

## **Certificate of Analysis for NR-46034**

## Staphylococcus aureus, Strain HT 20020233

## Catalog No. NR-46034

**Product Description:** Staphylococcus aureus (S. aureus), strain HT 20020233 was isolated in 2002 from a wound of a 2-month-old male with scarlet fever associated with varicella in France. S. aureus, strain HT 20020233 is a clinically associated methicillin-resistant S. aureus (MRSA) strain.

Lot<sup>1</sup>: 63397519 Manufacturing Date: 25MAR2015

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 and
, 1 3,	'	cream (Figure 1)
Motility (wet mount)	Report results	Non-motile /
Hemolysis <sup>2</sup>	Report results	β-hemolytic
Biochemical Analysis	'	
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® (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	Sensitive	Sensitive (≤ 0.5 μg/mL)
Ciprofloxacin	Report results	Sensitive (= 1 μg/mL) <sup>6</sup>
Levofloxacin	Report results	Sensitive (= 0.5 µg/mL)
Moxifloxacin	Report results	Sensitive (≤ 0.25 µg/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Report results	Sensitive (≤ 0.25 µg/mL) <sup>7</sup>
Clindamycin	Sensitive	Sensitive (≤ 0.25 µg/mL)
Quinupristin/dalfopristin	Sensitive	Sensitive (≤ 0.25 µg/mL)
Linezolid	Sensitive	Sensitive (= 2 µg/mL)
Daptomycin	Report results	Sensitive (≤ 0.5 μg/mL)
Vancomycin	Sensitive	Sensitive (≤ 1 µg/mL)
Minocycline	Report results	Sensitive (≤ 0.5 μg/mL)
Tetracycline	Report results	Sensitive (≤ 1 μg/mL)
Tigecycline	Report results	Sensitive (≤ 0.12 µg/mL)
Nitrofurantoin	Report results	Sensitive (≤ 16 µg/mL)
Rifampicin	Report results	Sensitive (≤ 0.5 µg/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 10 µg/mL)
Etest <sup>®</sup> antibiotic test strips <sup>8</sup>	2311011110	
Chloramphenicol <sup>9</sup>	Report results	Sensitive (= 3 µg/mL)
Teicoplanin <sup>9</sup>	Sensitive	Sensitive (= 3 µg/mL)
Genotypic Analysis		(- 1 Ma/)
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1500 base pairs)	Consistent with S. aureus	Consistent with S. aureus
Purity (post-freeze) <sup>10</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-46034

<sup>1</sup>S. aureus, strain HT 20020233 was deposited to BEI Resources as part of the NARSA collection. NR-46034 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 24 hours at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles which were grown 24 hours at 37°C in an aerobic atmosphere to produce this lot.

<sup>2</sup>22 hours 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™ Paper Disc (BBL™ 231650).

<sup>6</sup>S. aureus, strain HT 20020233 was deposited as having an intermediate susceptibility to ciprofloxacin. Antibiotic susceptibility testing performed in duplicate identified *S. aureus*, strain HT 20020233 as sensitive to ciprofloxacin.

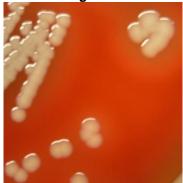
<sup>7</sup>S. aureus, strain HT 20020233 was deposited as having an intermediate susceptibility to erythromycin. Antibiotic susceptibility testing performed in duplicate identified S. aureus, strain HT 20020233 as sensitive to erythromycin.

<sup>8</sup>24 hours at 37°C in an aerobic atmosphere on Mueller Hinton agar

<sup>9</sup>For both chloramphenicol (bioMérieux Etest® 412308) and teicoplanin (bioMérieux Etest® 412459), a MIC ≤ 8 μg/mL is sensitive, a MIC = 16 μg/mL is intermediate and a MIC ≥ 32 μg/mL is resistant.

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

Figure 1



**Date:** 15 MAY 2015

Signature:

Title:

**BEI Resources Authentication** 

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