

Staphylococcus aureus, Strain BR 5

Catalog No. NR-45890

Product Description: *Staphylococcus aureus* (*S. aureus*), strain BR 5 was isolated in 1999 from a wound of an 11-year-old female burn patient in Brazil. *S. aureus*, strain BR 5 is a methicillin-resistant *S. aureus* (MRSA) strain and a vancomycin-intermediate *S. aureus* (VISA) strain.

Lot¹: 62280992

Manufacturing Date: 30JAN2014

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, low 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) ⁴ Beta-lactamase ⁵ Cefoxitin screen Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxacin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Clindamycin Quinupristin/dalfopristin Linezolid Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole Etest [®] antibiotic test strips ⁶ Chloramphenicol ⁷ Teicoplanin ⁷ Vancomycin ⁷	Report results Report results Report results Resistant Resistant Resistant Resistant Report results Report results Report results Resistant Resistant Resistant Sensitive Sensitive Report results Report results Report results Report results Report results Resistant Report results Sensitive Intermediate	Positive Positive Resistant (≥ 0.5 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (= 4 µg/mL) Sensitive (= 1 µg/mL) Negative Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (= 2 µg/mL) Intermediate (= 8 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 16 µg/mL) Intermediate (= 2 µg/mL) Resistant (≥ 320 µg/mL) Resistant (= 256 µg/ml) Sensitive (= 4 µg/ml) Intermediate (= 4 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs) Riboprinter [®] Microbial Characterization System	Consistent with <i>S. aureus</i> Consistent with <i>S. aureus</i>	Consistent with <i>S. aureus</i> Consistent with <i>S. aureus</i>
Viability (post-freeze)²	Growth	Growth

¹*S. aureus*, strain BR 5 was deposited to BEI Resources as part of the NARSA collection. NR-45890 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 27 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 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.

²25 hours at 37°C and 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)

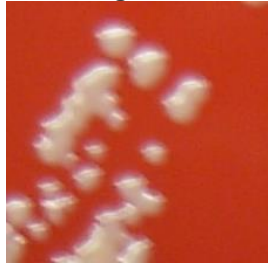
⁴Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

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

⁶24 hours at 37°C and aerobic atmosphere on Mueller Hinton agar

⁷For 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. For vancomycin (bioMérieux Etest® 412486), a MIC ≤ 2 µg/mL is sensitive, a MIC = 4 to 8 µg/mL is intermediate, and a MIC ≥ 16 µg/mL is resistant.

Figure 1



Date: 25 MAR 2014

Signature:

Title:

Technical Manager, BEI Authentication or designee

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