**Staphylococcus aureus**, Strain RN6390B

**Catalog No. NR-45949**

For research use only. Not for human use.

**Contributor:** Richard P. Novick, M.D., Departments of Microbiology, Medicine and Molecular Pathogenesis, New York University School of Medicine, New York, New York, USA

**Manufacturer:** BEI Resources

**Product Description:**

*Bacteria Classification:* Staphylococcaceae, Staphylococcus

*Species:* Staphylococcus aureus

*Strain:* RN6390B

*NARSA Catalog Number:* NRS147

*Original Source:* Staphylococcus aureus (S. aureus), strain RN6390B is an accessory gene regulator (agr)-positive re-isolate from an RN6390 stock culture that had become mostly agr-negative. In turn, S. aureus, strain RN6390 was generated through UV and mutagenesis of S. aureus, strain NCTC8325.1

*Comments:* S. aureus, strain RN6390B is a methicillin-sensitive S. aureus (MSSA) strain. S. aureus, strain RN6390B was deposited as lysogenic for an uncharacterized prophage encoding the virulence factor staphylokinase (SAK) ; negative for mecA and rsbU; MLST sequence type (ST) 8; eGenomic spa repeats YHGGFMBQBL; Ridom spa type t211; agr group I. Its parent strain, S. aureus RN6390, is the agr group I prototype strain from which the agr locus was first cloned.2

Note: Methicillin is no longer clinically used, however, the terms methicillin-resistant *Staphylococcus aureus* (MRSA) and methicillin-sensitive *Staphylococcus aureus* (MSSA) continue to be used to describe the susceptibility of *S. aureus* strains to the penicillins.

*S. aureus* is a Gram-positive, cluster-forming coccus that normally inhabits human nasal passages, skin and mucus membranes. It is also a human pathogen and causes a variety of pus-forming infections as well as food-poisoning and toxic shock syndrome. In 1961, two years after the introduction of methicillin, a penicillinase-resistant penicillin, *S. aureus* developed methicillin-resistance due to acquisition of the mecA gene. Subsequently, MRSA infections have become widespread in both hospital and community settings.3 As compared to MSSA infections, MRSA infections tend to have more complications such as a higher recurrence rate and higher mortality.4

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-45949 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Medium:**

Brain Heart Infusion broth or Tryptic Soy broth or equivalent

**Brain Heart Infusion agar or Tryptic Soy agar with 5% defibrinated sheep blood or equivalent**

**Incubation:**

Temperature: 37°C

Atmosphere: Aerobic

**Propagation:**

1. Keep vial frozen until ready for use, then thaw.
2. Transfer the entire thawed aliquot into a single tube of broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 18 to 24 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was provided by the Network on Antimicrobial Resistance in *Staphylococcus aureus* (NARSA) for distribution by BEI Resources, NIAID, NIH: *Staphylococcus aureus*, Strain RN6390B, NR-45949.”

**Biosafety Level:** 2


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References:
1. NARSA, NRS147

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