**Staphylococcus aureus**, Strain HT 20020365

**Catalog No. NR-46047**

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 20020365

**NARS Catalog Number:** NRS254

**Original Source:** *Staphylococcus aureus* (S. aureus), strain HT 20020365 was isolated in 2002 from a wound of an 8-year-old female with impetigo and scarlet fever in France.

**Comments:** S. aureus, strain HT 20020365 is a methicillin-resistant *S. aureus* (MRSA) strain. *S. aureus*, strain HT 20020365 was deposited as positive for mec subtype IV; the staphylococcal enterotoxin gene *sed*, the hemolysin genes *hbl* and *hlv* and the leukocidin genes *lukE* and *lukD*; MLST sequencing type (ST) 8; eGenomic *spa* type 363, eGenomic *spa* repeats YGFMBQBOLO; Ridom *spa* type t024; 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. 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. 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-46047 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 20020365, NR-46047.”

**Biosafety Level: 2**


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References:
1. NARSA, NRS254

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