**Staphylococcus aureus**, Strain HIP08926

**Catalog No. NR-45873**

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**Contributor:**
Network on Antimicrobial Resistance in *Staphylococcus aureus* (NARSA), NIAID, NIH

**Manufacturer:**
BEI Resources

**Product Description:**

- **Bacteria Classification:** Staphylococcaceae, Staphylococcus
- **Species:** *Staphylococcus aureus*
- **Strain:** HIP08926
- **NARSA Catalog Number:** NRS23
- **Original Source:** Staphylococcus aureus (S. aureus), strain HIP08926 was isolated in 2000 from a bone or joint of a 72-year-old female patient in California, USA.\(^1\)
- **Comments:** S. aureus, strain HIP08926 is a vancomycin-intermediate S. aureus (VISA) strain. S. aureus, strain HIP08926 was deposited as positive for mec (subtype II); negative for vanA, vanB, vanC1, vanC2, van D, and vanE; MLST sequencing type (ST) 5; eGenomic spa type 12; eGenomic spa repeats TJMGMK; Ridom spa type t062.\(^1\)

*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.\(^2\)

Vancomycin has been the preferred antibiotic of choice for the treatment of MRSA infections.\(^3\) However, there have now been MRSA strains isolated that also have reduced susceptibility or resistance to vancomycin.\(^4,5\) It is believed that this decreased sensitivity primarily arises through mutations affecting the production of peptidoglycans, resulting in a thickened cell wall and a reduction of vancomycin at its site of action.\(^6\) While much rarer, resistance can also occur through the acquisition of the vancomycin resistance gene, vanA, from *Enterococcus faecalis*.\(^4,6,7\)

**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-45873 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 HIP08926, NR-45873.”

**Biosafety Level:** 2


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References:  
1. NARSA, NRS23  

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