

***Staphylococcus aureus* subsp. *aureus*, Strain JE2, Transposon Mutant NE623 (SAUSA300\_2570)**

**Catalog No. NR-47166**

**Product Description:**

*Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, transposon mutant NE623 was derived from *S. aureus* subsp. *aureus*, strain JE2. Mutagenesis occurred through the use of the *mariner*-based transposon *bursa aurealis* resulting in an erythromycin-resistant deletion strain of JE2. *S. aureus* subsp. *aureus*, transposon mutant NE623 was created by disruption of SAUSA300\_2570, which encodes for an arginine deiminase. Strain JE2 is a plasmid-cured derivative of strain LAC that was isolated in 2002 from a skin and soft tissue infection of an inmate in the Los Angeles County Jail in California, USA. NR-47166 was produced by inoculation of BEI Resources seed lot 63529652 into Tryptic Soy broth with 5 µg/mL erythromycin and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5 µg/mL erythromycin 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.

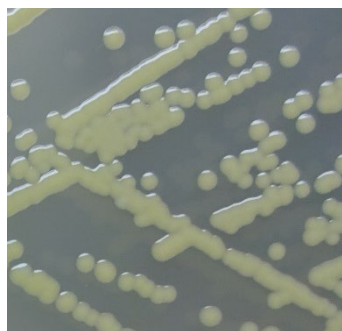
**Note:** Prior to initiating work, it is recommended that the presence and location of the transposon is confirmed. Gene specific primers should be paired with either the “Upstream” primer (5'-CTCGATTCTATTAACAAGGG-3') for transposons in the “plus” orientation or the “Buster” primer (5'-GCTTTTTCTAAATGTTTTTAAAGTAAATCAAGTAC-3') for transposons in the “minus” orientation. For additional information, refer to Fey, P. D., et al. “A Genetic Resource for Rapid and Comprehensive Phenotype Screening of Nonessential *Staphylococcus aureus* Genes.” *mBio* 4 (2013): e00537-12. PubMed: 23404398.

**Lot: 70058911**

**Manufacturing Date: 23FEB2023**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Motility (wet mount)	Gram-positive cocci Report results  Report results	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile
<b>Confirmation of Transposon Insertion</b>	Resistant to erythromycin	Resistant to erythromycin
<b>Purity (post-freeze)</b> 7 days at 37°C in an aerobic atmosphere 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>	Growth	Growth

**Figure 1: Colony Morphology**



/Sonia Bjorum Brower/

Sonia Bjorum Brower

29 JAN 2024

Technical Manager or designee, ATCC Federal Solutions

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.

