**Staphylococcus epidermidis, Strain VCU036**

**Catalog No. NR-46379**

For research use only. Not for use in humans.

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

**Manufacturer:**
BEI Resources

**Product Description:**

**Bacteria Classification:** Staphylococcaceae, Staphylococcus

**Species:** *Staphylococcus epidermidis*

**Strain:** VCU036

**NARSA Catalog Number:** NRS851

**Original Source:** *Staphylococcus epidermidis* (S. epidermidis), strain VCU036 is of unknown origin.  

**Comments:** The complete genome sequence of *S. epidermidis*, strain VCU036 is available (GenBank: JHUA00000000).

*S. epidermidis* is a Gram-positive, cluster-forming, coagulase-negative coccus which is part of the normal flora of the skin and nostrils. Recently, it has become a common cause of hospital-acquired infections, particularly infections on implanted medical devices. A number of factors, such as biofilm formation, small colony variants and a reduced susceptibility to a number of antibiotics, contribute to its success as a cause of nosocomial infections.  

Approximately 75% to 90% of hospital isolates are methicillin-resistant *S. epidermidis* (MRSE) and an increasing number of isolates have reduced susceptibility to vancomycin.  

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Similarly, *S. aureus* methicillin resistance is conferred by the *mecA* gene, whereas the reduced susceptibility to vancomycin is due to cell wall alterations including altered cross-linking and thickening of the wall. It is believed that *S. epidermidis* can serve as a reservoir for antibiotic resistant genes and other genomic islands for *S. aureus* which can acquire the genes through uni-directional horizontal gene transfer.

**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-46379 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 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 1 day.

**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 epidermidis*, Strain VCU036, NR-46379.”

**Biosafety Level:** 2


**Disclaimers:**

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References:
1. NARSA, NRS851

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