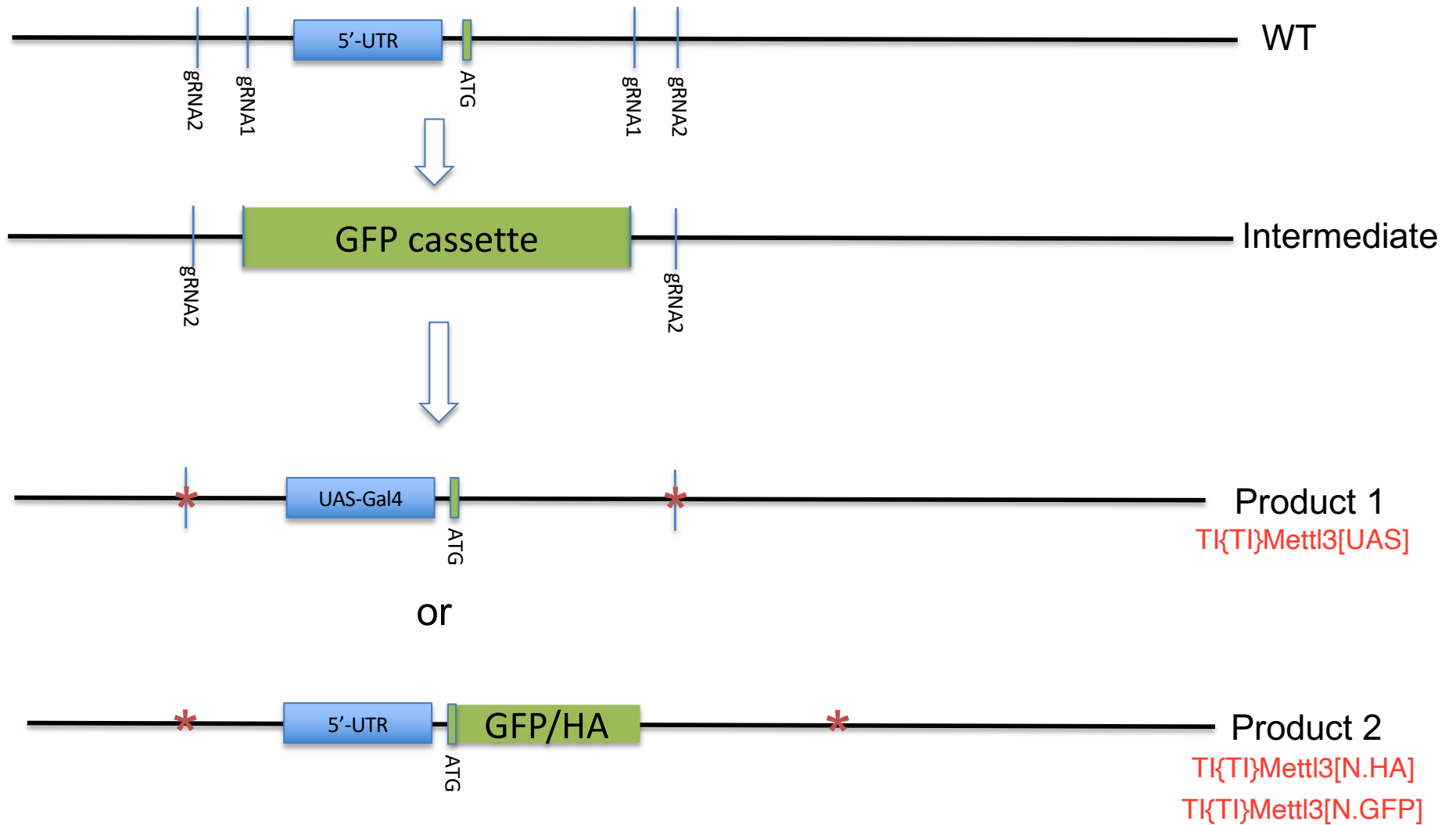
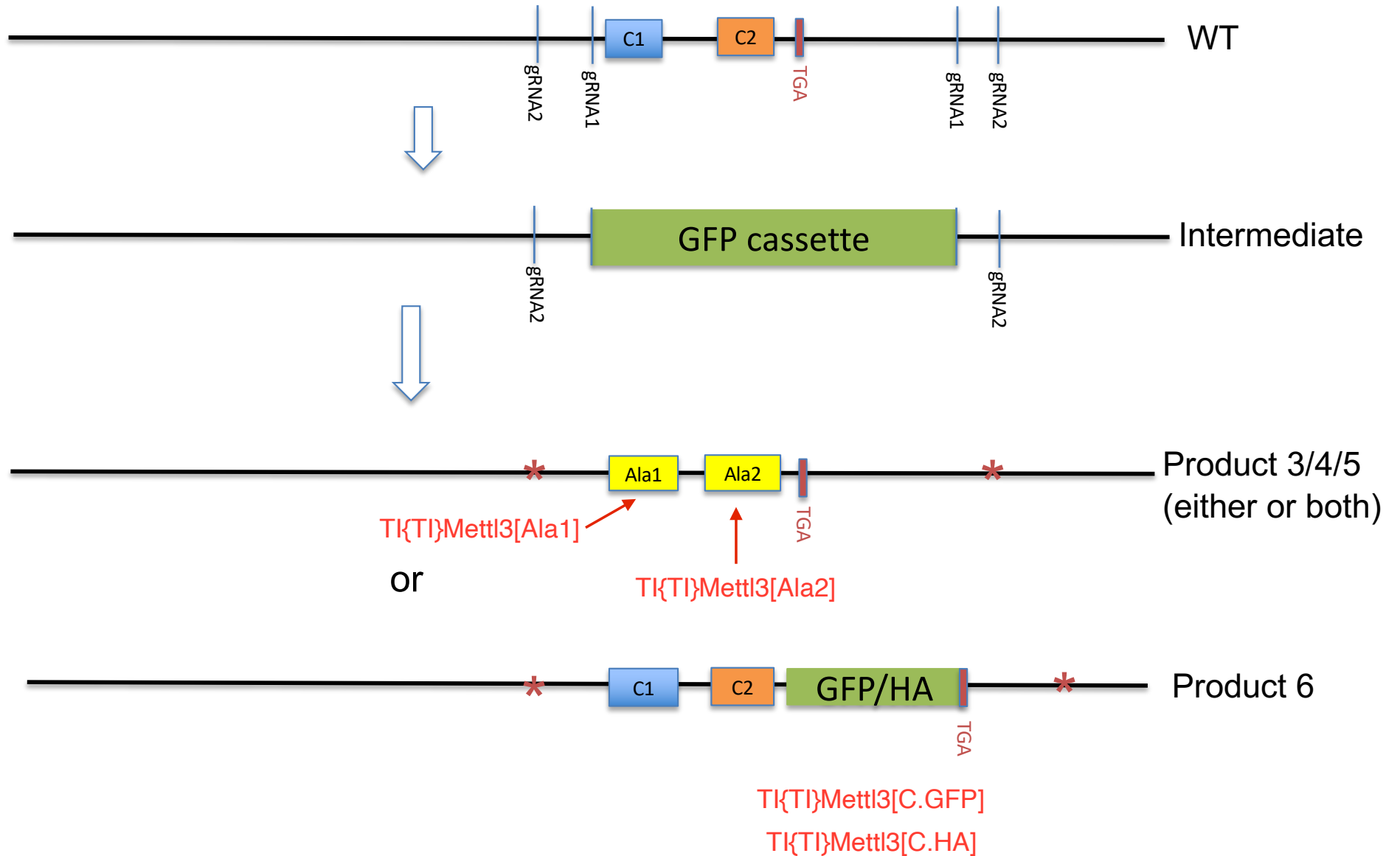


