

Genomic DNA from *Bacillus anthracis*, Strain UM23-1

Catalog No. NR-10448

For research use only. Not for human use.

Contributor:

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Product Description:

Genomic DNA was isolated from a preparation of *Bacillus anthracis* (*B. anthracis*), strain UM23-1. Strain UM23-1 is a uracil minus (Ura⁻), streptomycin-resistant (str^R) derivative of strain UM23, which contains the toxigenic pXO1 plasmid and lacks the pXO2 capsule plasmid.¹⁻³

The presence of pXO1 and absence of pXO2 in NR-10448 has been confirmed by PCR amplification of plasmid-specific sequences from extracted DNA. NR-10448 has been qualified for PCR applications by amplification of approximately 1500 bp of the 16S ribosomal RNA.

Material Provided:

Each vial contains 4 to 6 µg of bacterial genomic DNA in TE buffer (10 mM Tris-HCl and 1 mM EDTA, pH ~ 7.4). The concentration is shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-10448 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 anthracis*, Strain UM23-1, NR-10448."

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:

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References:

1. Battisti, L., B. D. Green and C. B. Thorne. "Mating System for Transfer of Plasmids Among *Bacillus anthracis*, *Bacillus cereus*, and *Bacillus thuringiensis*." J. Bacteriol. 162 (1985): 543-550. PubMed: 3988702.
2. Hoffmaster, A. R. and T. M. Koehler. "The Anthrax Toxin Activator Gene *atxA* is Associated with CO₂-Enhanced Non-Toxin Gene Expression in *Bacillus anthracis*." Infect. Immun. 65 (1997): 3091-3099. PubMed: 9234759.
3. Ivins, B. E., et al. "Immunization Against Anthrax with Aromatic Compound-Dependent (Aro-) Mutants of *Bacillus anthracis* and with Recombinant Strains of *Bacillus subtilis* that Produce Anthrax Protective Antigen." Infect. Immun. 58 (1990): 303-308. PubMed: 2105269.

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