Product Information Sheet for NR-45936

Staphylococcus aureus, Strain RN0027

Catalog No. NR-45936

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: RN0027
NARSA Catalog Number: NRS134
Original Source: Staphylococcus aureus (S. aureus), strain RN0027 is lysogenic for phages Φ13 and 80a and was derived from S. aureus, strain RN0025 (NRS133) through lysogenization with phage 80a. In turn, strain RN0025 was derived from UV treatment of S. aureus, strain RN1 (NCTC8325, NRS77).

Comments: S. aureus, strain RN0027 is a methicillin-sensitive S. aureus (MSSA) strain. S. aureus, strain RN0027 was deposited as positive for sak; negative for mecA, rsbU and hib; MLST sequence type (ST) 8; eGenomic spa type 59; eGenomic spa repeats YHGGFMBQBO; Ridom spa type t211; agr group I. Due to the integration of Φ13 in hib, this strain does not produce beta-hemolysin, but does produce alpha, delta and gamma-hemolysins.

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. As compared to MSSA infections, MRSA infections tend to have more complications such as a higher recurrence rate and higher mortality.

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-45936 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 (NARSA) for distribution by BEI Resources, NIAID, NIH: Staphylococcus aureus, Strain RN0027, NR-45936.”

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication:


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References:
3. NARSA, NRS134

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