

***Klebsiella pneumoniae*. Strain MRSN 702325**

**Catalog No. NR-55593**

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### Product Description:

*Klebsiella pneumoniae* (*K. pneumoniae*), strain MRSN 702325 was isolated in 2019 from a human wound sample in Africa as part of a global surveillance program. NR-55593 was deposited as a multidrug-resistant strain, sensitive to amikacin, aztreonam, cefepime, ceftazidime, ceftriaxone, ciprofloxacin, ceftazidime/avibactam, ceftolozane/tazobactam, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, tobramycin, tigecycline and trimethoprim/sulfamethoxazole, intermediately resistant to piperacillin/tazobactam and resistant to ampicillin/sulbactam and tetracycline. NR-55593 was produced by inoculation of BEI Resources seed lot 70051625 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: 70081502**

**Manufacturing Date: 13FEB2026**

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| TEST                                                     | SPECIFICATIONS                                                                                    | RESULTS                                                                                                        |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Phenotypic Analysis</b>                               |                                                                                                   |                                                                                                                |
| Cellular morphology                                      | Gram-negative rods                                                                                | Gram-negative rods                                                                                             |
| Colony morphology                                        | Report results                                                                                    | Circular, convex, entire, smooth, mucoid and cream (Figure 1)                                                  |
| Motility (wet mount)                                     | Non-motile                                                                                        | Non-motile                                                                                                     |
| VITEK® 2 (GN card)                                       | <i>K. pneumoniae</i> (≥ 89%)                                                                      | <i>K. pneumoniae</i> (99%)                                                                                     |
| <b>Antibiotic Susceptibility Profile<sup>1,2</sup></b>   |                                                                                                   |                                                                                                                |
| Amikacin                                                 | Sensitive                                                                                         | Sensitive (≤ 1 µg/mL)                                                                                          |
| Ampicillin/sulbactam                                     | Sensitive                                                                                         | Sensitive (4 to 6 µg/mL) <sup>3</sup>                                                                          |
| Aztreonam                                                | Sensitive                                                                                         | Sensitive (≤ 1 µg/mL)                                                                                          |
| Cefepime                                                 | Sensitive                                                                                         | Sensitive (≤ 0.12 µg/mL)                                                                                       |
| Ceftazidime                                              | Sensitive                                                                                         | Sensitive (≤ 0.5 µg/mL)                                                                                        |
| Ceftazidime/avibactam                                    | Sensitive                                                                                         | Sensitive (≤ 0.12 µg/mL)                                                                                       |
| Ceftolozane/tazobactam                                   | Sensitive                                                                                         | Sensitive (≤ 0.25 µg/mL)                                                                                       |
| Ceftriaxone                                              | Sensitive                                                                                         | Sensitive (≤ 0.25 µg/mL)                                                                                       |
| Ciprofloxacin                                            | Sensitive                                                                                         | Sensitive (≤ 0.06 µg/mL)                                                                                       |
| Ertapenem                                                | Sensitive                                                                                         | Sensitive (≤ 0.12 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                                  | Sensitive                                                                                         | Sensitive (≤ 4 µg/mL) <sup>4</sup>                                                                             |
| Tetracycline                                             | Resistant                                                                                         | Resistant (≥ 16 µg/mL)                                                                                         |
| Tigecycline                                              | Sensitive                                                                                         | Sensitive (1 µg/mL) <sup>5</sup>                                                                               |
| Tobramycin                                               | Sensitive                                                                                         | Sensitive (≤ 1 µg/mL)                                                                                          |
| Trimethoprim/sulfamethoxazole                            | Sensitive                                                                                         | Sensitive (≤ 20 µg/mL)                                                                                         |
| <b>Genotypic Analysis</b>                                |                                                                                                   |                                                                                                                |
| Sequencing of 16S ribosomal RNA gene (~ 1460 base pairs) | ≥ 99% sequence identity to <i>K. pneumoniae</i> , strain MRSN 702325 (GenBank: JAGYBS010000047.1) | 99.7% sequence identity to <i>K. pneumoniae</i> , strain MRSN 702325 (GenBank: JAGYBS010000047.1) <sup>6</sup> |

# Certificate of Analysis for NR-55593

| TEST                                                                                                             | SPECIFICATIONS                                    | RESULTS                                           |
|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| <b>Purity</b><br>8 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar | Growth consistent with expected colony morphology | Growth consistent with expected colony morphology |
| <b>Viability</b>                                                                                                 | Growth                                            | Growth                                            |

<sup>1</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>2</sup>Antibiotic susceptibility was tested using a combination of bioMérieux VITEK®2 N812, VITEK®2 XN33 and ETEST®.

<sup>3</sup>*K. pneumoniae*, strain MRSN 702325 was deposited as resistant to ampicillin/sulbactam, but showed a MIC of 4 µg/mL and 6 µg/mL (interpreted as sensitive) for lot 70051624 during QC testing.

<sup>4</sup>*K. pneumoniae*, strain MRSN 702325 was deposited as intermediately resistant to piperacillin/tazobactam, but showed a MIC of 1.5 µg/mL (interpreted as sensitive) for lot 70051624 during QC testing.

<sup>5</sup>MIC Interpretation Guideline: EUCAST Version 8.0 (2018)

<sup>6</sup>Also consistent with other *Klebsiella* species

**Figure 1: Colony Morphology**



/Sonia Bjorum Brower/

Sonia Bjorum Brower

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Technical Manager or designee, ATCC Federal Solutions

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