

***Pseudomonas aeruginosa*, Strain MRSN 11285**

**Catalog No. NR-51566**

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**Product Description:**

*Pseudomonas aeruginosa* (*P. aeruginosa*), strain MRSN 11285 was isolated in 2012 from human urine as part of a surveillance program in the United States. *P. aeruginosa*, strain MRSN 11285 was deposited as sensitive to amikacin, aztreonam, cefepime, ceftazidime, ciprofloxacin, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and tobramycin.

**Lot: 70025009<sup>1</sup>**

**Manufacturing Date: 03JUL2019**

| TEST  | SPECIFICATIONS  | RESULTS   |
|---|---|---|
| <b>Phenotypic Analysis</b><br>Cellular morphology<br>Colony morphology <sup>2</sup><br><br>Motility (wet mount)<br>VITEK <sup>®</sup> 2 (GN card)   | Gram-negative rods<br>Report results<br><br>Report results<br><i>P. aeruginosa</i> (≥ 89%)  | Gram-negative rods<br>Circular, convex, entire, smooth and cream (Figure 1)<br>Motile<br><i>P. aeruginosa</i> (93%)   |
| <b>Antibiotic Susceptibility Profile<sup>3</sup></b><br>VITEK <sup>®</sup> (AST-GN81 Card)<br>Ampicillin<br>Amoxicillin/clavulanic Acid<br>Piperacillin/tazobactam<br>Cefazolin<br>Cefoxitin<br>Ceftazidime<br>Ceftriaxone<br>Cefepime<br>Meropenem<br>Amikacin<br>Gentamicin<br>Tobramycin<br>Ciprofloxacin<br>Levofloxacin<br>Tetracycline<br>Nitrofurantoin<br>Trimethoprim/sulfamethoxazole | Report results<br>Report results<br>Sensitive<br>Report results<br>Report results<br>Sensitive<br>Report results<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Sensitive<br>Report results<br>Report results<br>Report results | Resistant (≥ 32 µg/mL)<br>Resistant (≥ 32 µg/mL)<br>Sensitive (≤ 4 µg/mL)<br>Resistant (≥ 64 µg/mL)<br>Resistant (≥ 64 µg/mL)<br>Sensitive (2 µg/mL)<br>Intermediate (16 µg/mL)<br>Sensitive (≤ 1 µg/mL)<br>Sensitive (≤ 0.25 µg/mL)<br>Sensitive (≤ 2 µg/mL)<br>Sensitive (≤ 1 µg/mL)<br>Sensitive (≤ 1 µg/mL)<br>Sensitive (≤ 0.25 µg/mL)<br>Sensitive (0.25 µg/mL)<br>Resistant (≥ 16 µg/mL)<br>Resistant (≥ 512 µg/mL)<br>80 µg/mL <sup>4</sup> |
| <b>Genotypic Analysis</b><br>Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)   | ≥ 99% sequence identity to <i>P. aeruginosa</i> , strain MRSN 11285 (GenBank: RXWQ01000052.1)   | 100% sequence identity to <i>P. aeruginosa</i> , strain MRSN 11285 (GenBank: RXWQ01000052.1)  |
| <b>Purity (post-freeze)<sup>5</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-51566 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.

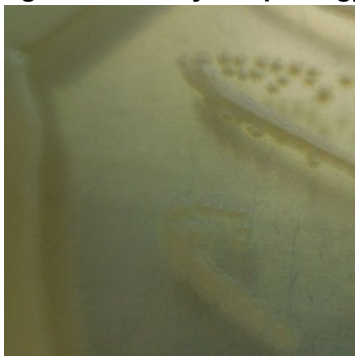
<sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

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

<sup>4</sup>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>5</sup>Purity of this lot was assessed for 8 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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Program Manager or designee, ATCC Federal Solutions

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