus* Strains." J. Bacteriol. 174 (1992): 3750–3756. PubMed: 1594268.
4. Agata, N., et al. "A Novel Dodecadepsipeptide, Cereulide, is an Emetic Toxin of *Bacillus cereus*." FEMS Microbiol. Lett. 129 (1995): 17–20. PubMed: 7781985.
5. Drobniewski, F. A. "*Bacillus cereus* and Related Species." Clin. Microbiol. Rev. 6 (1993): 324–338. PubMed: 8269390.
6. Fabiane, S. M., et al. "Crystal Structure of the Zinc-Dependent β-Lactamase from *Bacillus cereus* at 1.9 Å Resolution: Binuclear Active Site with Features of a Mononuclear Enzyme." Biochemistry 37 (1998): 12404–12411. PubMed: 9730812.
7. Priest, F. G., et al. "Population Structure and Evolution of the *Bacillus cereus* Group." J. Bacteriol. 186 (2004): 7959–7970. PubMed: 15547268.

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