

***Geobacillus stearothermophilus*, Strain NCA 1518**

Catalog No. NR-2497

(Derived from ATCC® 7953™)

For research use only. Not for human use.

Contributor:

ATCC®

Manufacturer:

Battelle, Battelle Eastern Science and Technology Center (BEST), 1204 Technology Drive, Aberdeen, Maryland

Product Description:

Bacteria Classification: *Bacillaceae, Geobacillus*

Species: *Geobacillus stearothermophilus* (formerly *Bacillus stearothermophilus*)¹

Strain: NCA 1518 (also referred to as CIP 52.81 and NRS T17)

Original Source:² *Geobacillus stearothermophilus* (*G. stearothermophilus*) was isolated from under-processed canned food at the National Cannery Association, Washington, D.C.

Comments: *G. stearothermophilus*, strain NCA 1518 was deposited to the ATCC® in 1941 by Dr. C. P. Hegarty of Georgetown University Medical School. This strain has been used as a bioindicator for testing the efficiency of sterilizers.³⁻⁸

G. stearothermophilus is a Gram-variable, spore-forming, aerobic microorganism with a high optimal growth temperature (45°C to 70°C) that is widely distributed in nature.

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Nutrient broth supplemented with 20% glycerol.

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

Packaging/Storage:

NR-2497 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:

Nutrient broth
Nutrient agar

Incubation:

Temperature: 55°C
Atmosphere: Aerobic

Propagation:

1. Keep vial frozen until ready for use; thaw slowly.
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 55°C for 24 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Geobacillus stearothermophilus*, Strain NCA 1518, NR-2497."

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/bmbl5/index.htm.

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References:

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