Table 1. Codon usage in the plastid genome of *Plasmodium chabaudi chabaudi* isolates and *Plasmodium falciparum*.

			Number of codons [a]			
Amino acid	1 letter code	Codon	P.c.c. AS [b]	P. c. c. CB [c]	P. f. C10 [d]	Decoding tRNA [e]
- [f]	-	TAA	23	22	24	-
-	-	TAG	0	1	0	-
-	-	TGA	8	8	7	-
Ala	A	GCA	21	21	16	tRNA-Ala(UGC)
Ala	A	GCC	1	1	1	tRNA-Ala(UGC)
Ala	A	GCG	4	4	0	tRNA-Ala(UGC)
Ala	A	GCT	37	37	41	tRNA-Ala(UGC)
Cys	C	TGC	2	5	1	tRNA-Cys(GCA)
Cys	C	TGT	84	81	82	tRNA-Cys(GCA)
Asp	D	GAC	11	10	3	tRNA-Asp(GUC)
Asp	D	GAT	126	125	127	tRNA-Asp(GUC)
Glu	E	GAA	134	134	145	tRNA-Glu(UUC)
Glu	E	GAG	11	11	8	tRNA-Glu(UUC)
Phe	F	TTC	4	4	5	tRNA-Phe(GAA)
Phe	F	TTT	429	428	457	tRNA-Phe(GAA)
Gly	G	GGA	83	84	85	tRNA-Gly(UCC)
Gly	G	GGC	0	0	0	tRNA-Gly(ACC)
Gly	G	GGG	17	16	13	tRNA-Gly(UCC)
Gly	G	GGT	116	116	120	tRNA-Gly(ACC)
His	H	CAC	3	3	0	tRNA-His(GUG)
His	H	CAT	58	58	70	tRNA-His(GUG)
Ile	I	ATA	662	660	758	tRNA-Ile(GAU)[g]
Ile	I	ATC	8	9	8	tRNA-Ile(GAU)
Ile	I	ATT	584	585	520	tRNA-Ile(GAU)
Lys	K	AAA	888	883	916	tRNA-Lys(UUU)
Lys	K	AAG	47	48	53	tRNA-Lys(UUU)
Leu	L	CTA	7	6	11	tRNA-Leu(UAG)
Leu	L	CTC	0	0	0	tRNA-Leu(UAG)
Leu	L	CTG	0	0	0	tRNA-Leu(UAG)
Leu	L	CTT	9	9	4	tRNA-Leu(UAG)
Leu	L	TTA	898	900	886	tRNA-Leu(UAA)
Leu	L	TTG	31	29	19	tRNA-Leu(UAA)
Met (initial)	M	ATG	31	31	31	tRNA-fMet(CAU)
Met (internal)	M	ATG	47	46	55	tRNA-Met(CAU)
Asn	N	AAC	20	21	7	tRNA-Asn(GUU)
Asn	N	AAT	1071	1066	1116	tRNA-Asn(GUU)
Pro	P	CCA	26	26	27	tRNA-Pro(UGG)
Pro	P	CCC	1	1	1	tRNA-Pro(UGG)
Pro	P	CCG	0	0	1	tRNA-Pro(UGG)
Pro	P	CCT	77	77	76	tRNA-Pro(UGG)
Gln	Q	CAA	113	113	118	tRNA-Gln(UUG)
Gln	Q	CAG	6	6	9	tRNA-Gln(UUG)
Arg	R	AGA	91	91	85	tRNA-Arg(UCU)
Arg	R	AGG	3	3	3	tRNA-Arg(UCU)
Arg	R	CGA	0	0	0	tRNA-Arg(ACG)
Arg	R	CGC	0	0	0	tRNA-Arg(ACG)
Arg	R	CGG	0	0	0	tRNA-Arg(ACG)
Arg	R	CGT	12	12	14	tRNA-Arg(ACG)
Ser	S	AGC	5	5	0	tRNA-Ser(GCU)
Ser	S	AGT	107	107	107	tRNA-Ser(GCU)
Ser	S	TCA	103	102	98	tRNA-Ser(UGA)
Ser	S	TCC	7	7	4	tRNA-Ser(UGA)
Ser	S	TCG	1	2	3	tRNA-Ser(UGA)
Ser	S	TCT	140	140	132	tRNA-Ser(UGA)
Thr	T	ACA	111	111	101	tRNA-Thr(UGU)
Thr	T	ACC	0	0	1	tRNA-Thr(UGU)
Thr	T	ACG	3	2	2	tRNA-Thr(UGU)
Thr	T	ACT	109	109	106	tRNA-Thr(UGU)
Val	V	GTA	79	78	79	tRNA-Val(UAC)
Val	V	GTC	1	1	0	tRNA-Val(UAC)
Val	V	GTG	7	7	1	tRNA-Val(UAC)
Val	V	GTT	68	68	48	tRNA-Val(UAC)
Trp	W	TGG	30	30	29	tRNA-Trp(CCA)
Tyr	Y	TAC	9	9	8	tRNA-Tyr(GUA)
Tyr	Y	TAT	807	806	777	tRNA-Tyr(GUA)
		Sum	7391	7375	7419	
		Total nt	22173	22125	22257	

[a] The sum for each codon species present in all the protein coding sequences annotated in the apicoplast DNA.
[b] AB649423.1 [7].
[c] HF563595 / HF563596 (this work).
[d] X95275.2 / X95276.2 [6].
[e] Proposed tRNA species decoding the codon [10].
[f] Termination codon.
[g] It is not certain if tRNA-Ile(GAU) can decode ATA codons to Ile.