

***Staphylococcus aureus* subsp. *aureus*, Strain JE2, Transposon Mutant NE292 (SAUSA300\_0539)**

**Catalog No. NR-46835**

**Product Description:** *Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, transposon mutant NE292 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 NE292 was created by disruption of *ilvE*, which encodes for a branched-chain amino acid (BCAA) aminotransferase that has a similar function as *ybgE* and *ywaA* of *Bacillus subtilis*. 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.

**Lot<sup>1</sup>: 62924597**

**Manufacturing Date: 03SEP2014**

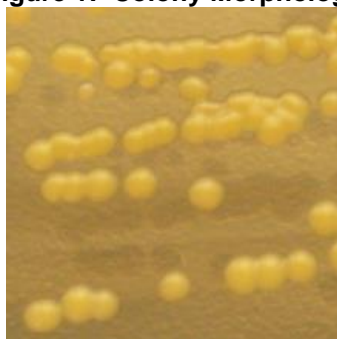
TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Motility (wet mount)	Gram-positive cocci Report results  Report results	Gram-positive cocci Circular, convex, entire, smooth and cream (Figure 1) Non-motile
<b>Confirmation of Transposon Insertion<sup>3</sup></b>	Resistant to erythromycin	Resistant to erythromycin
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>NR-46835 was produced by inoculation of the deposited material into Tryptic Soy broth with 5 µg/mL erythromycin and incubated for 21 hours at 37°C in an aerobic atmosphere.

<sup>2</sup>23 hours at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5 µg/mL erythromycin

<sup>3</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'-GCTTTTTCTAAATGTTTTTAAGTAAATCAAGTAC-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**



Date: 25 SEP 2014

Signature: 

BEI Resources Authentication

ATCC<sup>®</sup>, 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<sup>®</sup>'s knowledge.

ATCC<sup>®</sup> 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.

