

## S1 Fig. Validation of *Pfmyoa* promoter system at the *p230p* locus

A Exchanging the constitutive *BIP* promoter for the *Pfmyoa* promoter produced p230p-prMA-sfGFP parasites. Genotyping PCR showed a complete loss of the WT *p230p* locus (green half arrow) and gain of the integrated locus (IN, grey half arrow). **B** Live fluorescence microscopy of p230p-prMA-sfGFP parasites showing DNA (DRAQ5, magenta) and cytosolic sfGFP expression in merozoites/ring and schizont. Scale bars 1 μm. **C** Western blot of p230p-prMA-sfGFP parasites confirming sfGFP expression, although at a lower level than constitutive p230p-BIP-sfGFP. **D** Western blot of p230p-prMA-sfGFP parasite lysate, normalised by total protein level, at different stages of the asexual life cycle. Strong expression of sfGFP was present in late schizonts and early rings only, as expected for the *Pfmyoa* promoter, while control protein *P. falciparum* aldolase (PfALD) levels dip slightly in trophozoite stages.