

Staphylococcus aureus, Strain AIS 1000505

Catalog No. NR-46420

Product Description: *Staphylococcus aureus* (*S. aureus*), strain AIS 1000505 was isolated in 2009 from a plantar foot wound of a 53-year-old female in Michigan, USA. *S. aureus*, strain AIS 1000505 is a vancomycin-resistant *S. aureus* strain.

Lot¹: 62365145

Manufacturing Date: 07FEB2014

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 yellow (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 Resistant 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 Positive Resistant (≥ 0.5 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 1 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 (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL) Sensitive (= 2 µg/mL) Resistant (= 32 µg/mL) ⁹
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1490 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 1000505 was deposited to BEI Resources as part of the NARSA collection. NR-46420 was produced by inoculation of the deposited material into Brain Heart Infusion broth with 6 µg/mL vancomycin and grown 23 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 22 hours at 37°C in an aerobic atmosphere to produce this lot. Purity of this lot was assessed for 7 days under propagation conditions.

² 20 hours at 37°C and aerobic atmosphere on Brain Heart Infusion agar with 6 µg/mL vancomycin

³20 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)

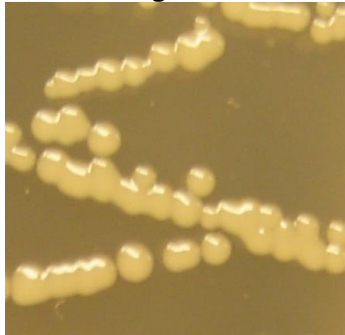
⁶The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).

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 1000505 was deposited as having an intermediate susceptibility to teicoplanin. ATCC® quality control determined that *S. aureus*, strain AIS 1000505 is resistant to teicoplanin. Repeat testing confirmed ATCC®'s initial results.

Figure 1



Date: 09 MAY 2014

Signature:

Title:

Technical Manager, BEI Authentication or designee

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