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Improving lives with every test.

# H. pylori

## H. pylori IgG and IgA EIAs

Approximately 25 million Americans each year suffer from peptic ulcer disease. *Helicobacter pylori* causes a great majority of duodenal and gastric ulcers.

Long-term infection with *H. pylori* may be associated with the development of gastric cancer. Diagnosis of infection is important for implementing the appropriate treatment regimens. Complete resolution of gastritis after eradication of the organism has been reported. The *H. pylori* assays distributed by Bio-Rad provide an efficient, economical alternative to endoscopy in the diagnosis of *H. pylori*.

*Helicobacter pylori* are spiral-shaped Gram-negative bacilli whose causal role in inflammatory gastrointestinal diseases has been firmly established. *H. pylori* infection is detected in a great majority of patients with duodenal and gastric ulcers. The value of *H. pylori* eradication to ensure lasting and effective cure of duodenal ulcers has been clearly demonstrated. Testing for *H. pylori* infection constitutes an important diagnostic step in subjects presenting with gastroduodenal inflammatory symptoms.

Serology EIA testing provides a minimally invasive, sensitive and easy-to-perform method for the determination of *H. pylori* infection. The *H. pylori* qualitative kits distributed by Bio-Rad use EIA technology for the determination of IgG and IgA antibodies to *H. pylori*.

### Convenient and Simple

- 96-test kit
- Ready-to-use reagents
- Rapid turn-around

### Objective

- Microplate format
- Qualitative detection
- Results normalized as index values

### IgG EIA Testing

- As an aid in the assessment of the patient's immunological response to *H. pylori*
- Aid in the detection of peptic and duodenal ulcers
- Indirect EIA

### IgA EIA Testing

- Use IgA EIA in conjunction with IgG EIA for more accurate information on *H. pylori* infection
- Indirect EIA

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# Helicobacter pylori EIA Testing

## Assay Precision

The intra- and inter-assay precision were calculated by running three patient sera (negative, low positive, and high positive) in 24 replicates using two independent operators. The following results were obtained:

### H. pylori IgG

	Serum 1	Serum 2	Serum 3
Operator 1 CV Intra-assay	3.85%	4.79%	1.39%
Operator 2 CV Intra-assay	3.22%	5.91%	1.56%
Inter-assay CV	4.35%	6.86%	5.53%

### H. pylori IgA

	Serum 1	Serum 2	Serum 3
Operator 1 CV Intra-assay	7.94%	2.81%	4.94%
Operator 2 CV Intra-assay	4.43%	2.97%	4.42%
Inter-assay CV	7.61%	4.19%	4.86%

## Interpretation of results using ELISA values

ELISA VALUES	Interpretation
≥ 1.0	Positive
0.89 - 0.99	Equivocal (Retest the specimen)
< 0.89	Negative

### H. pylori Indirect EIA Procedure

1



- Microplate: break-away wells dry coated with Ag

2



- Pipette 100 µL controls, calibrator and diluted samples (1:101 for IgG and IgA)
- Incubate 30 minutes at room temperature
- 3 washes

3



- Dispense 100 µL ready-to-use conjugate
- Incubate 30 minutes at room temperature
- 3 washes

4



- Dispense 100 µL ready-to-use chromogen/substrate
- Incubate 30 minutes at room temperature
- Add 100 µL of ready-to-use Stop Reagent

**Read:** At 450 nm. Interpret results according to package insert instructions.

## Ordering Information

### Catalog No. Description

25225	Pylori Detect IgA EIA Kit, Qualitative (TMB), microplate..... 96 tests
25226	Pylori Detect IgG EIA Kit, Qualitative (TMB), microplate ..... 96 tests

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For further information, please contact the Bio-Rad office nearest you or visit our website at [www.bio-rad.com](http://www.bio-rad.com).

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