

Acinetobacter baumannii, Strain MRSN 423159

Catalog No. NR-52243

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Product Description:

Acinetobacter baumannii (*A. baumannii*), strain MRSN 423159 was isolated in 2016 from a human respiratory sample in the United States as part of a global surveillance program. NR-52243 was deposited as multi-locus sequence type (MLST) ST 2, resistant to ampicillin/sulbactam, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, tobramycin and trimethoprim/sulfamethoxazole, sensitive to colistin and tetracycline, and intermediately resistant to amikacin and cefepime. NR-52243 was produced by inoculation of the deposited material 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: 70039378

Manufacturing Date: 23SEP2020

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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 BBL™ Motility Test Medium w/TTC Indicator for 1 day at 35°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 <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	Intermediate Resistant Intermediate Resistant Resistant Resistant Resistant Sensitive Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive	Intermediate (24 µg/mL) Intermediate (16 µg/mL) ⁴ Resistant (24 to 32 µg/mL) ⁴ Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 8 µg/mL) Resistant (> 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (96 to 192 µg/mL)⁵
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 423159 (GenBank: VHE01000114.1)	100% sequence identity to <i>A. baumannii</i> , strain MRSN 423159 (GenBank: VHE01000114.1)
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.

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

³Antibiotic susceptibility was tested using a combination of VITEK®2 GN82, Sensititre GNX2F AST and E-test strips.

⁴The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

⁵*A. baumannii*, strain MRSN 423159 was deposited as being sensitive to tetracycline. Repeated antibiotic susceptibility testing determined that for strain MRSN 423159, the tetracycline MIC is 96 to 192 µg/mL, which is interpreted as resistant. Testing was performed in duplicate.

Figure 1: Colony Morphology



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