

***Streptococcus* sp., Strain M334**

**Catalog No. HM-251**

**For research use only. Not for use in humans.**

**Contributor:**

Michael G. Surette, Professor, Department of Microbiology and Infectious Diseases, University of Calgary, Alberta, Canada

**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Staphylococcaceae*, *Staphylococcus*

Species: *Streptococcus* sp.

Strain: M334

Original Source: *Streptococcus* sp., strain M334 was isolated in 2007 from expectorated sputum from a female patient with cystic fibrosis.<sup>1,2</sup>

Comments: *Streptococcus* sp., strain M334 ([HMP ID 0851](#)) is a reference genome for [The Human Microbiome Project](#) (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *Streptococcus* sp., strain M334 was sequenced at the [Broad Institute](#) (GenBank: [ACRL01000000](#)).

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.

*Streptococcus* species are non-sporulating, Gram-positive cocci often part of the normal commensal flora of the human mouth, skin, intestine and upper respiratory tract. A few *Streptococcus* species are pathogenic and responsible for many cases of meningitis, bacterial pneumonia, endocarditis and necrotizing fasciitis.<sup>3,4,5,6</sup>

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in Brain Heart Infusion broth supplemented with 10% glycerol.

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

**Packaging/Storage:**

HM-251 was packaged aseptically, in screw-capped plastic 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, Tryptic Soy broth or equivalent  
Brain Heart Infusion agar, Tryptic Soy agar with 5% sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO<sub>2</sub>

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 2 days.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Streptococcus* sp., Strain M334, HM-251."

**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](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. [HMP 0851](#) (*Streptococcus* sp., strain M334)
2. Surette, M. G., Personal Communication.
3. Musser, J. M. and S. A. Shelburne III. "A Decade of Molecular Pathogenomic Analysis of Group A *Streptococcus*." *J. Clin. Invest.* 119 (2009): 2455-2463. PubMed: 19729843.
4. Nobbs, A. H., R. J. Lamont and H. F. Jenkinson. "*Streptococcus* Adherence and Colonization." *Microbiol. Mol. Biol. Rev.* 73 (2009): 407-450. PubMed: 19721085.
5. Maisey, H. C., K. S. Doran and V. Nizet. "Recent Advances in Understanding the Molecular Basis of Group B *Streptococcus* Virulence." *Expert. Rev. Mol. Med.* 10 (2008): e27. PubMed: 18803886.
6. Johri, A. K., et al. "Group B *Streptococcus*: Global Incidence and Vaccine Development." *Nat. Rev. Microbiol.* 4 (2006): 932-942. PubMed: 17088932.

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