SUPPORTING INFECTIOUS DISEASE RESEARCH

## Acinetobacter baumannii, Strain Naval-81

### Catalog No. NR-17786

**Product Description:** Acinetobacter baumannii (A. baumannii), strain Naval-81 was isolated on October 9, 2006, from human blood at the National Naval Medical Center in Bethesda, Maryland, USA.

### Lot<sup>1</sup>: 70000229

### Manufacturing Date: 01DEC2016

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphology <sup>2</sup>	Report results	Circular, convex, entire, mucoid and cream (Figure 1)
Motility <sup>3</sup>	Nonmotile	Motile <sup>4</sup>
Growth at 44°C ± 2°C <sup>5,6</sup>	Growth	Growth
Biochemical characterization:		
Catalase	Positive	Positive
Oxidase	Negative	Negative <sup>7</sup>
VITEK <sup>®</sup> 2 (GN card)	A. baumannii (≥ 90%)	A. baumannii (99%) <sup>8</sup>
VITEK <sup>®</sup> MS (MALDI-TOF)	A. baumannii	A. baumannii complex (99.9%) <sup>9</sup>
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	≥ 99% sequence identity to	100% sequence identity to
(~ 820 base pairs)	A. baumannii, strain Naval-81	A. baumannii, strain Naval-81
	(GenBank: AFDB02000002.1)	(GenBank: AFDB02000002.1)
Purity (post-freeze) <sup>10</sup>	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze) <sup>2</sup>	Growth	Growth

<sup>1</sup>NR-17786 was produced by inoculation of NRS-17786 (lot 61598576) into Tryptic Soy broth and incubated for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

<sup>2</sup>1 day on Tryptic Soy agar at 37°C in an aerobic atmosphere

<sup>3</sup>Motility test performed on Remel<sup>™</sup> Motility Test Medium with TTC Indicator for 1 day at 37°C in an aerobic atmosphere.

<sup>4</sup>Acinetobacter baumannii lack flagella but exhibit a twitching/swarming motility, which may be due to type IV pili or excretion of polysaccharide. For additional information please refer to McQueary, C. N., et al., "Extracellular Stress and Lipopolysaccharide Modulate Acinetobacter baumannii Surface-Associated Motility." J. Microbiol. 50 (2012): 434-43. PubMed: 22752907.

<sup>5</sup>1 day on Tryptic Soy agar at 44°C ± 2°C in an aerobic atmosphere

<sup>6</sup>Growth at 44°C ± 2°C differentiates A. baumannii from A. calcoaceticus, which does not grow at 44°C ± 2°C.

<sup>7</sup>The absence of cytochrome c oxidases differentiates the *Acinetobacter* genus from other Moraxellceae; refer to Bergey's Manual of Systematic Bacteriology Vol. 2, Pts. A & B: The Proteobacteria. (2nd ed., rev. ed.). Edited by Garrity, G. (2000). New York: Springer. p. 454.

<sup>8</sup>Percent probabilities above 90% indicate a close match to the typical biochemical pattern for the given organism, with a percent probability of 99% being a perfect match between the test reaction pattern and the unique biochemical pattern of the given organism or organism group. For additional information, please refer to O'Hara, C. M. and J. M. Miller. "Evaluation of the VITEK 2 ID-GNB Assay for Identification of Members of the Family *Enterobacteriaceae* and Other Nonenteric Gram-Negative Bacilli and Comparison with the VITEK GNI+ Card." J. Clin. Microbiol. 41 (2003): 2096-2101. PubMed: 12734254.

<sup>9</sup>A. baumannii complex species include A. baumannii, A. calcoaceticus, A. pittii and A. nosocomialis.

<sup>10</sup>Purity of this lot was assessed for 7 days on Tryptic Soy agar at 37°C in an aerobic atmosphere with and without 5% CO<sub>2</sub>.

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# **Certificate of Analysis for NR-17786**

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#### Figure 1: Colony Morphology



Date: 22 FEB 2017

Signature:

**BEI Resources Authentication** 

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