

***Klebsiella pneumoniae*, Strain MRSN 4111**

**Catalog No. NR-55505**

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**Product Description:**

*Klebsiella pneumoniae* (*K. pneumoniae*), strain MRSN 4111 was isolated in 2011 from a human perianal sample in North America as part of a global surveillance program. NR-55505 was deposited as a susceptible strain, sensitive to amikacin, ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftazidime/avibactam, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tetracycline, tigecycline, tobramycin and trimethoprim/sulfamethoxazole. NR-55505 was produced by inoculation of the deposited 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. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70049674**

**Manufacturing Date: 19JAN2022**

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TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Motility (wet mount) VITEK® 2 (GN card)	Gram-negative rods Report results  Report results <i>K. pneumoniae</i> (≥ 89%)	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1)  Non-motile <i>K. pneumoniae</i> (87%) <sup>1</sup>
<b>Antibiotic Susceptibility Profile<sup>2,3</sup></b> Amikacin Ampicillin/sulbactam Aztreonam Cefepime Ceftazidime Ceftazidime/avibactam Ceftolozane/tazobactam Ceftriaxone Ciprofloxacin Ertapenem Gentamicin Imipenem Levofloxacin Meropenem Piperacillin/tazobactam Tetracycline Tigecycline Tobramycin Trimethoprim/sulfamethoxazole	Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive	Sensitive (≤ 2 µg/mL) Sensitive (≤ 2 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.38 µg/mL) Sensitive (0.25 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.032 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (0.25 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 4 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.5 µg/mL) <sup>4</sup> Sensitive (≤ 1 µg/mL) Sensitive (≤ 20 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 4111 (GenBank: JAGYFB010000168.1)	99.6% sequence identity to <i>K. pneumoniae</i> , strain MRSN 4111 (GenBank: JAGYFB010000168.1) <sup>5</sup>

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Although the result is out of specification, performance of the product should not be affected.

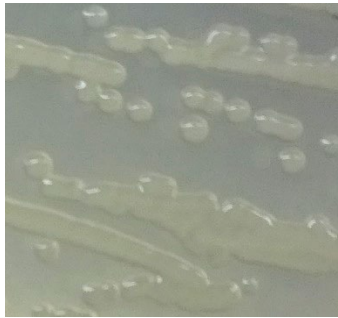
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of bioMérieux VITEK<sup>®</sup>2 GN74 and ETEST<sup>®</sup>.

<sup>4</sup>MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

<sup>5</sup>Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



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