SUPPORTING INFECTIOUS DISEASE RESEARCH

Staphylococcus aureus, Strain A960649

Catalog No. NR-45914

Product Description: *Staphylococcus aureus* (*S. aureus*), strain A960649 is a clinical isolate from France. *S. aureus*, strain A960649 is a methicillin-resistant *S. aureus* (MRSA) strain and is reported to be resistant to amikacin, tobramycin and gentamicin.

Lot¹: 62990908

Manufacturing Date: 09OCT2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology ²	Report results	Circular, low convex, entire, smooth,
		opaque and cream (Figure 1)
Motility (wet mount)	Report results	Non-motile
Hemolysis ²	Report results	β-hemolytic
Biochemical characterization	Report results	phemoryae
Catalase	Positive	Positive
Coagulase ³	Report results	Positive
VITEK [®] 2 Compact (GP card)	Consistent with <i>S. aureus</i>	Consistent with S. aureus
	Consistent with S. aureus	Consistent with S. adreus
Antibiotic Susceptibility Profile		
VITEK [®] (AST-GP71 card) ⁴		
Beta-lactamase ⁵	Report results	Positive
Cefoxitin screen	Report results	Positive
Benzylpenicillin	Report results	Resistant (≥ 0.5 µg/mL)
Oxacillin	Resistant	Resistant (≥ 4 µg/mL)
Gentamicin	Report results	Inconclusive ⁶
Ciprofloxacin	Resistant	Resistant (≥ 8 µg/mL)
Levofloxacin	Report results	Intermediate (= $2 \mu g/mL$)
Moxifloxacin	Report results	Intermediate (= 1 μ g/mL)
Clindamycin (inducible resistance)	Report results	Negative
Erythromycin	Resistant	Resistant (≥ 8 µg/mL)
Clindamycin	Resistant	Resistant (≥ 8 µg/mL)
Quinupristin/dalfopristin	Report results	Sensitive $(= 1 \mu g/mL)^7$
Linezolid	Sensitive	Sensitive (= $2 \mu g/mL$)
Daptomycin	Report results	Sensitive (= 0.5-1 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 ($\leq 16 \mu g/mL$)
Rifampicin	Report results	Sensitive ($\leq 0.5 \mu$ g/mL)
Trimethoprim/sulfamethoxazole	Sensitive	Sensitive (≤ 20 µg/mL)
Etest [®] antibiotic test strips ⁸		/
Chloramphenicol ⁹	Report results	Sensitive (= 4 µg/mL)
Teicoplanin ⁹	Sensitive	Sensitive (= $1-2 \mu g/mL$)
•		/
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene	Consistent with S. aureus	Consistent with S. aureus
(~ 1460 base pairs)		
Purity (post-freeze) ¹⁰	Growth consistent with S. aureus	Growth consistent with S. aureus
Viability (post-freeze) ²	Growth	Growth

b|**e**|**i** resources

Certificate of Analysis for NR-45914

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¹S. aureus, strain A960649 was deposited to BEI Resources as part of the NARSA collection. NR-45914 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 26 hours at 37°C in an aerobic atmosphere to produce this lot.

²24 hours at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood ³4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)

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

⁵The production of beta-lactamase was detected using a Cefinase[™] Paper Disc (BBL[™] 231650).

⁶S. aureus, strain A960649 was deposited as resistant to gentamicin. Antibiotic susceptibility testing performed in duplicate was inconclusive and could not confirm if this strain is resistant or susceptible to gentamicin.

⁷S. aureus, strain A960649 was deposited as being resistant to quinupristin/dalfopristin. Antibiotic susceptibility testing performed in duplicate identified S. aureus, strain A960649 as sensitive to quinupristin/dalfopristin.

824 hours at 37°C in an aerobic atmosphere on Mueller Hinton agar

⁹For 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.

Figure 1: Colony Morphology

¹⁰Purity of this lot was assessed for 8 days on Tryptic Soy agar with 5% defibrinated sheep blood at 37°C in an aerobic atmosphere.

Date: 26 APR 2017

Signature:

BEI Resources Authentication

ATCC[®], 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[®]'s knowledge.

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