

**Staphylococcus aureus, Strain HIP06854**

**Catalog No. NR-45869**

**Product Description:**

*Staphylococcus aureus* (*S. aureus*), strain HIP06854 was isolated in 1998 from blood of a 68-year-old male inpatient in New Jersey, USA. *S. aureus*, strain HIP06854 is a vancomycin-intermediate *S. aureus* (VISA) strain. NR-45869 was produced by inoculation of BEI Resources seed lot 70007484 into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70049545**

**Manufacturing Date: 30DEC2021**

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><br>Cellular morphology<br>Colony morphology<br><br>Motility (wet mount)<br>Hemolysis<br>1 day at 37°C in an aerobic atmosphere on<br>Tryptic Soy agar with 5% defibrinated sheep<br>blood<br>Biochemical characterization<br>Catalase<br>Coagulase<br>1 day at 37°C in rabbit serum with 0.15%<br>EDTA (Coagulase Plasma BBL™ 240827)<br>VITEK® MS (MALDI-TOF)<br>VITEK® 2 Compact (GP card) | Gram-positive cocci<br>Report results<br><br>Report results<br>Report results<br><br>Positive<br>Report results<br><br><i>S. aureus</i><br><i>S. aureus</i>  | Gram-positive cocci<br>Circular, convex, entire, smooth<br>and cream (Figure 1)<br><br>Non-motile<br>β-hemolytic<br><br>Positive<br>Positive<br><br><i>S. aureus</i> (99.9%)<br><i>S. aureus</i> (99% probability) <sup>1</sup>  |
| <b>Antibiotic Susceptibility Profile<sup>2</sup></b><br>VITEK® (AST-GP78 card)<br>Beta-lactamase<br>Cefinase™ Paper Disc<br>Cefoxitin screen<br>Benzylpenicillin<br>Oxacillin<br>Ceftaroline<br>Gentamicin<br>Ciprofloxacin<br>Levofloxacin<br>Moxifloxacin<br>Clindamycin (inducible resistance)<br>Erythromycin<br>Clindamycin<br>Linezolid<br>Vancomycin<br>Minocycline<br>Tetracycline<br>Tigecycline               | Positive<br>Positive<br>Resistant<br>Resistant<br>Report results<br>Sensitive<br>Resistant<br>Resistant<br>Resistant<br>Negative<br>Resistant<br>Resistant<br>Sensitive<br>Intermediate<br>Sensitive<br>Sensitive<br>Sensitive | Positive<br>Positive<br>Resistant (≥ 0.5 µg/mL)<br>Resistant (≥ 4 µg/mL)<br>Sensitive (0.25 µg/mL)<br>Sensitive (≤ 0.5 µg/mL)<br>Resistant (≥ 8 µg/mL)<br>Resistant (4 µg/mL)<br>Resistant (2 µg/mL)<br>Negative<br>Resistant (≥ 8 µg/mL)<br>Resistant (≥ 4 µg/mL)<br>Sensitive (2 µg/mL)<br>Intermediate (4 µg/mL)<br>Sensitive (≤ 0.5 µg/mL)<br>Sensitive (≤ 1 µg/mL)<br>Sensitive (≤ 0.12 µg/mL) <sup>3</sup> |

| TEST  | SPECIFICATIONS  | RESULTS  |
|---|---|--|
| Nitrofurantoin<br>Rifampicin<br>Trimethoprim/sulfamethoxazole<br>Etest® antibiotic test strips<br>1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar | Sensitive<br>Sensitive<br>Sensitive   | Sensitive (≤ 16 µg/mL)<br>Sensitive (≤ 0.5 µg/mL)<br>Sensitive (≤ 10 µg/mL)                                    |
| Chloramphenicol<br>Teicoplanin<br>Daptomycin<br>Quinupristin/dalfopristin   | Sensitive<br>Sensitive<br>Non-susceptible<br>Sensitive                      | Inconclusive <sup>4</sup><br>Sensitive (2 to 3 µg/mL)<br>Non-susceptible (1.5 µg/mL)<br>Sensitive (0.38 µg/mL) |
| <b>Genotypic Analysis</b><br>Sequencing of 16S ribosomal RNA gene (~ 1490 base pairs)   | ≥ 99% sequence identity to <i>S. aureus</i> , type strain (GenBank: L37597) | 100% sequence identity to <i>S. aureus</i> , type strain (GenBank: L37597)                                     |
| <b>Purity (post-freeze)</b><br>7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar                                  | Growth consistent with expected colony morphology                           | Growth consistent with expected colony morphology  |
| <b>Viability (post-freeze)</b><br>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar  | Growth  | Growth   |

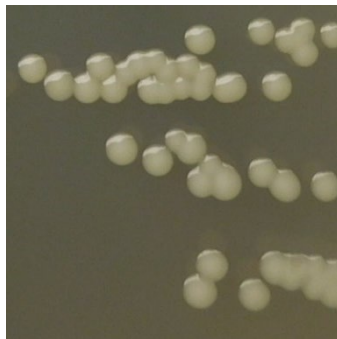
<sup>1</sup>Percent probabilities above 90% indicate a close match to the typical biochemical pattern for the given organism, with a percent probability of 99% being a perfect match between the test reaction pattern and the unique biochemical pattern of the given organism or organism group. For additional information, please refer to O'Hara, C. M. and J. M. Miller. "Evaluation of the VITEK 2 ID-GNB Assay for Identification of Members of the Family Enterobacteriaceae and Other Nonenteric Gram-Negative Bacilli and Comparison with the VITEK GNI+ Card." *J. Clin. Microbiol.* 41 (2003): 2096-2101. PubMed: 12734254.

<sup>2</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S28 (2018)

<sup>3</sup>MIC Interpretation Guideline: EUCAST Version 13.0 (2023)

<sup>4</sup>*S. aureus*, strain HIP06854 lot 70007483 was reported as sensitive to chloramphenicol; the current lot showed MICs of 4 and 12 µg/mL which are interpreted as sensitive, and intermediate, respectively. Testing was performed in quadruplicate.

Figure 1: Colony Morphology



/Sonia Bjorum Brower/  
Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

05 APR 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.

