

Staphylococcus hominis, Strain SK119

Catalog No. HM-119

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Staphylococcaceae*, *Staphylococcus*

Species: *Staphylococcus hominis*

Strain: SK119

Original Source: *Staphylococcus hominis* (*S. hominis*), strain SK119 was isolated from normal skin of the left arm of a 47-year-old woman.^{1,2}

Comments: *S. hominis*, strain SK119 ([HMP ID 799](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The whole genome sequence of *S. hominis*, strain SK119 has been sequenced (GenBank: [ACLPO0000000](#)).

Note: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

S. hominis is a Gram-positive, non-motile, coagulase-negative staphylococci (CoNS) that is a commensal resident of human skin covering the axillae, head, legs and arms. It is also an opportunistic pathogen in immunocompromised patients and neonates and has been associated as the causal agent of bacteremia, septicemia and endocarditis.^{2,3,4} *S. hominis* is subspeciated into *S. hominis* subsp. *hominis* and *S. hominis* subsp. *novobiosepticus* based on the combined characteristics of novobiocin resistance and failure to produce acid aerobically from D-trehalose and N-acetyl-D-glucosamine in *S. hominis* subsp. *novobiosepticus*.⁵ The two subspecies also differ in the presence and type of SCC*mec* cassette they carry. The majority of *S. hominis* subsp. *novobiosepticus* isolates have SCC*mec* cassette components similar to the ones found in *S. aureus*, whereas only a small subset of *S. hominis* subsp. *hominis* isolates carry a SCC*mec* cassette, and there is a larger diversity of SCC*mec* components.⁶

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in NYC III broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-119 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 equivalent

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 obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Staphylococcus hominis*, Strain SK119, HM-119."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Perez-Perez, G. I., Personal Communication.
2. [HMP ID 799](#) (*Staphylococcus hominis*, Strain SK119)
3. Kloos, W. E. and K. H. Schleifer. "Isolation and Characterization of Staphylococci from Human Skin. II. Descriptions of Four New Species: *Staphylococcus warneri*, *Staphylococcus capitis*, *Staphylococcus hominis*, and *Staphylococcus simulans*." Int. J. Syst. Bacteriol. 25 (1975): 62-79.
4. Chaves, F., et al. "Nosocomial Spread of a *Staphylococcus hominis* subsp. *novobiosepticus* Strain Causing Sepsis in a Neonatal Intensive Care Unit." J. Clin. Microbiol. 43 (2005): 4877-4879. PubMed: 16145165.
5. Mendoza-Olazarán, S., et al. "Microbiological and Molecular Characterization of *Staphylococcus hominis* Isolates from Blood." PLoS One 8 (2013): e61161. PubMed: 23585877.
6. Kloos, W. E., et al. "*Staphylococcus hominis* subsp. *novobiosepticus* subsp. nov., a Novel Trehalose- and N-Acetyl-D-Glucosamine-Negative, Novobiocin- and Multiple-Antibiotic-Resistant Subspecies Isolated from Human Blood Cultures." Int. J. Syst. Bacteriol. 48 (1998): 799-812. PubMed: 9734034.
7. Zhang, L., et al. "Multilocus Sequence Typing and Further Genetic Characterization of the Enigmatic Pathogen, *Staphylococcus hominis*." PLoS One 8 (2013): e66496. PubMed: 23776678.
8. Park, B., T. Iwase and G. Y. Liu. "Intranasal Application of *S. epidermidis* Prevents Colonization by Methicillin-Resistant *Staphylococcus aureus* in Mice." PLoS One 6 (2011): e25880. PubMed: 21998712.

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