Deletion of N-terminal region



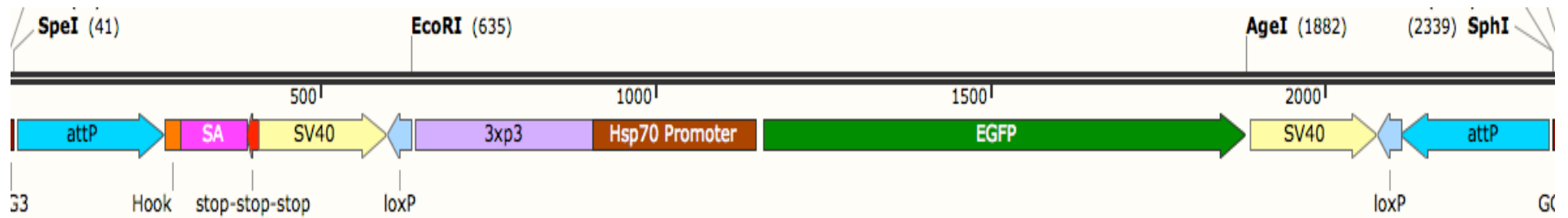
* Silent mutation on PAM region of gRNA2 target sequence in the donor DNA so that CRISPR/Cas9 will not re-attack the recombinant DNA.

