

Acinetobacter baumannii, Strain MRSN 30896

Catalog No. NR-52215

This reagent is the tangible property of the U.S. Government.

Product Description:

Acinetobacter baumannii (*A. baumannii*), strain MRSN 30896 was isolated in 2003 from a wound specimen in Europe as part of a global surveillance program. *A. baumannii*, strain MRSN 30896 was deposited as sensitive to amikacin, ceftazidime, ciprofloxacin, colistin, cefepime, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and trimethoprim/sulfamethoxazole and resistant to gentamicin, tobramycin and tetracycline, with intermediate resistance to ceftriaxone. NR-52215 was produced by inoculation of BEI Resources seed lot 70041133 into Tryptic Soy broth and grown 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. Quality control testing was completed under propagation conditions unless otherwise noted.

Lot: 70051023

Manufacturing Date: 16MAR2022

BEI Resources is committed to ensuring digital accessibility for people with disabilities. This Certificate of Analysis contains complex tables and may not be fully accessible. Please let us know if you encounter accessibility barriers and a fully accessible document will be provided: E-mail: Contact@BEIResources.org. We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Growth at 44°C ± 2°C ¹ 1 day in an aerobic atmosphere on Tryptic Soy agar Motility Remel™ Motility Test Medium with TTC Indicator for 1 day at 37°C in an aerobic atmosphere VITEK® MS (MALDI-TOF)	Gram-negative rods Report results Growth Report results <i>A. baumannii</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Growth Non-motile ² <i>A. baumannii</i> (99.9%)
Antibiotic Susceptibility Profile ^{3,4} Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Resistant	Sensitive (3 µg/mL) Sensitive (1.5 µg/mL) Sensitive (1.5 µg/mL) Resistant (≥ 64 µg/mL) ⁵ Sensitive (8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.5 µg/mL) ⁶ Resistant (≥ 16 µg/mL) Sensitive (0.75 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 20 µg/mL) Resistant (96 µg/mL) Resistant (≥ 16 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 30896 (GenBank: VHFZ01000068.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 30896 (GenBank: VHFZ01000068.1)
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

¹Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

²*A. baumannii*, strain MRSN 30896 tested positive for motility in BEI Resources seed lot 70041123, but this was not observed in lot 70051023. Twitching motility was observed in wet-mount for lot 70051023. *A. 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.

³Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

⁴Antibiotic susceptibility was tested using a combination of VITEK®2 GN81 and E-test strips.

⁵*A. baumannii*, strain MRSN 30896 was deposited as intermediately resistant to ceftriaxone, but showed an MIC of ≥ 32 µg/mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in duplicate.

⁶Testing was performed on BEI Resources seed lot 70041133.

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

Sonia Bjorum Brower

30 NOV 2023

Technical Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

