**Staphylococcus aureus, Strain HT 20020073**

**Catalog No. NR-46027**

**For research use only. Not for human use.**

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**Manufacturer:** BEI Resources

**Product Description:**

**Bacteria Classification:** Staphylococcaceae, Staphylococcus

**Species:** Staphylococcus aureus

**Strain:** HT 20020073

**NARSA Catalog Number:** NRS234

**Original Source:** Staphylococcus aureus (S. aureus), strain HT 20020073 was isolated in 2002 from the valve of a 3-year-old male with native valve endocarditis in France. A methicillin-resistant S. aureus (MRSA) strain.

**Comments:** S. aureus, strain HT 20020073 is a clinically associated methicillin-sensitive S. aureus (MSSA) strain. S. aureus, strain HT 20020073 was deposited as negative for mec; positive for a y-hemolysin gene (htgv) and the leukocidin genes lukE and lukD; MLST sequencing type (ST) 15; eGenomic spa type 21; eGenomic spa repeats UJGBBGGJAGJ; Ridom spa type t084; agr group II. Note: Methicillin is no longer clinically used, however, the terms methicillin-resistant S. aureus (MRSA) and methicillin-sensitive S. 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. 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-46027 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 20020073, NR-46027.”

**Biosafety Level:** 2


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References:
1. NARSA, NRS234

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