**Staphylococcus aureus, Strain RN0450**

**Catalog No. NR-45937**

For research use only. Not for human use.

**Contributor:**
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**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Staphylococcaceae, Staphylococcus

**Species:** Staphylococcus aureus

**Strain:** RN0450 (also referred to as NCTC8325-4)¹

**NARS A Catalog Number:** NRS77

**Original Source:** Staphylococcus aureus (S. aureus), strain RN0450 was derived from successive cycles of UV treatment of S. aureus, strain NCTC8325 (NRS77), curing it of phages Φ11, Φ12 and Φ13.¹³

**Comments:** S. aureus, strain RN0450 is a non-pigmented, methicillin-sensitive S. aureus (MSSA) strain developed for research purposes. It was deposited as negative for mec-Meclastic syndrome; 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.⁴ As compared to MSSA infections, MRSA infections tend to have more complications such as a higher recurrence rate and higher mortality.⁵⁶

**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-45937 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:**

**Media:**

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 (NARS A) for distribution by BEI Resources, NIAID, NIH: Staphylococcus aureus, Strain RN0450, NR-45937.”

**Biosafety Level:** 2


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References:
3. NARSA, NRS135

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