

**Staphylococcus aureus, Strain NRS68**

**Catalog No. NR-45896**

**Product Description:** *Staphylococcus aureus* (*S. aureus*), strain NRS68 was isolated in April 2001 from a 23-year-old female outpatient in Kentucky, USA. *S. aureus*, strain NRS68 was deposited as a vancomycin-intermediate *S. aureus* (VISA) strain.

**Lot<sup>1</sup>: 70011114**

**Manufacturing Date: 12JAN2018**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Motility (wet mount) Hemolysis <sup>3</sup> Biochemical characterization Catalase Coagulase <sup>4</sup> VITEK <sup>®</sup> 2 Compact (GP card)	Gram-positive cocci Report results  Report results Report results  Positive Report results <i>S. aureus</i> (≥ 89%)	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile β-hemolytic  Positive Positive <i>S. aureus</i> (96%)
<b>Antibiotic Susceptibility Profile<sup>5</sup></b> VITEK <sup>®</sup> (AST-GP71 card) Beta-lactamase <sup>6</sup> Cefoxitin screen Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxacin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Clindamycin Quinupristin/dalfopristin Linezolid Daptomycin Vancomycin Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole Etest <sup>®</sup> antibiotic test strips <sup>8</sup> Chloramphenicol Teicoplanin Vancomycin	Report results Report results Report results Resistant Sensitive Resistant Report results Report results Report results Report results Resistant Resistant Sensitive Sensitive Susceptible Intermediate Report results Report results Report results Report results Report results Report results Sensitive  Report results Sensitive Intermediate	Positive Positive Resistant (≥ 0.5 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 8 µg/mL) Resistant (= 4 µg/mL) Resistant (= 2 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (= 2 µg/mL) Susceptible (= 1 µg/mL) Intermediate (= 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.12 µg/mL) <sup>7</sup> Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL)  Sensitive (= 4-6 µg/mL) Sensitive (= 2 µg/mL) Intermediate (= 3 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (740 base pairs)	≥ 99% sequence identity to <i>S. aureus</i> type strain (GenBank: L37597)	100% sequence identity to <i>S. aureus</i> type strain (GenBank: L37597) <sup>9</sup>
<b>Purity (post-freeze)<sup>10</sup></b>	Consistent with expected colony morphology	Consistent with expected colony morphology
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>*S. aureus*, strain NRS68 was deposited to BEI Resources as part of the NARSA collection. NR-45896 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles which were grown 1 day at 37°C in an aerobic atmosphere to produce this lot.

<sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

<sup>3</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

<sup>4</sup>1 day at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)

<sup>5</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

<sup>6</sup>The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).

<sup>7</sup>MIC Interpretation Guideline: EUCAST Version 4.0 (2014)

<sup>8</sup>1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

<sup>9</sup>Also consistent with other *Staphylococcus* species

<sup>10</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood.

**Figure 1: Colony Morphology**



/Heather Couch/  
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