

Staphylococcus aureus* Fluorescent Reporter Plasmid pSFRFPS1, Recombinant in *Staphylococcus aureus

Catalog No. NR-51165

Product Description:

NR-51165 is a glycerol stock of *Staphylococcus aureus* (*S. aureus*), strain RN4220 containing the eqFP650 far-red fluorescent protein (FRFP) reporter plasmid pSFRFPS1, a derivative of the *Escherichia coli* (*E. coli*) - staphylococcal shuttle vector pKK30. NR-51165 was produced by inoculation of BEI Resources seed lot 70010753 into Tryptic Soy broth containing 10 µg/mL trimethoprim and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar containing 10 µg/mL trimethoprim 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.

Lot: 70082370

Manufacturing Date: 09APR2026

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) Hemolysis Catalase VITEK® MS (MALDI-TOF)	Gram-positive cocci Report results Report results β-hemolytic Positive <i>S. aureus</i>	Gram-positive cocci Circular, convex, entire, smooth and cream Non-motile β-hemolytic Positive <i>S. aureus</i> (99.9%)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	≥ 99% sequence identity to <i>S. aureus</i> , strain RN4220 (GenBank: AFGU01000017.1)	100% sequence identity to <i>S. aureus</i> , strain RN4220 (GenBank: AFGU01000017.1)
Confirmation of pSFRFPS1 Sequence Illumina® MiSeq	Report results	Consistent with pSFRFPS1 plasmid description (Figure 1) ^{1,2}
Antibiotic Resistance Trimethoprim (10 µg/mL)	Resistant (growth)	Growth observed
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

¹Illumina® MiSeq® sequence was analyzed with Unicycler v0.5.1.

²pSFRFPS1 was sequenced and annotated by BEI Resources and is consistent with the vector described in Rodriguez, M. D., et al. "Construction of Stable Fluorescent Reporter Plasmids for Use in *Staphylococcus aureus*." *Front. Microbiol.* 8 (2017): 2491. PubMed: 29312199.

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24 AUG 2026

Technical Manager or designee, ATCC Federal Solutions

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Figure 1: Complete Plasmid Sequence of pSFRFPS1

>NR-51163 lot 70082369 complete plasmid sequence

ATGCAATATAACTACTAGTAAGTATAACCGAAAAATCAAGATAATAAACGTTAAAAAGATATGACGAAAAAGTGGGAAACAACGCCCATGGAGAGAAA
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CTCGATTTTATATATATAGCTGTAACGTGTTGATATTACAGTGTTTAAACGTGTTTTTGTGCGTGAAAGGAAAAATTTGACAATAAAAAACCCAGTTA
TATTATTAAGGTGTCGAATCTTAAATAAATACTGGGGTCTTTTTAT