

Klebsiella pneumoniae, Strain MRSN 516635

Catalog No. NR-55565

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

Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 516635 was isolated in 2016 from an unknown human sample in the Middle East as part of a global surveillance program. NR-55565 was deposited as a multidrug-resistant strain (MDR), sensitive to amikacin, ceftazidime/avibactam, ceftolozane/tazobactam, ciprofloxacin, ertapenem, imipenem, levofloxacin, meropenem, piperacillin/tazobactam and tigecycline, intermediately resistant to tobramycin and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftriaxone, gentamicin, tetracycline and trimethoprim/sulfamethoxazole. NR-55565 was produced by inoculation of BEI Resources seed lot 70051101 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: 70080660

Manufacturing Date: 07JAN2026

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® MS (MALDI-TOF)	Gram-negative rods Report results Non-motile <i>K. pneumoniae</i>	Gram-negative rods Circular, convex, entire, smooth, mucoid and cream (Figure 1) Non-motile <i>K. pneumoniae</i> (99.9%)
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 Report results Resistant Sensitive Sensitive Resistant Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Intermediate Resistant	Sensitive ($\leq 1 \mu\text{g/mL}$) Resistant ($\geq 32 \mu\text{g/mL}$) Resistant (16 $\mu\text{g/mL}$) Intermediate (3 to 4 $\mu\text{g/mL}$) ³ Resistant (16 $\mu\text{g/mL}$) Sensitive ($\leq 0.12 \mu\text{g/mL}$) Sensitive ($\leq 0.25 \mu\text{g/mL}$) Resistant ($\geq 64 \mu\text{g/mL}$) Sensitive (0.5 $\mu\text{g/mL}$) Sensitive ($\leq 0.12 \mu\text{g/mL}$) Resistant ($\geq 16 \mu\text{g/mL}$) Sensitive ($\leq 0.25 \mu\text{g/mL}$) Sensitive (1 $\mu\text{g/mL}$) Sensitive ($\leq 0.25 \mu\text{g/mL}$) Sensitive ($\leq 4 \mu\text{g/mL}$) Resistant ($\geq 16 \mu\text{g/mL}$) Sensitive (0.75 $\mu\text{g/mL}$) ⁴ Intermediate (8 $\mu\text{g/mL}$) Resistant ($\geq 320 \mu\text{g/mL}$)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (1440 base pairs)	$\geq 99\%$ sequence identity to <i>K. pneumoniae</i> , strain MRSN 516635 (GenBank: JAGYCU010000101.1)	99.4% sequence identity to <i>K. pneumoniae</i> , strain MRSN 516635 (GenBank: JAGYCU010000101.1) 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, XN33 and ETEST®

³*K. pneumoniae*, strain MRSN 516635 was deposited as resistant to cefepime but showed MICs of 2 µg/mL (interpreted as sensitive) and 4 µg/mL (interpreted as intermediately resistant) for lot 70051100, resulting in an inconclusive 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

23 MAR 2026

Technical Manager 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 by ATCC® 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.

