**Fig. 8.** A modeled view of the active site of wild type (A), E191Q (B) and E191D (C) mutants. The position of the nucleophile (E406) and proposed acid/base catalyst (E191) and its substitution with Q and D are indicated as stick-ball form. Amino acid numbering is given with respect to the sequence of the mature Glu1 isozyme. Note that substitution of E191 with Q and D gives rise to a steriochemical change between two active site residues.