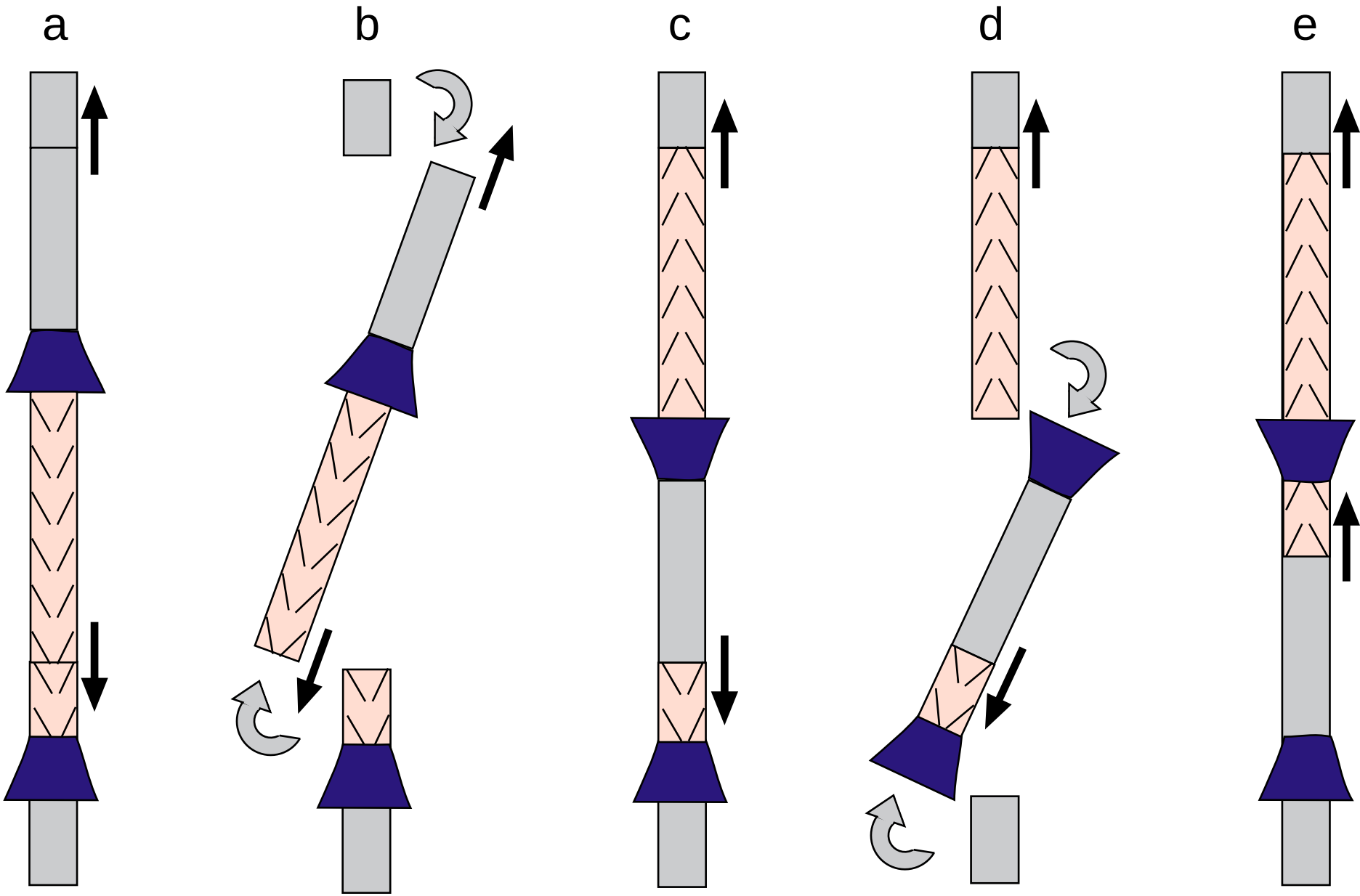
Supplementary Figure 5



Yp evolution. Inversion through LINE-LINE recombination that disrupted X-transposed block [Schwartz A, *et al*. *Hum Mol Genet* **7**, 1 (1998)] and at the same time created massive inverted duplication IR3, responsible for Yp inversion polymorphism [Tilford CA, *et al*. *Nature* **409**, 943 (2001)].
(a) X transposed block (pink), flanked by 300-kb direct repeats (blue). Black arrows indicate LINE 1 insertions in opposite orientation.
(b) Inversion caused by LINE-LINE recombination disrupted X-transposed block and reversed one of the repeat units.
(c) Resulting chromosome corresponds to previously published map [Foote S, *et al. Science* **258**, 60 (1992)].
(d) Inversion caused by IR3/IR3 recombination changed orientation of short X/Y homologous block.
(e) Resulting chromosome corresponds to RPCI-11 sequence. Notice absence of any intervening sequence between distal IR3 unit and short and long X/Y homologous blocks.