

Supplemental Table I. Primers used in this study.

Primers name	Sequence
PGIP2.Q224K Fw	CGGATCAGATAAGAACACGAAGAAGATACATCTGGCGAAG
PGIP2.Q224K Rv	CTTCGCCAGA TGTATCTTCTTCGTGTTCTT ATCTGATCCG
PGIP2.Q224E Fw	CGGATCAGATAAGAACACGGAGAAGATACATCTGGCGAAG
PGIP2.Q224E Rv	CTTCGCCAGA TGTATCTTCTCCGTGTTCTTATCTGATCCG
FvPGEcoFw	ACCTGAGAATTTCGATCCCTGCTCCGTGAC
FvPGXbaRv	GCCTATCTAGACTAGCTGGGGCAAGTGT
FwFpK116E	CAGGCGTACTGGGATGGCGAAGGTTCTAACAGCAATAGC
RvFpK116E	GCTATTGCTGTTAGAACCTTCGCCATCCCAGTACGCCTG
FwFpS120N	GGATGGCAAAGGTTCTAACACAATAGCAACCAAAAGCCCG
RvFpS120N	CGGGCTTTTGGTTGCTATTGTTGTTAGAACCTTTGCCATCC
FwFpN121K	GGCAAAGGTTCTAACAGCAAGAGCAACCAAAAGCCCGATC
RvFpN121K	GATCGGGCTTTTGGTTGCTCTTGCTGTTAGAACCTTTGCC
FwFpS122D	GGCAAAGGTTCTAACAGCAATGACAACCAAAAGCCCGATCAC
RvFpS122D	GTGATCGGGCTTTTGGTTGTCATTGCTGTTAGAACCTTTGCC
FwFpQ124P	GTTCTAACAGCAATAGCAACCAAAAGCCCGATCACTTCATCG
RvFpQ124P	CGATGAAGTGATCGGGCTTTGGGTTGCTATTGCTGTTAGAAC
FwFpA274T	GCATCAAGTCCAACCTCTGGCACAACCTGGCACGATCAACAACG
RvFpA274T	CGTTGTTGATCGTGCCAGTTGTGCCAGAGTTGGACTTGATGC
FwFpS120N-N121K	GGGATGGCAAAGGTTCTAACACAAGGACAACCAAAAGCCCGATCA C
RvFpS120N-N121K	GTGATCGGGCTTTTGGTTGTCCTTGTTGTTAGAACCTTTGCCATCCC
FwFpL303E	GTCGATGTTCAGCAGGACTATGAGAACGGCGGCCCTACTGGAAAG
RvFpL303E	CTTTCCAGTAGGGCCGCCGTTCTCATAGTCCTGCTGAACATCGAC
FwFpK310T	CGGCGGCCCTACTGGAACGCCGACCAACGGAGTCAA
RvFpK310T	TTGACTCCGTTGGTTCGGCGTTCCAGTAGGGCCGCCG
FwFpS363K	GGTGGTGGCAAGACTAGCAAGTGCAACTATCCTACCAACACT
RvFpS363K	AGTGTTGGTAGGATAGTTGCACTTGCTAGTCTTGCCACCACC
FwFvT274A	GCATCAAGTCCAACCTCTGGAGCAACTGGCACGATCAACAACG
RvFvT274A	CGTTGTTGATCGTGCCAGTTGCTCCAGAGTTGGACTTGATGC
FwFvL303E	GTCGATGTCCAGCAAGATTATGAGAACGGCGGTCCTACTGGAAAG
RvFvL303E	CTTTCCAGTAGGACCGCCGTTCTCATAATCTTGCTGGACATCGAC