**Staphylococcus aureus, Strain No. 315**

Catalog No. NR-46003

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: No. 315 (also referred to as 28243)
NARS Catalog Number: NRS209
Original Source: Staphylococcus aureus (S. aureus), strain No. 315 was isolated in 1971 from the trachea of a male in the United Kingdom.1
Comments: S. aureus, strain No. 315 is a methicillin-resistant S. aureus (MRSA) strain.1 It was deposited as resistant to methicillin, ampicillin and penicillin; positive for mec (subtype IV); MLST sequence type (ST) 247; eGenomic spa type 4, eGenomic spa repeats YHGFMBOBLO; Ridom spa type t051.1 Note: Methicillin is no longer clinically used, however, the term methicillin-resistant S. aureus (MRSA) continues to be used to describe S. aureus strains resistant to all 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. For the last forty-five years hospital-acquired (HA) MRSA strains have disseminated worldwide. More recently, MRSA strains have been isolated that are not hospital acquired and are referred to as community-associated (CA) MRSA. These CA-MRSA strains differ phenotypically and genotypically from HA-MRSA strains and they are more frequently recovered from skin and soft tissue sources rather than post-operative wounds.3,4

**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-46003 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% de fibrinated 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 No. 315, NR-46003.”

**Biosafety Level: 2**


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References:
1. NARSA, NRS209

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