

# ***Staphylococcus aureus* subsp. *aureus*, Strain JE2, Transposon Mutant NE128 (SAUSA300\_2458)**

**Catalog No. NR-46671**

## **Product Description:**

*Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, transposon mutant NE128 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 NE128 was created by disruption of SAUSA300\_2458, which encodes for a glyoxylase family protein. 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-46671 lot 70054143 was produced by inoculation of the deposited material 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 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'-GCTTTTCTAAATGTTTTTAAAGTAAATCAAGTAC-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: 70054143**

**Manufacturing Date: 13JUL2022**

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 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>	Growth	Growth

**Figure 1: Colony Morphology**



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