

***Paenibacillus* sp., Strain HGH0039**

**Catalog No. HM-785**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Bacteria Classification: *Paenibacillaceae*, *Paenibacillus*

Species: *Paenibacillus* sp.

Strain: HGH0039

Original Source: *Paenibacillus* sp., strain HGH0039 was isolated from a biopsy of large intestine mucosa of a human subject in the United States.

Comments: *Paenibacillus* sp., strain HGH0039 (HMP ID 1207) 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 *Paenibacillus* sp., strain HGH0039 was sequenced at the [Broad Institute](#) (GenBank: [AGEN00000000](#)).

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.

*Paenibacillus* sp. are Gram-positive, Gram-negative or Gram-variable, facultative anaerobes or strictly aerobic, spore-forming, rod-shaped bacterium that are motile by means of peritrichous flagella.<sup>2</sup> These bacteria have been isolated from geothermal regions, spacecraft assembly equipment, and human clinical samples.<sup>3,4</sup>

**Material Provided:**

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

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

**Packaging/Storage:**

HM-785 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:**

Nutrient broth or equivalent  
Nutrient agar or equivalent

Incubation:

Temperature: 30°C

Atmosphere: Aerobic

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 30°C for 2 to 4 day.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Paenibacillus* sp., Strain HGH0039, HM-785."

**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).

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**References:**

1. Schmidt, T. M., Personal Communication.
2. Shida, O., et al. "Transfer of *Bacillus alginolyticus*, *Bacillus chondroitinus*, *Bacillus curdlanolyticus*, *Bacillus glucanolyticus*, *Bacillus kobensis*, and *Bacillus thiaminolyticus* to the Genus *Paenibacillus* and Emended Description of the Genus *Paenibacillus*." Int. J. Syst. Bacteriol. 47 (1997): 289-298. PubMed: 9103612.
3. Osman, S., M. Satomi and K. Venkateswaran. "*Paenibacillus pasadenensis* sp. nov. and *Paenibacillus barengoltzii* sp. nov., Isolated from a Spacecraft Assembly Facility." Int. J. Syst. Evol. Microbiol. 56 (2006): 1509-1514. PubMed: 16825621.
4. Arzu, C. C., et al. "The Genetic Diversity of Genus *Bacillus* and the Related Genera Revealed by 16S rRNA Gene Sequences and Ardra Analyses Isolated from Geothermal Regions of Turkey." Braz. J. Microbiol. 43 (2012): 309-324. PubMed: 24031834.

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