

Helicobacter pylori, Strain 83

Catalog No. HM-273

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Helicobacteraceae*, *Helicobacter*

Species: *Helicobacter pylori*

Strain: 83

Original Source: *Helicobacter pylori* (*H. pylori*), strain 83 was isolated from a human stomach.¹

Comments: *H. pylori*, strain 83 ([HMP_0462](#)) 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 *H. pylori*, strain 83 was sequenced at the [Baylor College of Medicine](#) (GenBank: [CP002605](#)).

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.

H. pylori is a microaerophilic, Gram-negative, nonsporulating, spiral-shaped and flagellated rod commonly found in the human stomach, present in about half of the world population.^{2,3} It is an opportunistic pathogen linked to diseases of the upper gastrointestinal tract including: gastric and duodenal ulcers, chronic gastritis and stomach cancer.² *H. pylori* infections are difficult to cure and successful treatment generally requires the administration of several antibacterial agents simultaneously.^{4,5}

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in 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-273 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:

Tryptic Soy broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Microaerophilic

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 to 3 days.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Helicobacter pylori*, Strain 83, HM-273."

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 \(BMBL\)](#), 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. [HMP ID 0462](#) (*Helicobacter pylori*, strain 83)
2. Cover, T. L. and M. J. Blaser. "*Helicobacter pylori* in Health and Disease." *Gastroenterology* 136 (2009): 1863-1873. PubMed: 19457415.
3. Tomb, J. F., et al. "The Complete Genome Sequence of the Gastric Pathogen *Helicobacter pylori*." *Nature* 388 (1997): 539-47. PubMed: 9252185.
4. Graham, D. Y., H. Lu and Y. Yamaoka. "Therapy for *Helicobacter pylori* Infection Can Be Improved: Sequential Therapy and Beyond." *Drugs* 68 (2008): 725-736. PubMed: 18416582.
5. Graham, D. Y. and L. Fischbach. "*Helicobacter pylori* Treatment in the Era of Increasing Antibiotic Resistance." *Gut* 59 (2010): 1143-1153. PubMed: 20525969.

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