Certificate of Analysis for NR-52175

Acinetobacter baumannii, Strain MRSN 7251

Catalog No. NR-52175

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Product Description:

Acinetobacter baumannii (A. baumannii), strain MRSN 7251 was isolated in 2004 from a human wound sample in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 7251 was deposited as multi-locus sequence type (MLST) ST 32, sensitive to amikacin, colistin, imipenem, levofloxacin, meropenem and trimethoprim/sulfamethoxazole and resistant to cefepime, ceftazidime, ceftriaxone, ciprofloxacin, gentamicin, ampicillin/sulbactam, tetracycline and tobramycin. NR-52175 was produced by inoculation of BEI Resources seed lot 70040787 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: 70053514 **Manufacturing Date: 16JAN2022**

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphology	Report results	Circular, convex, entire, smooth and cream (Figure 1)
Growth at 44°C ± 2°C[1] 1 day in an aerobic atmosphere on Tryptic Soy agar	Growth	Growth
Motility BBL™ 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	Intermediate (32 µg/mL)[4]
Ampicillin/sulbactam	Resistant	Resistant (96 µg/mL)
Cefepime	Resistant	Resistant (≥ 256 µg/mL)
Ceftriaxone	Resistant	Resistant (≥ 64 µg/mL)
Ceftazidime	Resistant	Resistant (≥ 64 µg/mL)
Ciprofloxacin	Resistant	Resistant (≥ 4 µg/mL)
Gentamicin	Resistant	Resistant (96 µg/mL)
Imipenem	Sensitive	Sensitive (1 µg/mL)
Levofloxacin	Sensitive	Sensitive (2 µg/mL)
Meropenem	Sensitive	Sensitive (0.5 µg/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 20 µg/mL)
Tobramycin	Resistant	Resistant (≥ 256µg/mL)
Tetracycline	Resistant	Resistant (≥ 16 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to *A. baumannii*, strain MRSN 7251 (GenBank: VHED01000109.1)	99.9% sequence identity to *A. baumannii*, strain MRSN 7251 (GenBank: VHED01000109.1)
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
Viability	Growth	Growth

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[1]Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus and A. pittii*, which do not grow at 44°C.
[2]Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)
[3]Antibiotic susceptibility was tested using a combination of VITEK®2 GN81 and E-test strips.
[4]The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

Figure 1: Colony Morphology

/Sonia Bjorum Brower/
Sonia Bjorum Brower 12 APR 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.

Support Provided by NIAID

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