

Staphylococcus aureus, Strain AJUL24

Catalog No. NR-55238

Product Description:

Staphylococcus aureus (*S. aureus*), strain AJUL24 is deposited as a trimethoprim-resistant strain derived from *S. aureus*, strain SH1000 through introduction of plasmid pSK5487M containing the antibiotic resistance gene *dfcK* (encoding trimethoprim-resistant dihydrofolate reductase) and a chloramphenicol resistance gene (*cat*) for selection. NR-55238 was produced by resuspension of a lyophilized vial of deposited material in Tryptic Soy broth. Broth inoculum was added to Tryptic Soy broth containing 25 µg per mL chloramphenicol and grown for 1 day at 37°C in an aerobic atmosphere. The material from the initial growth was added to Tryptic Soy broth containing 25 µg per mL chloramphenicol, which was grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed using Tryptic Soy broth or agar containing 25 µg per mL chloramphenicol under propagation conditions unless otherwise noted.

Lot: 70052869

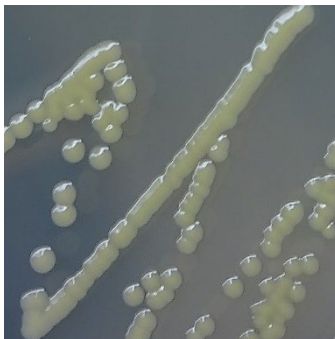
Manufacturing Date: 20MAY2022

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. We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) Hemolysis Catalase VITEK® MS (MALDI-TOF)	Gram-positive cocci Report results Report results Report results Positive <i>S. aureus</i>	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile Non-hemolytic Positive <i>S. aureus</i> (99.9%)
Antibiotic Susceptibility Profile¹ Etest® antibiotic test strips 1 day at 35°C in an aerobic atmosphere on Mueller Hinton agar Trimethoprim	Resistant	Resistant (≥ 32 µg per mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)	≥ 99% sequence identity to <i>S. aureus</i> , strain SH1000 (GenBank: CP059180.1)	99.9% sequence identity to <i>S. aureus</i> , strain SH1000 (GenBank: CP059180.1) ²
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ on Tryptic Soy agar with 5% defibrinated sheep blood	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)	Growth	Growth

¹Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

²Also consistent with other *Staphylococcus* species

Figure 1: Colony Morphology

/Sonia Bjorum Brower/

Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

04 APR 2023

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected 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.

