

**Staphylococcus aureus, Strain SA LinR #12**

**Catalog No. NR-45924**

**Product Description:**

*Staphylococcus aureus* (*S. aureus*), strain SA LinR #12 was isolated in 2001 from an 85-year-old male with dialysis-associated peritonitis in Massachusetts, USA. NR-45924 lot 70054856 was produced by the inoculation of BEI Resources seed lot 62990913 into Tryptic Soy broth and incubated for 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. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70054856**

**Manufacturing Date: 10AUG2022**

BEI Resources is committed to ensuring digital accessibility for people with disabilities. This Certificate of Analysis contains complex tables and may not be fully accessible. Please let us know if you encounter accessibility barriers and a fully accessible document will be provided: E-mail: [Contact@BEIResources.org](mailto:Contact@BEIResources.org). We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar Motility (wet mount) Hemolysis 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood Biochemical characterization Catalase Coagulase <sup>1</sup> VITEK® 2 Compact (GP card)	Gram-positive cocci Report results  Report results Report results  Positive Report results <i>S. aureus</i> (≥ 89.9%)	Gram-positive cocci Circular, convex, entire, smooth and white (Figure 1)  Non-motile β-hemolytic  Positive Positive <i>S. aureus</i> (99% probability)
<b>Antibiotic Susceptibility Profile<sup>2</sup></b> VITEK® (AST-GP78 card) Beta-lactamase <sup>3</sup> Cefoxitin screen Ceftaroline Benzylpenicillin Oxacillin Gentamicin Ciprofloxacin Levofloxacin Moxifloxacin Clindamycin (inducible resistance) Erythromycin Daptomycin Vancomycin Minocycline Tetracycline Tigecycline Nitrofurantoin Rifampicin Trimethoprim/sulfamethoxazole	Positive Positive Report results Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Negative Sensitive Sensitive Sensitive Sensitive Resistant Sensitive Sensitive Sensitive Sensitive Resistant	Positive Positive Sensitive (= 0.5 µg/mL) Resistant (≥ 0.5 µg/mL) Resistant (≥ 4 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 8 µg/mL) Resistant (≥ 8 µg/mL) Resistant (= 4 µg/mL) Negative Sensitive (≤ 0.5 µg/mL) Sensitive (= 0.5 µg/mL) Sensitive (≤ 0.5 µg/mL) Sensitive (= 1 µg/mL) Resistant (≥ 16 µg/mL) Sensitive (≤ 0.12 µg/mL) <sup>4</sup> Sensitive (≤ 16 µg/mL) Sensitive (≤ 0.5 µg/mL) Resistant (≥ 320 µg/mL)

TEST	SPECIFICATIONS	RESULTS
<b>Etest® antibiotic test strips</b> 1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar Chloramphenicol Clindamycin Linezolid Quinupristin-dalfopristin Teicoplanin	Intermediate Intermediate Resistant Sensitive Sensitive	Intermediate (= 24 µg/mL) Sensitive (= 0.38 µg/mL) <sup>5</sup> Resistant (= 16 µg/mL) Sensitive (= 0.25 µg/mL) Sensitive (= 1.5 µg/mL)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>S. aureus</i> , type strain (GenBank: L37597.1)	99.9% sequence identity to <i>S. aureus</i> , type strain (GenBank: L37597.1)
<b>Purity (post-freeze)</b> 7 days at 37°C in an aerobic atmosphere with 5% CO <sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability (post-freeze)</b> 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar	Growth	Growth

<sup>1</sup>4 hours at 37°C in rabbit serum with 0.15% EDTA (Coagulase Plasma BBL™ 240827)

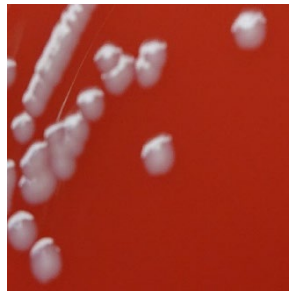
<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S22 (2012)

<sup>3</sup>The production of beta-lactamase was detected using a Cefinase™ Paper Disc (BBL™ 231650).

<sup>4</sup>MIC Interpretation Guideline: EUCAST Version 4.0 (2014)

<sup>5</sup>*S. aureus*, strain SA Lin #12 was deposited as intermediate to clindamycin but showed a MIC of 0.38 µg per mL (interpreted as sensitive) for this antibiotic during QC testing.

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

07 JUL 2023

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC® to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

