

**Supplemental Table 1**

**Primers used for site-directed mutagenesis**

Sequence (5'-3')	
G30R	GATCCATTGCTGAAATG <u>AGGG</u> CTTATGTCAGCTTG
A31T	CCATTGCTGAAATGGGG <u>ACTT</u> TATGTCAGCTTGCTG
M44K	ATTGAAGG <u>CAAG</u> ATTCTTCTT
L50P	CTTAGTGA <u>ACC</u> ATCCAGAAGG
S51A	AGTGAATTAG <u>CC</u> CAGAAGGC
S51D	AGTGAATTAG <u>AC</u> AGAAGGC
K79D	GACAAAGAAG <u>AT</u> GGATATATT
Y81D	GAAAAAGG <u>AG</u> ATATTGATTG
D83A	CAAAGAAAAAGGATATT <u>G</u> CTTGTCAAAAGAAGAGTTTC

The mutated residues are shaded and mutant codons are underlined.