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SUPPORTING INFECTIOUS DISEASE RESEARCH

Klebsiella pneumoniae, Strain MRSN 25616

Catalog No. NR-55534

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Product Description:

Klebsiella pneumoniae (K. pneumoniae), strain MRSN 25616 was isolated in 2014 from a human urine sample in North America as part of a global surveillance program. NR-55534 was deposited as a multidrug-resistant strain, sensitive to amikacin, aztreonam, cefepime, ceftazidime, ceftazidime/avibactam, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, tigecycline and tobramycin and resistant to ampicillin/sulbactam, piperacillin/tazobactam, tetracycline and trimethoprim/sulfamethoxazole. NR-55534 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: 70050364

Manufacturing Date: 11FEB2022

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TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphology	Report results	Circular, convex, entire, mucoid, smooth and cream
Motility (wet mount)	Report results	Non-motile
VITEK [®] 2 (GN card)	<i>K. pneumoniae</i> (≥ 89%)	K. pneumoniae (99%)
Antibiotic Susceptibility Profile ^{1,2}		
Amikacin	Sensitive	Sensitive (≤ 2 μg/mL)
Ampicillin/sulbactam	Resistant	Resistant (≥ 32 µg/mL)
Aztreonam	Sensitive	Sensitive (≤ 1 µg/mL)
Cefepime	Sensitive	Sensitive (≤ 1 µg/mL)
Ceftazidime	Sensitive	Sensitive (≤ 1 µg/mL)
Ceftazidime/avibactam	Sensitive	Sensitive (0.38 to 0.5 µg/mL)
Ceftolozane/tazobactam	Sensitive	Sensitive (0.38 µg/mL)
Ceftriaxone	Sensitive	Sensitive (≤ 1 µg/mL)
Ciprofloxacin	Sensitive	Sensitive (0.032 µg/mL)
Ertapenem	Sensitive	Sensitive (≤ 0.5 µg/mL)
Gentamicin	Sensitive	Sensitive (≤ 1 µg/mL)
Imipenem	Sensitive	Sensitive (0.25 µg/mL)
Levofloxacin	Sensitive	Sensitive (≤ 0.12 µg/mL)
Meropenem	Sensitive	Sensitive (≤ 0.25 µg/mL)
Piperacillin/tazobactam	Resistant	Resistant (≥ 128 µg/mL)
Tetracycline	Resistant	Resistant (≥ 16 µg/mL)
Tigecycline	Sensitive	Sensitive (≤ 0.5 µg/mL) ³
Tobramycin	Sensitive	Sensitive (≤ 1 µg/mL)
Trimethoprim/sulfamethoxazole	Resistant	Resistant (≥ 320 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 25616 (GenBank: JAGYDY010000083.1)	99.5% sequence identity to <i>K. pneumoniae</i> , strain MRSN 25616 (GenBank: JAGYDY010000083.1) ⁴

Certificate of Analysis for NR-55534

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TEST	SPECIFICATIONS	RESULTS
Purity 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar	- 1	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)

⁴Also consistent with other *Klebsiella* species

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