

Additional file 7. Alignment of amino acid sequences of PmDHFR-TS (A) and PoDHFR-TS (B) from the China-Myanmar border area and other countries

A.

		16	50 51	59	
Pf 3D7	MMEQCDVFDIYAIACACKVESKNEGKNEVFNNTYFRRGLGNKGVL PWKNSLDMKYFCAVTTVNESKYEKLKYKRCKYLNLKETVDNVN-----DMPNSKK [97]				
Pf TZ 2000708	MMEQCDVFDIYAIACACKVESKNEGKNEVFNNTYFRRGLGNKGVL PWKNSLDMKYFCAVTTVNESKYEKLKYKRCKYLNLKETVDNVN-----DMPNSKK [97]				
Pm TH Pm3	M-EEVSDVFDIYAIACACKVPNQGEGKNEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [103]				
Pm TH Te	M-EEVSDVFDIYAIACACKVPNQGEGKNEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [103]				
Pm TH Tu	M-EEVSDVFDIYAIACACKVPNQGEGKNEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [103]				
C0400117	-----NEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [76]				
MON00290	-----IFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [74]				
MON00556	-----ICACCKVPNQGEGKNEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [91]				
MON00648	-----ICACCKVPNQGEGKNEIFSTKTFRGLGNKGOLPWKSNSLDMKYFSSVTTVNEMKYKLKYKR[E]KLEKEISNENSSTVFENISLSSSK [91]				
		108	164		
Pf 3D7	LQNVVVMGRTSWESIPKKFKPLSNRINVLRLKKEFDFEDVYIINKVEDLIVLLGKLNYKCFCIIGGSVYQEFLKKLIKKIYFTRINSTYECDFVFFPEIN [201]				
Pf TZ 2000708	LQNVVVMGRNWESIPKKFKPLSNRINVLRLKKEFDFEDVYIINKVEDLIVLLGKLNYKCFCIIGGSVYQEFLKKLI[K]YFTRINSTYECDFVFFPEIN [201]				
Pm TH Pm3	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [207]				
Pm TH Te	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [207]				
Pm TH Tu	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [207]				
C0400117	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [180]				
MON00290	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [178]				
MON00556	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [195]				
MON00648	LQNVVVMGRSSWVSIPIKQYKPIE[N]RNIVWL[SL]RTLKKEDVKEDEIIFIINNMDQLVLLKLNYKCFCIIGGAIVYKECLERNLIK[Q]YFTRINNVYECDFVFFPEID [195]				
Pf 3D7	ENEYQIISVSDVYTTSNNTLDFI[I]YKKTNNKMLNQE[N]CKIGEEKNNNDPLKLNDDKDTCMHKKLTFEYKVNVDK---YKINYENDDDDEEEEDDFVYFNFNK [297]				
Pf TZ 2000708	ENEYQIISVSDVYTTSNCTSLDFI[V]FSKRKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [297]				
Pm TH Pm3	ENVFOQITSVSDVYTTSNCTSLDFI[V]FSKRKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [311]				
Pm TH Te	ENVFOQITSVSDVYTTSNCTSLDFI[V]FSKRKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [311]				
Pm TH Tu	ENVFOQITSVSDVYTTSNCTSLDFI[V]FSKRKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [311]				
C0400117	ENVFOQITSVSDVYTTSNCTSDEVIFSKRKKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [284]				
MON00290	ENVFOQITSVSDVYTTSNCTSDEVIFSKRKKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [282]				
MON00556	ENVFOQITSVSDVYTTSNCTSDEVIFSKRKKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [299]				
MON00648	ENVFOQITSVSDVYTTSNCTSDEVIFSKRKKALTQE[SL]PHOSSGDKGSNTSSTI[S]NGAMSSNTIRGSTTSSSGKGKGGGESIFEREYNFMGDEEDDLIVYFNFNK [299]				
Pf 3D7	EKEEKKNKNSIHPNDFQIYNSLKYKHYPEYQYLNIIYDMMNGNQSDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [401]				
Pf TZ 2000708	EKEEKKNKNSIHPNDFQIYNSLKYKHYPEYQYLNIIYDMMNGNQSDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [401]				
Pm TH Pm3	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [414]				
Pm TH Te	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [414]				
Pm TH Tu	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [414]				
C0400117	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [387]				
MON00290	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [385]				
MON00556	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [402]				
MON00648	NKNE-YKNAENANDEK[I]YNSLKEFH[H]PEYQYLSIIYDIIMNGNQNDRTGVGVLSKFQGYIMKFDSLQYFPLLTKKLFLRGIIIEELLWFIRGETNGNTLLNKNV [402]				
Pf 3D7	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNIINLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [505]				
Pf TZ 2000708	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNIINLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [505]				
Pm TH Pm3	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [518]				
Pm TH Te	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [518]				
Pm TH Tu	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [518]				
C0400117	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [491]				
MON00290	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [489]				
MON00556	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [506]				
MON00648	RIWEANGTREFLDNRKLFHREVNDLGPIYGFQWRHFGAETYNTMNYDNEYKGVQDLKNI[I]HLIKNDPTSRRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [506]				
Pf 3D7	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [608]				
Pf TZ 2000708	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [608]				
Pm TH Pm3	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [621]				
Pm TH Te	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [621]				
Pm TH Tu	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [621]				
C0400117	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [561]				
MON00290	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [559]				
MON00556	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [592]				
MON00648	IMYQRSCDLGLGVFPNIASYSIFTMIAQVCNLQPAQFIHVLGNAHVYNNHDSLKIQLNRIYPFPPTLKLNPDIKNIEDFTISDFTIQNVHHEKISMDMAA [576]				

