SUPPORTING INFECTIOUS DISEASE RESEARCH

#### Staphylococcus aureus, Strain MN-095

## Catalog No. NR-46232

**Product Description**: *Staphylococcus aureus* (*S. aureus*), strain MN-095 was isolated in 2006 from the blood of a 48-year-old female with cellulitis and/or a bloodstream infection in Minnesota, USA.

## Lot<sup>1</sup>: 63693272

### Manufacturing Date: 19AUG2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology <sup>2</sup>	Report results	Circular, flat, entire, smooth and
		gray (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis <sup>2</sup>	Report results	β-hemolytic
Biochemical characterization		
Catalase	Positive	Positive
Coagulase <sup>3</sup>	Report results	Positive
VITEK <sup>®</sup> 2 Compact (GP card)	Consistent with S. aureus	Consistent with S. aureus
Antibiotic Susceptibility Profile		
VITEK <sup>®</sup> (AST-GP71 card) <sup>4</sup>		
Beta-lactamase <sup>5</sup>	Report results	Positive
Cefoxitin screen	Report results	Positive
Benzylpenicillin	Report results	Resistant (≥ 0.5 µg/mL)
Oxacillin	Resistant	Resistant ( $\geq$ 4 µg/mL)
Gentamicin	Sensitive	Sensitive ( $\leq 0.5 \ \mu g/mL$ )
Ciprofloxacin	Report results	Resistant (≥ 8 µg/mL)
Levofloxacin	Resistant	Resistant (= 4 $\mu$ g/mL)
Moxifloxacin	Report results	Resistant (= 2 $\mu$ g/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Resistant	Resistant (≥ 8 µg/mL)
Clindamycin	Sensitive	Sensitive (≤ 0.25 µg/mL)
Quinupristin/dalfopristin	Report results	Sensitive (≤ 0.25 µg/mL)
Linezolid	Sensitive	Sensitive (= $2 \mu g/mL$ )
Daptomycin	Sensitive	Sensitive (= $0.5-1 \mu g/mL$ )
Vancomycin	Sensitive	Sensitive (= 1 $\mu$ g/mL)
Minocycline	Report results	Sensitive (≤ 0.5 µg/mL)
Tetracycline	Sensitive	Sensitive ( $\leq 1 \mu g/mL$ )
Tigecycline	Report results	Sensitive ( $\leq 0.12 \mu$ g/mL)
Nitrofurantoin	Report results	Sensitive ( $\leq 16 \mu$ g/mL)
Rifampicin	Sensitive	Sensitive ( $\leq 0.5 \ \mu g/mL$ )
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 10 µg/mL)
Etest <sup>®</sup> antibiotic test strips <sup>6</sup>		σοποιώτο (= το μ <u>θ</u> , <b>_</b> )
Chloramphenicol <sup>7</sup>	Sensitive	Sensitive (= 4 µg/mL)
Teicoplanin <sup>7</sup>	Report results	Sensitive (= 1 $\mu$ g/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1490 base pairs)		
Purity (post-freeze) <sup>8</sup>	Growth consistent with S. aureus	Growth consistent with S. aureus
Viability (post-freeze) <sup>2</sup>	Growth	Growth

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# **Certificate of Analysis for NR-46232**

SUPPORTING INFECTIOUS DISEASE RESEARCH

<sup>1</sup>S. aureus, strain MN-095 was deposited to BEI Resources as part of the NARSA collection. NR-46232 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 with 5% defibrinated sheep blood 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 with 5% defibrinated sheep blood <sup>3</sup>4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)

<sup>4</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

<sup>5</sup>The production of beta-lactamase was detected using a Cefinase<sup>™</sup> Paper Disc (BBL<sup>™</sup> 231650).

<sup>6</sup>1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

For both chloramphenicol (bioMérieux Etest<sup>®</sup> 412308) and teicoplanin (bioMérieux Etest<sup>®</sup> 412459), a MIC  $\leq$  8 µg/mL is sensitive, a MIC = 16 µg/mL is intermediate and a MIC  $\geq$  32 µg/mL is resistant.

<sup>8</sup>Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 27 OCT 2015

Signature:

**BEI** Resources Authentication

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC<sup>®</sup>'s knowledge.

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