

Table S1. Analysis of *P. falciparum* var genes for the presence of the putative thrombin cleavage site. All published *P. falciparum* var genes from seven published parasite genotypes (33) were analyzed for the presence of the putative thrombin cleavage site PPRRRRLY. For each var gene, the var group (UPS), presence of the DBL δ 1 domain, and predicted binding phenotype were ascertained.

PPRRRLY	DBL δ 1	UPS	Binding Phenotype	Domain Content
DD2				
var01a	1	B	CD36	DBL α 0.6 CIDR α 3.1 DBL β 5 DBL γ 5 DBL δ 1 CIDR β 1
var01b	1	B	CD36	DBL α 0.6 CIDR α 3.1 DBL β 5 DBL γ 5 DBL δ 1 CIDR β 1
var07	1	C	CD36	DBL α 0.16 CIDR α 2.3 DBL δ 1 CIDR β 5
var09b	1	A	OTHER	DBL α 1.5 CIDR δ 2 DBL γ 11 DBL β 7 DBL δ 1 CIDR β 1
var10	1	C	CD36	DBL α 0.15 CIDR α 3.2 DBL δ 1 CIDR β 1
var11	1	B	CD36	DBL α 0.15 CIDR α 3.2 DBL δ 1 CIDR β 1
var12	1	C	CD36	DBL α 0.24 CIDR α 3.3 DBL δ 1 CIDR γ 6
var13	1	B	CD36	DBL α 0.8 CIDR α 3.5 DBL β 8 DBL δ 1 CIDR β 1
var19	1	B	CD36	DBL α 0.10 CIDR α 2.2 DBL δ 1 CIDR γ 9 DBL ζ 6 DBL ϵ 6
var20	1	B	CD36	DBL α 0.9 CIDR α 2.7 DBL δ 1 CIDR β 6
var24	1	B	CD36	DBL α 0.15 CIDR α 3.2 DBL β 5 DBL δ 1 CIDR γ 1 DBL γ 3 DBL ζ 4
var26	1	C	CD36	DBL α 0.19 CIDR α 2.3 DBL δ 1 CIDR β 5
var29	1	B	CD36	DBL α 0.16 CIDR α 3.4 DBL δ 1 CIDR β 1 DBL γ 10
var31	1	B	CD36	DBL α 0.5 CIDR α 2.6 DBL δ 1 CIDR β 1
var32	1	A	EPCR	DBL α 1.7 CIDR α 1.4 DBL β 1 DBL β 6 DBL γ 11 DBL δ 1 CIDR γ 5
var33	1	B	CD36	DBL α 0.9 CIDR α 2.1 DBL δ 1 CIDR β 3
var35	1	B	CD36	DBL α 0.2 CIDR α 3.1 DBL δ 1 CIDR γ 7
var37	1	B	CD36	DBL α 0.3 CIDR α 3.2 DBL δ 1 CIDR γ 5
var39	1	B	CD36	DBL α 0.10 CIDR α 2.8 DBL δ 1 CIDR β 1
var41	1	C	CD36	DBL α 0.16 CIDR α 3.4 DBL β 10 DBL δ 1 CIDR β 1
var42	1	A	EPCR	DBL α 1.2 CIDR α 1.7 DBL β 7 DBL γ 2 DBL δ 1 CIDR β 1
var44	1	B	CD36	DBL α 0.23 CIDR α 3.1 DBL δ 1 CIDR β 5
var45	1	C	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR γ 4
var51	0	C	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 6 CIDR β 2
HB3				
var01	1	A	OTHER	DBL α 1.6 CIDR δ 2 DBL β 7 DBL γ 13 DBL γ 9 DBL δ 1 CIDR β
var08	1	B	CD36	DBL α 0.9 CIDR α 2.7 DBL δ 1 CIDR γ 7 DBL γ 14 DBL ζ 5 DBL ϵ 4
var10	1	B	CD36	DBL α 0.6 CIDR α 3.1 DBL β 5 DBL δ 1 CIDR β 6
var11	1	B	CD36	DBL α 0.12 CIDR α 2.1 DBL δ 1 CIDR β 3 DBL ϵ 4
var16	1	B	CD36	DBL α 0.9 CIDR α 2.2 DBL δ 1 CIDR β 1
var19	1	B	CD36	DBL α 0.12 CIDR α 2.2 DBL δ 1 CIDR γ 5
var22	0	B	CD36	DBL α 0.8 CIDR α 2.2 DBL δ 3 CIDR γ 2 DBL ϵ 2 DBL ϵ 7 DBL ϵ 3
var26	1	C	CD36	DBL α 0.8 CIDR α 3.5 DBL δ 1 CIDR β 1
var27	1	B	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 1
var29	1	C	CD36	DBL α 0.2 CIDR α 3.2 DBL δ 1 CIDR β 1
var30	1	B	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 1 CIDR β 1
var32	1	C	CD36	DBL α 0.15 CIDR α 3.1 DBL δ 1 CIDR γ 1

