

***Streptococcus intermedius*, Strain F0413**

Catalog No. HM-368

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Streptococcaceae*, *Streptococcus*

Species: *Streptococcus intermedius*

Strain: F0413 (also referred to as BH47P15)¹

Original Source: *Streptococcus intermedius* (*S. intermedius*), strain F0413 was isolated in 2006 from the dental plaque on a molar of a 4-year-old girl with caries.^{1,2}

Comments: *S. intermedius*, strain F0413 ([HMP ID 9177](#)) 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. intermedius*, strain F0413 was sequenced at the [Broad Institute](#) (GenBank: [AFXO00000000](#)).

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. intermedius is a nonmotile, non-sporulating, Gram-positive coccus normally found in human dental plaque and correlated with periodontal disease.^{3,4} Along with other members of the *Streptococcus anginosus* group, *S. intermedius* was under-recognized as a pathogen in the past.⁵ *S. intermedius* has a tendency to cause liver and brain abscesses, and is an emerging pathogen in cystic fibrosis patients.^{5,6}

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-368 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 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 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 intermedius*, Strain F0413, HM-368.”

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](#), 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

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References:

1. Izard, J., Personal Communication.
2. [HMP 9177](#) (*Streptococcus intermedius*, strain F0413)
3. Whiley, R. A. and D. Beighton. "Emended Descriptions and Recognition of *Streptococcus constellatus*, *Streptococcus intermedius*, and *Streptococcus anginosus* as Distinct Species." Int. J. Syst. Bacteriol. (1991) 41: 1-5. PubMed: 1995029.
4. Sitkiewicz, I. "How to Become a Killer, or Is It All Accidental? Virulence Strategies in Oral Streptococci." Mol. Oral Microbiol. 33 (2018): 1-12. PubMed: 28727895.
5. Tran, M. P, et al. "*Streptococcus intermedius* Causing Infective Endocarditis and Abscesses: A Report of Three Cases and Review of the Literature." BMC Infect. Dis. 8 (2008): 154. PubMed: 18992173.
6. Asam, D. and B. Spellerberg. "Molecular Pathogenicity of *Streptococcus anginosus*." Mol. Oral Microbiol. 29 (2014): 145-155. PubMed: 24848553.
7. Nguyen, S. V. and W. M. McShan. "Chromosomal Islands of *Streptococcus pyogenes* and Related Streptococci: Molecular Switches for Survival and Virulence." Front. Cell. Infect. Microbiol. 4 (2014): 109. PubMed: 25161960.

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