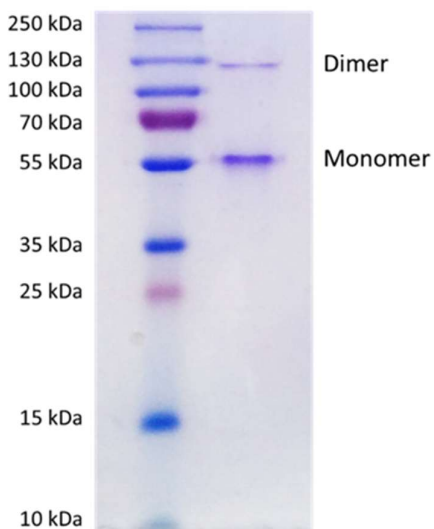
**High concentration****High purity****His-Tagged****Formulation on request****Analytical :**

- 1 Western Blot/Dot Blot
- 2 ELISA
- 3 Lateral flow assay control

**rHRP-2 in solution**

- \* A130112-01 : 1mg/ml

**rHRP-2 Lyophilised**

- \* A130112-01- L : 0,1mg/vial

**Other quantities and buffer  
available on request**

**Background**

Malaria is the most lethal parasitic disease in the world, annually affecting approximately 500 million people and resulting in 800,000 deaths, mostly in African sub-Saharan countries [1]. The disease is transmitted most commonly by an infected female *Anopheles* mosquito. Five species of *Plasmodium* can infect and be spread by humans.[2] Most deaths are caused by *P. falciparum* because *P. vivax*, *P. ovale*, and *P. malariae* generally cause a milder form of malaria [2] [3]. Malaria is typically diagnosed by the microscopic examination of blood films, or with antigen-based rapid diagnostic tests [2]. There are currently over 20 such tests commercially available (WHO product testing 2008). Antigens suitable as target for Rapid Diagnostic Tests (RDTs) are Glutamate dehydrogenase (pGluDH), Histidine Rich Protein

**Product**

HRP2 is a surface malaria protein. The antigen is expressed only by *P. falciparum* trophozoites.[4] It is an histidine- and alanine-rich protein, which is localized in several cell compartments including the parasite cytoplasm. It is characterised by many contiguous repeats of the sequences AHH and AHHAAD [5]. The histidine-rich protein 2 from *P. falciparum* has been implicated as a haeme polymerase which detoxifies free haeme by its polymerization to inactive haemozoin

**Technical data**

This protein is recombinant *Plasmodium falciparum* histidine rich protein-2 expressed in *Escherichia coli*. It is purified by Immobilized metal ion affinity chromatography.

The protein theoretical l size is 31Kda (sequence). A shift at 55kDa is visible in SDS - PAGE.

This protein is untagged.

**Application**

This product can be used by RDT manufacturers.

**Literature**

- 1 W.H.O. (2010) World Malaria Report 2010.
- 2 Caraballo H (2014). "Emergency department management of mosquito-borne illness: Malaria, dengue, and west nile virus". *Emergency Medicine Practice* 16
- 3 "Malaria Fact sheet N°94". WHO. March 2014. Retrieved 28 August 2014.
- 4Bzik DJ, Fox BA, Gonyer K (1993). "Expression of *Plasmodium falciparum* lactate dehydrogenase in *Escherichia coli*". *Mol Biochem Parasitol* 59 (1): 155-166
- 5 Panton LJ, McPhie P, Maloy WL, Wellems TE, Taylor DW, Howard RJ Purification and partial characterization of an unusual protein of *Plasmodium falciparum*: histidine-rich protein II. *Mol Biochem Parasitol*. 1989 Jun 15;35(2):149-60.
- 6 Lynn A1, Chandra S, Malhotra P, Chauhan VS. Heme binding and polymerization by *Plasmodium falciparum* histidine rich protein II: influence of pH on activity and