

# Quantimal™ Ultra-sensitive PfHRP2 Malaria CELISA

## Enzyme Immunoassay for detection of *P. falciparum* HRP2 to the picogram level

The development, by Taylor and Voller in 1993, of a monoclonal antibody based sandwich antigen ELISA for the detection of plasmodial **histidine rich protein 2 (HRP2)** in the blood of patients opened up a new chapter in the diagnosis of malaria, and for the first time provided a viable alternative to conventional Giemsa-stained blood films.

The first GMP-accredited HRP2 ELISA was produced in 1995 by Cellabs Pty Ltd and in the 20 plus years since it has become the international standard for detection of this malarial protein marker. It can be used, visually or with a reader, to diagnose falciparum malaria but has also been widely used to assess anti-malarial drug resistance.

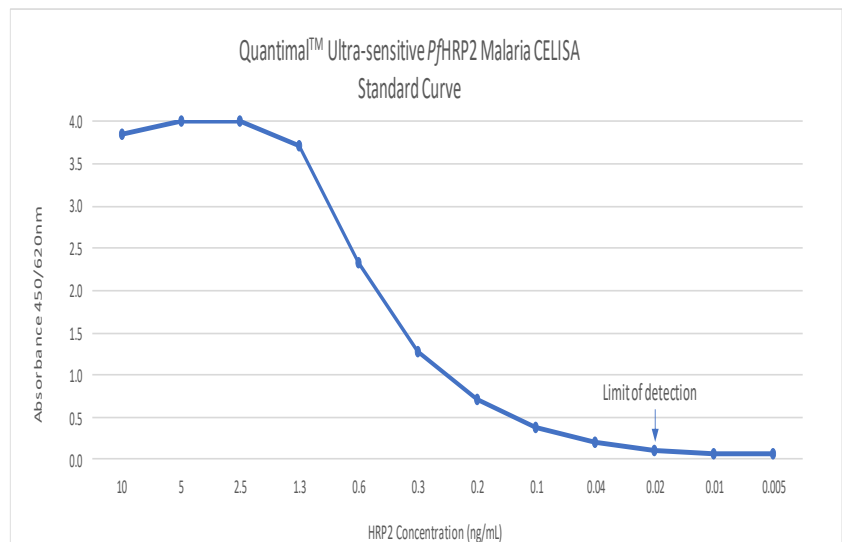
The HRP2 ELISA was also quickly adapted to the newly developed immunochromatographic or ICT format. In 1994 Becton Dickinson produced the ParaSight-F dipstick test and in 1995 ICT Diagnostics (a Cellabs spin-off company) produced the ICT Malaria P.f. card test. These two tests, together with the Flow Laboratories OptiMAL pLDH dipstick test in 1998, formed the basis for the very successful international uptake of malaria RDTs. Currently this involves over 40 companies producing more than 300 million tests per year.

However as the focus of global anti-malaria efforts have moved from basic control towards transmission and even, in some countries, eradication, it has become clear that RDTs (with a limit of detection between 100-200 parasites per  $\mu\text{L}$ ) are not sufficiently sensitive to detect the low level parasitemia associated with asymptomatic malaria and transmission.

To counter this problem Cellabs can now offer the Quantimal™ Ultra-sensitive PfHRP2 Malaria CELISA. Developed using the same anti-*P.falciparum* monoclonal antibodies as the Malaria Ag CELISA, to provide an improved sensitivity for quantification of HRP2 to the picogram level. **The lower limit of detection is 20pg/mL, equivalent to <1 parasite/ $\mu\text{L}$ .**

### Advantages

- \* Ten fold increase in sensitivity in comparison to Malaria Ag CELISA
- \* **Lower limit of detection of HRP2 is 20pg/mL equivalent to <1 parasite/ $\mu\text{L}$**
- \* Stable assay, manufactured to current QMS ISO13485 IVD standard
- \* Assay time < 2hrs



### Ordering Information

Product Code: KM8 or KM8BP

Available as a Standard 192 Test Kit or as a Bulk 960 Test Kit

Contact Cellabs for more information regarding our worldwide distribution network or for direct sales

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