**Staphylococcus aureus, Strain HT 20020320**

**Catalog No. NR-46038**

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:** HT 20020320
- **NARSA Catalog Number:** NRS245
- **Original Source:** Staphylococcus aureus (S. aureus), strain HT 20020320 was isolated in 2002 from a wound of an 8-year-old female with impetigo in France.
- **Comments:** S. aureus, strain HT 20020320 is a clinically associated methicillin-resistant S. aureus (MRSA) strain. S. aureus, strain HT 20020320 was deposited as positive for mec (subtype IV), the staphylococcal enterotoxin genes sea and sed, the gamma-hemolysin gene hlgv and the leukocidin genes lukE and lukD; MLST sequencing type (ST) 8-SLV; eGenomic spa type 914, eGenomic spa repeats YHGFHGFMBLO; agr group I. 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.2,3

**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-46038 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 HT 20020320, NR-46038.”

**Biosafety Level:**
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References:
1. NARSA, NRS245

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