var33	1	C	CD36	DBL α 0.22 CIDR α 3.1 DBL δ 1 CIDR γ 6
var36	1	C	CD36	DBL α 0.4 CIDR α 3.2 DBL δ 1 CIDR β 6
var40	1	B	CD36	DBL α 0.7 CIDR α 3.4 DBL δ 1 CIDR γ 1 DBL ζ 6 DBL ε 9
var50	1	B	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 1 CIDR β 6 DBL ζ 6 DBL ε 9
IGH				
var01	1	B	CD36	DBL α 0.15 CIDR α 3.2 DBL δ 1 CIDR β 1
var03	1	B	CD36	DBL α 0.5 CIDR α 2.6 DBL δ 1 CIDR β 1
var05	1	B	CD36	DBL α 0.3 CIDR α 3.4 DBL γ 10 DBL δ 1 CIDR γ 5
var06	1	C	CD36	DBL α 0.24 CIDR α 3.1 DBL δ 1 CIDR β 6
var08	1	B	CD36	DBL α 0.14 CIDR α 4 DBL δ 1 CIDR β 6
var09	1	A	EPCR	DBL α 1.2 CIDR α 1.5 DBL β 6 DBL γ 2 DBL δ 1 CIDR β 5
var16	1	C	CD36	DBL α 0.11 CIDR α 2.4 DBL δ 1 CIDR β 6
var19	1	B	EPCR	DBL α 2 CIDR α 1.1 DBL β 1 DBL γ 6 DBL δ 1 CIDR β 1
var20	1	B	CD36	DBL α 0.4 CIDR α 3.1 DBL δ 1 CIDR γ 11
var23	1	A	EPCR	DBL α 1.7 CIDR α 1.4 DBL β 1 DBL γ 11 DBL δ 1 CIDR β 1
var25	1	B	CD36	DBL α 0.9 CIDR α 2.2 DBL δ 1 CIDR γ 7
var27	1	A	EPCR	DBL α 1.7 CIDR α 1.4 DBL β 3 DBL β 6 DBL δ 1 CIDR β 1
var36	1	C	CD36	DBL α 0.22 CIDR α 3.1 DBL δ 1 CIDR γ 7
var37	1	C	CD36	DBL α 0.8 CIDR α 5 DBL β 5 DBL γ 5 DBL δ 1 CIDR γ 11
IT4/FCR3				
var05	1	C	CD36	DBL α 0.5 CIDR α 2.3 DBL δ 1 CIDR β 1
var06	1	B	EPCR	DBL α 2 CIDR α 1.1 DBL β 12 DBL γ 6 DBL δ 1 CIDR β 4
var07	1	A	EPCR	DBL α 1.7 CIDR α 1.4 DBL β 1 DBL β 3 DBL γ 10 DBL δ 1 CIDR β 1
var12	1	ND	CD36	DBL α 0.18 CIDR α 6 DBL β 4 DBL δ 1 CIDR β 1
var15	1	B	CD36	DBL α 0.8 CIDR α 3.5 DBL β 8 DBL δ 1 CIDR β 1
var19	1	B	EPCR	DBL α 2 CIDR α 1.1 DBL β 12 DBL γ 6 DBL δ 1 CIDR β 1 DBL γ 9
var21	1	ND	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 1
var24	1	B	CD36	DBL α 0.10 CIDR α 2.2 DBL δ 1 CIDR γ 5
var25	1	B	CD36	DBL α 0.11 CIDR α 2.4 DBL δ 1 CIDR β 1
var26	1	B	CD36	DBL α 0.23 CIDR α 3.3 DBL δ 1 CIDR β 1
var27	1	B	CD36	DBL α 0.6 CIDR α 3.1 DBL β 5 DBL γ 5 DBL δ 1 CIDR β 1
var29	1	B	CD36	DBL α 0.3 CIDR α 3.2 DBL δ 1 CIDR γ 5
var30	1	ND	CD36	DBL α 0.13 CIDR α 2.10 DBL δ 1 CIDR β 1
var32a	1	ND	CD36	DBL α 0.23 CIDR α 3.2 DBL γ 6 DBL δ 1 CIDR β 1
var32b	1	B	EPCR	DBL α 2 CIDR α 1.1 DBL β 12 DBL γ 6 DBL δ 1 CIDR β 1
var33	1	B	CD36	DBL α 0.11 CIDR α 2.4 DBL δ 1 CIDR β 5
var34	1	C	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 4
var39	1	ND	CD36	DBL α 0.5 CIDR α 2.5 DBL δ 1 CIDR β 6
var40*	0	B	CD36	DBL α 0.12 CIDR α 2.11
var41	1	B	CD36	DBL α 0.4 CIDR α 5 DBL β 5 DBL γ 5 DBL δ 1 CIDR β 1
var44	1	B	CD36	DBL α 0.16 CIDR α 3.4 DBL β 13 DBL δ 1 CIDR β 6
var45	1	B	CD36	DBL α 0.5 CIDR α 2.9 DBL δ 1 CIDR β 1
var46	1	B	CD36	DBL α 0.10 CIDR α 2.2 DBL δ 1 CIDR γ 4 DBL ε 2 DBL ζ 3 DBL ε 3
var47	1	C	CD36	DBL α 0.1 CIDR α 3.3 DBL δ 1 CIDR β 1
var51	1	C	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR γ 12
var59	1	B	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 1
var62	1	B	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 8 CIDR β 2

