

Certificate of Analysis for NR-55544

Klebsiella pneumoniae, Strain MRSN 365679

Catalog No. NR-55544

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

Product Description:

Klebsiella pneumoniae (K. pneumoniae), strain MRSN 365679 was isolated in 2016 from a human urine sample in Asia as part of a global surveillance program. NR-55544 was deposited as an extensively drug-resistant strain, sensitive to tigecycline, intermediately resistant to amikacin and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, ceftazidime/avibactam, ceftolozane/tazobactam, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tetracycline, tobramycin and trimethoprim/sulfamethoxazole. NR-55544 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: 70050648 Manufacturing Date: 02MAR2022

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	Gram-negative rods	Gram-negative rods
Colony morphology	Report results	Circular, convex, entire, smooth and cream (Figure 1)
Motility (wet mount)	Report results	Non-motile
VITEK [®] 2 (GN card)	K. pneumoniae (≥ 89%)	K. pneumoniae (99%)
Antibiotic Susceptibility Profile ^{1,2}		
Amikacin	Intermediate	Intermediate (32 µg/mL)
Ampicillin/sulbactam	Resistant	Resistant (≥ 32 µg/mL)
Aztreonam	Resistant	Resistant (≥ 64 µg/mL)
Cefepime	Resistant	Resistant (≥ 64 µg/mL)
Ceftazidime	Resistant	Resistant (≥ 64 µg/mL)
Ceftazidime/avibactam	Resistant	Resistant (≥ 256 µg/mL)
Ceftolozane/tazobactam	Resistant	Resistant (≥ 256 µg/mL)
Ceftriaxone	Resistant	Resistant (≥ 64 µg/mL)
Ciprofloxacin	Resistant	Resistant (≥ 32 µg/mL)
Ertapenem	Resistant	Resistant (≥ 8 µg/mL)
Gentamicin	Resistant	Resistant (≥ 16 µg/mL)
Imipenem	Resistant	Resistant (≥ 32 µg/mL)
Levofloxacin	Resistant	Resistant (≥ 8 μg/mL)
Meropenem	Resistant	Resistant (≥ 16 µg/mL)
Piperacillin/tazobactam	Resistant	Resistant (≥ 128 µg/mL)
Tetracycline	Resistant	Resistant (≥ 16 µg/mL)
Tigecycline	Sensitive	Resistant (2 to 3 µg/mL) ^{3,4}
Tobramycin	Resistant	Resistant (≥ 16 µg/mL)
Trimethoprim/sulfamethoxazole	Resistant	Resistant (≥ 320 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1110 base pairs)	≥ 99% sequence identity to K. pneumoniae, strain MRSN 365679 (GenBank: JAGYDP010000045.1)	99.6% sequence identity to <i>K. pneumoniae</i> , strain MRSN 365679 (GenBank: JAGYDP010000045.1) ⁵

BEI Resources www.beiresources.org E-mail: contact@beiresources.org

Tel: 800-359-7370 Fax: 703-365-2898

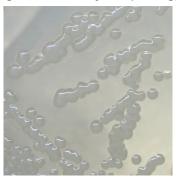


Certificate of Analysis for NR-55544

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)

Figure 1: Colony Morphology



/Sonia Bjorum Brower/
Sonia Bjorum Brower

27 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.

BEI Resources www.beiresources.org E-mail: contact@beiresources.org
Tel: 800-359-7370

Fax: 703-365-2898

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

³MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁴K. pneumoniae, strain MRSN 365679 was deposited as sensitive to tigecycline, but showed a MIC of 2 to 3 μg per mL (interpreted as resistant) for this antibiotic during QC testing. Testing was performed in duplicate.

⁵Also consistent with other *Klebsiella* species