

Staphylococcus aureus, Strain RN6911

Catalog No. NR-45953

Product Description: *Staphylococcus aureus* (*S. aureus*), strain RN6911 is a derivative of RN6390B in which accessory gene regulator (*agr*) has been replaced with the tetracycline resistance gene (*tetM*). In turn, *S. aureus*, strain RN6390B (NRS147) was generated through UV and mutagenesis of *S. aureus*, strain NCTC8325 (NRS77). *S. aureus*, strain RN6911 is a methicillin-sensitive *S. aureus* (MSSA) strain developed for research purposes and is reported to be resistant to tetracycline.

Lot¹: 63061359

Manufacturing Date: 31OCT2014

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, convex, entire, smooth and white (Figure 1) Non-motile β-hemolytic Positive Positive Consistent with <i>S. aureus</i>
Antibiotic Susceptibility Profile VITEK [®] (AST-GP71 card) ⁴ 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 ⁶ Chloramphenicol ⁷ Teicoplanin ⁷	Report results Report results Sensitive Sensitive Sensitive Sensitive Report results Report results Report results Report results Sensitive Sensitive Sensitive Sensitive Report results Sensitive Report results Report results Report results Sensitive Report results Sensitive	Negative Sensitive (≤ 0.12 µg/mL) ⁵ Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Negative Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 1 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 1 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 10 µg/mL) Sensitive (= 3-4 µg/mL) Sensitive (= 1.5 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 830 base pairs)	Consistent with <i>S. aureus</i>	Consistent with <i>S. aureus</i>

TEST	SPECIFICATIONS	RESULTS
Purity (post-freeze) ⁸	Growth consistent with <i>S. aureus</i>	Growth consistent with <i>S. aureus</i>
Viability (post-freeze) ²	Growth	Growth

¹*S. aureus*, strain RN6911 was deposited to BEI Resources as part of the NARSA collection. NR-45953 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 24 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 26 hours at 37°C in an aerobic atmosphere to produce this lot.

²24 hours 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)

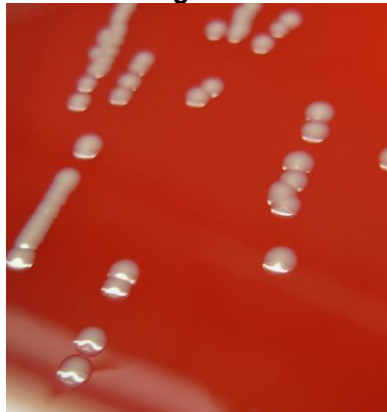
⁵*S. aureus*, strain RN6911 was deposited as being sensitive to penicillin; however, production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650), suggesting that the gene encoding beta-lactamase may be present.

⁶24 hours at 37°C in an 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.

⁸Purity of this lot was assessed for 7 days on Tryptic Soy agar with 5% defibrinated sheep blood at 37°C in an aerobic atmosphere.

Figure 1



Date: 14 JAN 2015

Signature: 

Title: Technical Manager, BEI Authentication or designee

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