

***Pseudomonas aeruginosa*, Strain MRSN 1948**

Catalog No. NR-51536

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Product Description:

Pseudomonas aeruginosa (*P. aeruginosa*), strain MRSN 1948 was isolated in 2010 from a human wound as part of a surveillance program in the United States. *P. aeruginosa*, strain MRSN 1948 was deposited as sensitive to amikacin, aztreonam, cefepime, ceftazidime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and tobramycin.

Lot: 70024944¹

Manufacturing Date: 10MAY2019

| TEST | SPECIFICATIONS | RESULTS |
|---|--|--|
| Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) VITEK® 2 (GN card) | Gram-negative rods Report results Report results <i>P. aeruginosa</i> (≥ 89%) | Gram-negative rods Circular, slight peaked, undulate, rough and green (Figure 1) Motile <i>P. aeruginosa</i> (98%) |
| Antibiotic Susceptibility Profile³ 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 Report results Report results Report results | Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Sensitive (≤ 4 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (4 µg/mL) Resistant (32 µg/mL) Sensitive (2 µg/mL) Sensitive (≤ 0.25 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 to 160 µg/mL ⁴ |
| Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs) | ≥ 99% sequence identity to <i>P. aeruginosa</i> , strain MRSN 1948 (GenBank: RXUY01000152.1) | 100% sequence identity to <i>P. aeruginosa</i> , strain MRSN 1948 (GenBank: RXUY01000152.1) |
| Purity (post-freeze)⁵ | Growth consistent with expected colony morphology | Growth consistent with expected colony morphology |
| Viability (post-freeze)² | Growth | Growth |

¹NR-51536 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.

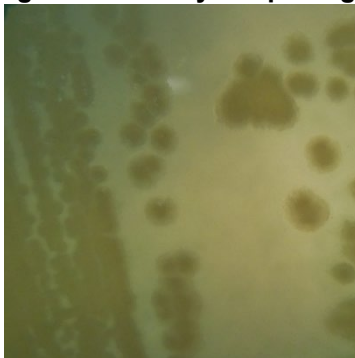
²1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

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

⁴Trimethoprim/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.

⁵Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with and without 5% CO₂ on Tryptic Soy agar.

Figure 1: Colony Morphology



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