* GenBank accession numbers: Isolates of China-Myanmar border: KX672033 (C0400117), KX672034 (MON00556), KX672035 (MON00648), KX672036 (MON00290); Pf: XM_001351443 and KI926308 (Tanzania, TZ 2000708); Thailand (TH) isolates: EF188271 (Pm3), EF188272 (Te) and EF188273 (Tu).

B.

		16	50	51	59	
Pf 3D7	MMEQVCDVFDIYAIcacckvvesknegkknevfnnytfrglgnkvglpwkcnsldmkycavtvyvnneskyeklkykrckylnket-----vdnvndmpnskklnqnvv [102]					
Pf TZ 2000708	MMEQVCDVFDIYAIcacckvvesknegkknevfnnytfrglgnkvglpwkcisldmkycfravtvyvnneskyeklkykrckylnket-----vdnvndmpnskklnqnvv [102]					
Pow UG Po2012-3	M-EFVCFVDIYAIcacckvskegdwkksesfssstfrgignkgilpkncnsdysyfssvttyvnnewnyklkykrckylekdjsndkkkvdviniaepiskklqnvv [107]					
Pow NG Po2006	M-EQLSBVFDIYAIcacckvskegdwkksesfssstfrgignkgilpkncnsdysyfssvttyvnnewnyklkykrckylekdjsndkkkvdviniaepiskklqnvv [107]					
Poc IN Po2003	M-EDVCFVDIYAIcacckvskegdwkksesysnstfrgignkgilpkwysnvdisyfssvttyvnnewnyklkykrckylekdjsndkkkvdviniaepiskklqnvv [107]					
Poc ID Po2012-2	M-EDVCFVDIYAIcscckvskegdwkksesysnstfrgignkgilpkwysnvdisyfssvttyvnnewnyklkykrckylekdjsndkkkvdviniaepiskklqnvv [107]					
M0500214	-----STFRGIGNKGILPKWYNSVDISYFSSVTITYVNNEWNYKLKYKRCKYLEKDJSNDKKKVDVINIAEPISKKLQNVV [107]					
C0100511	-----STFRGIGNKGILPKWYNSVDISYFSSVTITYVNNEWNYKLKYKRCKYLEKDJSNDKKKVDVINIAEPISKKLQNVV [74]					
M0102751	-----DWKSESYNSTFRGIGNKGILPKWYNSVDISYFSSVTAYVNNEWNYKLKYKRCKYLEKDJSNDKKKVDVINIAEPISKKLQNVV [84]					
		108			164	
Pf 3D7	VMGRTSWESIPKPKPLSNRINVLSRTLKKDFDEDDVYIINKVEDLIVLLGKLNYKCFIGGSVYQEFLEKKLIKLYFTRINSTYECDFVFPINENEYQIISV [210]					
Pf TZ 2000708	VMGRTNESIPKPKPLSNRINVLSRTLKKDFDEDDVYIINKVEDLIVLLGKLNYKCFIGGSVYQEFLEKKLIKLYFTRINSTYECDFVFPINENEYQIISV [210]					
Pow UG Po2012-3	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [215]					
Pow NG Po2006	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [215]					
Poc IN Po2003	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [215]					
Poc ID Po2012-2	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [215]					
M0500214	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [215]					
C0100511	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [182]					
M0102751	VMGRSSWESIPKSYKPLANRINVVLSSLTKKEDVREDFIMKSMDEVILLKKLYYYKCFIIGGAGVYKECLERNLIKQYLTTRINNTYECDFVFPDMENAFQITSV [192]					
Pf 3D7	SDVYTSNNTTLDFIIYKKTTNNKMLNEQNCIKGEEKN-----NDMPLKNDKDTCMKKLTEFYKVNVDKYK-----INYENDDDDEEEDD [289]					
Pf TZ 2000708	SDVYTSNNTTLDFIIYKKTTNNKMLNEQNCIKGEEKN-----NDMPLKNDKDTCMKKLTEFYKVNVDKYK-----INYENDDDDEEEDD [289]					
Pow UG Po2012-3	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKGCTKGGAEEWWGNMALTSQGKDNVDEEDD [321]					
Pow NG Po2006	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKGCTKGGAEEWWGNMALTSQGKDNVDEEDD [323]					
Poc IN Po2003	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKVCTKSGAEWWKNMTLTSQGKDNVDEEDD [319]					
Poc ID Po2012-2	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKVCTKSGAEWWKNMTLTSQGKDNVDEEDD [319]					
M0500214	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKVCTKSGAEWWKNMTLTSQGKDNVDEEDD [286]					
