



Figure S4 The predicted structure of duplications induced by NAHR (Non-Allelic Homologous Recombination) or UCO

(Unequal Crossover). Prior to NAHR or UCO, the progenitor gene may consist of 10 exons (labeled here as 1-9, plus 12). Two copies of *PIF-Harbinger* MITE elements (in blue lines) are located in introns 7 and 9, and the segment to be duplicated is indicated by the grey shaded arrowhead. Both MITE elements contain sequence degraded 5' termini (solid, partial triangles) and intact 3' termini (open triangles). TSDs ("TAA") flanking the MITES are shown as black vertical lines.

- A. NAHR/UCO occurs between the proximal and distal MITE elements on sister chromatids. Crossing over is indicated by the grey dotted line.
- B. The resulting duplication structure. Note that this NAHR/UCO mechanism predicts the presence of a third MITE element inserted at the duplication endpoint in intron 7.