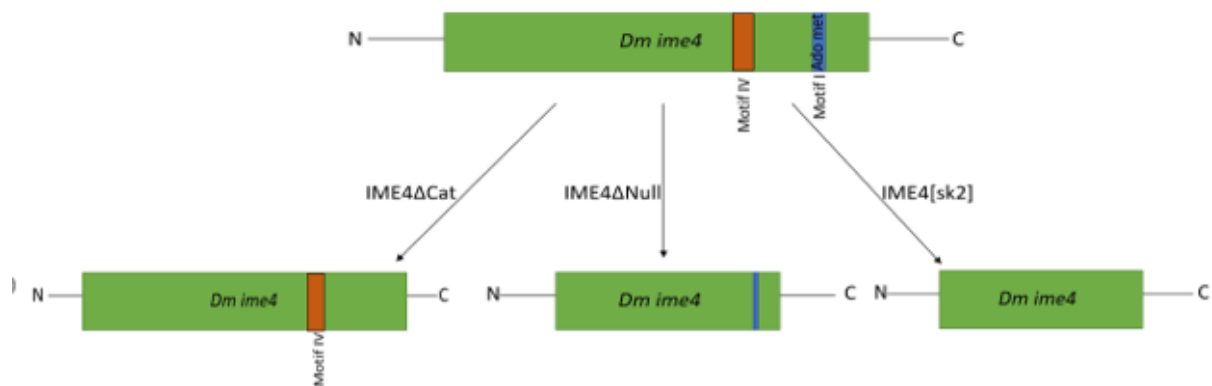**Supplemental Figure 1. Mutations in *Dm ime4* generated by CRISPR gene editing.** A) Alanine amino acid substitutions in motif I and motif IV. B) Addition of GFP tag on the N-terminal end. C) Addition of GFP tag on the C-terminal end. D) Addition of HA tag on the N-terminal end. E) Addition of HA tag on the C-terminal end F) Addition of UAS construct at the N-terminal end.

Supplemental Figure 2. Deletions in *Dm ime4* generated by CRISPR gene editing. Three different deletion alleles are shown *ime4ΔCat* (catalytic domain deleted), *ime4ΔNull* (SAM binding domain and portions of catalytic domain deleted) and *ime4[sk2]* (catalytic domain and SAM binding domain deleted).