

Genomic DNA from *Geobacillus stearothermophilus*, Strain NCA 1518 (CIP 52.81)

Catalog No. NR-2549

For research use only. Not for human use.

Contributor:
ATCC®

Product Description:

Genomic DNA was isolated from a preparation of *Geobacillus stearothermophilus*, strain NCA 1518 (CIP 52.81).

Geobacillus stearothermophilus (formerly *Bacillus stearothermophilus*)¹ is a Gram-positive, spore-forming, aerobic microorganism with a high optimal growth temperature (45–70°C) that is widely distributed in nature. *Geobacillus stearothermophilus*, strain NCA 1518 was isolated from under-processed canned food at the National Canners Association, Washington, DC.²

NR-2549 has been qualified for PCR applications by amplification of ~ 740 bp of 16S ribosomal RNA.

Material Provided:

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

Packaging/Storage:

NR-2549 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 *Geobacillus stearothermophilus*, Strain NCA 1518 (CIP 52.81), NR-2549.”

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/bmb15/bmb15toc.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government make any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Nazina, T. N., et al. “Taxonomic Study of Aerobic Thermophilic Bacilli: Descriptions of *Geobacillus subterraneus* gen. nov., sp. nov. and *Geobacillus uzensis* sp. nov. from Petroleum Reservoirs and Transfer of *Bacillus stearothermophilus*, *Bacillus thermocatenulatus*, *Bacillus thermoleovorans*, *Bacillus kaustophilus*, *Bacillus thermoglucosidasius* and *Bacillus thermodenitrificans* to *Geobacillus* as the New Combinations *G. stearothermophilus*, *G. thermocatenulatus*, *G. thermoleovorans*, *G. kaustophilus*, *G. thermoglucosidasius* and *G. thermodenitrificans*.” Int. J. Syst. Evol. Microbiol. 51 (2001): 433–446. PubMed: 11321089.
2. Donk, P. J. “A Highly Resistant Thermophilic Organism.” J. Bacteriol. 5 (1920): 373–374. PubMed: 16558885.
3. McMullan, G., et al. “Habitat, Applications and Genomics of the Aerobic, Thermophilic Genus *Geobacillus*.” Biochem. Soc. Trans. 32 (2004): 214–217. PubMed: 15046574.

ATCC® is a trademark of the American Type Culture Collection.