

# Certificate of Analysis for NR-51527

### Pseudomonas aeruginosa, Strain MRSN 1613

### Catalog No. NR-51527

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

#### **Product Description:**

Pseudomonas aeruginosa (P. aeruginosa), strain MRSN 1613 was isolated in 2010 from a human groin as part of a surveillance program in the United States. *P. aeruginosa*, strain MRSN 1613 was deposited as sensitive to amikacin, aztreonam, cefepime, ceftazidime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and tobramycin.

Lot: 70024608<sup>1</sup> Manufacturing Date: 12APR2019

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphology <sup>2</sup>	Report results	Irregular, low convex, undulate, rough and cream (Figure 1)
Motility (wet mount)	Report results	Motile
VITEK® 2 (GN card)	P. aeruginosa (≥ 89%)	P. aeruginosa (99%)
Antibiotic Susceptibility Profile <sup>3</sup> VITEK® (AST-GN81 Card) Ampicillin	Report results	Resistant (≥ 32 µg/mL)
Amoxicillin/clavulanic acid	Report results	Resistant (≥ 32 µg/mL)
Piperacillin/tazobactam	Sensitive	Sensitive (8 µg/mL)
Cefazolin	Report results	Resistant (≥ 64 µg/mL)
Cefoxitin	Report results	Resistant (≥ 64 µg/mL)
Ceftazidime	Sensitive	Sensitive (4 µg/mL)
Ceftriaxone	Report results	Resistant (≥ 32 µg/mL)
Cefepime	Sensitive	Sensitive (2 µg/mL)
Meropenem	Sensitive	Sensitive (≤ 0.25 µg/mL)
Amikacin	Sensitive	Sensitive (≤ 2 µg/mL)
Gentamicin	Sensitive	Sensitive (≤ 1 µg/mL)
Tobramycin	Sensitive	Sensitive (≤ 1 µg/mL)
Ciprofloxacin	Sensitive	Sensitive (≤ 0.25 μg/mL)
Levofloxacin	Sensitive	Sensitive (0.5 µg/mL)
Tetracycline	Report results	Resistant (≥ 16 µg/mL)
Nitrofurantoin	Report results	Resistant (≥ 512 µg/mL)
Trimethoprim/sulfamethoxazole	Report results	160 μg/mL <sup>4</sup>
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	≥ 99% sequence identity to	100% sequence identity to
(~1470 base pairs)	P. aeruginosa, strain MRSN 1613 (GenBank: RXVU01000026.1)	P. aeruginosa, strain MRSN 1613 (GenBank: RXVU01000026.1)
Purity (post-freeze) <sup>5</sup>	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze) <sup>2</sup>	Growth	Growth

<sup>&</sup>lt;sup>1</sup>NR-51527 was produced by inoculation of the depositor 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.

BEI Resources www.beiresources.org E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

<sup>&</sup>lt;sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

<sup>&</sup>lt;sup>3</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>&</sup>lt;sup>4</sup>Trimethoprim/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*." <u>Antimicrob. Agents Chemother.</u> 40 (1996): 2288-2290. PubMed: 9036831.

<sup>&</sup>lt;sup>5</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with and without 5% CO<sub>2</sub> on Tryptic Soy agar.



# **Certificate of Analysis for NR-51527**

Figure 1: Colony Morphology



/Heather Couch/ Heather Couch

10 OCT 2019

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.

BEI Resources www.beiresources.org E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898