

Staphylococcus aureus, Strain AIS 1001095

Catalog No. NR-46421

Product Description: *Staphylococcus aureus* (*S. aureus*), strain AIS 1001095 was isolated in 2010 in Delaware, USA from wound drainage of a 63-year-old female with a prosthetic joint infection who had been unsuccessfully treated with continuous vancomycin therapy for 3 months. *S. aureus*, strain AIS 1001095 is a vancomycin-resistant *S. aureus* (VRSA) strain.

Lot¹: 62401815

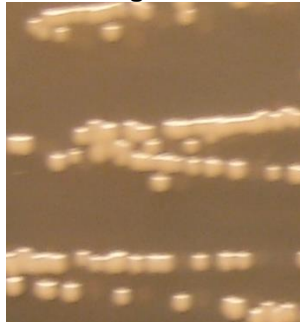
Manufacturing Date: 26FEB2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) Hemolysis ³ Biochemical Characterization Catalase Coagulase ⁴ VITEK [®] 2 Compact (GP card)	Gram-positive cocci Report results Report results Report results Positive Report results Consistent with <i>S. aureus</i>	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile β-hemolytic Positive Positive Consistent with <i>S. aureus</i>
Antibiotic Susceptibility Profile VITEK [®] (AST-GP71 card) ⁵ Beta-lactamase ⁶ 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 [®] antibiotic test strips ⁷ Chloramphenicol ⁸ Teicoplanin ⁸	Report results Report results Report results Sensitive Sensitive Resistant Report results Report results Report results Resistant Resistant Sensitive Sensitive Sensitive Resistant Report results Report results Report results Report results Sensitive Sensitive Report results Intermediate	Positive Negative Resistant (≥ 0.5 µg/mL) Sensitive (= 1 µg/mL) Sensitive (= 1 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 2 µg/mL) Sensitive (≤ 0.12 µg/mL) Resistant (≥ 32 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 16 µg/mL) Sensitive (= 1 µg/mL) Sensitive (≤ 10 µg/mL) Sensitive (= 6 µg/mL) Resistant (≥ 256 µg/mL) ⁹
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1500 base pairs)	Consistent with <i>S. aureus</i>	Consistent with <i>S. aureus</i>
Viability (post-freeze)²	Growth	Growth

¹*S. aureus*, strain AIS 1001095 was deposited to BEI Resources as part of the NARSA collection. NR-46421 was produced by inoculation of the deposited material into Brain Heart Infusion broth with 6 µg/mL vancomycin and grown 24 hours at 37°C in an aerobic atmosphere. Broth

inoculum was added to Brain Heart Infusion agar with 6 µg/mL vancomycin kolles which were grown 24 hours at 37°C in an aerobic atmosphere to produce this lot. Purity of this lot was assessed for 7 days under propagation conditions.
²21 hours at 37°C and aerobic atmosphere on Brain Heart Infusion agar with 6 µg/mL vancomycin
³21 hours at 37°C and aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood
⁴4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)
⁵Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)
⁶The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).
⁷24 hours at 37°C and aerobic atmosphere on Mueller Hinton agar
⁸For 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.
⁹*S. aureus*, strain AIS 1001095 was deposited as having an intermediate susceptibility to teicoplanin. ATCC® quality control determined that *S. aureus*, strain AIS 1001095 is resistant to teicoplanin. Repeat testing confirmed ATCC®'s initial results.

Figure 1



Date: 13 MAY 2014

Signature: 

Title: Technical Manager, BEI Authentication or designee

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.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

