**BACKGROUND**

*Helicobacter pylori* is a bacterium that infects the mucus lining of mammalian stomach and duodenum and may cause peptic ulcers, gastritis and duodenitis. It is estimated that about 66% of the world population are infected by the bacterium, though most do not experience symptoms. This spiral-shaped Gram-negative bacterium is unique in that it can thrive in the highly acidic environment of the stomach. *Helicobacter pylori* can exist in a number of locations: in the mucus; attached to epithelial cells; or inside of vacuoles in epithelial cells, where it produces adhesins that bind to membrane-associated lipids and carbohydrates to help its adhesion to epithelial cells. *Helicobacter pylori* contains a hydrogenase enzyme and obtains energy by oxidizing molecular hydrogen produced by other intestinal bacteria. It also excretes urease in order to convert urea into ammonia and bicarbonate which neutralizes the acidic environment of the stomach. *Helicobacter pylori* OMPs (outer membrane proteins) are involved in *Helicobacter pylori* adhesion and can cause signal transduction events in host cells.

**REFERENCES**


**SOURCE**

*Helicobacter pylori* OMP (BD1176) is a mouse monoclonal antibody raised against a whole cell preparation of *Helicobacter pylori*.

**PRODUCT**

Each vial contains 100 μg IgG₁ in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

*Helicobacter pylori* OMP (BD1176) is recommended for detection of outer membrane protein (OMP) and heat shock protein (HSP) of *Helicobacter pylori* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with *C. jejuni*, *E. coli* (mix), *Shigella* (mix), *P. aeruginosa*, *Yersinia* and *Citrobacter* in ELISA.

- Molecular Weight of *Helicobacter pylori* OMP precursor: 140 kDa.
- Molecular Weight of mature *Helicobacter pylori* OMP: 95 kDa.
- Molecular Weight of *Helicobacter pylori* OMP cytotoxin fragments: 58/37 kDa.
- Molecular Weight of *Helicobacter pylori* OMP outermembrane antigen: 19 kDa.

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.