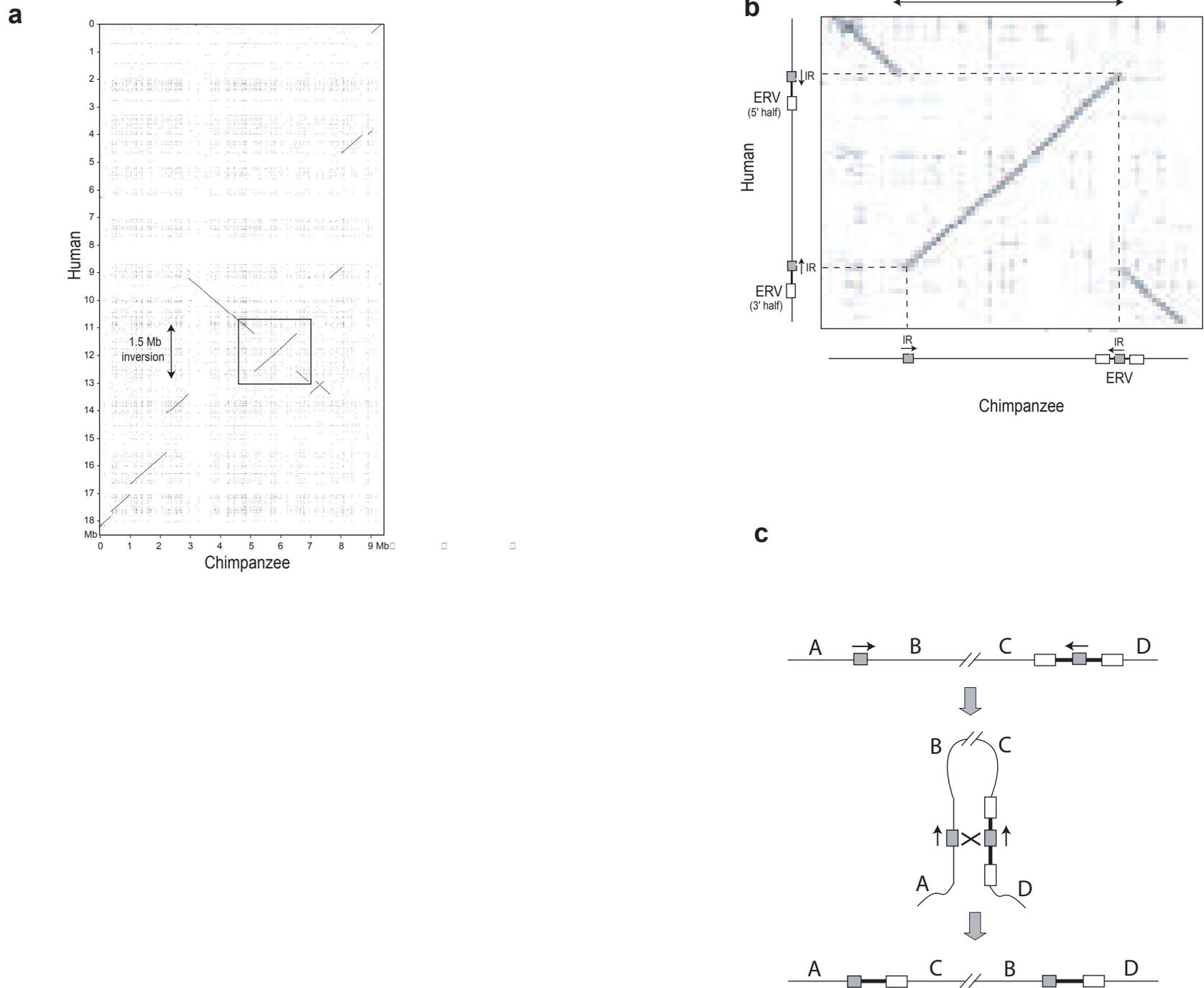


Supplementary Figure 3



Supplementary Figure 3 1.5-Mb inversion in the human lineage is mediated by homologous recombination between 6 bp inverted repeats. **a.** Dot-plot from Supplementary Figure 1. The boundaries of the 1.5-Mb inversion are boxed. **b.** The area in the box from part a is enlarged. The dotted lines show the positions of the inversion breakpoints on the axes. The relative positions of the inverted repeat and the intact and disrupted ERV elements in the chimpanzee and human sequences are shown next to each axis (not to scale). The orientation of each 6 bp repeat element is indicated by an arrow. **c.** Schematic model for the recombination event. The bottom figure represents the present-day human sequence. Letters A-D denote Y chromosomal sequence located upstream and downstream of each element.

This inversion was mediated by recombination between a pair of 6 bp repeats in inverted orientation, which are positioned at the breakpoints of the inversion (b). One of the repeat sequences is located in an ERV element, which was disrupted in the human sequence by the recombination event (c).