

***Klebsiella pneumoniae*, Strain MRSN 430405**

Catalog No. NR-55555

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Product Description:

Klebsiella pneumoniae (*K. pneumoniae*), strain MRSN 430405 was isolated in 2013 from a human blood sample in the Middle East as part of a global surveillance program. NR-55555 was deposited as an extensively drug-resistant strain, sensitive to ceftazidime/avibactam and tigecycline, intermediately resistant to gentamicin and tetracycline and resistant to amikacin, ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tobramycin and trimethoprim/sulfamethoxazole. NR-55555 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: 70050676

Manufacturing Date: 02MAR2022

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) VITEK® 2 (GN card)	Gram-negative rods Report results Report results <i>K. pneumoniae</i> (≥ 89%)	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Non-motile <i>K. pneumoniae</i> (99%)
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	Resistant Resistant Resistant Resistant Resistant Sensitive Resistant Resistant Resistant Resistant Intermediate Resistant Resistant Resistant Resistant Resistant Resistant Intermediate Sensitive Resistant Resistant	Resistant (≥ 64 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Sensitive (2 µg/mL) Resistant (64 to 96 µg/mL) Resistant (≥ 64 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 8 µg/mL) Intermediate (8 µg/mL) Resistant (> 32 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 128 µg/mL) Intermediate (8 µg/mL) Resistant (1.5 µg/mL) ^{3,4} Resistant (≥ 16 µg/mL) Resistant (≥ 320 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 430405 (GenBank: JAGYDE010000058.1)	99.4% sequence identity to <i>K. pneumoniae</i> , strain MRSN 430405 (GenBank: JAGYDE010000058.1) 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)

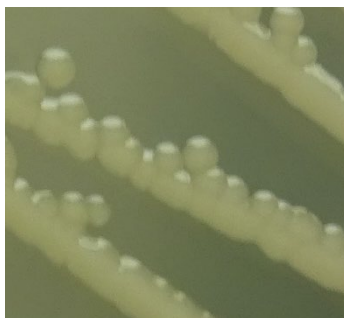
²Antibiotic susceptibility was tested using a combination of bioMérieux VITEK®2 GN74 and ETEST®.

³MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

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

⁵Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



/Sonia Bjorum Brower/
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