## Monoclonal antibody (mAb) 18.2

**Description:** Anti-knob-associated histidine rich protein (KAHRP)

Shipped: Frozen on dry ice

Storage: -80°C -

Usage: IFA, Western Blotting, ELISA.

There are 35 SNPs in the KAHRP gene (see <u>plasmodb.org</u> for details), and in our hands, reactivity with *P. falciparum* strains is variable. In IFA, mAb 18.2 reacts with isolates 3D7, MAD20, G1, PA17, and K1. Negative IFA results have been obtained with Dd2 and RO33 isolates.

Western blotting with schizont extracts from 3D7 parasites shows reactivity of mAb 18.2 with a ~ 90 kDa band (see figure). Warning: 3D7 parasites in long term culture may become 18.2 negative by IFA – it is advised that proteins prepared for WB are from fresh (<20 generations) parasites.

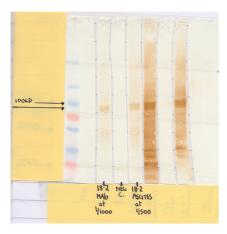


Figure: Western blot using mAb 18.2. MACS column purified schizont proteins were resolved by SDS-PAGE (4-12% gel, Tris-glycine) and blotted onto nitrocellulose membrane. Strips from the membrane were incubated with mAb 18.2 after blocking (5% non-fat milk in PBS) then detected with HRP-conjugated anti-mouse Ig (Dako, Cat. No. P0260) using SigmaFast substrate (3,3, diaminobenzidine).

**Special instructions:** When thawing immediately after shipping,  $CO_2$  may accumulate in the head space of the vial, which can dissolve in the thawed liquid, causing acid damage to the antibody (see Murphy BM, Swarts S, Mueller BM, van der Geer P, Manning MC, et al. (2013) Protein instability following transport or storage on dry ice. Nat Meth 10: 278–279. doi:10.1038/nmeth.2409.). To avoid damage, either store the frozen vial at -80 $^{\circ}$ C for at least 4 days to allow  $CO_2$  dispersal, or vent the vial during thawing to allow  $CO_2$  escape.

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