A total of 100 serum samples from putatively immune and *P. falciparum* infected patients were screened using immunofluorescence technique on glutaraldehyde-fixed and air dried infected erythrocyte monolayers. Twenty-two of them were found positive for malaria antibodies with 12 (54%) giving anti-RESA/Pf155 titres of 1000-5000 and 10 (45%) giving titres between 40 and 200. These antibodies, acquired through natural priming with *P. falciparum* infection, could be important in conferring protection against blood stage malaria. The immunofluorescence technique may be employed in detecting RESA antibodies in holoendemic malaria populations.