

# Acinetobacter baumannii, Strain MRSN 32915

## Catalog No. NR-52239

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## Product Description:

*Acinetobacter baumannii* (*A. baumannii*), strain MRSN 32915 was isolated in 2008 from a wound specimen in Europe as part of a global surveillance program. NR-52239 was deposited as sensitive to colistin, resistant to amikacin, ceftazidime, ciprofloxacin, ceftriaxone, cefepime, gentamicin, imipenem, levofloxacin, meropenem, trimethoprim/sulfamethoxazole, tobramycin and tetracycline, and intermediately resistant to ampicillin/sulbactam. NR-52239 was produced by inoculation of BEI Resources seed lot 70039375 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: 70061539

Manufacturing Date: 21JUN2023

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| TEST                                                                                                                                                                                                                                                                                                                     | SPECIFICATIONS                                                                                                                                                                        | RESULTS                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Phenotypic Analysis</b><br>Cellular morphology<br>Colony morphology<br><br>Growth at 44°C ± 2°C <sup>1</sup><br>1 day in an aerobic atmosphere on Tryptic Soy agar<br><br>Motility<br>Hardy Diagnostics™ Motility Test Medium w/TTC Indicator for 1 day at 37°C in an aerobic atmosphere<br><br>VITEK® MS (MALDI-TOF) | Gram-negative rods<br>Report results<br><br>Growth<br><br>Report results<br><br><i>A. baumannii</i>                                                                                   | Gram-negative rods<br>Circular, convex, entire, smooth and cream (Figure 1)<br>Growth<br><br>Non-motile<br><br><i>A. baumannii</i> (99.9%)                                                                                                                                                                                                                                                                     |
| <b>Antibiotic Susceptibility Profile<sup>2,3</sup></b><br>Amikacin<br>Ampicillin/sulbactam<br>Cefepime<br>Ceftazidime<br>Ceftriaxone<br>Ciprofloxacin<br>Gentamicin<br>Imipenem<br>Levofloxacin<br>Meropenem<br>Tetracycline<br>Tobramycin<br>Trimethoprim/sulfamethoxazole                                              | Resistant<br>Resistant<br>Resistant<br>Resistant<br>Resistant<br>Resistant<br>Resistant<br>Resistant<br>Resistant<br>Intermediate<br>Resistant<br>Resistant<br>Resistant<br>Resistant | Intermediate (24 to 48 µg/mL) <sup>4</sup><br>Resistant (32 µg/mL) <sup>5</sup><br>Resistant (>256 µg/mL)<br>Resistant (≥ 64 µg/mL)<br>Resistant (≥ 64 µg/mL)<br>Resistant (≥ 4 µg/mL)<br><b>Sensitive (4 to 6 µg/mL)<sup>6</sup></b><br>Resistant (≥ 32 µg/mL)<br>Resistant (≥ 32 µg/mL) <sup>7</sup><br>Resistant (≥ 16 µg/mL)<br>Resistant (≥ 16 µg/mL)<br>Resistant (≥ 64 µg/mL)<br>Resistant (≥320 µg/mL) |
| <b>Genotypic Analysis</b><br>Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)                                                                                                                                                                                                                                    | ≥ 99% sequence identity to <i>A. baumannii</i> , strain MRSN 32915 (GenBank: VFHB01000088.1)                                                                                          | 100% sequence identity to <i>A. baumannii</i> , strain MRSN 32915 (GenBank: VFHB01000088.1)                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b><br>7 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                                                                                                                                                                                                                                                                                                                                                              |

| TEST      | SPECIFICATIONS | RESULTS |
|-----------|----------------|---------|
| Viability | Growth         | Growth  |

<sup>1</sup>Growth at 44°C differentiates *A. baumannii* from *A. calcoaceticus* and *A. pittii*, which do not grow at 44°C.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>Antibiotic susceptibility was tested using a combination of VITEK®2 GN82, and E-test strips.

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

<sup>5</sup>*A. baumannii*, strain MRSN 32915 was deposited as intermediately resistant to ampicillin/sulbactam, but showed a MIC of 48 to 64 µg/mL (interpreted as resistant) for lot 70039374 during QC testing. Testing was performed in duplicate.

<sup>6</sup>*A. baumannii*, strain MRSN 32915 was deposited as resistant to gentamicin but showed a MIC of 4 to 6 µg/mL (interpreted as sensitive) for ampicillin/sulbactam during QC testing. Testing was performed in duplicate.

<sup>7</sup>*A. baumannii*, strain MRSN 32915 was deposited as resistant to levofloxacin, and was found to be intermediately resistant for lot 70039374, but showed a MIC of (≥ 32 µg/mL for the current lot (interpreted as resistant) for levofloxacin during QC testing. Testing was performed in duplicate.

Figure 1: Colony Morphology



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