



Quantimal™ pLDH Malaria CELISA

Enzyme Immunoassay for detection of pLDH, a biomarker common to all *Plasmodium spp.*

The use of *Plasmodium* lactate dehydrogenase (**pLDH**) as a marker in malaria diagnosis stems from the work of Dr. David Vander Jagt, a biochemist, who showed in 1990 that parasites from the four main species of human malaria express high levels of this glycolytic enzyme.

Dr. Michael Makler and his colleagues then showed that levels of pLDH correlate directly with the activity of live malaria parasites, both *in vitro* and in patient samples, raising the intriguing possibility that this enzyme might be a suitable marker for detecting and monitoring malaria infection. These observations were quickly translated into an enzymatic assay (MalStat) and then directly into an immunochromatographic test kit, the OptiMAL assay, produced by Flow Inc. of Portland, Oregon in 1998.

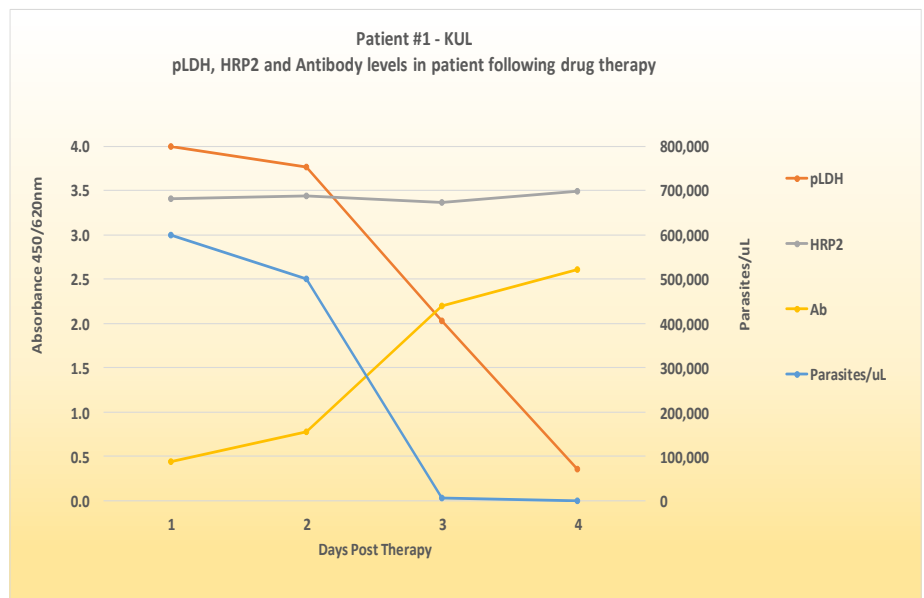
Though produced in lower quantities pLDH has two distinct advantages over HRP2 as a malaria marker. Firstly, antigenic differences between the pLDH isoforms permit speciation of malaria parasites, allowing assays to be designed to be **pan-specific** or **species-specific**.

Secondly, the fact that pLDH has a short half-life (in contrast to HRP2) and is **only** secreted by **live** parasites means that pLDH levels in blood or plasma correlate directly with parasitemia as measured by microscopy i.e. they are a direct measure of the stage of infection and can be used to measure the success (or failure) of treatment.

The **Quantimal pLDH CELISA** kit is a pan-species specific pLDH assay which detects all species of human malaria. The kit may be used for direct diagnosis, for treatment monitoring, for blood bank screening, and for drug resistance studies.

Advantages

- * Can be used for the detection of active infection
- * Useful tool in monitoring anti-malarial chemotherapy, for screening in blood banks* and for in-vitro evaluation of anti-malarial drugs
- * Manufactured to current QMS ISO13485 Standard ensures high quality and reproducibility
- * Assay time < 1.5hrs
- * Available as a 192 or 960 Test Kit



*For blood banking use in Australia please contact Celllabs for further details

Ordering Information

Product Code: KM7 (192 Test Kit) or KM7BP (960 Test Kit)

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

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