

***Streptococcus downei*, Oral Taxon 594,
Strain F0415**

Catalog No. HM-475

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Streptococcaceae*, *Streptococcus*

Species: *Streptococcus downei*

Strain: F0415

Original Source: *Streptococcus downei* (*S. downei*), Oral Taxon 594, strain F0415 was isolated in 2008 from dental plaque on a molar tooth of a 2-year-old male with caries in the United States.^{1,2}

Comments: *S. downei*, Oral Taxon 594, strain F0415 ([HMP ID 9176](#)) 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 *S. downei*, strain F0415 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [AEKN00000000](#)).

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. downei is a nonmotile, non-sporulating, Gram-positive coccus normally found in the dental plaque of humans and animals.^{3,4}

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-475 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% sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Aerobic with 5% CO₂

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: *Streptococcus downei*, Oral Taxon 594, Strain F0415, HM-475."

Biosafety Level: 1

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](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Izard, J., Personal Communications.
2. [HMP ID 9176](#) (*S. downei*, Oral Taxon 594, strain F0415)
3. Whiley, R. A., et al. "*Streptococcus downei* sp. nov. for Strains Previously Described as *Streptococcus mutans* Serotype h." *Int. J. Syst. Bacteriol.* 38 (1988): 25-29.
4. Yoo, S. Y., et al. "First Isolation of *Streptococcus downei* from Human Dental Plaques." *FEMS Microbiol Lett.* 249 (2005): 323-326. PubMed: 16002238.
5. Igarashi, T., et al. "Species-Specific PCR Method for Identification of *Streptococcus downei*." *Lett. Appl. Microbiol.* 38 (2004): 125-129. PubMed: 14746543.
6. Dewhirst, F. E., et al. "The Human Oral Microbiome." *J. Bacteriol.* 192 (2010): 5002-5017. PubMed: 20656903.

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