

Mutation	Primer
A30P	Forward: 5'-GGGTGTGGCAGAAGCACCAGGAAAGACAAAAGA-3' Reverse: 5'-TCTTTTGTCTTTCCTGGTGCTTCTGCCACACCC-3'
E46K	Forward: 5'-TAGGCTCCAAAACCAAGAAGGGAGTGGTGCATGG-3' Reverse: 5'-CCATGCACCACTCCCTTCTTGGTTTTGGAGCCTA-3'
H50Q	Forward: 5'-GGAGGGAGTGGTGCAGGGTGTGGCAACAG-3' Reverse: 5'-CTGTTGCCACACCCTGCACCACTCCCTCC-3'
G51D	Forward: 5'-GGGAGTGGTGCATGATGTGGCAACAGTGG-3' Reverse: 5'-CCACTGTTGCCACATCATGCACCACTCCC-3'
A53T	Forward: 5'-GAGTGGTGCATGGTGTGACGACAGTGGCTGAGAAGAC-3' Reverse: 5'-GTCTTCTCAGCCACTGTCGTCACACCATGCACCACTC-3'
E35K	Forward: 5'-CAGAAGCAGCAGGAAAGACAAAAAAGGGTGTCTCT-3' Reverse: 5'-AGAGAACACCCTTTTTTGTCTTTCCTGCTGCTTCTG-3'
E57K	Forward: 5' GTGGCAACAGTGGCTAAGAAGACCAAAGAGC 3' Reverse: 5' GCTCTTTGGTCTTCTTAGCCACTGTTGCCAC 3'
A56P	Forward: 5'-GGTGTGGCAACAGTGCCTGAGAAGACCAAAG-3' Reverse: 5'-CTTTGGTCTTCTCAGGCACTGTTGCCACACC-3'
A76P	Forward: 5'-TGACGGGTGTGACACCAGTAGCCCAGAAG-3' Reverse: 5'-CTTCTGGGCTACTGGTGTACACCCGTCA-3'
S129A	Forward: 5'CTTATGAAATGCCTGCTGAGGAAGGGTATC-3' Reverse: 5'GATACCCTTCCTCAGCAGGCATTTTCATAAG-3'
S129D	Forward: 5'-GGCTTATGAAATGCCTGATGAGGAAGGGTATCAAG-3' Reverse: 5'-CTTGATACCCTTCCTCATCAGGCATTTTCATAAG CC-3'
S129G	Forward: 5'-GACAATGAGGCTTATGAAATGCCTGGTGGAGGAAGGGTATC-3' Reverse: 5'-GATACCCTTCCTCACCAGGCATTTTCATAAGCCTCATTGTC-3'
S87A	Forward: 5'-AAGACAGTGGAGGGAGCAGGGGCCATTGCAGCAG-3' Reverse: 5'-CTGCTGCAATGGCCCCCTGCTCCCTCCACTGTCTT-3'
S87E	Forward: 5'-ACAGTGGAGGGAGCAGGGGAAATTGCAGCAGC-3' Reverse: 5'-GCTGCTGCAATTTCCCCTGCTCCCTCCACTGT-3'
Y125F	Forward: 5'-GGATCCTGACAATGAGGCTTTTGAAATGCCTTCTGA-3' Reverse: 5'-TCAGAAGGCATTTCAAAGCCTCATTGTCAGGATCC-3'
Y125D	Forward: 5'-GATCCTGACAATGAGGCTGATGAAATGCCTTCTGAGG-3' Reverse: 5'-CCTCAGAAGGCATTTTCATCAGCCTCATTGTCAGGATC-3'
K96R	Forward: 5'-GCCACTGGCTTTGTCAGAAAGGACCAGTTGGGC-3' Reverse: 5'-GCCCAACTGGTCCTTTCTGACAAAGCCAGTGGC-3'
K102R	Forward: 5'-AAGGACCAGTTGGGCAGGAATGAAGAAGGAGCC-3' Reverse: 5'-GGCTCCTTCTTCATTCCTGCCCAACTGGTCCTT-3'