

Cooke et al., <http://www.jcb.org/cgi/content/full/jcb.200509122/DC1>

FRET was performed using the acceptor photobleaching method (Kenworthy, 2001) as previously described for malaria parasite proteins (Topolska et al., 2004) using AlexaFluor488- and -568-conjugated secondary antibodies. FRET was determined as a function of increased fluorescence intensity of the donor fluorophore after photobleaching of the acceptor using a confocal microscope (model TCS NT; Leica) and confocal software (Leica). Several different Maurer's clefts in multiple IRBCs were analyzed. Typical fluorescence/time curves for PfEMP1 and SBP1 were obtained during acceptor photobleaching at 568 nm.

For immunoprecipitation experiments, soluble parasite lysate was immunoprecipitated with rabbit polyclonal antibody raised against the NH₂ terminus of SBP1 for 2 h at 4°C, and the resulting immune complexes were captured by incubating with GammaBind G-Sepharose beads (GE Healthcare) for 2 h at 4°C. After four washes with lysis buffer, beads were dissolved in Laemmli buffer, boiled for 5 min, and proteins were separated by SDS gel electrophoresis and probed with either a mouse polyclonal antibody raised against the NH₂ terminus of SBP1 or mouse monoclonal anti-VARC antibody to detect PfEMP1.

References

- Kenworthy, A.K. 2001. Imaging protein-protein interactions using fluorescence resonance energy transfer microscopy. *Methods*. 24:289–296.
- Topolska, A.E., A. Lidgett, D. Truman, H. Fujioka, and R.L. Coppel. 2004. Characterization of a membrane-associated rho-try protein of *Plasmodium falciparum*. *J. Biol. Chem.* 279:4648–4656.