

Staphylococcus aureus, Strain GA-62

Catalog No. NR-46220

Product Description: *Staphylococcus aureus* (*S. aureus*), strain GA-62 was isolated in 2005 from the blood of a 72 year-old-male with cellulitis and/or a bloodstream infection in Georgia, USA. *S. aureus*, strain GA-62 is a methicillin-resistant *S. aureus* (MRSA) strain.

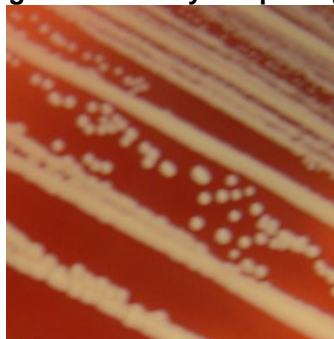
Lot¹: 63693265

Manufacturing Date: 21AUG2015

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) Hemolysis ² Biochemical characterization Catalase Coagulase ³ 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, flat, entire, smooth and gray (Figure 1) Non-motile β-hemolytic Positive Positive Consistent with <i>S. aureus</i>
Antibiotic Susceptibility Profile VITEK [®] (AST-GP71 card) ⁴ Beta-lactamase ⁵ Cefoxitin screen Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxacin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Quinupristin/dalfopristin Linezolid Daptomycin Vancomycin Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole Etest [®] antibiotic test strips ⁸ Chloramphenicol ⁹ Teicoplanin ⁹	Report results Report results Report results Resistant Sensitive Report results Resistant Report results Report results Resistant Report results Sensitive Sensitive Sensitive Sensitive Report results Sensitive Sensitive Report results Report results Sensitive Resistant Sensitive 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 (≥ 8 µg/mL) Positive ⁶ Resistant (≥ 8 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 1 µg/mL) Sensitive (= 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Sensitive (≤ 0.12 µg/mL) ⁷ Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 320 µg/mL) Sensitive (= 4 µg/mL) Sensitive (= 1.5 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1390 base pairs)	Consistent with <i>S. aureus</i>	Consistent with <i>S. aureus</i>
Purity (post-freeze)¹⁰	Consistent with expected colony morphology	Consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

- ¹*S. aureus*, strain GA-62 was deposited to BEI Resources as part of the NARSA collection. NR-46220 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles which were grown 1 day at 37°C in an aerobic atmosphere to produce this lot.
- ²1 day 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).
- ⁶The VITEK® AST-GP71 card tests for both clindamycin resistance and inducible clindamycin resistance (ICR). A positive ICR test is indicative of inducible MLS_B resistance, which confers resistance to macrolides, lincosamides, and type B streptogramin and the isolate should be considered resistant to clindamycin. *S. aureus*, strain GA-62 was found to be sensitive to clindamycin but had a positive ICR test and therefore is considered resistant to clindamycin.
- ⁷MIC Interpretation Guideline: EUCAST Version 4.0 (2014)
- ⁸1 day 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.
- ¹⁰Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 30 NOV 2015

Signature: 
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