

**PRATHAM<sup>®</sup>**  
*H.Pylori Antigen***INTENDED USE**

**PRATHAM<sup>®</sup> H.Pylori Antigen Test** is a rapid immunoassay based upon chromatography principle for the qualitative detection of H. Pylori Ag present in the feces by using specific antibodies, which indicates an active H.pylori infection. For professional and in-vitro diagnostic use only.

**INTRODUCTION**

H.pylori is a small, spiral-shaped bacterium that lives in the surface of the stomach and duodenum. It is implicated in the etiology of a variety of gastrointestinal diseases, including duodenal and gastric ulcer, non-ulcer dyspepsia and acute and chronic gastritis. 1,2 Both invasive and non-invasive methods are used to diagnose H.pylori infection in patients with symptoms of gastrointestinal disease. Specimen dependent and costly invasive diagnostic methods include gastric or duodenal biopsy followed by urease testing (presumptive), culture, and/or histologic staining. 3 Non-invasive techniques include the urea breath test, which requires expensive laboratory equipment and moderate radiation exposure, and serological methods. 4,5 Individuals infected with H.pylori develop antibodies which correlate strongly with histologically confirmed H.pylori infection. 6,7,8 The H.pylori Rapid Test Device (Whole Blood/Serum/Plasma) is a simple test that utilizes a combination of H.pylori antigen coated particles and anti-human IgG to qualitatively and selectively detect H.pylori antibodies in whole blood, serum, or plasma in just minutes.

**TEST PRINCIPLE**

**PRATHAM<sup>®</sup> H.pylori Antigen Test** reacts with the conjugate-Red latex sensitizer with anti-H.pylori monoclonal antibody coated to the membrane of the test. The formed H.pylori conjugate complex, which migrates upward the membrane by capillarity, binds to the specific antibody molecules fixed to the reaction zone. The excess of complex keeps migrating through the membrane until reaching the C zone of control, where it will bind to another specific antibody coated to the membrane forming a green band. The green band presence confirms the functionality of the test.

**KIT COMPONENTS**

1. Individually sealed foil pouches containing: A. one cassette device B. One desiccant
2. Stool collection devices, each containing Sample Extraction Buffer.
3. Plastic droppers for transferring watery stool.
4. One package insert (instruction for use).

**MATERIAL REQUIRED BUT NOT PROVIDED**

Timer, Gloves, Micro Pipette, Tips & Centrifuge etc.

**STORAGE AND STABILITY**

The sealed pouches in the test kit may be stored between 2-40°C till the duration of shelf life as indicated on the pouch. Do not freeze. Once the pouch is opened, test card must be used immediately.

**SPECIMEN COLLECTION AND HANDLING**

1. Stool: Do not use watery or diarrhoeal samples.
2. Collect the stool sample in a clean container and use as soon as possible.
3. The samples can be stored at 2-8°C for a longer period of time.

**WARNING AND PRECAUTIONS**

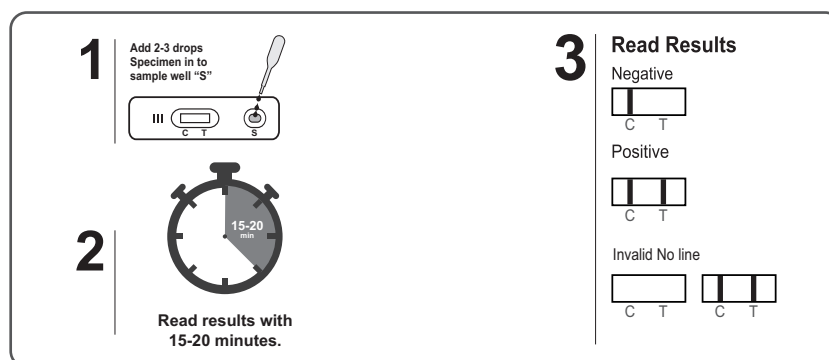
1. For professional use only, not to be used by the general public.
2. The test must be carried out by or under the direction of a registered medical practitioner or by a technician at the request of registered medical practitioner.
3. Bring all reagents and specimen to room temperature before use.

4. Do not pipette any material by mouth.
5. Do not eat, drink or smoke in the area where testing is done.
6. Use protective clothing and wear gloves when handling samples.
7. Use absorbent sheet to cover the working area.
8. Immediately clean up any spills with sodium hypochlorite.
9. Dispose off all the reagents and material used as if they contain infectious agent.
10. Neutralize acid containing waste before adding hypochlorite.
11. Do not use kit after the expiry date.
12. Do not mix components of one kit with another
13. Sample running buffer contains sodium azide (0.1%), avoid skin contact with this reagent. Azide may react with lead and copper in the plumbing and form highly explosive metal oxides. Flush with large volumes of water to prevent azide build-up in the plumbing.

