**Product Information Sheet for NR-46377**

**Staphylococcus epidermidis, Strain VCU014**

**Catalog No. NR-46377**

For research use only. Not for use in humans.

**Contributor:**
Network on Antimicrobial Resistance in *Staphylococcus aureus* (NARSA), National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH)

**Manufacturer:**
BEI Resources

**Product Description:**
**Bacteria Classification:** Staphylococcaceae, Staphylococcus
**Species:** *Staphylococcus epidermidis*
**Strain:** VCU014
**NARSA Catalog Number:** NRS849
**Original Source:** *Staphylococcus epidermidis* (S. epidermidis), strain VCU014 is of unknown origin.
**Comments:** The complete genome sequence of *S. epidermidis*, strain VCU014 is available (GenBank: JHQB00000000).

*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. Similar to *S. aureus*, methicillin resistance in *S. epidermidis* 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 resistance 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-46377 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
**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 through BEI Resources, NIAID, NIH: *Staphylococcus epidermidis*, Strain VCU014, NR-46377.”

**Biosafety Level:** 2

**Disclaimers:**
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References:
1. NARSA, NRS 848

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