# SANTA CRUZ BIOTECHNOLOGY, INC.

# Helicobacter pylori (3-15-45-2): sc-73509



#### 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.

# REFERENCES

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#### SOURCE

Helicobacter pylori (3-15-45-2) is a mouse monoclonal antibody raised against *Helicobacter pylori*.

## PRODUCT

Each vial contains 100  $\mu g~lg G_1$  in 1.0 ml of TBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

Helicobacter pylori (3-15-45-2) is recommended for detection of Helicobacter pylori of Helicobacter pylori origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of precursor/mature Helicobacter pylori: 140/95 kDa.

Molecular Weight of Helicobacter pylori cytotoxin fragments: 37/58 kDa.

Molecular Weight of Helicobacter pylori outermembrane antigen: 19 kDa.

#### **STORAGE**

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

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

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