

# Malaria (Plasmodium Falciparum Antigen) Rapid Test Kit

## Catalog No.: abx090709

Size: 400 tests / 1920 tests / 10000 tests

Storage: Store all reagents at 4-30°C. Keep dry. Do not freeze.

**Application:** For qualitative detection of Malaria (Plasmodium Falciparum Antigen) in human serum, plasma and whole blood.

## Introduction and assay principle

Abbexa's Malaria (Plasmodium Falciparum Antigen) Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any Plasmodium Falciparum antigen present in the samples combines with the colloidal gold particle-labelled Plasmodium Falciparum antibody. When the concentration of Plasmodium Falciparum antigen in the sample is more than the detection limit, there is a color change in the detection line and the result is positive. When the concentration of Plasmodium Falciparum antigen in the sample solution is less than the detection limit, there is no color change in the detection line and the result is negative.

## **Kit Components**

- Test cassettes
- Lysis buffer

## Material Required But Not Provided

- High-precision pipette and sterile pipette tips
- Timer
- Alcohol pad
- Lancet
- Capillary tube

## Sample preparation

- Serum: Samples should be collected into a serum separator tube. Coagulate the serum by leaving the tube undisturbed at room temperature for 30 min. Centrifuge at approximately 1000 × g for 15 mins between 2-8°C. If a precipitate appears, centrifuge again. Take the supernatant and assay immediately, or aliquot the supernatant and store between 2-8°C for up to 3 days, or at or below -20°C for long-term storage.
- Plasma: Collect plasma using an anticoagulant tube. Centrifuge for 15 mins at 1000 x g between 2-8°C, within 30 mins of collection. If precipitate appears, centrifuge again. Take the supernatant and assay immediately, or aliquot the supernatant and store between 2-8°C for up to 3 days, or at or below -20°C for long-term storage.
- Whole blood (venipuncture): Collect whole blood using an anticoagulant tube, then assay immediately or store between 2-8°C for up to 3 days. Do not freeze whole blood samples.
- Whole blood (fingerstick): Wash hands thoroughly with soap and water. Ensure fingertips are clean and dry. Using a lancet, press against the fingertip to puncture. Use a clean paper towel or similar material to wipe off the first drop of blood. Gently massage the finger from knuckle to fingertip to allow a second drop of blood to form. Immediately collect 20 µl (approximately one drop) of blood and assay immediately.

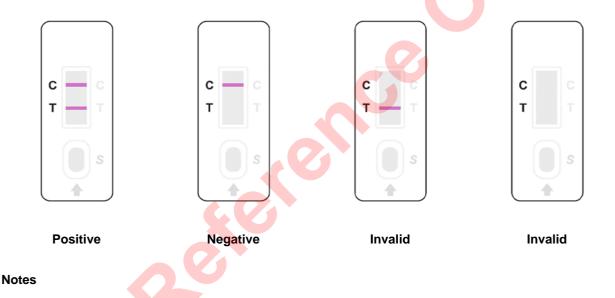


# Assay procedure

- 1. Bring all kit components and samples to room temperature.
- 2. Take a test cassette and lay it flat on a clean table. Using a pipette, slowly and vertically add 5 µl of sample to the sample well on the test cassette. Avoid foaming.
- 3. Add 3 drops (approximal 105 150 µl) of lysis buffer. Start the timer.
- 4. Leave at room temperature for 20-30 min, then analyze the result.

## **Results analysis**

- Positive result: A colored line is observed in both the control (C) section and the test (T) section.
- Negative result: A colored line is observed in the control (C) section but not the test (T) section.
- Invalid result: No colored line is observed in the control (C) section.



## 1. The test cassettes should be brought to room temperature before use.

- 2. After opening the aluminum foil, use the test cassette as soon as possible.
- 3. Samples should be clear with no visible particles, turbidity or bacterial pollution.
- 4. Do not mix or re-use the disposable pipettes to avoid cross-contamination.
- 5. Avoid touching the cassette membrane through the sample well or test result window.
- 6. This kit is for qualitative detection of Malaria (Plasmodium Falciparum Antigen) in human whole blood. For other sample types, a preliminary experiment is recommended to determine compatibility with this kit. Positive samples can be tested with another method (e.g. HPLC, LC/MS) for quantitative results.
- 7. This kit is for research use only and the results are for reference only. It is recommended to use this kit in conjunction with another detection method.
- 8. All waste should be disposed appropriately. Please note that you may need to follow special waste disposal procedures for infectious samples. Please check local disposal regulations.