

***Pseudomonas aeruginosa*, Strain MRSN 12282**

Catalog No. NR-51571

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Product Description:

Pseudomonas aeruginosa (*P. aeruginosa*), strain MRSN 12282 was isolated in 2012 from human respiratory sample as part of a surveillance program in the United States. *P. aeruginosa*, strain MRSN 12282 was deposited as sensitive to amikacin and tobramycin, intermediate to gentamicin and resistant to imipenem, piperacillin/tazobactam, cefepime, levofloxacin, ceftazidime, aztreonam, meropenem and ciprofloxacin.

Lot: 70025034¹

Manufacturing Date: 26JUN2019

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, convex, entire, smooth and cream (Figure 1) Plaques observed Motile <i>P. aeruginosa</i> (97%)
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 Resistant Report results Report results Resistant Report results Resistant Resistant Sensitive Intermediate Sensitive Resistant Resistant Report results Report results Report results	Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 128 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (32 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (16 µg/mL) ⁴ Resistant (≥ 16 µg/mL) Sensitive (16 µg/mL) Intermediate (8 µg/mL) Sensitive (2 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 512 µg/mL) ≥ 320 µg/mL ⁵
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>P. aeruginosa</i> , strain MRSN 12282 (GenBank: RXWL01000175.1)	99.9% sequence identity to <i>P. aeruginosa</i> , strain MRSN 12282 (GenBank: RXWL01000175.1)
Purity (post-freeze)⁶	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

¹NR-51571 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

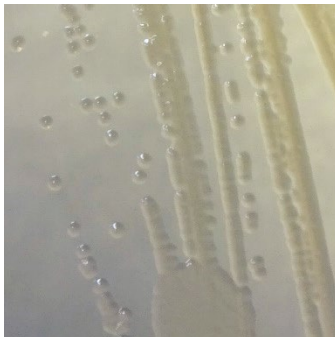
³Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

⁴*P. aeruginosa*, strain MRSN 12282 was deposited as resistant to cefepime, but showed a MIC of 16 µg/mL (interpreted as intermediate) for cefepime during QC testing. Testing was performed in quadruplicate.

⁵Trimethoprim/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.
⁶Purity 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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23 DEC 2019

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