

Pseudomonas aeruginosa, Strain MRSN 6695

Catalog No. NR-51552

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

Product Description:

Pseudomonas aeruginosa (*P. aeruginosa*), strain MRSN 6695 was isolated in 2012 from a human urine sample in the United States as part of a global surveillance program. *P. aeruginosa*, strain MRSN 6695 was deposited as multi-locus sequence type (MLST) ST 497, sensitive to amikacin, gentamicin and tobramycin and resistant to aztreonam, cefepime, ceftazidime, ciprofloxacin, imipenem, levofloxacin and meropenem. NR-51552 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: 70024979

Manufacturing Date: 09MAY2019

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 Colony morphology Motility (wet mount) VITEK® 2 (GN card)	Gram-negative rods Report results Report results <i>P. aeruginosa</i> (≥ 89%)	Gram-negative rods Circular, low convex, entire, opaque and cream (Figure 1) Motile <i>P. aeruginosa</i> (99%)
Antibiotic Susceptibility Profile^{1,2} Amikacin Amoxicillin/clavulanic acid Ampicillin Cefazolin Cefepime Cefoxitin Ceftazidime Ceftriaxone Ciprofloxacin Gentamicin Levofloxacin Meropenem Nitrofurantoin Piperacillin/tazobactam Tetracycline Tobramycin Trimethoprim/sulfamethoxazole	Sensitive Report results Report results Report results Resistant Report results Resistant Report results Resistant Report results Sensitive Resistant Resistant Report results Resistant Report results Sensitive Report results	Sensitive (8 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (8 µg/mL) ³ Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) ⁴ Resistant (≥ 64 µg/mL) Sensitive (1 µg/mL) ⁵ Sensitive (2 µg/mL) Intermediate (4 µg/mL) ⁶ Intermediate (4 µg/mL) ⁷ Resistant (≥ 512 µg/mL) Resistant (≥ 128 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 1 µg/mL) 80 µg/mL ⁸
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>P. aeruginosa</i> , strain MRSN 6695 (GenBank: RXTJ01000040.1)	99.9% sequence identity to <i>P. aeruginosa</i> , strain MRSN 6695 (GenBank: RXTJ01000040.1)
Purity 8 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

¹Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

²Antibiotic susceptibility was tested using bioMérieux VITEK® 2 GN81.

³The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

⁴*P. aeruginosa* strain MRSN 6695 was deposited as resistant to ceftazidime. Repeated antibiotic susceptibility testing determined that strain MRSN 6695 is intermediately resistant to ceftazidime.

⁵*P. aeruginosa* strain MRSN 6695 was deposited as resistant to ciprofloxacin. Repeated antibiotic susceptibility testing determined that strain MRSN 6695 is sensitive to ciprofloxacin.

⁶*P. aeruginosa* strain MRSN 6695 was deposited as resistant to levofloxacin. Repeated antibiotic susceptibility testing determined that strain MRSN 6695 is intermediately resistant to levofloxacin.

⁷*P. aeruginosa* strain MRSN 6695 was deposited as resistant to meropenem. Repeated antibiotic susceptibility testing determined that strain MRSN 6695 is intermediately resistant to meropenem.

⁸Trimethoprim/sulfamethoxazole MIC interpretive standards are not available for *P. aeruginosa*; however, most clinical isolates are resistant to trimethoprim/sulfamethoxazole. For more information, please refer to Köhler, T., et al. "Multidrug Efflux in Intrinsic Resistance to Trimethoprim and Sulfamethoxazole in *Pseudomonas aeruginosa*." *Antimicrob. Agents Chemother.* 40 (1996): 2288-2290. PubMed: 9036831.

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

Sonia Bjorum Brower

14 JAN 2025

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.

