

***Klebsiella pneumoniae*, Strain MRSN 368001**

Catalog No. NR-55546

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Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 368001 was isolated in 2015 from a human wound sample in Africa as part of a global surveillance program. NR-55546 was deposited as an extensively drug-resistant strain (XDR), sensitive to tetracycline and tigecycline and resistant to amikacin, ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftriaxone, ceftazidime/avibactam, ceftolozane/tazobactam, ciprofloxacin, ertapenem, meropenem, gentamicin, imipenem, levofloxacin, piperacillin/tazobactam, tobramycin and trimethoprim/sulfamethoxazole. NR-55546 was produced by inoculation of BEI Resources seed lot 70050654 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: 70077912

Manufacturing Date: 20AUG2025

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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 morphologies ¹	Report results	Colony type 1: Circular, low convex, entire, smooth and light cream (Figure 1) Colony type 2: Circular, convex, entire and smooth (Figure 1)
Motility (wet mount)	Report results	Non-motile
VITEK® 2 (GN card)	<i>K. pneumoniae</i>	<i>K. pneumoniae</i> (98%)
Antibiotic Susceptibility Profile^{2,3}		
Amikacin	Resistant	Resistant (≥ 64 µg/mL)
Ampicillin/sulbactam	Resistant	Resistant (≥ 32 µg/mL)
Aztreonam	Resistant	Resistant (≥ 64 µg/mL)
Cefepime	Resistant	Resistant (≥ 64 µg/mL)
Cefoxitin	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 (≥ 256 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	Sensitive	Sensitive (≤ 1 µg/mL)
Tigecycline	Sensitive	Sensitive (≤ 0.5 µg/mL) ⁴
Tobramycin	Resistant	Resistant (≥ 16 µg/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 20 µg/mL) ⁵

Certificate of Analysis for NR-55546

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 368001 (GenBank: JAGYDN010000074.1)	99.9% sequence identity to <i>K. pneumoniae</i> , strain MRSN 368001 (GenBank: JAGYDN010000074.1) ⁶
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

¹Two colony types were observed. Plating of the individual colony types showed that they did not revert to the mixed colony type. VITEK[®] MS (MALDI-TOF) analysis identified cells from both colony types as *K. pneumoniae*.

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

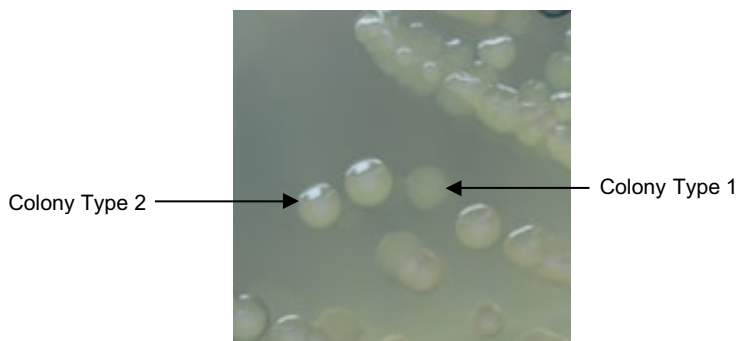
³Antibiotic susceptibility was tested using a combination of bioMérieux VITEK[®]2 GN74 and ETEST[®].

⁴MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁵*K. pneumoniae*, strain MRSN 368001 was deposited as resistant to trimethoprim/sulfamethoxazole, but showed a MIC of ≤ 32 µg /mL (interpreted as sensitive) for lot 70050653 during QC testing.

⁶Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



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Technical Manager or designee, ATCC Federal Solutions

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