

Genomic DNA from *Bacillus anthracis*, Strain Sterne ΔGBAA0419-2

Catalog No. NR-10305

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Product Description: Genomic DNA was isolated from a preparation of *Bacillus anthracis* (*B. anthracis*), strain Sterne ΔGBAA0419-2, a deletion mutant of the toxigenic acapsulate original Sterne strain (34F2).

Lot¹: 58253180

Manufacturing Date: 22DEC2008

TEST	SPECIFICATIONS	RESULTS
Sequencing of 16S Ribosomal RNA Gene (1435 base pairs)	Consistent with <i>B. cereus</i> group	Consistent with <i>B. cereus</i> group ^{2,3}
Presence or Absence of Plasmids Confirmed by PCR Amplification pXO1 (<i>aat</i>) pXO2 (<i>at, capA, capB, capC</i>)	Positive Negative	Positive Negative
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Content by PicoGreen[®] Measurement	4 to 6 µg in 25 to 100 µL per vial	5.3 µg in 71 µL per vial (75 µg/mL)
Functional Activity by PCR Amplification 16S ribosomal RNA gene Virulence markers on plasmid pXO1 (<i>aat</i>)	~ 1500 bp amplicon ~ 125 bp amplicon	~ 1500 bp amplicon ~ 125 bp amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 1.9	1.8
Bacterial Inactivation 10% of total yield plated on Tryptic Soy Agar with 5% sheep blood ^{4,5}	No viable bacteria detected	No viable bacteria detected

¹*B. anthracis*, strain Sterne ΔGBAA0419-2 was deposited by Philip Hanna, Associate Professor, Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, Michigan. The bacterial preparation used for extraction of genomic DNA was produced by broth culture of the deposited material. After incubation for 24 hours at 37°C and aerobic atmosphere, genomic DNA was extracted using proprietary technology.

²*Bacillus cereus* group species (*B. cereus*, *B. thuringiensis*, *B. mycooides*, and *B. anthracis*) cannot be classified based on 16S sequence [Spencer, R. C. "Bacillus anthracis." *J. Clin. Pathol.* 56 (2003): 182-187. PubMed: 12610093].

³Also consistent with *Bacillus subtilis*

⁴7 days at 37°C in an aerobic atmosphere

⁵An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative bacteria.

Date: 06 AUG 2009

Signature: Signature on File

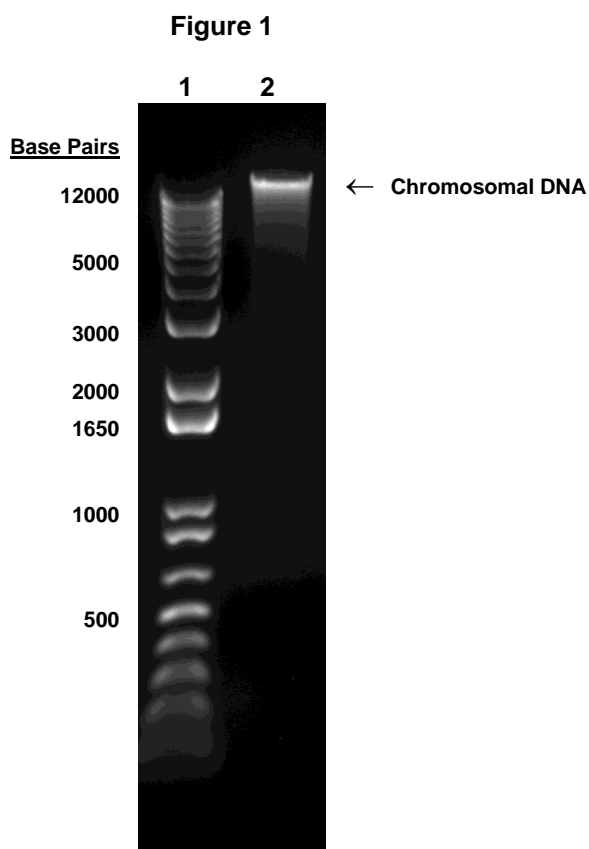
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Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-10305