

Genomic DNA from *Bacillus licheniformis*, Strain Gibson 46 (NCIB 9375)

Catalog No. NR-2546

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Contributor:
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Product Description:

Genomic DNA was isolated from a preparation of *Bacillus licheniformis*, strain Gibson 46 (NCIB 9375).

Bacillus licheniformis (*B. licheniformis*) is a Gram-positive, spore-forming, facultative aerobe that is widely distributed as a saprophytic organism in the environment.¹ It is a common contaminant in raw milk and its spores are highly resistant to pasteurization treatments. In addition, *B. licheniformis* can cause a variety of infections in humans including meningitis. *B. licheniformis* is used to manufacture enzymes, antibiotics, and biochemicals.¹

The complete genome of *B. licheniformis*, Gibson 46 (NCIB 9375; ATCC® 14580™) has been sequenced (GenBank: CP000002 and AE017333).^{1,2}

NR-2546 has been qualified for PCR applications by amplification of ~ 690 bp of the 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-2546 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 licheniformis*, Strain Gibson 46 (NCIB 9375), NR-2546."

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.

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References:

1. Rey, M. W., et al. "Complete Genome Sequence of the Industrial Bacterium *Bacillus licheniformis* and Comparisons with Closely Related *Bacillus* Species." Genome Biol. 5 (2004): R77.1–R77.12. PubMed: 15461803. GenBank: CP000002.
2. Veith, B., et al. "The Complete Genome Sequence of *Bacillus licheniformis* DSM13, an Organism with Great Industrial Potential." J. Mol. Microbiol. Biotechnol. 7 (2004): 204–211. PubMed: 15383718. GenBank: AE017333.
3. Perrodou, E., et al. "ICDS Database: Interrupted CoDing Sequences in Prokaryotic Genomes." Nucleic Acids Res. 34 (2006): D338–D343. PubMed: 16381882.
4. Xu, D. and J.-C. Côté. "Phylogenetic Relationships between *Bacillus* Species and Related Genera Inferred from Comparison of 3' End 16S rDNA and 5' End 16S–23S ITS Nucleotide Sequences." Int. J. Syst. Evol. Microbiol. 53 (2003): 695–704. PubMed: 12807189.

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