

***Klebsiella pneumoniae*, Strain MRSN 375436**

**Catalog No. NR-55550**

This reagent is the tangible property of the U.S. Government.

**Product Description:**

*Klebsiella pneumoniae* (*K. pneumoniae*), strain MRSN 375436 was isolated in 2016 from a human urine sample in North America as part of a global surveillance program. NR-55550 was deposited as an extensively drug-resistant strain, sensitive to amikacin, ceftazidime/avibactam, tigecycline, tetracycline and tobramycin and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and trimethoprim/sulfamethoxazole. NR-55550 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: 70050666**

**Manufacturing Date: 04MAR2022**

BEI Resources is committed to ensuring digital accessibility for people with disabilities. This Certificate of Analysis contains complex tables and may not be fully accessible. Please let us know if you encounter accessibility barriers and a fully accessible document will be provided: E-mail: [Contact@BEIResources.org](mailto:Contact@BEIResources.org). We try to respond to feedback within 24 hours.

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  Non-motile <i>K. pneumoniae</i> (98%)
<b>Antibiotic Susceptibility Profile<sup>1,2</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 Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Sensitive Sensitive Resistant	Sensitive (≤ 2 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (24 to 32 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (4 µg/mL) Resistant (48 µg/mL) Resistant (32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 128 µg/mL) Sensitive (4 µg/mL) Sensitive (1 µg/mL) <sup>3</sup> Sensitive (2 µg/mL) Resistant (≥ 320 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 375436 (GenBank: JAGYDJ01000110.1)	99.5% sequence identity to <i>K. pneumoniae</i> , strain MRSN 375436 (GenBank: JAGYDJ01000110.1) <sup>4</sup>

TEST	SPECIFICATIONS	RESULTS
<b>Purity</b> 11 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

<sup>1</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

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

<sup>3</sup>MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

<sup>4</sup>Also consistent with other *Klebsiella* species

/Sonia Bjorum Brower/

Sonia Bjorum Brower

26 JUL 2022

Lead Technical Writer or designee, ATCC Federal Solutions

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC<sup>®</sup>'s knowledge.

ATCC<sup>®</sup> is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

