

***Staphylococcus aureus* subsp. *aureus*, Strain JE2, Transposon Mutant NE873 (SAUSA300\_1991)**

**Catalog No. NR-47416**

**Product Description:**

*Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, transposon mutant NE873 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 NE873 was created by disruption of SAUSA300\_1991, which encodes for accessory gene regulator protein C. 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-47416 was produced by inoculation of BEI Resources seed lot 62691023 into Tryptic Soy broth with 5 µg per mL erythromycin and incubated for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5 µg per mL erythromycin kolles, which were grown for 2 days at 37°C in an aerobic atmosphere to produce this lot.

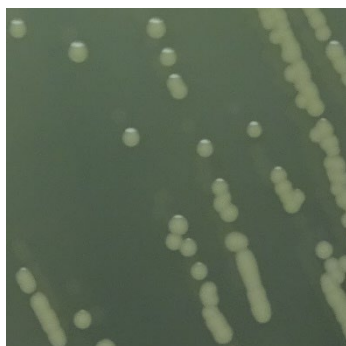
**Lot: 70048310**

**Manufacturing Date: 05NOV2021**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5 µg per mL erythromycin 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<sup>1</sup></b>	Resistant to erythromycin	Resistant to erythromycin
<b>Purity (post-freeze)</b> 7 days at 37°C in an aerobic atmosphere with and without 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 with 5 µg per mL erythromycin	Growth	Growth

<sup>1</sup>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'-GCTTTTCTAAATGTTTTTAAGTAAATCAAGTAC-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.

**Figure 1: Colony Morphology**



/Heather Couch/

Heather Couch

15 MAR 2022

Program 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.

