

***Staphylococcus aureus* subsp. *aureus*, Strain JE2, Transposon Mutant NE1399 (SAUSA300_2365)**

Catalog No. NR-47941

Product Description: *Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, transposon mutant NE1399 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 NE1399 was created by disruption of *hlgA*, which encodes for the pore-forming toxin (PFT) gamma-hemolysin A that is capable of lysing both leukocytes and erythrocytes when associated with gamma-hemolysin B (HlgB). 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.

Lot¹: 70013871

Manufacturing Date: 22MAR2018

| TEST | SPECIFICATIONS | RESULTS |
|---|---|--|
| Phenotypic Analysis Cellular morphology Colony morphology ² Motility (wet mount) | Gram-positive cocci Report results Report results | Gram-positive cocci Circular, convex, entire, smooth, opaque and cream (Figure 1) Non-motile |
| Confirmation of Transposon Insertion³ | Resistant to erythromycin | Resistant to erythromycin |
| Purity (post-freeze)⁴ | Consistent with expected colony morphology | Consistent with expected colony morphology |
| Viability (post-freeze)² | Growth | Growth |

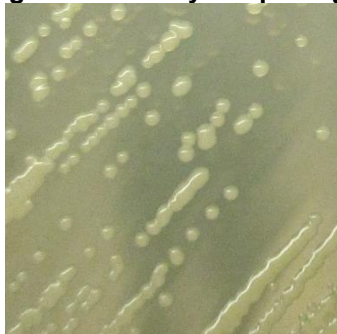
¹NR-47941 lot 70013871 was produced by inoculation of BEI Resources NRS-47941 lot 63958881 into Tryptic Soy broth with 5 µg/mL erythromycin and incubated for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5 µg/mL erythromycin kolles which were grown 2 days at 37°C in an aerobic atmosphere to produce this lot.

²1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5 µg/mL erythromycin

³Prior 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.

⁴Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



10 MAY 2018

Program Manager or designee, ATCC Federal Solutions

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