

Bacillus thuringiensis, Strain BAG10-3

Catalog No. NR-28583

Product Description: *Bacillus thuringiensis* (*B. thuringiensis*), strain BAG10-3 was isolated in 2009 from a soil sample collected in Boston, Massachusetts, USA.

Lot¹: 63817653

Manufacturing Date: 07NOV2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis² Cellular morphology Colony morphology ³ Motility ⁴ Hemolysis Biochemical tests Production of acid from trehalose Production of acid from salicin Production of acid from glycerol Nitrate reduction Arginine decarboxylase activity	Gram-positive rods Report results Motile Report results Positive Report results Report results Report results Report results	Gram-positive rods Circular, flat, entire, rough and gray (Figure 1) Motile β-hemolytic Positive Positive Positive Positive Positive
Presence of Virulence Plasmids⁵ pXO1 (four targets) pXO2 (three targets)	Not present Not present	Not present Not present
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1420 base pairs)	≥ 99% sequence identity to <i>B. thuringiensis</i> , strain BAG10-3 (GenBank: AHCP01000033.1)	99.9% sequence identity to <i>B. thuringiensis</i> , strain BAG10-3 (GenBank: AHCP01000033.1) ⁶
Purity (post-freeze)⁷	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)³	Growth	Growth

¹The deposited material was passaged on Tryptic Soy broth for 1 day at 30°C in an aerobic atmosphere, and the resulting subculture vial and frozen. NR-28583 was produced by inoculation of the thawed subculture into Tryptic Soy broth and grown for 1 day at 30°C in an aerobic atmosphere followed by 1 day at room temperature in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 1 day at 30°C in an aerobic atmosphere to produce this lot.

²Presumptive identification of *B. thuringiensis* was performed using phenotypic tests that eliminate other *B. cereus* group (*B. cereus*, *B. thuringiensis* and *B. mycoides*) members.

³1 day at 30°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

⁴Motility test performed on Remel™ Motility Test Medium w/TTC Indicator for 1 day at 30°C in an aerobic atmosphere. In the *B. cereus* group, *B. cereus* and *B. thuringiensis* are motile, whereas *B. anthracis* and *B. mycoides* are non-motile.

⁵Presence of plasmid targets was determined by *in silico* PCR of the complete genome sequence obtained by BEI Resources.

⁶*B. cereus* group species cannot be classified based on 16S sequence (Spencer, R. C. "Bacillus anthracis." *J. Clin. Pathol.* 56 (2003): 182-187. PubMed: 12610093).

⁷Purity of this lot was assessed for 7 days at 30°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 25 AUG 2016

Signature: 

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