

Supplementary file Table S1.

Sequence of the primers and probes used

Molecular beacons *Pfcrt K76T*

crtssense (170-190)	5' TTTAGGTGGAGGTTCTTGT
crtantisense (368-348)	5' AATAAAGTTGTGAGTTTCGGA
wild-type beacon K76	5' GCGACGTGTAATGAATAAAATTTGGTCG
mutant beacon K76T	5' GCGACGTGTAATTGAAACAATTTGTCGC

Molecular beacons *Pfdhfr-ts S108N*

dhfrsense (303-326)	5' TGTGGATAATGTAATGATATGCC
dhfrantisense (421-398)	5' CATTATCCTATTGCTTAAAGGTT
wild-type beacon S108	5' GCGACGAAGAACAAAGCTGGAAAGGTCGC
mutant beacon S108N	5' GCGACGAAGAACAAACTGGAAAGGTCGC

Pfcrt PCR for exon 2 sequencing

Crt76-5	5' GGTGGAGGTTCTTGTCTTG
Crt76-3	5' ATAAAGTTGTGAGTTCCGGATG

Pfcrt exon 4- exon 5 PCR

CRT220-sense	5' TTATACAATTATCTGGAGCAG
CRT220-antisense	5' CATTTGAAAAGCATACAGGC

Pfdhfr-ts gene sequencing

DhfrPfQS	5' CTCGAGGAATTGGATCCTATGATGGAACAAGTCTGCGAC
DhfrPfCoasQ	5' TCTAGAAAGCTTGGATCCTAAGCAGCCATATCCATTGAAATT
dhfrsm13	5' AACAGCTATGACCATGCCATATGTGCATGTTGAA
dhfrasm13	5' GTAAAACGACGCCAGTATTAAGCAGCCATATCCATTG

internal primers for sequencing

DHb-2.b	5' CTCGAGGAATTGGATCC
DHg-1.g	5' TCTAGAAAGCTTGGATCC

Microsatellites

-0.1kb dhfrts*	
DHFR0.3kb.F	5' ATTCCAACATTTCAAGA
DHFR0.3kb.3R	5' GGCATAAATATCGAAAAC
DHFR0.3kb.RHEX	5' TCCATCATAAAAAGGAGA

+0.5kb dhfrts**

d106_8.F	5' TAAAGAAGGCATAATTTCA
DHFRp0.5R	5' ACTTTATATTTTCAATTGAG
d106_8.RHEX	5' CATTGAGATAATAAGTGTCA

-4.4kb dhfrts***

DHFR4.4kb.3F	5' GTTGTCAATAATTCATGCATC
DHFR4.4kb.R	5' CGATATATCTGATGGGTGA
DHFR4.4kb.RHEX	5'TACCATAGCAGTCTTGCA

Pfmsp1 block2

Universal primers

Fmsp1uf (106-125^a) 5' GAAGATGCAGTATTGACAGG

Fmsp1ur (586-607^a) 5' CATTAATTCTTCATATCCATC

Allelic specific primers

k1ff (161-183^a) 5' ATGAAGAAGAAATTACTACAAAA

mad20ff (163-182^b) 5' GAAGGAACAAGTGGAACAGC

ro33ff (174-193^c) 5' TACTCAAGTTGTTGCAAAGC

* locus also called 0.3kb primers from Roper et al, (2003) Lancet 361: 1174-1181

** primers d106_8.F and d106_8.RHEX from Nair S et al (2003) Mol Biol Evol 20: 1526-1536

DHFRp0.5R designed for this study

*** primers from Roper et al, (2003) Lancet 361: 1174-1181

^{a,b,c}The *Pfmsp1* block2 positions are based on the reference strain Palo Alto-Uganda^a (accession No M37213) for K1-type; MAD20^b (accession No X05624) for MAD20-type and RO33Ghana^c (accession No M35727) for RO33-type.