Genomic DNA from Bacillus anthracis, Strain Sterne ∆GBAA1887-2

Catalog No. NR-10312
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Contributor:
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Product Description:
Genomic DNA was isolated from a preparation of Bacillus anthracis (B. anthracis), strain Sterne ∆GBAA1887-2.

Bacillus anthracis (B. anthracis), strain Sterne ∆GBAA1887-2 is a deletion mutant of the toxigenic acapsulate original Sterne strain (34F2), constructed by replacing codons 10 through 14 with three in-frame stop codons followed by the recognition site for BamH1 (to facilitate screening of the correct mutation). The remainder of the putative enterotoxin gene (GBAA1887-2) retains the wild type sequence.1,2 Additional information is available at the Resource Center for Biodefense Proteomics Research (BPRC).

B. anthracis virulence is dependent on the possession of two large plasmids, pX01 and pX02, which are responsible for the expression of an extracellular toxin and a polysaccharide capsule, respectively. The extracellular toxin is composed of three proteins: lethal factor, edema factor, and protective antigen.3 The Sterne strain of B. anthracis is known to contain pX01 and lack pX02.

NR-10312 has been qualified for PCR applications by amplification of approximately 1500 bp of the 16S ribosomal RNA gene. The presence of plasmid pX01 and absence of plasmid pX02 have been confirmed by PCR amplification of plasmid-specific sequences from extracted DNA.

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-10312 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 contributed by P. Hanna, University of Michigan for distribution through BEI Resources, NIAID, NIH: Genomic DNA from Bacillus anthracis, Strain Sterne ∆GBAA1887-2, NR-10312.”

Biosafety Level: 1

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References:
1. http://pir.georgetown.edu/cgi-bin/textsearch_cat_ra.pl?datatype=bacteria&search=1&field0=ID&query0=NR-100008


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