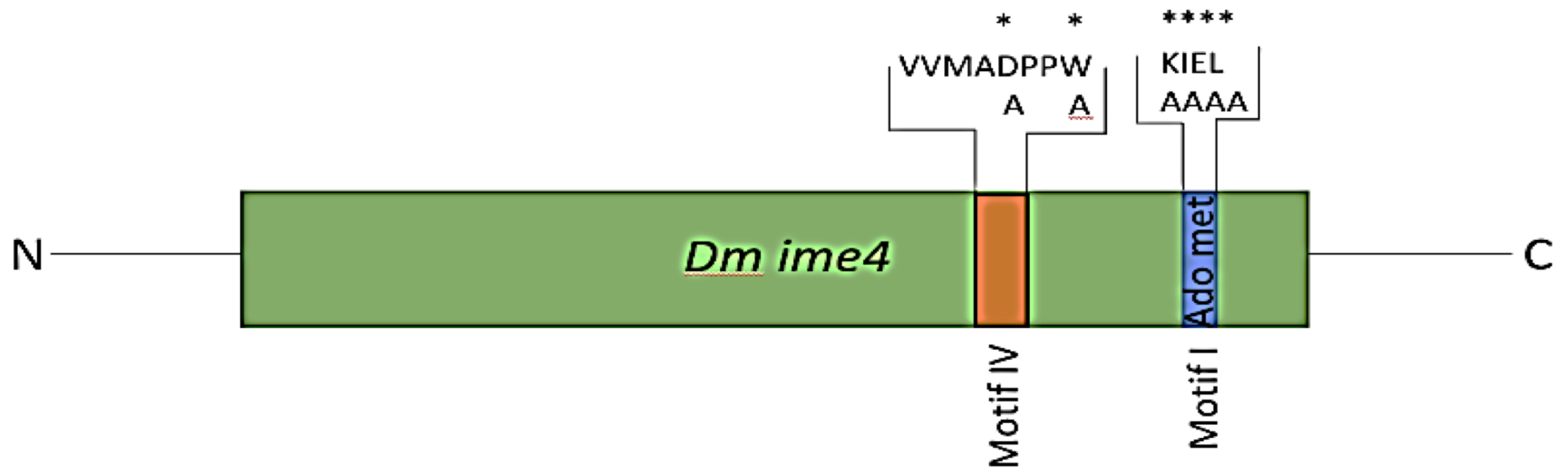
Deletion of C-terminal region



Details of the GFP cassette inserted and eventually replaced by a subsequent CRISPR/HR

Our GFP cassette





Motifs I and IV: residues with asterisks were replaced by Alanines.

These are the two motifs replaced in the Mettl3[Ala1] and Mettl3[Ala2] insertions.

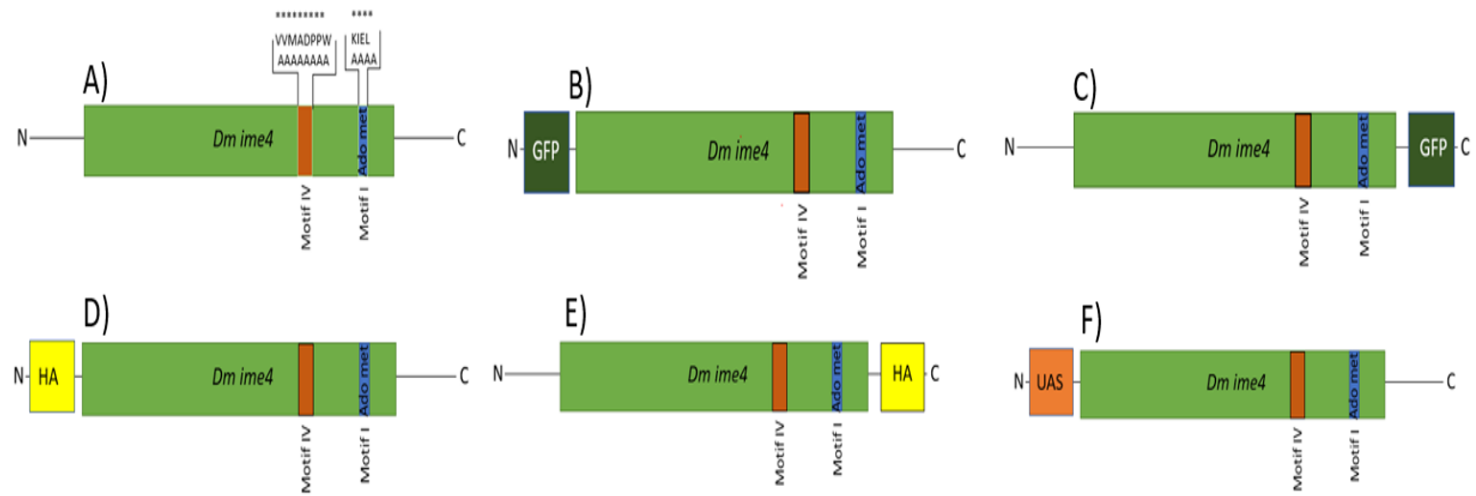


Figure 2.1. Mutations in *Dm ime4* generated by Genetivision. A) Alanine amino acid substitutions in motif I and motif IV. B) Addition of GFP tag on the N-terminal end. C) Addition of GFP tag on the C-terminal end. D) Addition of HA tag on the N-terminal end. E) Addition of HA tag on the C-terminal end F) Addition of UAS construct at the N-terminal end.