

Staphylococcus aureus, Strain AIS 2006045

Catalog No. NR-46417

Product Description: *Staphylococcus aureus* (*S. aureus*), strain AIS 2006045 was isolated in 2006 in Michigan, USA from a triceps wound of a 43-year-old female with necrotizing fasciitis of the right upper limb who had been recently treated with a five-week course of vancomycin. *S. aureus*, strain AIS 2006045 is a vancomycin-resistant *S. aureus* strain and is reported to be resistant to a number of other antimicrobial agents.

Lot¹: 62385713

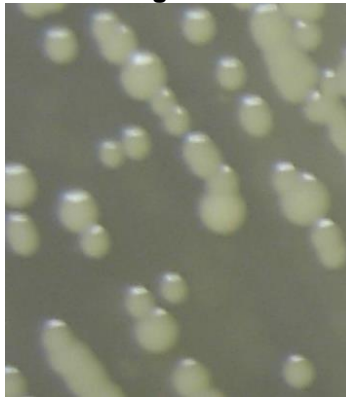
Manufacturing Date: 21FEB2014

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 Report results Resistant Resistant Sensitive Report results Report results Resistant Report results Report results Report results Report results Report results Sensitive Report results Report results	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 (= 4 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 0.25 µg/mL) Resistant (≥ 32 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (= 32 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL)
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 2006045 was deposited to BEI Resources as part of the NARSA collection. NR-46417 was produced by inoculation of the deposited material into Brain Heart Infusion broth with 6 µg/mL vancomycin and grown 28 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 8 days under propagation conditions.
²23 hours at 37°C and aerobic atmosphere on Brain Heart Infusion agar with 6 µg/mL vancomycin
³23 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.

Figure 1



Date: 09 MAY 2014

Signature: *[Handwritten Signature]*

Title: Technical Manager, BEI Authentication or designee

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