

Acinetobacter baumannii, Strain MRSN 7576

Catalog No. NR-52180

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Product Description:

Acinetobacter baumannii (*A. baumannii*), strain MRSN 7576 was isolated in 2005 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7576 was deposited as multi-locus sequence type (MLST) ST 150, sensitive to amikacin, ampicillin/sulbactam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, colistin, gentamicin, imipenem, levofloxacin, meropenem, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-52180 was produced by inoculation of BEI Resources seed lot 70041738 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: 70062665

Manufacturing Date: 17AUG2023

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| 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 Hardy Diagnostics™ 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 Motile <i>A. baumannii</i> (99.9%) |
| Antibiotic Susceptibility Profile^{2,3} Amikacin Ampicillin/sulbactam Cefepime Ceftriaxone Ceftazidime Ciprofloxacin Colistin Gentamicin Imipenem Levofloxacin Meropenem Trimethoprim/sulfamethoxazole Tobramycin Tetracycline | Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Intermediate | Sensitive (2 µg/mL) Sensitive (1 µg/mL) Sensitive (2 µg/mL) Sensitive (8 µg/mL) Sensitive (4 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) ⁴ Sensitive (≤ 1 µg/mL) Sensitive (0.38 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 20 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (1.5 to 2 µg/mL) ⁵ |
| Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs) | ≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 7576 (GenBank: VHGC0100093.1) | 99.9% sequence identity to <i>A. baumannii</i> , strain MRSN 7576 (GenBank: VHGC0100093.1) |

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|---|---|--|
| Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood | Growth consistent with expected colony morphology | Growth consistent with expected colony morphology ⁶ |
| 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.

⁴Testing was performed on BEI Resources seed lot 70041738.

⁵*A. baumannii*, strain MRSN 7576 was deposited as sensitive to tetracycline and was found to be intermediately resistant for lot 70041737, but showed a MIC of 1.5 to 2 µg/mL (interpreted as sensitive) for lot 70062665 during QC testing. Testing was performed in duplicate.

⁶Two colony types (CT) were observed (CT1: circular, entire, convex, smooth and cream; CT2: circular, entire, convex, smooth and white). Plating of the individual colony types showed that they did not revert to the mixed colony type. VITEK[®] MS (MALDI-TOF) analysis identified cells from both colony types as *A. baumannii*.

Figure 1: Colony Morphology



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11 OCT 2023

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