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MAL6P1.1	1	B	CD36	DBL α 0.8 CIDR α 4 DBL δ 1 CIDR β 1
MAL6P1.252	1	C	CD36	DBL α 0.21 CIDR α 2.1 DBL β 4 DBL δ 1 CIDR β 1
MAL7P1.212	1	B	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR β 1
MAL7P1.55	1	B	CD36	DBL α 0.9 CIDR α 2.4 DBL δ 1 CIDR γ 5
MAL7P1.56	1	C	CD36	DBL α 0.20 CIDR α 3.1 DBL δ 1 CIDR β 1
PF07_0048	1	C	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 1 CIDR β 6
PF07_49	1	C	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR γ 7
PF07_51	1	C	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 1
PF08_0103	1	B	CD36	DBL α 0.12 CIDR α 2.2 DBL δ 1 CIDR β 1
PF08_0142	1	B	CD36	DBL α 0.9 CIDR α 2.11 DBL δ 1 CIDR β 1
PF10_0406	1	B	CD36	DBL α 0.9 CIDR α 2.7 DBL δ 1 CIDR β 1
PF11_0007	1	B	CD36	DBL α 0.15 CIDR α 3.2 DBL δ 1 CIDR β 1
PF11_0521	0	A	EPCR	DBL α 1.7 CIDR α 1.4 DBL β 3 DBL β 6 DBL δ 3 CIDR γ 2
PF13_0001	1	B	CD36	DBL α 0.11 CIDR α 2.4 DBL δ 1 CIDR β 1
PF13_0003	0	A	OTHER	DBL α 1.6 CIDR δ 1 DBL β 3 DBL γ 12 DBL δ 5 CIDR β 3 DBL β 9
PFA0005w	1	B	CD36	DBL α 0.11 CIDR α 2.8 DBL δ 1 CIDR β 1
PFB1055c	1	B	CD36	DBL α 0.16 CIDR α 3.4 DBL δ 1 CIDR β 1
PFC0005w	1	B	CD36	DBL α 0.9 CIDR α 2.4 DBL δ 1 CIDR β 1
PFD0020c	1	A	EPCR	DBL α 1.2 CIDR α 1.1 DBL β 12 DBL γ 6 DBL γ 11 DBL δ 1 CIDR γ 8
PFD615c	1	C	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR β 1
PFD630c	1	C	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR γ 2
PFD635c	1	B	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR γ 2
PFD995c	1	C	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 1 CIDR γ 6
PFD1000c	1	C	CD36	DBL α 0.1 CIDR α 3.2 DBL δ 1 CIDR γ 11
PFD1005c	1	B	CD36	DBL α 0.8 CIDR α 4 DBL δ 1 CIDR γ 11
PFD1235w	1	A	EPCR	DBL α 1.4 CIDR α 1.6 DBL β 3 DBL β 3 DBL γ 13 DBL δ 1 CIDR β 5
PFE0005w	1	B	CD36	DBL α 0.11 CIDR α 2.4 DBL δ 1 CIDR β 1
PFL0935c	1	B	CD36	DBL α 0.16 CIDR α 3.4 DBL δ 1 CIDR γ 12
PFL1955w	1	B	CD36	DBL α 0.16 CIDR α 3.4 DBL δ 1 CIDR γ 12
PFL1960w	1	C	CD36	DBL α 0.20 CIDR α 3.1 DBL δ 1 CIDR β 1
PFL2665c	1	B	CD36	DBL α 0.19 CIDR α 2.3 DBL δ 1 CIDR β 1
PFCLIN				
var26	1	C	CD36	DBL α 0.16 CIDR α 3.4 DBL δ 1 CIDR γ 5
var32	1	A	EPCR	DBL α 1.2 CIDR α 1.4 DBL β 7 DBL γ 11 DBL δ 1 CIDR β 1
var41	1	C	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR β 1
var44	1	B	CD36	DBL α 0.5 CIDR α 2.5 DBL β 13 DBL δ 1 CIDR γ 4
var47	1	C	CD36	DBL α 0.17 CIDR α 3.1 DBL δ 1 CIDR β 1
var54	1	B	CD36	DBL α 0.15 CIDR α 3.2 DBL δ 1 CIDR β 1
var55	1	C	CD36	DBL α 0.5 CIDR α 2.6 DBL δ 1 CIDR β 1
var56	1	C	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 6
var59#	1	ND	OTHER	DBL β 5 DBL β 8 DBL δ 1 CIDR β 2
var63	1	C	CD36	DBL α 0.4 CIDR α 3.1 DBL δ 1 CIDR β 1
var64	1	C	CD36	DBL α 0.19 CIDR α 3.4 DBL δ 1 CIDR γ 6
var65	1	B	CD36	DBL α 0.1 CIDR α 3.1 DBL δ 1 CIDR β 1
var66	1	C	CD36	DBL α 0.5 CIDR α 2.10 DBL β 13 DBL δ 1 CIDR γ 11
var77*	1	ND	?	DBL δ 1 CIDR β 1

