

## Supporting information

**S1 Table. List of PCR primers used in mutagenesis**

Site mutation	Mutation primer sequence
T33A/Y35F	P1: CTCTGATCATCAACGCCTTCTTCTCCAACAAGGAGA P2: TCTCCTTGTTGGAGAAGAAGGCGTTGATGATCAGAG
T33D	P1: CTCTGATCATCAACGACTTCTACTCCAACAAG P2: CTTGTTGGAGTAGAAGTCGTTGATGATCAGAG
T33E	P1: CTCTGATCATCAACGAGTTCTACTCCAACAAG P2: CTTGTTGGAGTAGAACTCGTTGATGATCAGAG
T87A	P1: AAGAGCGCACGCTGGCCATCATCGACACC P2: GGTGTCGATGATGGCCAGCGTGCGCTCTT
T87E	P1: AAGAGCGCACGCTGGAGATCATCGACACCGG P2: CCGGTGTCGATGATCTCCAGCGTGCGCTCTT
D90A	P1: CGCTGACCATCATCGCCACCGGCATCGGCAT P2: ATGCCGATGCCGGTGGCGATGATGGTCAGCG
G94D	P1: TCGACACCGGCATCGACATGACCAAAGCTGA P2: TCAGCTTTGGTCATGTCGATGCCGGTGTCTGA
T181A	P1: ATCAATTGGACGTGGTGCCAAAGTCATTCTCCAC P2: GTGGAGAATGACTTTGGCACCACGTCCAATTGAT
K206R	P1: GGAAGTGGTGAAGAGGCACTCTCAGTT P2: AACTGAGAGTGCCTCTTCACCACTTCC
K287R	P1: GCTGAATAAGACCAGGCCGATCTGGACC P2: GGTCCAGATCGGCCTGGTCTTATTCAGC
K287Q	P1: GCTGAATAAGACCCAGCCGATCTGGACC P2: GGTCCAGATCGGCTGGGTCTTATTCAGC
K608R	P1: GGAGAGGATCATGAGGTCTCAGGCTCT P2: AGAGCCTGAGACCTCATGATCCTCTCC