

# Product Information Sheet for HM-817

## ***Porphyromonas* sp., Oral Taxon 279, Strain F0450**

**Catalog No. HM-817**

**For research use only. Not for human use.**

### **Contributor:**

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### **Manufacturer:**

BEI Resources

### **Product Description:**

Bacteria Classification: *Porphyromonadaceae*,  
*Porphyromonas*

Species: *Porphyromonas* sp.

Subtaxon: Oral taxon 279

Strain: F0450

Original Source: *Porphyromonas* sp., Oral Taxon 279, strain F0450 was isolated on February 1, 2009, from dental plaque of a healthy 2-year-old female in the United States.<sup>1</sup>

Comments: *Porphyromonas* sp., Oral Taxon 279, strain F0450 ([HMP ID 1323](#)) 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 *Porphyromonas* sp., Oral Taxon 279, strain F0450 was sequenced at the [J. Craig Venter Institute](#) (GenBank: [ALKJ000000000](#)).

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.

*Porphyromonas* species are typically Gram-negative, obligately anaerobic, non-spore-forming, non-motile rods or coccobacilli found in the subgingival plaque of humans and animals.<sup>2</sup> The colonies of most species are pigmented due to protoheme production.<sup>2</sup> A few species of *Porphyromonas* have been linked to gingivitis, periodontitis, and spreading infections.<sup>3,4</sup>

### **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-817 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 (see Appendix I) or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or Supplemented Tryptic Soy agar (see Appendix I) or equivalent

Note: HM-817 did not grow on Tryptic Soy agar with 5% defibrinated sheep blood.

#### 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 24 to 72 hours.

### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Porphyromonas* sp., Oral Taxon 279, Strain F0450, HM-817."

### **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/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

### **Disclaimers:**

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#### References:

1. Izard, J., Personal Communication.

2. 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.
3. Coil, D. A., et al. "Draft Genome Sequences of 26 *Porphyromonas* Strains Isolated from the Canine Oral Microbiome." *Genome Announc.* 3 (2015): e00187-15. PubMed: 25858832.
4. Bostanci, N. and G. N. Belibasakis. "*Porphyromonas gingivalis*: An Invasive and Evasive Opportunistic Oral Pathogen." *FEMS Microbiol. Lett.* 333 (2012): 1-9. PubMed: 22530835.

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#### Appendix 1: Supplemented Tryptic Soy Media

Tryptic Soy broth.....	30.0 g
Yeast Extract.....	5.0 g
L-cysteine hydrochloride.....	0.5 g
Hemin stock (see below).....	1.0 mL
Vitamin K1 stock* (5 mg/mL).....	0.2 mL
Agar (if required).....	15.0 g
Deionized water.....	1000mL

Autoclave at 121 °C. Wrap each bottle in aluminum foil or keep bottle in the dark as hemin and vitamin K are light sensitive and will be degraded. Supplement Tryptic Soy broth can be pre-reduced and pre-warmed by incubating bottle of fresh media in an anaerobic chamber overnight before using it.

\*Menadione (vitamin K3) can be used at a final concentration of 10µg/mL instead of vitamin K1

#### Hemin Stock Solution

Hemin.....	0.5 g
Dipotassium phosphate (K <sub>2</sub> HPO <sub>4</sub> ).....	1.74 g
Deionized water.....	100 mL

Boil the above ingredients in a large flask. Store in the dark.

Note: Hemin will have a final concentration of 5 µg/mL. Vitamin K1 will have a final concentration of 1.0 µg/mL.