

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

Catalog No. NR-9989

**Product Description:** *Bacillus anthracis* (*B. anthracis*), strain Sterne BA851 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>: 58394743

Manufacturing Date: 05NOV2008

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Sporulation Motility $\beta$ -hemolysis Capsule (India ink staining) Tenacious Analytical profile index (API <sup>®</sup> 50 CHB including API <sup>®</sup> 20E; ONPG to GEL only) Nitrate reduction	Gram-positive rod Report results  Positive Non-motile Non-hemolytic Negative Positive Consistent with <i>B. anthracis</i>  Positive	Gram-positive rod Circular, low convex, entire, ground-glass, grey, opaque (Figure 1) Positive Non-motile Non-hemolytic Negative Positive Consistent with <i>B. anthracis</i>  Positive
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1420 base pairs)	Consistent with <i>Bacillus cereus</i> group	Consistent with <i>Bacillus cereus</i> group <sup>3</sup>
<b>PCR Assay of Extracted DNA</b> 16S ribosomal RNA gene Presence of virulence plasmids pXO1 ( <i>aat</i> ) pXO2 ( <i>at</i> , <i>capB</i> , <i>capC</i> )	~ 1500 bp amplicon  ~ 125 bp amplicon No amplicons	~ 1500 bp amplicon  ~ 125 bp amplicon No amplicons
<b>Viability (post-vialing)<sup>4</sup></b>	Growth	Growth

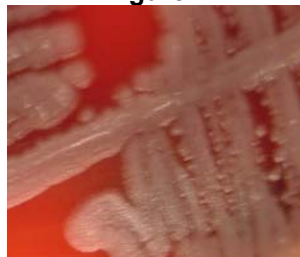
<sup>1</sup>*B. anthracis*, strain Sterne BA851 ( $\Delta asbA$ ) was deposited by Philip C. Hanna, Associate Professor, Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, Michigan. NR-9989 was produced by inoculation of the deposited material into Tryptic Soy Broth and grown 24 hours at 37°C. Broth inoculum was added to Kolles which were grown 24 hours at 37°C to produce this lot.

<sup>2</sup>24 hours at 37°C on Tryptic Soy Agar with 5% sheep blood

<sup>3</sup>*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).

<sup>4</sup>24 hours at 37°C in Tryptic Soy Broth

Figure 1



**Date:** 23 JUN 2009

**Signature:** Signature on File

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

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