

***Helicobacter pylori*, Strain CPY6261**

Catalog No. NR-43640

For research use only. Not for human use.

Contributor:

Thomas G. Blanchard, Ph.D., J.D., Associate Professor, University of Maryland School of Medicine, Baltimore, Maryland, USA

Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: *Helicobacteraceae*, *Helicobacter*

Species: *Helicobacter pylori*

Strain: CPY6261

Original Source: *Helicobacter pylori* (*H. pylori*), strain CPY6261 was isolated by Teruko Nakazawa, Professor Emeritus, Yamaguchi University, from the gastric biopsy homogenate from a gastric cancer patient in Yamaguchi Prefecture, Japan.^{1,2}

Comments: *H. pylori*, strain CPY6261 was deposited as a toxigenic strain and is part of a genome sequencing project at the [Institute for Genome Sciences](http://www.genome.gov) at the University of Maryland.^{2,3} The complete genome of *H. pylori*, strain CPY6261 has been sequenced (GenBank: [AUVQ00000000](http://www.ncbi.nlm.nih.gov/nuccore/AUVQ00000000)).

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.^{4,5} 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.^{6,7}

Material Provided:

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

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

Packaging/Storage:

NR-43640 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 Brain Heart Infusion broth or Brucella broth or equivalent

Tryptic Soy agar or Tryptic Soy agar with 5% defibrinated sheep blood or Brucella agar or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Microaerophilic (~ 6-16% O₂ and 2-10% 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 48 to 72 hours.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Helicobacter pylori*, Strain CPY6261, NR-43640."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its

derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale. This material may be subject to third party rights.

References:

1. Blanchard, T.G., Personal Communication.
2. Blanchard, T.G., et al. "Genome Sequences of 65 *Helicobacter pylori* Strains Isolated from Asymptomatic Individuals and Patients with Gastric Cancer, Peptic Ulcer Disease, or Gastritis." *Pathog. Dis.* 68 (2013): 39-43. PubMed: 23661595.
3. Blanchard, T., W. F. Fricke and S. Czinn. "Comparative Sequence Analysis of *H. pylori* Isolates from Subjects with Distinct Gastric Pathologies." [Institute for Genome Sciences](http://gscid.igs.umaryland.edu/doc/whitepapers/comparative_sequence_analysis_of_h_pylori_isolates_from_subjects_with_distinct_gastric_pathologies.pdf) at the University of Maryland.
<http://gscid.igs.umaryland.edu/doc/whitepapers/comparative_sequence_analysis_of_h_pylori_isolates_from_subjects_with_distinct_gastric_pathologies.pdf>
4. Cover, T. L. and M. J. Blaser. "*Helicobacter pylori* in Health and Disease." *Gastroenterology* 136 (2009): 1863-1873. PubMed: 19457415.
5. Tomb, J. F., et al. "The Complete Genome Sequence of the Gastric Pathogen *Helicobacter pylori*." *Nature* 388 (1997): 539-47. PubMed: 9252185.
6. 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.
7. Graham, D. Y. and L. Fischbach. "*Helicobacter pylori* Treatment in the Era of Increasing Antibiotic Resistance." *Gut* 59 (2010): 1143-1153. PubMed: 20525969.

ATCC® is a trademark of the American Type Culture Collection.

