

# Pseudomonas aeruginosa, Strain MRSN 1601

## Catalog No. NR-51525

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## Product Description:

*Pseudomonas aeruginosa* (*P. aeruginosa*), strain MRSN 1601 was isolated in 2010 from a human wound in the United States. *P. aeruginosa*, strain MRSN 1601 was deposited as sensitive to amikacin, aztreonam, cefepime, ceftazidime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and tobramycin.

Lot: 70024604<sup>1</sup>

Manufacturing Date: 08MAY2019

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup> Motility (wet mount) VITEK® 2 (GN card)	Gram-negative rods Report results Report results <i>P. aeruginosa</i> (≥ 89%)	Gram-negative rods Irregular, flat, undulate and green (Figure 1) Motile <i>P. aeruginosa</i> (99%)
<b>Antibiotic Susceptibility Profile<sup>3</sup></b> VITEK® (AST-GN81 Card) Ampicillin Amoxicillin/Clavulanic Acid Piperacillin/Tazobactam Cefazolin Cefoxitin Ceftazidime Ceftriaxone Cefepime Meropenem Amikacin Gentamicin Tobramycin Ciprofloxacin Levofloxacin Tetracycline Nitrofurantoin Trimethoprim/Sulfamethoxazole	Report results Report results Sensitive Report results Report results Sensitive Report results Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Report results Report results Report results	Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Intermediate (64 µg/mL) <sup>4</sup> Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (8 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (2 µg/mL) Sensitive (1 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (0.5 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 512 µg/mL) 80 µg/mL <sup>5</sup>
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs)	≥ 99% sequence identity to <i>P. aeruginosa</i> , strain MRSN 1601 (GenBank: RXVW01000143.1)	100% sequence identity to <i>P. aeruginosa</i> , strain MRSN 1601 (GenBank: RXVW01000143.1)
<b>Purity (post-freeze)<sup>6</sup></b>	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>NR-51525 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.

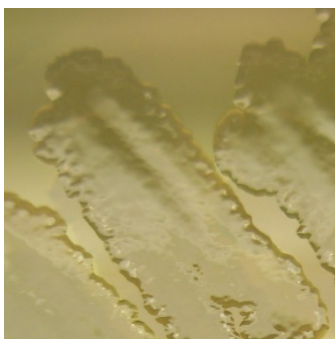
<sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

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

<sup>4</sup>*P. aeruginosa* strain MRSN 1601 was deposited as sensitive to piperacillin/tazobactam. Repeated antibiotic susceptibility testing determined that strain MRSN 1601 is intermediately resistant to piperacillin/tazobactam.

<sup>5</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*." *Antimicrob. Agents Chemother.* 40 (1996): 2288-2290. PubMed: 9036831.

<sup>6</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.

**Figure 1: Colony Morphology**

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