

Figure S1: **Photomicrograph of agarose gel for COX III PCR.** HL is a DNA ladder (hyperladder 100 bp, Bioline, 100–1013 bp); lanes 1–18 shows a band of approximately 500 bp characteristics of COX III fragment of *P. falciparum*; lane 19 is for PF3D7 positive control gDNA

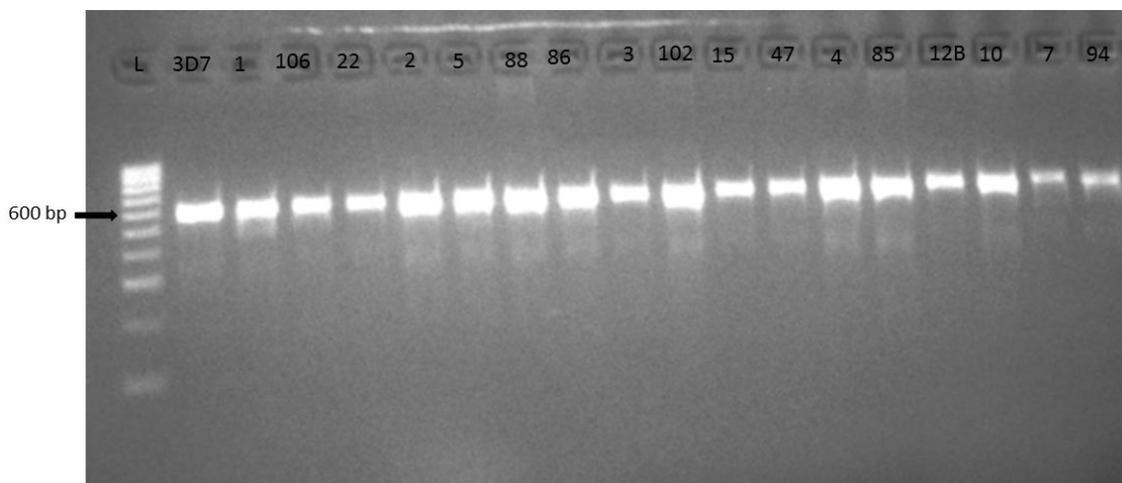


Figure S2: **Comparison of sequences of *pfmdr1* of field isolates and PF3D7.** Residues affected by mutations are highlighted in grey, with isolate MM106 exhibiting double mutations, 86Y and 184F

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                20                               40
>pf3D7_CRT  NGSRLGGGSC  LGKCAHVFKL  IFKEIKDNIF  IYILSIIYLS  VCVMNK  IFAK  50
>MM106_CRT  NGSRLGGGSC  LGKCAHVFKL  IFKEIKENIF  IYILSIIYLS  VCVIET  IFAK  50
>MM12B_CRT  NGSRLGGGSC  LGKCAHVFKL  IFKEIKENIF  IYILSIIYLS  VCVIET  IFAK  50
>MM21_CRT  NGSRLGGGSC  LGKCAHVFKL  IFKEIKDNIF  IYILSIIYLS  VCVMET  IFAK  50
>MM1_CRT   NGSRLGGGSC  LGKCAHVFKL  IFKEIKDNIF  IYILSIIYLS  VCVMNK  IFAK  50
>MM5_CRT   NGSRLGGGSC  LGKCAHVFKL  IFKEIKDNIF  IYILSIIYLS  VCVMNK  IFAK  50

                60                               80
>pf3D7_CRT  RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKKGNS  89
>MM106_CRT  RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKKGNS  89
>MM12B_CRT  RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKKGNS  89
>MM21_CRT  RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKKGNS  89
>MM1_CRT   RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKR  GNS  89
>MM5_CRT   RTLNKIGNYS  FVTSETHNF  I  CMIMFFIVYS  LFGNKN  GNS  89

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Figure S3: **Comparison of sequences of *pfCRT* of field isolates and PF3D7.** Residues affected by mutations are highlighted in grey, with MM106 and MM12B exhibiting D57E mutation, in addition

to being a CVIET haplotype.

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                20          40          60          80
> pf3D7  EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80
> MM85  EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80
> MM88  EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80
> MM94  EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80
> MM102 EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80
> MM106 EKKDGNLSIK  EEVEKELNKK  STAELFRKIK  NEKISFLLPF  KCLPAQHRKL  LFI SFVCAVL  SGGTLPFFIS  VFGVILKNMN 80

                100       120       140       160
> pf3D7  LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160
> MM85  LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160
> MM88  LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160
> MM94  LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160
> MM102 LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160
> MM106 LGDDINP I I L  SLVSI GLVQF  ILSMIS SYCM  DVITSKILKT  LKLEYLRSVF  YQDQQFHDNN  PGSKLRSDLD  FYLEQVSSGI 160

                180       200
> pf3D7  GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203
> MM85  GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203
> MM88  GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203
> MM94  GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203
> MM102 GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203
> MM106 GTKFITIFTY  ASSFLGLFIW  SLIKNARLTL  CITCVFPLIY  VCG 203

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Figure S4: Photomicrograph of agarose gel for *pfmdr1*. L is a DNA ladder (hyperladder 100 bp, Bioline, 100–1013 bp); lane 2 is PF3D7 positive control gDNA, and 3–18 show bands of approximately 610 bp, characteristic of the *pfmdr1* fragment encompassing the 86th and 184th codons.

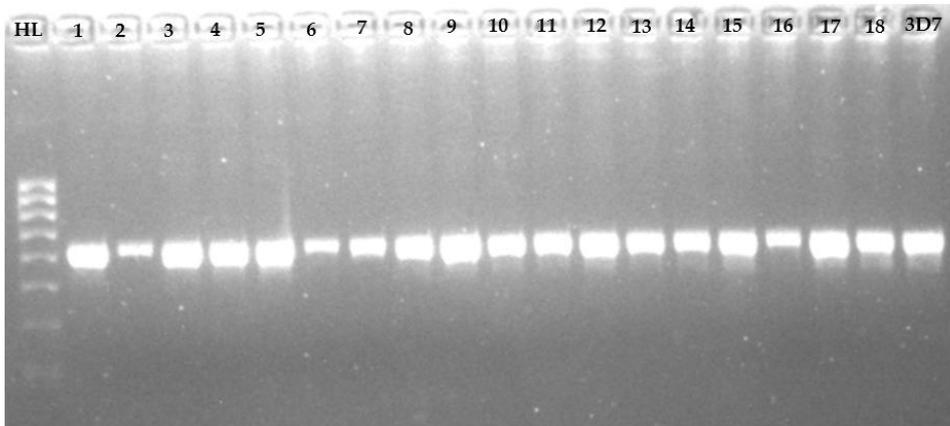


Figure S5: Photomicrograph of agarose gel for *pfprt*. L is a DNA ladder (hyperladder 100 bp, Bioline, 100–1013 bp); lanes 2–19 are 267 bp *pfprt* fragments encompassing codons 72–76; lane 20 is for PF3D7 positive control gDNA.