

Table 3. *pfcrt* PCR primers and SSOPs

Nest1 primers region I (5'UTR - intron 2)

23327up*	5'-CAT TGT CTT CCA CAT ATA TGA CAT AAA-3'
24076dn	5'-TTG GTA GGT GGA ATA GAT TCT CTT-3'

Nest2 primers region I (5'UTR - intron 2)

23402up†	5'-CCG TTA ATA ATA AAT ACA CGC AG-3'
24011dn‡	5'-AAT TTC CCT TTT TAT TTC CAA ATA AGG-3'
23939dn	5'-CGG ATG TTA CAA AAC TAT AGT TAC C-3'

Reverse transcriptase-PCR primers (exon1/2 - exon 2/3)

23561up	5'-ATT TAG TAC AAG AAG GAA GTA TGG CTC-3'
24197dn	5'-AAA GCT TCG GTG TCG TTT TTT G-3'

Probes for region I

		Wash stringency
CVMNK§	5'-TA TGT GTA ATG AAT AAA-3'	0.8× SSC 37°C
CVIET	5'-TA TGT GTA ATT GAA ACA-3'	0.8× SSC 37°C
SVMNT	5'-TA AGT GTA ATG AAT ACA-3'	0.8× SSC 37°C
SVMNT*	5'-TA TCT GTA ATG AAT ACA-3'	0.8× SSC 37°C

Nest1 primers region II (intron 3/exon 4-exon 8/intron 9)

24511up	5'-CTC CTT TTT AGA TAT CAC TTA TAC-3'
25460dn	5'-GCT TCT TAC CCA TGC TCC GT-3'

Nest2 primers region II (intron 3/exon 4-exon 8/intron 9)

24541up†	5'-CTC GGA GCA GTT ATT ATT GTT G-3'
25145dn‡	5'-ATA TAT ATA TAT ATG GGC ACA TTC A-3'

Nest1 primers region III (exon 8/intron 9–intron 11)

25441up	5'-ACG GAG CAT GGG TAA GAA GC-3'
26220dn	5'-ACG AAC AAG CCA TTT GAT ATT AC-3'

Nest2 primers region III (exon 8/intron 9–intron 11)

25588up†	5'-GAA AAC CTT CGC ATT GTT TTC C-3'
26132dn‡	5'-ATT TCA CAC TTA CCA AAG TTA CG-3'

PCR amplification of three *pfcrt*-specific sequences were performed with primers identified in Table 3. Nomenclature for PCR primers is based on nucleotide sequence numbering derived from GenBank accession no. AF030694 (1). For *pfcrt* region I, nest 1 reactions used 23327up and 24076dn and nest 2 reactions used 23402up and 23939dn (sequence-specific oligonucleotide probe hybridization assays) or 24011dn (direct DNA sequencing) covering polymorphic codons 72–76 and 97 in exon 2. For *pfcrt* region II, nest 1 reactions used 24511up and 25460dn and nest 2 reactions used 24541up and 25145dn (direct DNA sequencing) covering polymorphic codons 220 and 271 in exons 4 and 6, respectively. For *pfcrt* region III, nest 1 reactions used 25441up and 26220dn and nest 2 reactions used 25588up and 26132dn (direct DNA sequencing) covering polymorphic codons 326 and 371 in exons 9 and 11, respectively. Codon 356, which

shows polymorphism in only some of the CQR strains (2), was not analyzed in this study. Nest 1 amplification conditions were: 94°C for 3 min (1x); 94°C for 30 sec, 56°C for 30 sec, 60°C for 1 min (45x); 60°C for 3 min (1x). Nest 2 amplification conditions were: 94°C for 3 min (1x); 94°C for 30 sec, 56°C for 30 sec, 60°C for 1 min (25x); 60°C for 3 min (1x). UTR, untranslated region.

*Nucleotide coordinates based on GenBank accession no. AF030694.

†M13 Forward primer sequence (5'-GTT TTC CCA GTC ACG ACG TTG TAA AAC GAC GGC CAG-3') added as a 5' extension.

‡M13 Reverse primer sequence (5'-TGA GCG GAT AAC AAT TTC ACA CAG GAA ACA GCT ATG AC-3') added as a 5' extension.

§Probe nomenclature based on polymorphic *Pfcrt* amino acid haplotype spanning residues 72-76.

References:

1. Su, X.-Z., Kirkman, L. S., Fujioka, H. & Wellem, T. W. (1997) *Cell* **91**, 593-603.
2. Fidock, D. A., Nomura, T., Talley, A. K., Cooper, R. A., Dzekunov, S. M., Ferdig, M. T., Ursos, L. M., bir Singh Sidhu, A., Naude, B., Deitsch, K. W., *et al.* (2000) *Mol. Cell* **6**, 861-871.