

***Bacillus thuringiensis*, Strain NRS 996**

Catalog No. NR-609

(Derived from ATCC® 10792™)

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Bacillaceae*, *Bacillus*

Species: *Bacillus thuringiensis*

Type Strain: NRS 996 (CIP 53.137, DSM 2046, NRRL HD-735)¹

Original Source: *Bacillus thuringiensis* (*B. thuringiensis*), strain NRS 996 was isolated in 1927 from a Mediterranean flour moth (*Ephesita kuehriella*) by Otto Mattes. The isolate was obtained by N.R. Smith and deposited to the ATCC by E. A. Steinhaus an Associate Professor of Insect Pathology at the University of California.²

Comments: *B. thuringiensis*, strain NRS 996 is reported to produce parasporal crystals. The complete genome sequence of *B. thuringiensis*, strain NRS 996 is available (GenBank: [ACNF00000000](https://www.ncbi.nlm.nih.gov/nuclseq/ACNF00000000)).

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-609 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: 30°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 NRS 996, NR-609.”

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, 2009; see www.cdc.gov/biosafety/publications/bmbI5/index.htm.

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References:

1. Skerman, V. B. D., V. McGowan and P. H. A. Sneath. "Approved List of Bacterial Names." *Int. J. Syst. Bacteriol.* 30 (1980): 258.
2. Zwick, M. E., et al. "Genomic Characterization of the *Bacillus cereus sensu lato* Species: Backdrop to the Evolution of *Bacillus anthracis*." *Genome Res.* 22 (2012): 1512-1524. PubMed: 22645259.

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