

***Klebsiella pneumoniae*, Strain MRSN 728987**

Catalog No. NR-55594

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Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 728987 was isolated in 2018 from a human wound sample in Asia as part of a global surveillance program. NR-55594 was deposited as a multidrug-resistant strain, 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-55594 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: 70051626

Manufacturing Date: 01APR2022

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative rods Report results Report results <i>K. pneumoniae</i>	Gram-negative rods Circular, convex, entire, smooth 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 Resistant Resistant Sensitive Sensitive Resistant Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Intermediate Resistant	Sensitive ($\leq 2 \mu\text{g/mL}$) Resistant ($\geq 32 \mu\text{g/mL}$) Resistant ($16 \mu\text{g/mL}$) Resistant ($\geq 64 \mu\text{g/mL}$) Intermediate ($8 \mu\text{g/mL}$) ³ Sensitive ($0.25 \mu\text{g/mL}$) Sensitive (0.38 to $0.5 \mu\text{g/mL}$) Resistant ($\geq 64 \mu\text{g/mL}$) Sensitive (0.38 to $0.5 \mu\text{g/mL}$) Sensitive ($\leq 0.5 \mu\text{g/mL}$) Resistant ($\geq 16 \mu\text{g/mL}$) Sensitive ($0.25 \mu\text{g/mL}$) Sensitive ($1 \mu\text{g/mL}$) Sensitive ($\leq 0.25 \mu\text{g/mL}$) Sensitive ($\leq 4 \mu\text{g/mL}$) Resistant ($\geq 16 \mu\text{g/mL}$) Resistant ($2 \mu\text{g/mL}$) ^{3,4} Intermediate ($8 \mu\text{g/mL}$) Resistant ($\geq 320 \mu\text{g/mL}$)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	$\geq 99\%$ sequence identity to <i>K. pneumoniae</i> , strain MRSN 728987 (GenBank: JAGYBR010000097.1)	99.5% sequence identity to <i>K. pneumoniae</i> , strain MRSN 728987 (GenBank: JAGYBR010000097.1) 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)

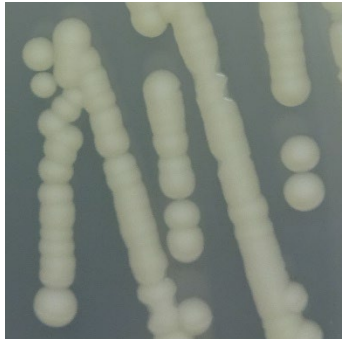
²Antibiotic susceptibility was tested using a combination of bioMérieux VITEK[®]2 GN74 and ETEST[®].

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



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