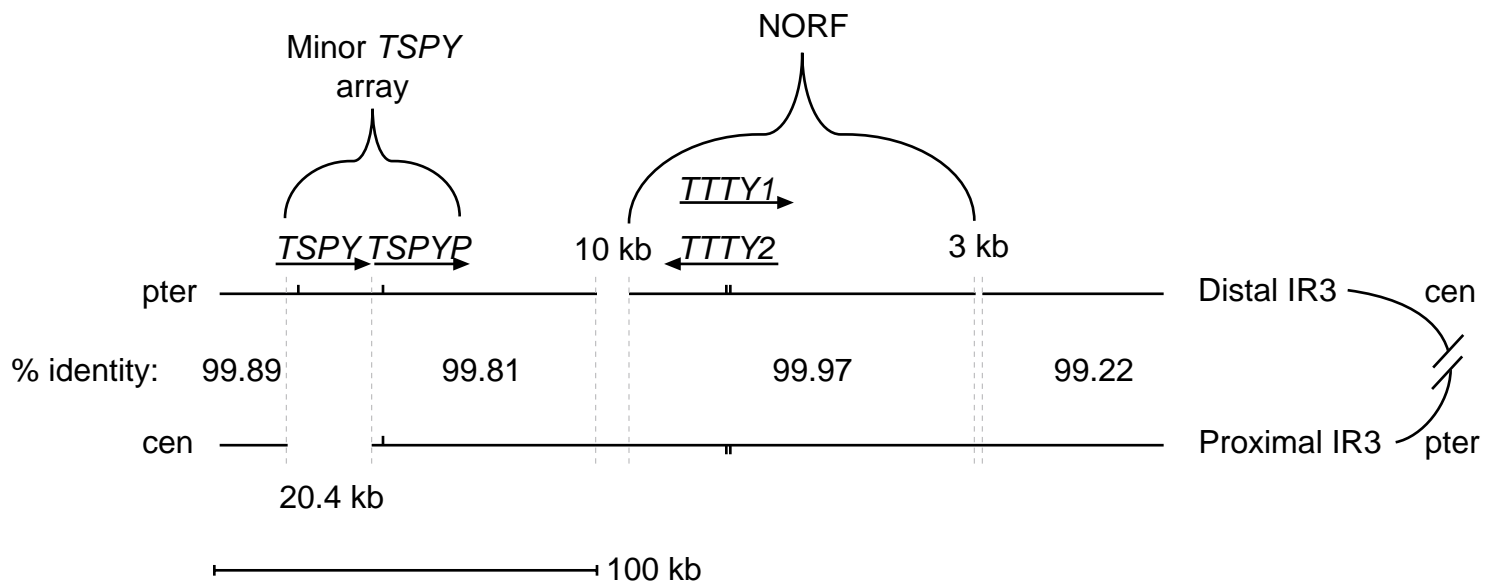


## Supplementary Figure 6



**Schematic alignment of the two copies of IR3.** The IR3 copies are found at positions ~3.5 Mb and ~7.4 Mb, on the MSY short arm (Figure 2a and Supplementary Figure 2a). Deletions/insertions between the distal and proximal copies of IR3 demark four regions, each characterized by a different level of sequence similarity between the two copies. The third of these regions consists entirely of NORF sequence and shows the highest sequence similarity—99.97%. This similarity is the same as that typically observed between arms of MSY palindromes (Table 2).

Transcripts *TTTY1* and *TTTY2* are indicated by small rectangles, and arrows indicate the direction of transcription. Other transcripts in IR3 are not shown; see Figure 2h and Supplementary Figure 2h.

The distal copy of IR3 contains the minor *TSPY* array, which consists of two 20.4-kb repeat units. Within the minor *TSPY* array, the distal 20.4 repeat unit contains an apparently intact copy of *TSPY*, and the proximal unit contains a diverged *TSPY* pseudogene. The 20.4-kb *TSPY* repeat unit that contains the intact *TSPY* gene is deleted in the proximal copy of IR3.