SUPPORTING INFECTIOUS DISEASE RESEARCH

Acinetobacter baumannii, Strain MRSN 843

Catalog No. NR-52149

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

Product Description:

Acinetobacter baumannii (A. baumannii), strain MRSN 843 was isolated in 2010 from a human wound sample in the United States as part of a global surveillance program. A. baumannii, strain MRSN 843 was deposited as multi-locus sequence type (MLST) ST 417, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, colistin and imipenem, intermediately resistant to ceftriaxone and tobramycin and resistant to ciprofloxacin, gentamicin, levofloxacin, meropenem, trimethoprim/sulfamethoxazole and tetracycline. NR-52149 was produced by inoculation of BEI Resources seed lot 70038256 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: 70059681

Manufacturing Date: 31MAR2023

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: <u>Contact@BEIResources.org</u>. We try to respond to feedback within 24 hours.

| TEST | SPECIFICATIONS | RESULTS |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Phenotypic Analysis | | |
| Cellular morphology | Gram-negative rods | Gram-negative rods |
| Colony morphology | Report results | Circular, raised, entire, smooth and cream |
| Growth at 44°C ± 2°C ¹ 1 day in an aerobic atmosphere on Tryptic Soy agar | Growth | Growth |
| Motility Hardy Diagnostics™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere | Report results | Non-motile |
| VITEK [®] MS (MALDI-TOF) | A. baumannii | A. baumannii (99.9%) |
| Antibiotic Susceptibility Profile ^{2,3} | | |
| Amikacin | Sensitive | Sensitive (4 µg/mL) |
| Ampicillin/sulbactam | Sensitive | Sensitive (1.5 µg/mL) |
| Cefepime | Sensitive | Sensitive (3 µg/mL |
| Ceftriaxone | Intermediate | Intermediate (16 µg/mL) |
| Ceftazidime | Intermediate | Intermediate $(16 \mu g/mL)^4$ |
| Ciprofloxacin | Resistant | Resistant (≥ 4 µg/mL) |
| Gentamicin | Resistant | Intermediate (6 to 8 µg/mL) ⁵ |
| Imipenem | Sensitive | Sensitive (0.25 µg/mL) |
| Levofloxacin | Resistant | Resistant (≥ 8 µg/mL) |
| Meropenem | Resistant | Resistant (≥ 32 µg/mL) |
| Trimethoprim/sulfamethoxazole | Resistant | Resistant (≥ 320 µg/mL) |
| Tobramycin | Intermediate | Intermediate (6 µg/mL) |
| Tetracycline | Resistant | Intermediate (8 µg/mL) ⁶ |
| Genotypic Analysis | | |
| Sequencing of 16S ribosomal RNA gene (~ 1430 base pairs) | ≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 843 (GenBank: VHDU01000088.1) | 100% sequence identity to <i>A. baumannii</i> , strain MRSN 843 (GenBank: VHDU01000088.1) |
| 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 |

E-mail: <u>contact@beiresources.org</u> Tel: 800-359-7370 Fax: 703-365-2898

Certificate of Analysis for NR-52149

SUPPORTING INFECTIOUS DISEASE RESEARCH

| 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.

²Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

³Antibiotic susceptibility was tested using a combination of VITEK[®]2 GN81 and E-test strips.

⁴A. baumannii, strain MRSN 843 was deposited as sensitive to ceftazidime, but showed a MIC of 16 μg/mL (interpreted as intermediately resistant) for lot 70038245 during QC testing.

⁵A. baumannii, strain MRŠN 843 was deposited as resistant to gentamicin but showed MICs of 6 and 8 μg/mL (interpreted as intermediately resistant) during QC testing. Testing was performed in duplicate.

⁶Susceptibility results for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

/Sonia Bjorum Brower/

Sonia Bjorum Brower

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.



02 OCT 2023