## TEST PROCEDURE

1. Bring the specimen and test components to room temperature Once the specimen is thawed, mix well prior to performing the assay.
2. When ready to test, open the pouch at the notch and remove the test device. Place the test device on a clean, flat surface.
3. Shake the stool collection device vigorously to ensure a homogenous liquid suspension.
4. Insert the stool specimen with the help of dropper into the Assay buffer tube and mix it.
5. Dispense 2-3 drops of the solution (containing stool specimen) with the help of dropper into the sample well of the cassette. Do not overload the solution.
6. Read the result in 15-20 minutes.

## INTERPRETATION OF RESULTS



### Positive:

Two colored lines appear. Both T (Test) line and C (Control) line appear. This result means that there is the presence of the *H. pylori* antigen in feces and that you should consult a physician.

### Note:

The intensity of the color in the test line region (T) will vary depending on the concentration of *H. pylori* antigen present in the specimen. Therefore, any shade of color in the test line region (T) should be considered positive.

### Negative:

One colored line appears in the control line region (C). No line appears in the test line region (T). This result means that the presence of the *H. pylori* antigen in feces was not detectable.

**Invalid:** Control line fails to appear. Insufficient specimen volume or incorrect procedural techniques are the most likely reasons for control line failure. Review the procedure and repeat the test with a new test. If the problem persists, discontinue using the test kit immediately and contact your local distributor.

## INTERNAL QUALITY CONTROL

An internal procedural control is included in the test. A colored line appearing in the control region (C) is considered an internal positive procedural control. It confirms sufficient specimen volume and correct procedural technique. External controls are not

supplied with this kit. It is recommended that positive and negative controls should be tested as a good laboratory practice to confirm the test procedure and to verify proper test performance. Handle the negative and positive controls in the same manner as patient specimens.

## PERFORMANCE CHARACTERISTICS

**Pratham® H.pylori Antigen Test** has been evaluated with specimens obtained from a population of symptomatic and asymptomatic individuals. The result shows that the sensitivity of the H. pylori Antigen Rapid Test is 97.6% and the specificity is 97.9% relative to other rapid test.

## LIMITATION OF THE TEST

1. The test must be carried out immediately after opening the sealed bag.
2. The clinical diagnosis must not be done with the result of an assay, the clinical background of the patient must also be taken in account.

## DISPOSAL

Consider all test devices run with human specimen as potentially infectious and discard using standard biosafety practices.

## DISCLAIMER:

Every precaution has been taken to ensure diagnostic ability and accuracy of this product. This product is used outside the control of manufacturer and distributors. Various factors including storage temperature, environment conditions, and procedural errors may affect the result. A person who is subject of the diagnosis should consult a doctor for further confirmation.











## WARNING

The Manufacturer and Distributors of this product shall not be liable for any losses, liability, claims, costs or damages whether direct or indirect or consequential arising out of or related to an incorrect diagnosis, whether positive or negative in the use of this product.

## BIBLIOGRAPHY OF SUGGESTED READING

1. Marshall, BJ, McGeachie, DB, Rogers, PAR and Glancy, RG. Pyloric Campylobacter infection and gastroduodenal disease. Med. J. Australia. (1985), 149: 439-444.
2. Soll, AH. Pathogenesis of peptic ulcer and implications for therapy. New England J. Med. (1990), 322: 909-916.
3. Hazell, SL, et al. Campylobacter pylori is and gastritis I: Detection of urease as a marker of bacterial colonization and gastritis. Amer. J. Gastroenterology. (1987), 82
4. 292-296. 4. Cutler AF. Testing for Helicobacter pylori in clinical practice. Am j. Med. 1996; 100:355-415.
5. Anand BS, Raed AK, Malaty HM, et al. Loe point prevalence of peptic ulcer in normal individual with Helicobacter pylori infection. Am J Gastroenterol. 1996,91:1112-1115.

## SYMBOLS

 Read instructions for use	 Name of Manufacturer	 For single use only
 No. of test	 Expiry Date of Kit.	 Date of manufacturing of IVD Kit
 In-vitro diagnostic use	 Keep away from Sunlight	 Reference Catalogue Number
 Storage Condition		