

Acinetobacter baumannii, Strain MRSN 32304

Catalog No. NR-52232

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

Product Description:

Acinetobacter baumannii (*A. baumannii*), strain MRSN 32304 was isolated in 2015 from a human sterile body fluid sample in the United States as part of a global surveillance program. NR-52232 was deposited as sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52232 was produced by inoculation of BEI Resources seed lot 70042855 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: 70061535

Manufacturing Date: 22JUN2023

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 Motility Hardy Diagnostics™ Motility Test Medium w/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 Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline	Sensitive Sensitive Sensitive Intermediate Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (4 µg/mL) Sensitive (1.5 µg/mL) Sensitive (1.5 µg/mL) Intermediate (16 µg/mL) ⁵ Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.25 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 20 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (2 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32304 (GenBank: VFH101000126.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 32304 (GenBank: VFH101000126.1)
Purity 8 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
Viability	Growth	Growth

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

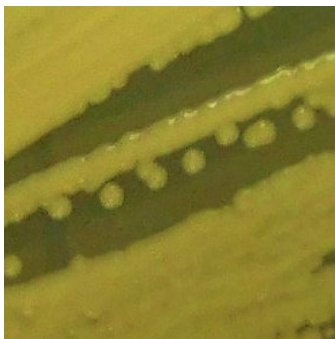
²Previous lot 70042854 showed motility. *A. baumannii* lack flagella but exhibit a twitching/swarming motility, which may be due to type IV pili or excretion of polysaccharide. For additional information please refer to McQueary, C. N., et al., "Extracellular Stress and Lipopolysaccharide Modulate Acinetobacter *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 GN82, Sensititre[™] GNX2F AST and E-test strips.

⁵*A. baumannii*, strain MRSN 32304 was deposited as sensitive to ceftriaxone, but showed a MIC of 16 µg/mL (interpreted as intermediate) for lot 70042854 during QC testing.

Figure 1: Colony Morphology



/Sonia Bjorum Brower/
Sonia Bjorum Brower

30 AUG 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.

