

Polyclonal Antibody to *Helicobacter pylori* - Purified

Alternate names: H. pylori

Catalog No.: AP32828PU-S

Quantity: 0.1 mg

Concentration: 0.2 mg/ml

Background: *Helicobacter pylori* (*H.pylori*) is a gram-negative, microaerophil bacterium found in the stomach. Although *Helicobacter pylori* is present in the upper gastrointestinal track of more than 50% of the world's population, about 80% of people infected with *Helicobacter pylori* are asymptomatic. However, *Helicobacter pylori* is also strongly linked to disease and is thought to have evolved to penetrate the mucoid lining of the stomach. Penetrating the mucosal layer can cause considerable damage to mucosa, and chronic infection can result in or contribute to chronic gastritis, gastric ulcers as well as duodenal ulcers. There is also strong evidence that *Helicobacter pylori* plays a causal role in the development of some stomach cancers, likely through chronic infection. However, *Helicobacter pylori* is also thought to play a role in normal stomach homeostasis which could help explain the large percent of people who have some level of *Helicobacter pylori* in their gut.

Host / Isotype: Rabbit / IgG

Immunogen: Total sonicate of *Helicobacter pylori*.

Format: **State:** Liquid purified IgG fraction from Serum

Purification: Protein A Chromatography

Buffer System: 10mM PBS

Preservatives: 0.05% Sodium Azide

Stabilizers: 0.05% BSA

Applications: **Flow Cytometry:** 0.5-1 µg/10⁶ cells.

Immunofluorescence: 1-2 µg/ml.

Immunohistochemistry on Paraffin Sections: 1-2 µg/ml for 30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Positive Control: *Helicobacter pylori* infected stomach biopsy.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody stains the individual *H. pylori* bacterium when it presents on the surface of the epithelium or in the cytoplasm of the epithelial cells in biopsy tissue sections from the antrum and body of the stomach.

The antibody can be used as an ancillary tool for identifying *Helicobacter pylori* by Immunohistochemistry of tissue sections and may help determine if disease is linked to active infection.

Cellular Localization: Cell surface and cytoplasm.

Storage:

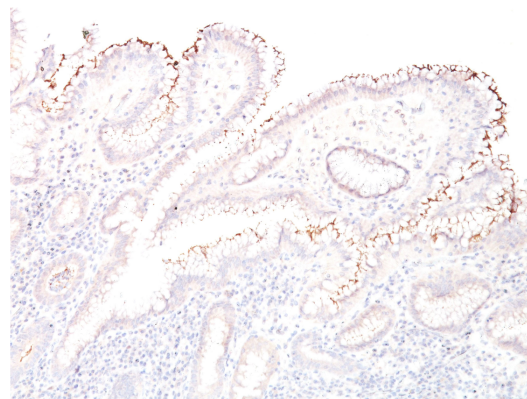
Store undiluted at 2-8 °C.
Shelf life: one year from despatch.

General Readings:

1. Fiorentino M, Ding H, Blanchard TG, Czinn SJ, Sztein MB, Fasano A. Helicobacter pylori-induced disruption of monolayer permeability and proinflammatory cytokine secretion in polarized human gastric epithelial cells. Infect Immun. 2013 Mar;81(3):876-83. doi: 10.1128/IAI.01406-12. Epub 2013 Jan 7. PubMed PMID: 23297384.
2. Moodley Y, Linz B, Bond RP, Nieuwoudt M, Soodyall H, Schlebusch CM, et al. Age of the association between Helicobacter pylori and man. PLoS Pathog. 2012;8(5):e1002693. doi: 10.1371/journal.ppat.1002693. Epub 2012 May 10. PubMed PMID: 22589724.

Pictures:

Formalin-Fixed, Paraffin-Embedded Human stomach stained with Helicobacter pylori Antibody Cat.-No AP32828PU at 1/200 dilution using peroxidase-conjugate and DAB chromogen.



Formalin-Fixed, Paraffin-Embedded Human stomach stained with Helicobacter pylori Antibody Cat.-No AP32828PU at 1/200 dilution using peroxidase-conjugate and DAB chromogen.

