

**Supplementary Table 2:** Primers used in this study. Underline sequence indicates restriction site and bold sequence indicate the substituted codon.

Sequence (5'-3')	Location
GACAGAATT <u>CCCATATGAATCTATCGAACACATTCTGCGG</u>	BprV and BprB 5' region
CTGTAAGCTT <u>CTCGAGACGATTTGATCGCCTAAACAGC</u>	BprV and BprB 3' region
GAGTTGGCGGCCG <u>A</u> CGGTGGTTGTTCAC	BprB.D180G mutagenesis (sense)
GCGTTGTGA <u>ACTTGTGAACAACCACCGTCG</u>	BprB.D180G mutagenesis (anti-sense)
GTTATTAA <u>ATATGAGTTGGCGGCCGGT</u> GATTG	BprB.D182G mutagenesis (sense)
GA <u>ACTTGTGAACAATCACGCCGCC</u> CCC	BprB.D182G mutagenesis (sense)