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var10	1	B	CD36	DBLα0.9 CIDRα2.1 DBLδ1 CIDRγ10	
var11	1	B	EPCR	DBLα2 CIDRα1.8 DBLβ12 DBLy4 DBLδ1 CIDRβ1	
var13	1	B	CD36	DBLα0.1 CIDRα3.3 DBLδ1 CIDRβ6	
var19	1	A	OTHER	DBLα1.6 CIDRδ1 DBLy2 DBLδ1 CIDRβ1	
var30	1	B	CD36	DBLα0.13 CIDRα2.6 DBLδ1 CIDRβ4 DBLε2	
var31	1	B	CD36	DBLα0.5 CIDRα2.6 DBLδ1 CIDRβ5	
var33	1	B	CD36	DBLα0.18 CIDRα6 DBLβ4 DBLy13 DBLδ1 CIDRβ1	
var34	1	B	CD36	DBLα0.15 CIDRα3.2 DBLδ1 CIDRγ10	
var36	1	B	CD36	DBLα0.13 CIDRα2.9 DBLδ1 CIDRβ3	
Plasmodium reichenowi					
var49	1	ND	CD36	CIDRα4 DBLδ1 CIDRβ5	
var77	1	ND	?	DBLδ1 CIDRβ5	
var85	1	ND	CD36	DBLα0.8 CIDRα5 DBLβ8 DBLδ1	
var93	1	B	CD36	DBLα0.16 CIDRα3.4 DBLδ1 CIDRβ1	
PPRRRLY	DBLδ1	UPS	Count	%	P.falcip varA,B,C only
Total	139	134 A		14 10.37037	10.9375
Pfalcip	135	130 B		76 56.2963	59.375
Preich	4	4 C		38 28.14815	29.6875
		ND		7 5.185185	
		Total	135		
		CD36	114	85.07463	
		EPCR	15	11.19403	
		OTHER	5	3.731343	
		Total	134		

* var genes that are only partially sequenced

PFCLINvar59 is predicted to be a DC8 EPCR binder but the distal n-terminal did not sequence well