

Supplementary Table . List of the mutations observed in *pfserca*

Codon	nucleotide position mutation	wild-type codon	mutant codon	Amino Acid	Isolate	Country of origin of the isolate	Reference
037*	110 G>A	AGA	AAA	R→K	7G8	Brazil [#]	Tanabe 2004 Ferreira 2008
089	266 T>C	ATA	ACA	I→T	Mad20 T9/94	Papua New Guinea Thailand Vietnam	Tanabe 2004 Price 2004 Bertaux 2009
141*	421 T>G	TGG	GGG	W→G		Senegal [#]	this work
229	685 G>A	GTA	ATA	V→I		Zanzibar	Dahlström 2008
243	727 C>T	CAT	TAT	H→Y		Angola Zanzibar	Menegon 2008 Dahlström 2008
252	756 T>C	GAT	GAC	<i>D→D</i>		Zanzibar	Dahlström 2008
402**	1204 T>G	TTA	GTA	L→V	T9/96	Senegal [#] , Brazil [#] Thailand Senegal, Ghana, Nigeria, Kenya, Cameroon, Congo Dem, Niger	Tanabe 2004 Menegon 2008
421**	1233 G>A	GGA	GAA	G→E		French Guiana [#]	this work
431**	1262 G>A ?1291	GAA	AAA	E→K		Senegal [#] Senegal, Angola, Ghana, Cote d'Ivoire, Nigeria, Kenya, Congo Dem, Madagascar, Niger, China Zanzibar, Tanzania, Gambia, Liberia, Malawi Sudan, Uganda	Menegon 2008 Dahlström 2008
438**	1313 C>A	GCT	GAT	A→D	Mad20	Papua New Guinea	Tanabe 2004
441**	1323 T>C	TAT	TAC	Y→Y		French Guiana [#]	this work
443**	1329 C>T	GAC	GAT	<i>D→D</i>		French Guiana [#]	this work
460	1380 T>C			<i>N→N</i>		Vietnam	Bertaux 2009
463	1388 A>G 1387-1392			<i>N→S</i> del		Vietnam	Bertaux 2009
465**	1395 T>C 1395 A>G	AAT	AAC AGC	<i>N→N</i> <i>N→S</i>		French Guiana [#] Vietnam	this work Bertaux 2009
466	1397 G>A	AGT	AAT	S→N	HB3	Honduras	Tanabe 2004
537	C>A	GAC	GAT	<i>D→D</i>		Niger	Ibrahim 2009
538	1612 A>C 1614 T>C	AGT	CGT AGC	S→R S→S		French Guiana [#]	this work
539	1616 C>T	ACC	ATC	T→I		French Guiana [#]	this work
557	1671 T>A	TCT	TCA	S→S		Equatorial Guinea [#]	this work
561	A>T	AAA	AAT	K→N		Niger	Ibrahim 2009
569**	1706 A>G 1706 A>T 1707 T>A	AAT	AGT AAA	<i>N→S</i> <i>N→I</i> <i>N→K</i>		French Guiana [#] Zanzibar Papua New Guinea,	this work Dahlström 2008

					Gambia, Zanzibar, Malawi, Tanzania Sudan, Niger	Ibrahim 2009
570**	1710 A>C	ACA	ACC	T→T	French Guiana [#]	this work
574**	1721 A>C	CAA	CCA	Q→P	French Guiana [#]	this work
585	1754 G>A	GGT	GAT	G→D	Zanzibar	Dahlström 2008
602	1805 C>T	ACA	ATA	T→I	Zanzibar	Dahlström 2008
610	1828 T>A	TTA	ATA	L→I	Zanzibar	Dahlström 2008
611	1833 G>T	AAG	AAT	K→N	Zanzibar	Dahlström 2008
612	1834 A>T	AAT	TAT	N→Y	Zanzibar	Dahlström 2008
621**	1861 G>T 1862 C>A	GCT	TCT GAT	A→S A→D	French Guiana [#] Zanzibar	this work Dahlström 2008
623**	1867 G>A 1868 C>A	GCA	ACA GAA	A→T A→E	Zanzibar Senegal [#] , Senegal	Dahlström 2008 Menegon 2008
630**	1888 G>T	GCT	TCT	A→S	Brazil [#] Zanzibar, Tanzania Angola Niger	this work Dahlström 2008 Menegon 2008 Ibrahim 2009
632	1895 G>A	GGA	GAA	G→E	Zanzibar	Dahlström 2008
635	1903 A>G 1904 C>A	ACA	GCA AAA	T→A T→K	Zanzibar	Dahlström 2008
637	1910 A>G	GAG	GGG	E→G	Zanzibar	Dahlström 2008
639**	1916 G>A	GGC	GAC	G→D	7G8 Brazil Brazil Niger Zanzibar	Tanabe 2004; Ferreira 2008 Ibrahim 2009 Dahlström 2008
641	1921 A>G	AGT	GGT	S→G	Zanzibar	Dahlström 2008
643**	1927 G>C	GAA	CAA	E→Q	Equatorial Guinea [#] Zanzibar	this work Dahlström 2008
644	1931 A>T	AAT	ATT	N→I	Zanzibar	Dahlström 2008
649	1945 A>G	AAA	GAA	K→E	Zanzibar	Dahlström 2008
683	2049 T>G	AAT	AAG	N→K	Senegal [#] Senegal Cambodia Vietnam	this work Menegon 2008 Dahlström 2008 Bertaux 2009
723	2167 A>G	ATA	GTA	I→V	Zanzibar	Dahlström 2008
747	2239 C>T 2240 A>G	CAT	TAT CGT	H→Y H→R	Zanzibar Zanzibar	Dahlström 2008
756	2268 A>G	AGA	AGG	R→R	Vanuatu	Dahlström 2008
758	2274 A>G	TTA	TTG	L→L	Zanzibar	Dahlström 2008
769	2306 G>A	AGT	AAT	S→N	French Guiana [#] ?	Jambou, 2005 Cojean 2006
771	2311 A>G	AAA	GAA	K→E	Angola, Ghana, Niger	Menegon 2008
776	2328 G>T	AAG	AAT	K→N	China	Menegon 2008
783	2347 A>G	AAA	GAA	K→E	Zanzibar	Dahlström 2008
801	2403 T>C	CGT	CGC	R→R	Zanzibar	Dahlström 2008
809	2425 A>G	AGA	GGA	R→G	Zanzibar	Dahlström 2008

844	2530-2	GGA	del	G→-	HB3	Honduras	Tanabe 2004
885*	2656 T>A	ATT	ATA	I→I		Senegal [#]	this work
898*	2694 T>A	ATT	ATA	I→I		Brazil [#]	this work
						Cambodia [#]	this work
						Brazil [#]	Ferreira 2007
						Vietnam	Bertaux 2009
959	2877 T>A	ATT	ATA	I→I		Cambodia [#]	this work
987	2960 A>C	ATT	CTT	I→T		Senegal [#]	this work
	2962 T>A		ATA	I→I		Cambodia [#]	
998	2974 T>C	AGT	AGC	S→S		Senegal [#]	this work
1030	3090 G>A	AAG	AAA	K→K		Cambodia [#]	this work
1031*	3093 C>T	TGC	TGT	C→C		Senegal [#] Cambodia [#]	this work
						Vietnam	Bertaux 2009

Legend:

**Plasmodium specific area : AA 407-486, 569-671, 852-860

this work

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