

Staphylococcus aureus, Strain RN9121

Catalog No. NR-45956

Product Description: *Staphylococcus aureus* (*S. aureus*), strain RN9121 is an *agr* null derivative of the *agr* group IV prototype strain RN4850 (NRS153), with *tetM* replacing *agr*. *S. aureus*, strain RN9121 is an exfoliatin-producing, methicillin-sensitive *S. aureus* (MSSA) strain that was developed for research purposes.

Lot¹: 62471626

Manufacturing Date: 27MAR2014

| 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) VITEK [®] MS (MALDI-TOF) | Gram-positive cocci Report results Report results Report results Positive Report results Consistent with <i>S. aureus</i> Consistent with <i>S. aureus</i> | Gram-positive cocci Circular, low convex, entire, smooth and gray (Figure 1) Non-motile β-hemolytic Positive Positive Consistent with <i>S. aureus</i> 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 Daptomycin Vancomycin Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole Etest [®] antibiotic test strips ⁶ Chloramphenicol ⁷ Teicoplanin ⁷ | Report results Report results Report results Sensitive Sensitive Sensitive Sensitive Report results Report results Report results Sensitive Sensitive Sensitive Sensitive Report results Sensitive Report results Resistant Report results Report results Report results Sensitive Report results Sensitive | Negative Negative Sensitive (= 0.06 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (≤ 0.12 µg/mL) Sensitive (≤ 0.25 µg/mL) Negative Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (≤ 0.25 µg/mL) Sensitive (= 2 µg/mL) Sensitive (= 1 µg/mL) Sensitive (= 1 µg/mL) Sensitive (= 2 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 (= 2 µg/mL) Sensitive (= 1.5 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 RN9121 was deposited to BEI Resources as part of the NARSA collection. NR-45956 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 24 hours at 37°C in an aerobic atmosphere to produce this lot. Purity of this lot was assessed for 7 days under propagation conditions.

²21 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)

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

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.

Figure 1



Date: 07 JUL 2014

Signature:

Title:

Technical Manager, BEI Authentication or designee

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