H. pylori ANTIBODY (IgG/IgM)

METHOD - LATERAL FLOW IMMUNOASSAY PRODUCT CODE - RC11

INSTRUCTIONS FOR USE



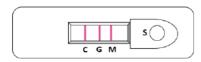
INTENDED USE: Test for qualitative detection of Helicobacter pylori IgG/IgM in human serum and plasma.

CLINICAL SIGNIFICANCE

Gastritis and peptic ulcers are one of the most common human diseases. Since the discovery of *H. pylori*, many reports have suggested that this organism is one of the main causes of ulcer diseases and stomach cancer. The eradication of *H. pylori* has been associated with elimination of ulcer diseases. The detection of the specific IgG antibodies to *H. pylori* has been shown to be an accurate method for detection of *H. pylori* infection in symptomatic patients.

PRINCIPLE

H. pylori IgG/IgM test device has 3 pre-coated lines on the surface of the membrane. The "Control Line" is used for procedural control. Control line should always appear if the test procedure is performed properly and the test reagents of control line are working.



Anti-IgG and Anti-IgM antibodies coated on the test line 1 & 2 respectively. If sample contains antibody, reacts with gold conjugated nanoparticle and flow on the membrane. It will be captured by membrane coated antibodies depend on IgG or IgM type by developing purple colour on test line.

KIT COMPONENTS

Test Cassette Device, assay buffer, Sample Dropper and Instructions for Use

PRECAUTIONS

- 1. For professional *in vitro* diagnostic use only. Do not use after the expiration date.
- Wear protective gloves while handling specimens. Wash hands thoroughly afterwards.
- The device is sensitive to humidity as well as heat. Therefore take out the device from seal pouch just before test.
- 4. Do not mix reagents from different lot.
- Dispose all the samples and kits properly as per the instruction after test in accordance in GLP.
- 6. Follow the testing procedure exactly as mention in the insert.

STORAGE & STABILITY

The kit can be stored at room temperature or refrigerated (2-30 °C). The test cassette is stable through the expiration date printed on the sealed pouch. The test cassette must remain in the sealed pouch until use. DO NOT FREEZE. Do not use beyond the expiration date.

SPECIMEN COLLECTION AND PREPARATION

- Separate the serum or plasma from blood as soon as possible to avoid hemolysis. Only clear, non-hemolyzed specimens can be used.
- 2. Testing should be performed immediately after the specimens have been collected. Do not leave the specimens at room temperature for prolonged periods. Specimens may be stored at 2-8 °C for up to 3 days. For long-term storage, specimens should be kept below -20 °C.

- Bring specimens to room temperature prior to testing. Frozen specimens must be completely thawed and mixed well prior to testing. Specimens should not be frozen and thawed repeatedly.
- If specimens are to be shipped, they should be packed in compliance with federal regulations for the transportation of etiologic agents.

TEST PROCEDURE

Allow test cassette, specimen, and buffer to equilibrate to room temperature (15-30 °C) prior to testing.

- Bring the pouch to room temperature before opening it.
 Remove the test device from the sealed pouch and use it as soon as possible.
- With a micropipette (not provided) or a disposable dropper, add about 10 μL of serum/plasma specimen into the sample well marked "S".
- 3. Add 2 drop of assay buffer to the sample well.
- As the test begins to work, you will see red color move across the result window in the center of the test device.
- 5. Interpret test results at 15-20 minutes.

Note: Do not interpret the result after 30 minutes.

INTERPRETATION OF THE RESULTS

NEGATIVE RESULT:



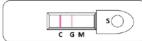
One colour line appears in the control region (C). No apparent red or pink line appears in the IgG and IgM region. Retest in 3-5 days if *H. pylori* bacteria is suspected.

POSITIVE RESULT:

IgG Positive:

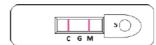
The control line (C) and IgG line (G) are visible on the test device. This is positive for IgG antibodies to *H.pylori*. This is indicative of secondary or previous infection of *H.pylori* bacteria.

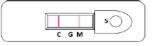




IgM Positive:

The control line (C) and the IgM line (M) are visible on the test device. This is positive for IgM antibodies to *H.pylori*. This is an indication of a primary infection of *H.pylori* bacteria.

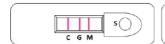


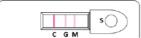




IgG and IgM Positive:

The control line (C), IgG (G) and IgM (M) lines are all visible on the test device. This is positive for both IgG and IgM antibodies. This is indicative of late primary or early secondary infection of *H. pylori* bacteria.





INVALID TEST:

The control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the likeliest reasons for control line failure. Repeat the test using a new test device.



LIMITATIONS OF THE TEST

- The Assay Procedure and the Test Result Interpretation must be followed closely when testing the presence of antibodies to *H. pylori* bacteria in serum or plasma from individual subjects. Failure to follow the procedure may give inaccurate results
- 2. The *H. pylori* IgG/IgM Rapid Test is limited to the qualitative detection of antibodies to *H. pylori* bacteria in human serum or plasma. The intensity of the test band does not correlate with antibody titre of the specimen.
- 3. A negative result for an individual subject indicates absence of detectable *H. pylori* bacteria antibodies. However, a negative test result does not preclude the possibility of exposure to or infection with *H. pylori* bacteria.

INTERNAL QUALITY CONTROL

The "Control Line" is used for procedural control. Control line should always appear if the test procedure is performed properly and the test reagents of control line are working. It confirms sufficient specimen volume and correct procedural technique. A clear background is also required

BIBLIOGRAPHY

- Anderson, L.P., Nielsen, H. (1993) Peptic ulcer: an infectious disease? Ann. Med. <u>25</u>, 563 - 568.
- Evans, D.J., Evans, D.G., Graham, D.Y., Klein, P.D. (1989) A sensitive and specific serologic test for detection of Campylobacter pylori infection. Gastroenterology <u>96</u>, 1004 -1008.

- Hunt, R.H., Mohamed, A.H. (1995) The current role of Helicobacter pylori: eradication in clinical practice. Scan. J. Gastroenterol. <u>30</u> suppl 208, 47 - 52.
- Lambert, J.R., Lin, S.K., Aranda-Michel, J. (1995) Heliocobacter pylori. Scan. J. Gastroenterol. <u>30</u> suppl 208, 33 - 46.