**S1 Table. Primer sequences used to introduce mutations into the PfCRT coding sequence via site-directed mutagenesis.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Template** | **Mutation** | **Forward PCR primer 5’ -> 3’**a | **Reverse PCR primer 5’ -> 3’**a | **Resulting construct** |
| bPfCRTK1 | T76K | GTTGTGTCATTGAAaagATTTTTGCGAAGAG | CTCTTCGCAAAAATcttTTCAATGACACAAAC | 76K-PfCRTK1 |
| PfCRTK1 | T76N | GTTTGTGTCATTGAAaatATTTTTGCGAGAAC | GTTCTCTTCGCAAAAATattTTC | 76N-PfCRTK1 |
| PfCRTK1 | T76I | GTTTGTGTCATTGAAattATTTTTGCGAAGAGAAC | CTCTTCGCAAAAATaatTTCAATGACACAAAC | 76I-PfCRTK1 |
| 76I-PfCRTK1 | C72R | CTACCTGTCTGTTagaGTCATTGAAATT | AATTTCAATGACtctAACAGACAGGTAG | 72R,76I-PfCRTK1 |
| 76I-PfCRTK1 | Q352K | GATTGTTTCTTGTATCaaaGGGCCCGCC | GGCGGGCCCtttGATACAAGAAACAATC | 76I,352K-PfCRTK1 |
| 76I-PfCRTK1 | Q352R | GTTTCTTGTATCcgaGGGCCCGC | GTGGCGGGCCCtcgGATACAAG | 76I,352R-PfCRTK1 |
| 76I-PfCRTK1 | V369F | CGAttcGTGATTGAAC | TCACgaaATCGCCCGCCAG | 76I,369F-PfCRTK1 |
| PfCRTK1 | S163R | GCTGagaATTCCCATAAC | GGGAATtctCAGCTGTAGAAC | 163R-PfCRTK1 |
| 163R-PfCRTK1 | T356V | GCCgtgGCGATCGCGTATTACTTCAAATTCC | GTAATACGCGATCGCcacGGCGGGCCCC | 163R,356V-PfCRTK1 |

aMutated codons are shown in lowercase.

bThe PCR template was a codon-harmonized version of the PfCRTK1 sequence that encodes a retention motif-free form of the protein, and which therefore localizes to the oocyte plasma membrane [[30](#_ENREF_1), [42](#_ENREF_2)].