

## **Certificate of Analysis for NR-46069**

## Staphylococcus aureus, Strain 96758

## Catalog No. NR-46069

**Product Description:** Staphylococcus aureus (S. aureus), strain 96758 was isolated from a bloodstream sample in North Carolina, USA. S. aureus, strain 96758 is a methicillin-resistant S. aureus (MRSA) strain and is also reported to be resistant to erythromycin, clindamycin and gentamicin.

Lot<sup>1</sup>: 62280952 Manufacturing Date: 15JAN2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology <sup>2</sup>	Report results	Circular, low convex, entire, smooth
5 J	1100	and gray (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis <sup>2</sup>	Report results	Non-hemolytic
Biochemical Analysis	•	,
Catalase	Positive	Positive
Coagulase <sup>3</sup>	Report results	Positive
VITEK® 2 Compact (GP card)	Consistent with S. aureus	Consistent with S. aureus
Antibiotic Susceptibility Profile		
VITEK® (AST-GP71card) <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 (≥ 4 µg/mL)
Gentamicin	Resistant	Resistant (≥ 16 µg/mL)
Ciprofloxacin	Resistant	Resistant (≥ 8 µg/mL)
Levofloxin	Report results	Resistant (≥ 8 µg/mL)
Moxifloxacin	Report results	Resistant (= 4 µg/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Resistant	Resistant (≥ 8 µg/mL)
Clindamycin	Resistant	Resistant (≥ 8 µg/mL)
Quinupristin/dalfopristin	Sensitive	Sensitive (= 0.5 µg/mL)
Linezolid	Sensitive	Sensitive (= 2 µg/mL)
Daptomycin	Report results	Sensitive (= 1 µg/mL)
Vancomycin	Sensitive	Sensitive (≤ 0.5 µg/mL)
Minocycline	Report results	Sensitive (≤ 0.5 µg/mL)
Tetracycline	Sensitive	Sensitive (= 2 µg/mL)
Tigecycline	Report results	Sensitive (= 0.5 µg/mL)
Nitrofurantoin	Report results	Sensitive (≤ 16 µg/mL)
Rifampicin	Report results	Sensitive (≤ 0.5 µg/mL)
Etest <sup>®</sup> antibiotic test strips <sup>6</sup>		
Chloramphenicol <sup>7</sup>	Report results	Sensitive (= 1.5 µg/mL)
Teicoplanin <sup>7</sup>	Sensitive	Sensitive (= 1 µg/mL)
Trimethoprim/sulfamethoxazole <sup>7</sup>	Sensitive	Sensitive (= 1 µg/mL)
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1460 base pairs)		
Riboprinter® Microbial Characterization System	Consistent with S. aureus	Consistent with S. aureus
Viability (post-freeze) <sup>2</sup>	Growth	Growth
** <del>**</del>	<u> </u>	1

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SUPPORTING INFECTIOUS DISEASE RESEARCH

## **Certificate of Analysis for NR-46069**

<sup>1</sup>S. aureus, strain 96758 was deposited to BEI Resources as part of the NARSA collection. NR-46069 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 18 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5%

for 7 days under propagation conditions.

<sup>2</sup>23 hours at 37°C and 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 (Coaqulase 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™ Paper Disc (BBL™ 231650).

624 hours at 37°C and aerobic atmosphere on Mueller Hinton agar

<sup>7</sup>For both chloramphenicol (bioMérieux Etest<sup>®</sup> 412308) and teicoplanin (bioMérieux Etest<sup>®</sup> 412459), a MIC ≤ 8 µg/mL is sensitive, a MIC = 16 µg/mL is intermediate and a MIC ≥ 32 μg/mL is resistant. For trimethoprim/sulfamethoxazole (bioMérieux Etest® 412470), a MIC ≤ 2 μg/mL is sensitive and a MIC ≥ 4 µg/mL is resistant.

defibrinated sheep blood kolles which were grown 24 hours at 37°C in an aerobic atmosphere to produce this lot. Purity of this lot was assessed

Figure 1



Date: 09 APR 2014

Signature:

Title: Technical Manager, BEI Authentication or designee

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