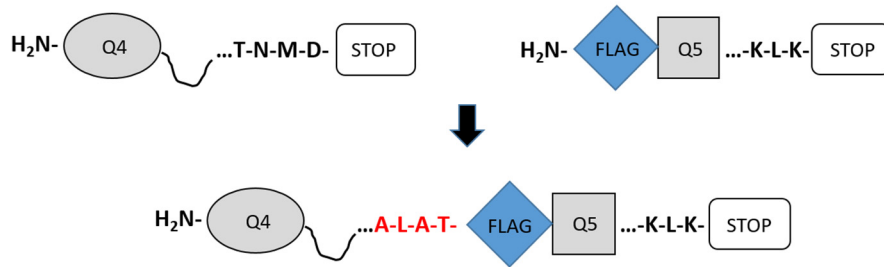
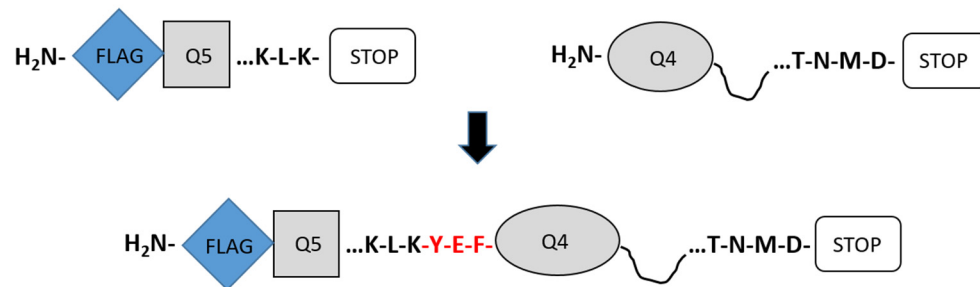


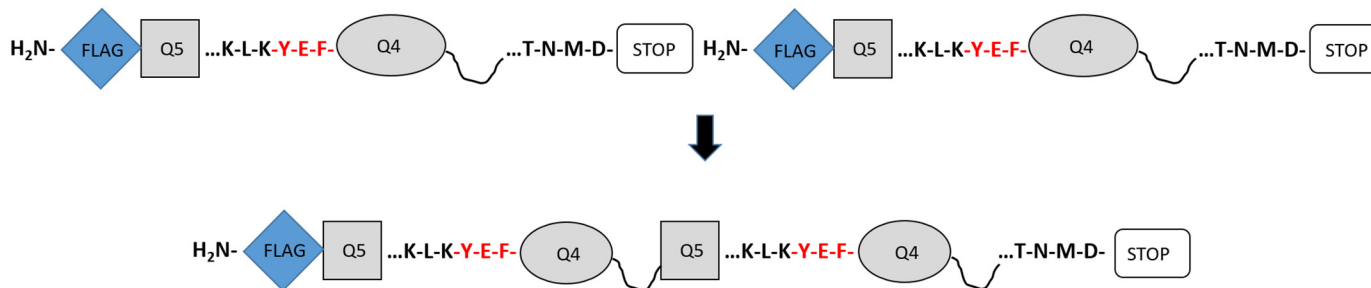
**A) Q4-Q5 Dimer:** Q5-FLAG replaces T-N-M-D-STOP, inserting A-L-A-T



**B) Q5-Q4 Dimer:** Q4 replaces Q5 STOP codon, inserting Y-E-F



**C) Q5-Q4-Q5-Q4:** Two Q5-Q4 dimers are joined eliminating 1<sup>st</sup> Q4 C-terminus (Q-T-L-S-I-S-R-S-V-S-T-N-M-D-STOP) and 2<sup>nd</sup> FLAG



**Figure S1. Construction of Concatenated Kv7 Subunits.** Schematic representations of a) Q4-Q5; b) Q5-Q4; and c) Q5-Q4-Q5-Q4 constructs. Amino acids inserted as a result of the cloning strategy are shown in red.