

A		Orientation (transcribed towards)			DBL1-CIDR1			Domain structure														
Gene	Location	5' region	ATS	3' region	DBL1	CIDR1	DBL2	C2	DBL3	DBL4	DBL5	DBL6	DBL7	...								
PFE1640w**	Telomeric	Telomere	upsD	A	None	None	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	DBL5-□	DBL6-□	DBL7-□	...						
PFL0030c	Near telomere	Telomere	upsE	None	D	X	DBL1-x	DBL2-x	DBL3-x	DBL4-□	DBL5-□	DBL6-□	ATS									
PFD1235v	Near telomere	Telomere	upsA	A	A		DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	C2	DBL4-□	DBL4-□	CIDR-□	ATS						
MAL7P1.1	Telomeric	Telomere	upsA	A	A	A	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	C2	DBL4-□	CIDR-□	ATS							
PF11_0521	Telomeric	Telomere	upsA	A	A	A	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	C2	DBL4-□	CIDR-□	ATS							
PF13_0003	Near telomere	Telomere	upsA	A	A	A	DBL1-□	CIDR-□	DBL2-□	C2	DBL3-□	DBL4-□	CIDR-□	DBL5-□	C2	ATS						
PF08_0141	Near telomere	Telomere	upsA	A	A	A	DBL1-□	CIDR-□	DBL2-□	C2	DBL3-□	DBL4-□	DBL5-□	ATS								
PF11_0008	Near telomere	Telomere	upsA	A	A	A	DBL1-□	CIDR-□	DBL2-□	DBL4-□	CIDR-□	DBL4-□	C2	ATS								
PFD0020c	Near telomere	Telomere	upsA	A	A	A	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	DBL4-□	CIDR-□	ATS							
PFA0015c	Near telomere	Telomere	upsA	A*	A	A	DBL1-□	DBL2-□	ATS													
MAL6P1.314	Near telomere	Telomere	upsA	A*	A	A	DBL1-□	DBL2-□	ATS													
PF11820w	Near telomere	Telomere	upsA	A*	A	A	DBL1-□	DBL2-□	ATS													
PF08_0140	Near telomere	Centromere	upsBsh	A	B	B	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	CIDR-□	ATS								
MAL6P1.316	Near telomere	Centromere	upsBsh*	A	X	X	DBL1-□	CIDR-□	DBL2-□	C2	DBL3-□	DBL4-□	DBL5-□	ATS								
PFL0020w	Near telomere	Centromere	upsBsh	X	X	B	DBL1-□	CIDR-□	DBL2-□	C2	DBL3-□	DBL4-□	DBL5-□	ATS								
MAL6P1.4	Telomeric	Centromere	upsB	C	X	B	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	CIDR-□	DBL5-□	DBL6-□	DBL7-□	ATS					
PF11_0007	Telomeric	Centromere	upsB	X	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF08_0142	Telomeric	Centromere	upsB	B	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFE0005w	Telomeric	Centromere	upsB	B	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFA0005w	Telomeric	Centromere	upsB	B	C	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFA0765c	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFC1120c	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0005w	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	DBL4-x	CIDR-□	ATS										
PF10005w	Telomeric	Centromere	upsB	D	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF13_0364	Telomeric	Centromere	upsB	D	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF07_0139	Telomeric	Centromere	upsB	D	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	DBL3-□	ATS										
PFB1055c	Telomeric	Centromere	upsB	D	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF10_0406	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL0005w	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFB0010w	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	ATS												
PFC0005w	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL2865c	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL13_0001	Telomeric	Centromere	upsB	B	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
MAL6P1.1	Telomeric	Centromere	upsB	E	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD1245c	Telomeric	Centromere	upsB	X	C	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF11830c	Telomeric	Centromere	upsB	C	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF10_0001	Telomeric	Centromere	upsB	C	B	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL0935c	Centromeric	Telomere	upsB	D	C	B	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0035c	Centromeric	Telomere	upsBsh	C	C	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL1955w	Centromeric	Telomere	upsBsh	C	C	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF08_0106	Centromeric	Telomere	upsBsh	C	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
MAL7P1.50	Centromeric	Telomere	upsBsh	C	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF08_0103	Centromeric	Telomere	upsBsh	B	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
MAL7P1.55	Centromeric	Telomere	upsBsh	B	C	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF07_0050	Centromeric	Telomere	upsBsh	B	B	D	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	ATS										
PFD1005c	Centromeric	Telomere	upsBsh	E	B	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL1950w	Centromeric	Telomere	upsB*	E	B	D	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□	ATS									
MAL6P1.252	Centromeric	Telomere	upsC*	B	D	X	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□	ATS									
MAL7P1.56	Centromeric	Telomere	upsC*	C	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF08_0107	Centromeric	Telomere	upsC*	X	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0995c	Centromeric	Telomere	upsC	C	D	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF07_0049	Centromeric	Telomere	upsC	C	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0630c	Centromeric	Telomere	upsC	C	C	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD1000c	Centromeric	Telomere	upsC	C	B	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD1015c	Centromeric	Telomere	upsC	D	B	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0615c	Centromeric	Telomere	upsC	C	X	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF07_0051	Centromeric	Telomere	upsC	C	D	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PF07_0048	Centromeric	Telomere	upsC	C	C	C	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFL1960w	Centromeric	Telomere	upsC	C	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											
PFD0625c	Centromeric	Telomere	upsC	C	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS											

  

B		3D7 gene with closest related 5' sequence			DBL1-CIDR1			Known domain structure										
PIEMP1	Strain	5' region	ATS	3' region	DBL1	CIDR1	DBL2	C2	DBL3	DBL4	CIDR	ATS						
var1 family	3D7 homologue: PFE1640w	Both 5' region and coding sequences are conserved [42]																
var2 family	3D7 homologue: PFL0030c	Both 5' region and coding sequences are conserved [35]																
AAA75397	FCR3 MAL6P1.316	upsBsh*	A	C	D	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	CIDR-□	ATS					
AAA75396	Dd2 PF07_0050	upsB	C	B	X	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	DBL4-□	CIDR-□	ATS					
AAA75398	FCR3 PF07_0139	upsB	E	B	X	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□	ATS						
AAD03351	It PFL2865c	upsB	X	nd.	nd.	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□	DBL4-□	DBL5-□					
AF193424	It PF08_0142	upsB	X	nd.	nd.	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□								
AAB60251	MC -	nd.	B	B	D	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	DBL3-□	DBL4-□	ATS						
AAC05220	- PFD0005w	upsB	B	nd.	nd.	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□								
AAC47438	FCR3 PFB1055c	upsB	X	B	nd.	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□	ATS						
AAB06961	It PFL0020w	upsBsh	X	nd.	nd.	DBL1-□	CIDR1-□	DBL2-□	C2	DBL3-□	CIDR-□							
AAA75399	Dd2 PFD1015c	upsC	B	C	X	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS								
AAC05730	FCR3 -	nd.	C	C	nd.	DBL1-□	CIDR1-□	DBL2-□	CIDR-□	ATS								