

***Klebsiella pneumoniae*, Strain MRSN 515432**

Catalog No. NR-55564

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

Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 515432 was isolated in 2014 from an unknown human sample in the Middle East as part of a global surveillance program. NR-55564 was deposited as a multidrug-resistant strain (MDR), sensitive to amikacin, ceftazidime/avibactam, ertapenem, imipenem, meropenem, tetracycline and tigecycline and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, gentamicin, levofloxacin, piperacillin/tazobactam, tobramycin and trimethoprim/sulfamethoxazole. NR-55564 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. The material from the initial growth was added to Tryptic Soy broth, which was grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed on Tryptic Soy agar under propagation conditions unless otherwise noted.

Lot: 70051098

Manufacturing Date: 23MAR2022

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. We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis 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> (95%)
Antibiotic Susceptibility Profile^{1,2} 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 Sensitive Resistant Resistant Resistant Sensitive Resistant Sensitive Resistant Resistant Sensitive Resistant Resistant Resistant	Sensitive (16 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Intermediate (8 µg/mL) ³ Resistant (≥ 64 µg/mL) Sensitive (3 µg/mL) Resistant (48 µg/mL) Resistant (≥ 64 µg/mL) Resistant (8 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (0.25 to 0.38 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Resistant (≥ 128 µg/mL) Sensitive (2 µg/mL) Sensitive (1 µg/mL) ⁴ Resistant (≥ 16 µg/mL) Resistant (≥ 320 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 515432 (GenBank: JAGYCV010000163.1)	99.7% sequence identity to <i>K. pneumoniae</i> , strain MRSN 515432 (GenBank: JAGYCV010000163.1) ⁵

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

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

²Antibiotic susceptibility was tested using a combination of bioMérieux VITEK[®]2 GN74 and ETEST[®]

³The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

⁴MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁵Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



/Sonia Bjorum Brower/
Sonia Bjorum Brower

18 JUL 2022

Lead Technical Writer or designee, ATCC Federal Solutions

ATCC[®], 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[®]'s knowledge.

ATCC[®] 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.

