**Staphylococcus aureus, Strain RN9120**

**Catalog No. NR-45957**

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:** RN9120 (also referred to as 502A)

**NARS Catalog Number:** NRS155

**Original Source:** Staphylococcus aureus (S. aureus), strain RN9120 is an accessory gene regulator (agr) null derivative of S. aureus, strain 502A (NRS144) in which agr has been replaced with the tetracycline resistance gene (tetM).\(^1\)\(^2\)

**Comments:** S. aureus, strain RN9120 is a methicillin-sensitive S. aureus (MSSA) strain developed for research purposes.\(^1\) S. aureus, strain RN9120 was deposited as as agr;tetM and resistant to tetracycline; negative for mec; MLST sequence type (ST) 5; eGenomic spa type 230, eGenomic spa repeats TMBMDGMK; Ridom spa type t010.\(^1\)\(^3\)

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.\(^4\)

As compared to MSSA infections, MRSA infections tend to have more complications such as a higher recurrence rate and higher mortality.\(^5\)\(^7\)

**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-45957 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) for distribution by BEI Resources, NIAID, NIH: Staphylococcus aureus, Strain RN9120, NR-45957.”

**Biosafety Level:** 2


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References:
3. NARSA, NRS155

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