

***Bacillus thuringiensis*, Strain BAG10-3**

Catalog No. NR-28583

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Bacillaceae*, *Bacillus*

Species: *Bacillus thuringiensis* (NR-28583 was deposited to BEI Resources as *Bacillus cereus*, however, digital DNA-DNA hybridization (dDDH) testing¹ performed at BEI Resources, resulted in reclassification of the species to *thuringiensis*.)

Strain: BAG10-3

Original Source: *Bacillus thuringiensis* (*B. thuringiensis*), strain BAG10-3 was isolated in 2009 from a soil sample collected in Boston, Massachusetts, USA.²

Comments: *B. thuringiensis*, strain BAG10-3 is part of a *Bacillus cereus* Database Sequencing Project at the [Broad Institute](#). The complete genome sequence of *B. thuringiensis*, strain BAG10-3 is available (GenBank: [AHCP00000000](#)).

B. thuringiensis is a Gram-positive bacterium commonly found in soil. It is well known for the production of insecticidal toxin during sporulation.³ A large number of strains have been isolated from dead insects, most notably the lepidopterous species (moths and butterflies). Many of the toxin genes that are specific for a variety of insects have been studied and are being used in genetically modified plants, which have been engineered to produce the toxin themselves.³

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

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

Packaging/Storage:

NR-28583 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:

Tryptic Soy broth or Nutrient broth or equivalent

Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or Nutrient agar or equivalent

Incubation:

Temperature: 28°C to 37°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 37°C for 1 to 2 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Bacillus thuringiensis*, Strain BAG10-3, NR-28583."

Biosafety Level: 2

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, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Liu, Y., et al. "Genomic Insights into the Taxonomic Status of the *Bacillus cereus* Group." Sci. Rep. 5 (2015): 14082. PubMed: 26373441.
2. Van der Auwera, G. A., et al. "Whole Genome Sequences of 94 Environmental Isolates of *Bacillus cereus Sensu Lato*." Genome Announc. 1 (2013): e00380-13. PubMed: 24092776.
3. Roh, J. Y., et al. "*Bacillus thuringiensis* as a Specific, Safe, and Effective Tool for Insect Pest Control. J. Microbiol. Biotechnol. 17 (2007): 547-559. PubMed: 18051264.

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