

***Klebsiella pneumoniae*, Strain MRSN 13768**

Catalog No. NR-55517

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Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 13768 was isolated in 2011 from a human blood sample in Europe as part of a global surveillance program. NR-55517 was deposited as an extensively drug-resistant strain, sensitive to amikacin, ceftazidime/avibactam, gentamicin, tigecycline and trimethoprim/sulfamethoxazole and resistant to ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tetracycline and tobramycin. NR-55517 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: 70049649

Manufacturing Date: 06JAN2022

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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, 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 Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Sensitive	Sensitive (8 to 16 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (4 µg/mL) Resistant (> 256 µg/mL) Resistant (≥ 64 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 128 µg/mL) Resistant (≥ 16 µg/mL) Inconclusive ^{3,4} Resistant (≥ 16 µg/mL) Sensitive (≤ 20 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 13768 (GenBank: JAGYEP010000113.1)	99.5% sequence identity to <i>K. pneumoniae</i> , strain MRSN 13768 (GenBank: JAGYEP010000113.1) 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)

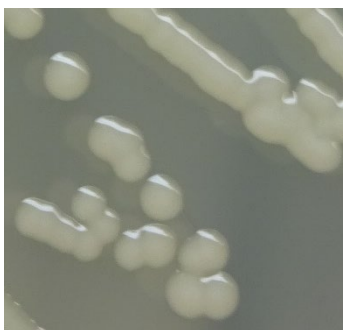
²Antibiotic susceptibility was tested using a combination of bioMérieux VITEK[®]2 GN74 and ETEST[®].

³*K. pneumoniae*, strain MRSN 13768 was deposited as being sensitive to tigecycline. Antibiotic susceptibility testing performed in duplicate determined that for strain MRSN 13768, the tigecycline MICs are 1 µg per mL and 2 µg per mL, which are interpreted as sensitive and resistant, respectively.

⁴MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁵Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



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11 AUG 2022

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