

TECHNICAL SPECIFICATION.

Product Name

First Response Malaria Ag. pLDH/HRP2 Combo Card Test

<u>Manufacturer: Premier Medical Corporation Private</u> <u>Limited</u>

A1-302, GIDC, Sarigam-396155. Dist. Valsad, Gujarat, INDIA.

An ISO 13485 & EN ISO 13485 Certified Company

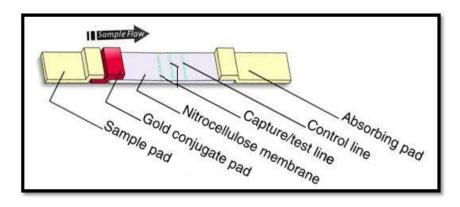
Product Details			
1	Product Name	:	First Response Malaria Ag. pLDH/HRP2 Combo Card Test
2	Product Family	:	Rapid Diagnostic Tests
3	Product Code	:	PI16FRC

Intended Use:

First Response® Malaria Ag. PLDH/HRP2 Combo Card Test is intended to be performed by trained users and as *in vitro* qualitative screening test for detection of *P. falciparum*, *P. vivax*, *P.ovale* and *P. malariae*. The test is intended for use with whole blood specimens (capillary or venous blood). Venous blood with the following anti-coagulants such as heparin, EDTA or citrate do not affect the test results. The test is not automated and does not require any additional instrument.

Assay Principle:

First Response® Malaria Ag. pLDH/HRP2 Combo Card Test is based on principle of immunochromatography in which nitrocellulose membrane is pre-coated with two monoclonal antibodies as two separate lines. One monoclonal antibody (test line PAN) is PAN specific to Lactate Dehydro-genase (pLDH) of the *Plasmodium* species (*Plasmodium falciparum*, *P. vivax*, *P. ovale* and *P. malariae*.) and the other line (test line P.f.) consists of a monoclonal antibody specific to Histidine-Rich Protein 2 (HRP2) of the *Plasmodium falciparum*. When the test sample along with assay buffer flows through the nitrocellulose membrane, monoclonal antibodies conjugated with colloidal gold, which are PAN specific to pLDH and *P. falciparum* specific to HRP2 binds to *Plasmodium* antigens released from the lysed blood sample. These antigen-conjugated antibody complex moves through the nitrocellulose membrane and binds to corresponding immobilized antibody at test lines, which leads to the formation of colour line / lines indicating reactive results. The control line will appear irrespective of reactive or non reactive sample. So, the First Response® Malaria Ag. pLDH/HRP2 Combo Card Test is "of additional value" in the differential diagnosis of *Plasmodium falciparum* and other *Plasmodium* species.



Storage & Stability

First Response®Malaria Ag. pLDH/HRP2 Combo Card Test should be stored at 1-40 °C. Do not freeze the kit or components. Assay buffer & the unopened Test Device are stable until the expiry date printed on the label, when stored at room temperature 1-40 °C. The test device is sensitive to humidity and heat. Perform the test immediately after removing the test device from the foil pouch. The shelf life of the kit is as indicated on the outer package. Do not use test device and assay buffer beyond the date of expiry.

Shelf Life:

First Response® Malaria Ag. pLDH/HRP2 Combo Card Test has shelf life of 24 months.

Performance Characteristics:

Based on the demonstrated P. falciparum panel detection score (82% at 200 parasites/ μ l), P. vivax panel detection score (91.4% at 200 parasites/ μ l), false-positive rates (1.9% for clean negatives, 1.5% for P. falciparum at 200 parasites/ μ l, 0.0% for P. vivax at 200 parasites/ μ l, 0.0% for P. falciparum at 2000 to 5000 parasites/ μ l, 0.0% for P. vivax at 2000 to 5000 parasites/ μ l) and invalid rate (0.1%).

Operational Characteristics:

Temperature range:

- ➤ First Response Malaria Ag. pLDH/HRP2 Combo Card Test is stable at temperature range of 1-40°C.
- > Operating Temperature range is room temperature.
- > Test result interpretation time 20 minutes.

Certification:

- First Response Malaria Ag. pLDH/HRP2 Combo Card Test is WHO pre-qualified product.
- First Response Malaria Ag. pLDH/HRP2 Combo Card Test is CE certified product.
- First Response Malaria Ag. pLDH/HRP2 Combo Card Test is manufactured by Premier Medical Corporation Pvt Ltd is ISO 13485 & EN ISO 13485 certified company.

Kit components:

Each kit of First Response Malaria Ag. pLDH/HRP2 Combo Card Test contains:

- Test devices packed in aluminum pouch with desiccant.
- Specimen Transfer device.
- Sterile lancet.
- Alcohol swab.
- Instructions for use in English language.
- Assay buffer bottle.