

***Klebsiella pneumoniae*, Strain MRSN 669448**
Catalog No. NR-55584

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Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 669448 was isolated in 2017 from a blood sample in Europe as part of a global surveillance program. NR-55584 was deposited as an extensively drug-resistant (XDR) strain, sensitive to amikacin and ceftazidime/avibactam, intermediately resistant to tetracycline and tigecycline and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tobramycin and trimethoprim/sulfamethoxazole. NR-55584 was produced by inoculation of BEI Resources seed lot 70051606 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 on Tryptic Soy agar under propagation conditions unless otherwise noted.

Lot: 70081139
Manufacturing Date: 05FEB2026

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphologies ¹	Report results	Colony type 1: Circular, convex, entire, smooth and cream (Figure 1) Colony type 2: Circular, low convex, entire, smooth and light cream (Figure 1)
Motility (wet mount)	Non-motile	Non-motile
VITEK [®] 2 (GN card)	<i>K. pneumoniae</i> (≥ 89%)	<i>K. pneumoniae</i> (99%)
Antibiotic Susceptibility Profile^{2,3}		
Amikacin	Sensitive	Sensitive (4 µg/mL)
Ampicillin/sulbactam	Resistant	Resistant (≥ 32 µg/mL)
Aztreonam	Resistant	Resistant (≥ 64 µg/mL)
Cefepime	Resistant	Resistant (≥ 32 µg/mL)
Ceftazidime	Resistant	Resistant (≥ 32 µg/mL)
Ceftazidime/avibactam	Sensitive	Sensitive (1 µg/mL)
Ceftolozane/tazobactam	Resistant	Resistant (≥ 32 µg/mL)
Ceftriaxone	Resistant	Resistant (≥ 64 µg/mL)
Ciprofloxacin	Resistant	Resistant (≥ 4 µg/mL)
Ertapenem	Resistant	Resistant (≥ 8 µg/mL)
Gentamicin	Resistant	Resistant (≥ 16 µg/mL)
Imipenem	Resistant	Resistant (≥ 16 µg/mL)
Levofloxacin	Resistant	Resistant (≥ 8 µg/mL)
Meropenem	Resistant	Resistant (≥ 16 µg/mL)
Piperacillin/tazobactam	Resistant	Resistant (≥ 128 µg/mL)
Tetracycline	Intermediate	Sensitive (4 µg/mL) ⁴
Tigecycline	Resistant	Resistant (3 µg/mL) ^{5,6}
Tobramycin	Resistant	Resistant (12 µg/mL)
Trimethoprim/sulfamethoxazole	Resistant	Resistant (≥ 320 µg/mL)

Certificate of Analysis for NR-55584

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1450 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 669448 (GenBank: JAGYCB010000094.1)	99.8% sequence identity to <i>K. pneumoniae</i> , strain MRSN 669448 (GenBank: JAGYCB010000094.1) ⁷
Purity 8 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability	Growth	Growth

¹Two colony types were observed and are consistent with the colony types observed in *K. pneumoniae*.

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

³Antibiotic susceptibility was tested using a combination of bioMérieux VITEK®2 N812, VITEK®2 XN33 and ETEST®.

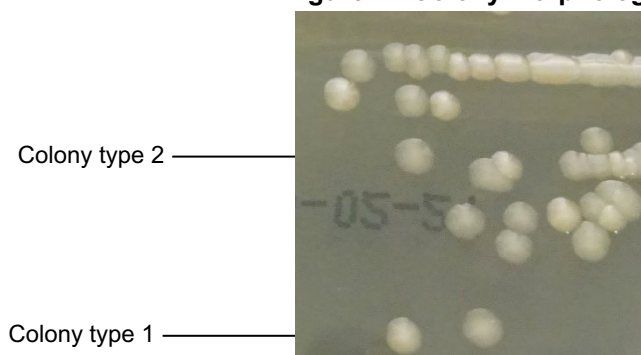
⁴The susceptibility result for this antibiotic is within one doubling dilution of specification, which is considered an equivalent result.

⁵MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁶*K. pneumoniae*, strain MRSN 669448 was deposited as intermediately resistant to tigecycline, but showed a MIC of 4 µg/mL (interpreted as resistant) for lot 70051605 during QC testing.

⁷Also consistent with other *Klebsiella* species.

Figure 1: Colony Morphology



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