**Product Information Sheet for NR-46053**

**Staphylococcus aureus, Strain HT 20020390**

**Catalog No. NR-46053**

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 20020390

**NARS Catalog Number:** NRS260

**Original Source:** Staphylococcus aureus (S. aureus), strain HT 20020390 was isolated in 2002 from an abscess of a 2-month-old female with Kawasaki syndrome.

**Comments:** S. aureus, strain HT 20020390 is a methicillin-sensitive S. aureus (MSSA) strain. S. aureus, strain HT 20020390 was deposited as negative for mec; positive for the staphylococcal enterotoxin gene seb; the hemolysin gene hlg; enterotoxin gene cluster (egc) operon, the epidermal cell differentiation inhibitor (EDIN) exotoxin genes edinA, edinB and edinC and the leukocidin genes lukE and lukD; MLST sequencing type (ST) 25; eGenomic spa type 916; eGenomic spa repeats ZFGU2DMGGU2; Ridom spa type 11350; agr group I.\(^1\)

**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.\(^2\) As compared to MSSA infections, MRSA infections tend to have more complications such as a higher recurrence rate and higher mortality.\(^3,5\)

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 10% glycerol. Each vial of NR-46053 lot 63693264 contains approximately 0.5 mL of bacterial culture in Tryptic Soy broth supplemented with 5% DMSO.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-46053 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 HT 20020390, NR-46053.”

**Biosafety Level:** 2


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References:
1. NARSA, NRS260

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