SUPPORTING INFECTIOUS DISEASE RESEARCH

Klebsiella pneumoniae, Strain MRSN 28893

Catalog No. NR-55543

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Product Description:

Klebsiella pneumoniae (K. pneumoniae), strain MRSN 28893 was isolated in 2014 from a human urine sample in North America as part of a global surveillance program. NR-55543 was deposited as a susceptible strain, sensitive to amikacin, ampicillin/sulbactam, aztreonam, cefepime, ceftazidime, ceftazidime/avibactam, ceftolozane/tazobactam, ceftriaxone, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, piperacillin/tazobactam, tigecycline, tobramycin, tetracycline and trimethoprim/sulfamethoxazole. NR-55543 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: 70050646

Manufacturing Date: 02MAR2022

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| TEST | SPECIFICATIONS | RESULTS |
|--|----------------------------------|---|
| Phenotypic Analysis | | |
| Cellular morphology | Gram-negative rods | Gram-negative rods |
| Colony morphology | Report results | Circular, convex, entire, smooth and |
| | | cream (Figure 1) |
| Motility (wet mount) | Report results | Non-motile |
| VITEK [®] 2 (GN card) | K. pneumoniae (≥ 89%) | K. pneumoniae (99%) |
| Antibiotic Susceptibility Profile ^{1,2} | | |
| Amikacin | Sensitive | Sensitive (≤ 2 μg/mL) |
| Ampicillin/sulbactam | Sensitive | Sensitive (4 µg/mL) |
| Aztreonam | Sensitive | Sensitive (≤ 1 μg/mL) |
| Cefepime | Sensitive | Sensitive (≤ 1 µg/mL) |
| Ceftazidime | Sensitive | Sensitive (≤ 1 µg/mL) |
| Ceftazidime/avibactam | Sensitive | Sensitive (0.125 µg/mL) |
| Ceftolozane/tazobactam | Sensitive | Sensitive (0.125 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 (0.38 µg/mL) |
| Levofloxacin | Sensitive | Sensitive (≤ 0.12 µg/mL) |
| Meropenem | Sensitive | Sensitive (≤ 0.25 µg/mL) |
| Piperacillin/tazobactam | Sensitive | Sensitive (≤ 4 µg/mL) |
| Tetracycline | Sensitive | Sensitive (≤ 1 μg/mL) |
| Tigecycline | Sensitive | Sensitive (1 µg/mL) ³ |
| Tobramycin | Sensitive | Sensitive (≤ 1 μg/mL) |
| Trimethoprim/sulfamethoxazole | Sensitive | Sensitive (≤ 20 µg/mL) |
| Genotypic Analysis | | |
| Sequencing of 16S ribosomal RNA gene | ≥ 99% sequence identity to | 99.7% sequence identity to |
| (1480 base pairs) | K. pneumoniae, strain MRSN 28893 | K. pneumoniae, strain MRSN 28893 |
| | (GenBank: JAGYDQ010000065.1) | (GenBank: JAGYDQ010000065.1) ⁴ |
| Purity | Growth consistent with expected | Growth consistent with expected |
| 7 days at 37°C in an aerobic atmosphere with | colony morphology | colony morphology |
| and without 5% CO ₂ on Tryptic Soy agar | | |

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Certificate of Analysis for NR-55543

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| TEST | SPECIFICATIONS | RESULTS |
|-----------|----------------|---------|
| 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 ETÉST[®].

³MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

⁴Also consistent with other *Klebsiella* species

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

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Lead Technical Writer or designee, ATCC Federal Solutions

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29 JUN 2022