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SUPPORTING INFECTIOUS DISEASE RESEARCH

Staphylococcus aureus subsp. *aureus*, Strain JE2, Transposon Mutant NE197 (SAUSA300_2383)

Catalog No. NR-46740

Product Description:

Staphylococcus aureus (S. aureus) subsp. aureus, transposon mutant NE197 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 NE197 was created by disruption of SAUSA300_2383, which encodes for an amino acid permease. 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-46740 was produced by inoculation of the deposited material into Tryptic Soy broth with 5 μ g/mL erythromycin and incubated for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5 μ g/mL erythromycin kolles, which were grown 1 day at 37°C in an aerobic atmosphere to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

<u>Note</u>: 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'-GCTTTTTCTAAATGTTTTTTAAGTAAATCAAGTAC-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." <u>mBio</u>. 4 (2013): e00537-12. PubMed: 23404398.

Lot: 70062929

Manufacturing Date: 25AUG2023

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-positive cocci	Gram-positive cocci
Colony morphology	Report results	Circular, convex, entire, smooth and cream (Figure 1)
Motility (wet mount)	Report results	Non-motile
Confirmation of Transposon Insertion	Resistant to erythromycin	Resistant to erythromycin
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

Figure 1: Colony Morphology



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Certificate of Analysis for NR-46740

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/Sonia Bjorum Brower/ Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

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