C0100511	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKVCTKSGAEWWKNMTLTSQGKDNVDEEDD [286]					
M0102751	SEVYSSNCTTLDFTIYSRKKDTQNDGDSSEGSTTT-----TATATATWPPIAGATSSMNAETSTTFASSHHKGSSSWTKVCTKSGAEWWKNMTLTSQGKDNVDEEDD [296]					
Pf 3D7	FVYFNFNKEKEEKKNKNSIHPNDFQIYNSLKYKHYPEYQYLNIYDIMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [397]					
Pf TZ 2000708	FVYFNFNKEKEEKKNKNSIHPNDFQIYNSLKYKHYPEYQYLNIYDIMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [397]					
Pow UG Po2012-3	YMFPSFNKKK-KSQIMKNEDFEIYNSIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [428]					
Pow NG Po2006	YMFPSFNKKK-KSQIMKNEDFEIYNSIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [430]					
Poc IN Po2003	YMFPSFNKKK-KSQIGKNAEDFEIYNTIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [426]					
Poc ID Po2012-2	YMFPSFNKKK-KSQIGKNAEDFEIYNTIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [426]					
M0500214	YMFPSFNKKK-KSQIGKNAEDFEIYNTIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [393]					
C0100511	YMFPSFNKKK-KSQIGKNAEDFEIYNTIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [393]					
M0102751	YMFPSFNKKK-KSQIGKNAEDFEIYNTIYKLYKHYPEYQYLNIYDMMNGNQSDRTGVGVLSKFGYIMKFDLSQYFLTTKFLRGIIEELLFIRGETNGNTLL [403]					
Pf 3D7	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGVDQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [505]					
Pf TZ 2000708	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGVDQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [505]					
Pow UG Po2012-3	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [536]					
Pow NG Po2006	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [538]					
Poc IN Po2003	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [534]					
Poc ID Po2012-2	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [534]					
M0500214	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [501]					
C0100511	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [501]					
M0102751	NKNVRIWEANGTREFLDNRKLFHREVNDLGLPIYGQWRHFGAEYTNMDYENKGIDQQLKNIINLIKNDPTSRILLCAWNVKDLDQMALPPCHILCQFYVFDGKLSC [511]					
Pf 3D7	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [608]					
Pf TZ 2000708	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [608]					
Pow UG Po2012-3	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [639]					
Pow NG Po2006	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [641]					
Poc IN Po2003	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [637]					
Poc ID Po2012-2	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [637]					
M0500214	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [557]					
C0100511	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [557]					
M0102751	IMYQRSCDLGLGVPFNIASYSIFTMIAQVCNLQPAQFTHVILGNAHVYNNHIDSLSKIQLNRIPYPFPFTLKLNPDIKNIEDFTISDFTIQNVVHEKISMDMAA [585]					

* GenBank accession numbers: KX672037 (M0500214), KX672038 (C0100511), KX672039 (M0102751); KI926308 (Tanzania, TZ 2000708); Indonesia (ID): KP050408; India (IN): KP050405; Nigeria (NG): KP050406; Uganda (UG): KP050409.