Certificate of Analysis for NR-52159

Acinetobacter baumannii, Strain MRSN 1551

Catalog No. NR-52159

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

Product Description:

Acinetobacter baumannii (A. baumannii), strain MRSN 1551 was isolated in 2010 from a human specimen in the USA as part of a global surveillance program. *A. baumannii*, strain MRSN 1551 was deposited as multi-locus sequence type (MLST) ST 10, sensitive to amikacin, ceftazidime, colistin, cefepime, imipenem, levofloxacin, meropenem, ampicillin/sulbactam and tobramycin, resistant to ciprofloxacin, trimethoprim/sulfamethoxazole and tetracycline and intermediately resistant to ceftriaxone and gentamicin. NR-52159 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: 70040776 **Manufacturing Date: 09DEC2020**

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	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 Remel™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere	Report results	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 (2 µg/mL)
Cefepime	Sensitive	Sensitive (≤ 2 µg/mL)
Ceftriaxone	Intermediate	Intermediate (≥ 32 µg/mL)
Ceftazidime	Sensitive	Sensitive (8 µg/mL)
Ciprofloxacin	Resistant	Intermediate (2 µg/mL)[4]
Colistin	Sensitive	Sensitive (≤ 0.25 µg/mL)
Gentamicin	Intermediate	Sensitive (3 µg/mL)[5]
Imipenem	Sensitive	Sensitive (≤ 1 µg/mL)
Levofloxacin	Sensitive	Sensitive (≤ 1 µg/mL)
Meropenem	Sensitive	Sensitive (≤ 1 µg/mL)
Trimethoprim/sulfamethoxazole	Resistant	Resistant (≥ 4 µg/mL)
Tobramycin	Sensitive	Sensitive (≤ 1 µg/mL)
Tetracycline	Resistant	Resistant (≥ 256 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to *A. baumannii*, strain MRSN 1551 (GenBank: VHGQ01000056.1)	100% sequence identity to *A. baumannii*, strain MRSN 1551 (GenBank: VHGQ01000056.1)
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

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

Certificate of Analysis for NR-52159

TEST	SPECIFICATIONS	RESULTS
Viability	Growth	Growth

[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 GN82, Sensititre GNX2F AST and E-test strips.
[4]The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.
[5]*A. baumannii*, strain MRSN 1551 was deposited as being intermediately resistant to gentamicin. Antibiotic susceptibility testing determined that for strain MRSN 1551, the gentamicin MIC is 3 µg per mL, which is interpreted as sensitive. Testing was performed in duplicate.

Figure 1: Colony Morphology

/Heather Couch/
Heather Couch 31 AUG 2021
Program 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.

Support Provided by NIAID

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898