

## Genomic DNA from *Bacillus anthracis*, Strain Sterne BA851 ( $\Delta asbA$ )

### Catalog No. NR-10293

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**Product Description:** Genomic DNA was isolated from a preparation of *Bacillus anthracis* (*B. anthracis*), strain Sterne BA851 ( $\Delta asbA$ ). This strain is a markerless, nonpolar, 1773 bp deletion mutant of the petrobactin biosynthetic gene ( $\Delta asbA$ ) of the toxigenic acapsulate original Sterne strain (34F2).

**Lot<sup>1</sup>: 58253168**

**Manufacturing Date: 17NOV2008**

TEST	SPECIFICATIONS	RESULTS
<b>Sequencing of 16S Ribosomal RNA Gene (~ 1420 bp)</b>	Identical to BEI Resources NR-9989 Consistent with <i>B. cereus</i> group	Identical to BEI Resources NR-9989 Consistent with <i>B. cereus</i> group <sup>2</sup>
<b>Presence or Absence of Plasmids Confirmed by PCR Amplification</b> pXO1 ( <i>aaf</i> ) pXO2 ( <i>at</i> , <i>capB</i> , <i>capC</i> )	Positive Negative	Positive Negative
<b>Agarose Gel Electrophoresis</b>	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
<b>Content by PicoGreen® Measurement</b>	4 to 6 µg in 25 to 100 µL per vial	4.3 µg in 33 µL per vial (130 µg/mL)
<b>Functional Activity by PCR Amplification</b> 16S ribosomal RNA gene Virulence markers on plasmid pXO1 ( <i>aaf</i> )	~ 1500 bp amplicon ~ 125 bp amplicon	~ 1500 bp amplicon ~ 125 bp amplicon
<b>OD<sub>260</sub>/OD<sub>280</sub> Ratio</b>	1.7 to 1.9	1.8
<b>Bacterial Inactivation</b> 10% of total yield plated on Tryptic Soy Agar with 5% sheep blood <sup>3,4</sup>	No viable bacteria detected	No viable bacteria detected

<sup>1</sup>*B. anthracis*, strain BA851 ( $\Delta asbA$ ) 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 (Tryptic Soy Broth; BD 211768) culture of the deposited material. After incubation for 24 hours at 37°C and aerobic atmosphere, genomic DNA was extracted using proprietary technology.

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

<sup>3</sup>7 days at 37°C in an aerobic atmosphere

<sup>4</sup>An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative bacteria.

**Date:** 26 JUN 2009

**Signature:** Signature on File

**Title:** Technical Manager, BEI Authentication or designee

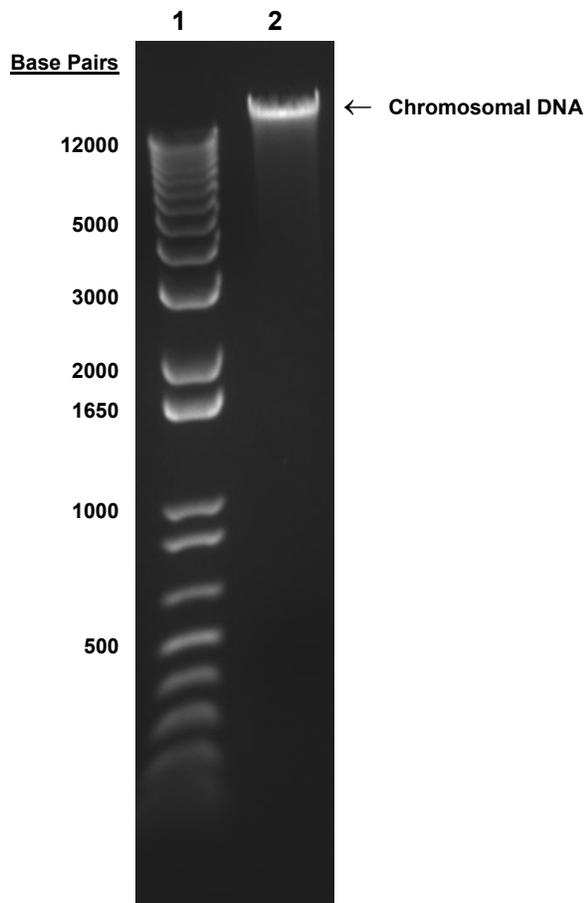
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Figure 1



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder  
Lane 2: 200 ng of NR-10293