

Product Information Sheet for HM-1071

Porphyromonas gingivalis, Strain F0568

Catalog No. HM-1071

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Porphyromonadaceae*,
Porphyromonas

Species: *Porphyromonas gingivalis*

Strain: F0568

Original Source: *Porphyromonas gingivalis* (*P. gingivalis*), strain F0568 was isolated in 1983 from the subgingival plaque biofilm of a patient diagnosed with moderate periodontitis in the United States.^{1,2}

Comments: *P. gingivalis*, strain F0568 ([HMP ID 1553](#)) 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 *P. gingivalis*, strain F0568 was sequenced at the Genome Institute at [Washington University](#) (GenBank: [AWUU00000000](#)).

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.

P. gingivalis is a Gram-negative, obligately anaerobic, non-spore-forming, non-motile rod or coccobacillus usually found in the subgingival plaque of patients with periodontitis.^{3,4,5} This invasive bacterium has been identified as an important cause of chronic periodontal disease and is suspected to be involved in the onset or exacerbation of systemic health disorders such as rheumatoid arthritis, cardiovascular diseases and obesity.^{6,7,8}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Supplemented Tryptic Soy broth supplemented with 10% glycerol.

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

Packaging/Storage:

HM-1071 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:

Supplemented Tryptic Soy broth or equivalent
Tryptic Soy agar with 5% defibrinated sheep blood or
Supplemented Tryptic Soy agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Anaerobic

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 7 days. Broth cultures should include shaking.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Porphyromonas gingivalis*, Strain F0568, HM-1071."

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 <http://www.cdc.gov/biosafety/publications/bmbl5/index.htm>.

Disclaimers:

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References:

1. Dewhirst, F. E. and J. Izard, Personal Communication.
2. [HMP ID 1553](#) (*P. gingivalis*, strain F0568)
3. Coykendall, A. L., F. S. Kaczmarek and J. Slots. "Genetic Heterogeneity in *Bacteroides asaccharolyticus* (Holdeman and Moore 1970) Finegold and Barnes 1977 (Approved Lists, 1980) and Proposal of *Bacteroides gingivalis* sp. nov. and *Bacteroides macacae* (Slots and Genco) comb. nov." *Int. J. Syst. Bacteriol.* 30 (1980): 559-564.
4. Shah, H. N. and M. D. Collins. "Proposal for Reclassification of *Bacteroides asaccharolyticus*, *Bacteroides gingivalis*, and *Bacteroides endodontalis* in a New Genus, *Porphyromonas*." *Int. J. Syst. Bacteriol.* 38 (1988): 128-131.
5. Xu, W., et al. "Roles of *Porphyromonas gingivalis* and its Virulence Factors in Periodontitis." *Adv. Protein Chem. Struct. Biol.* 120 (2020): 45-84. PubMed: 32085888.
6. Bostanci, N. and G. N. Belibasakis. "*Porphyromonas gingivalis*: An Invasive and Evasive Opportunistic Oral Pathogen." *FEMS Microbiol. Lett.* 333 (2012): 1-9. PubMed: 22530835.
7. Tribble, G. D., J. E. Kerr and B.-Y. Wang. "Genetic Diversity in the Oral Pathogen *Porphyromonas gingivalis*: Molecular Mechanisms and Biological Consequences." *Future Microbiol.* 8 (2013): 607-620. PubMed: 23642116.
8. Mulhall H., O. Huck and S. Amar. "*Porphyromonas gingivalis*, a Long-Range Pathogen: Systemic Impact and Therapeutic Implications." *Microorganisms* 8 (2020): 869. PubMed: 32526864.

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