

Supporting Information

Conserved high activity binding peptides are involved in adhesion of two detergent-resistant membrane-associated merozoite proteins to red blood cells during invasion

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Peptide number	Pf92			Specific Binding Activity (%)			
				1	2	3	4
33667	221	R L S D Y G G K I L V K G T N A Q N L N	240				
36913	-	L A G Q I N G L N D L Y G R N S K K T V	-				
33675	381	K T C K V P S S H L K Y S S D G L Y K L	400				
36915	-	S D Y H K C S V G K K K S Y L T P S L L	-				

Peptide number	Pf113			Specific Binding Activity (%)			
				1	2	3	4
33723	81	Y F F E Y E L R K K T Q S F R N K N S I	100				
36901	-	I K Y T E F F E S N Y N R L K R S F Q K	-				
33740	421	A S L K E T M N K I D T I E K K I E E F Y	440				
36897	-	I T I E E L F K S A I K T E E M K D N K Y	-				
33748	581	R L K E N K D Y D V V S S I I Q H L D N	600				
36900	-	Q N N D I D H S E D K K L I S R V L Y V	-				

Figure S1. Binding profile of two Pf92 HABPs (33667 and 33675) and three Pf113 HABPs (33723, 33740 and 33748) to RBCs compared to the binding profile of their corresponding scrambled-sequence peptides shown immediately below of each HABP.

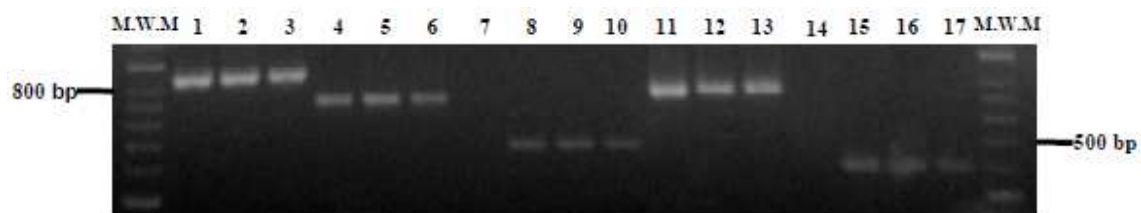


Figure S2. PCR amplification of the regions encoding HABPs in the Pf92 and Pf113 proteins. Lanes 1, 2 and 3: Pf92 region encoding HABPs 33667, 33672, 33675 and 33677 in the FCB-2, FVO and PAS-2 strains, respectively. PCR products were loaded into the gel maintaining the same strain order. Lanes 4, 5 and 6: Pf92 region encoding HABPs 33680 and 33689. Lanes 8, 9 and 10 correspond to the Pf113 region encoding HABPs 33723 and 33728. Lanes 11, 12 and 13 correspond the Pf113 region encoding HABPs 33740, 33745, 33746, 33748 and 33749. Lanes 7 and 14: Negative controls. Lanes 15, 16 and 17: Positive control: amplification of Pf25-IMP HABP 30577. M.W.M: 100-bp molecular weight marker.

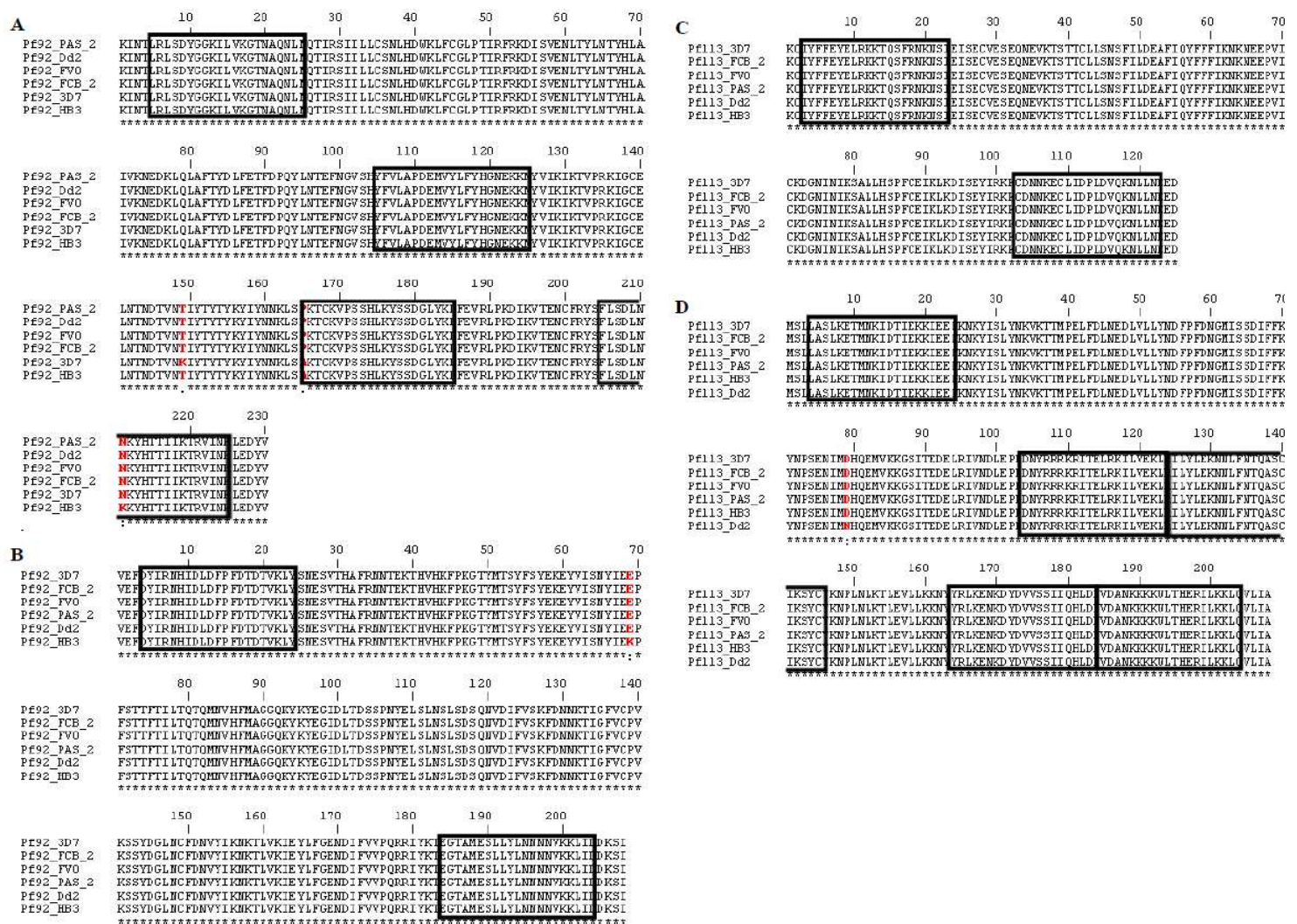


Figure S3. Amino acid alignment of the region encoding Pf92 and Pf113 HABPs in the *P. falciparum* 3D7, FCB-2, FVO, PAS-2, HB3 and Dd2 strains. Black boxes indicate the position of each HABP. Amino acid substitutions are indicated in red letters. **A.** Pf92 HABPs 33667, 33672, 33675 and 33677. **B.** Pf92 HABPs 33680. **C.** Pf113 HABPs 33723 and 33728. **D.** Pf113 HABPs 33740, 33745, 33748 and 33749.