

Genomic DNA from *Bacillus cereus*, Strain NRRL B-569

Catalog No. NR-2544

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Contributor:

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Product Description:

Genomic DNA was isolated from a preparation of *Bacillus cereus*, strain NRRL B-569.¹

Bacillus 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 dodecadeptide cerulide² whereas the late onset (diarrheal) disease is caused by a heat labile enterotoxin.³ Genetic and genomic analyses have revealed that the chromosome of *Bacillus cereus* is very similar to *Bacillus anthracis*.⁴ Most *B. cereus* strains produce β -lactamases and are resistant to β -lactam antimicrobial agents.⁵

Bacillus cereus, NRRL B-569 was isolated in 1944 from a contaminated flask by Dr. Kenneth B. Raper. This strain reportedly has enterotoxin activity⁶ and contains a 650 kb plasmid.⁷

NR-2544 has been qualified for PCR applications by amplification of ~ 755 bp of the 16S ribosomal RNA.

Material Provided:

Each vial contains 1–3 μ g of dried bacterial genomic DNA. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-2544 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Genomic DNA from *Bacillus cereus*, Strain NRRL B-569, NR-2544.”

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

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8. 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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