

## Anti- Ferredoxin (*P. falciparrum*) antibody, rabbit polyclonal 81-023 200 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C. Do not freeze.

**Immunogen:** Ferredoxin (Pd) protein purified from Malaria parasite, *Plasmodium falciparum.*.

**Form:** 4 mg/ml in PBS- with 50% glycerol. Filter sterilized. No preservative or carrier protein added.

Purity: IgG, Protein A purified.

Reactivity: P. alciparum Ferredoxin

## Applications:

- 1. Western blotting (1/500-1/2,000 dilution)
- 2. Immunofluorescent staining (assay dependent)
- 3. ELISA (assay dependent)

Other applications have not been tested.

**Background:** Ferredoxins are iron-sulfur proteins that transfer electrons in a wide variety of metabolic reactions.

Subcellular location: Apicoplast (plastid-like organelle)

Data Link: UniProtKB Q8IED5 (FER\_PLAF7)

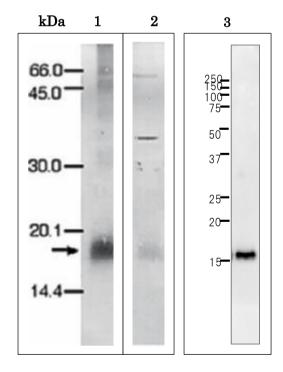


Fig.1 Western Blot of P. falciparum. Ferredoxin.

Anti-Pf Fd antibody was used at 1/1,000 dilution. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated) was used

- 1. Purified recombinant Pf Ferrodoxin. 10 ng
- 2. Partially purified *Pf* Ferredoxin from culture of *P. falciparum*.
- 3. Purified recombinant PfFerrodoxin. 1.4 ng

Molecular mass of PfFd is 18 kDa



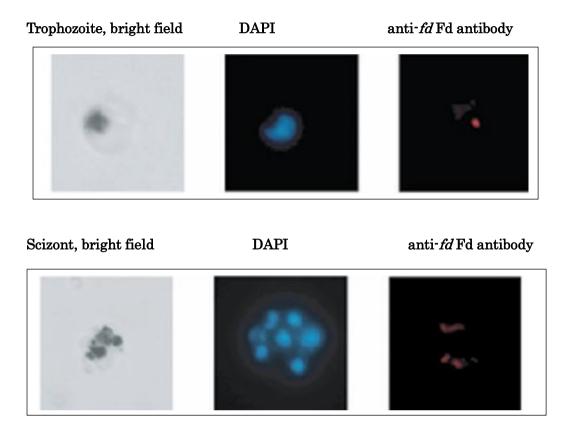


Fig. 2 Immunofluorescence staining of ferredoxin in P. alciparum.

Trophozoit and shizont stages of *P. alciparum* were stained with the anti- *Pf* Fd antibody (right panels, red color). Nuclear DNA was stained with DAPI (middle panels, blue color). Dark spots in bright field microscopy (left panels) are hemozoin pigment.

Reference: This product has been used in the following publications.

- Kimata-Ariga Y. et al. Cloning and characterization of ferredoxin and ferredoxin-NADP+ reductase from human malaria parasite. J Biochem. 2007 Mar;141(3):421-8. PMID 17251200 WB, IF; P. alciparum.
- 2. Kobayashi T. et al. Mitochondria and apicoplast of Plasmodium falciparum: behaviour on subcellular fractionation and the implication. Mitochondrion. 2007 Feb-Apr;7(1-2):125-32. PMID: 17289446 WB;*P. alciparum*.