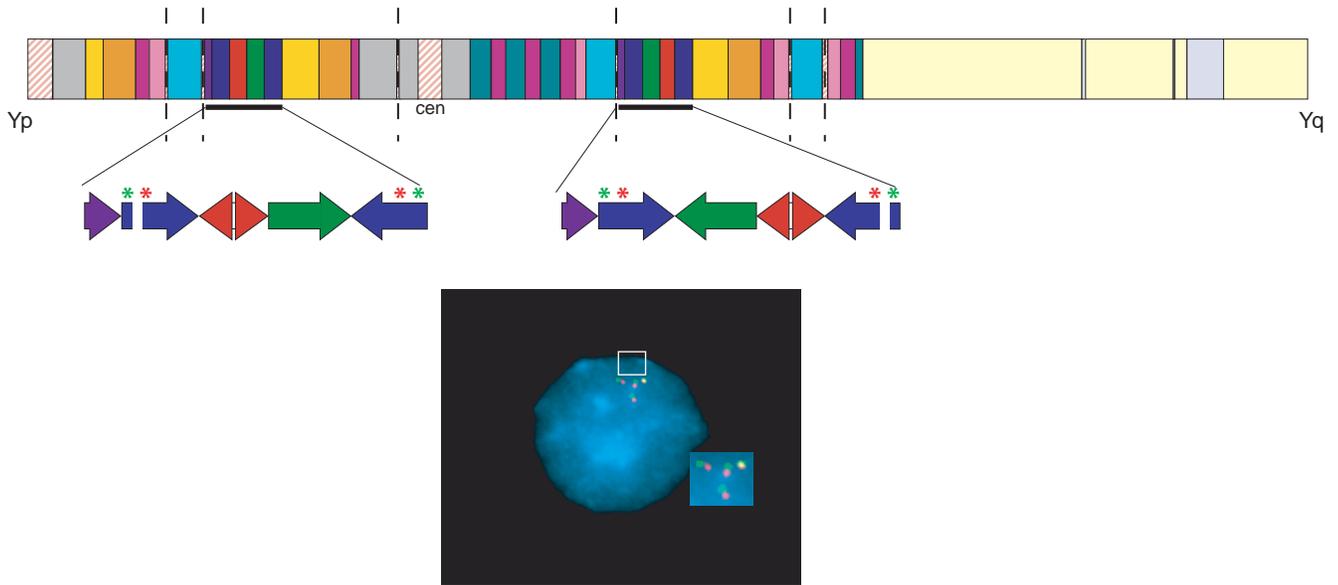
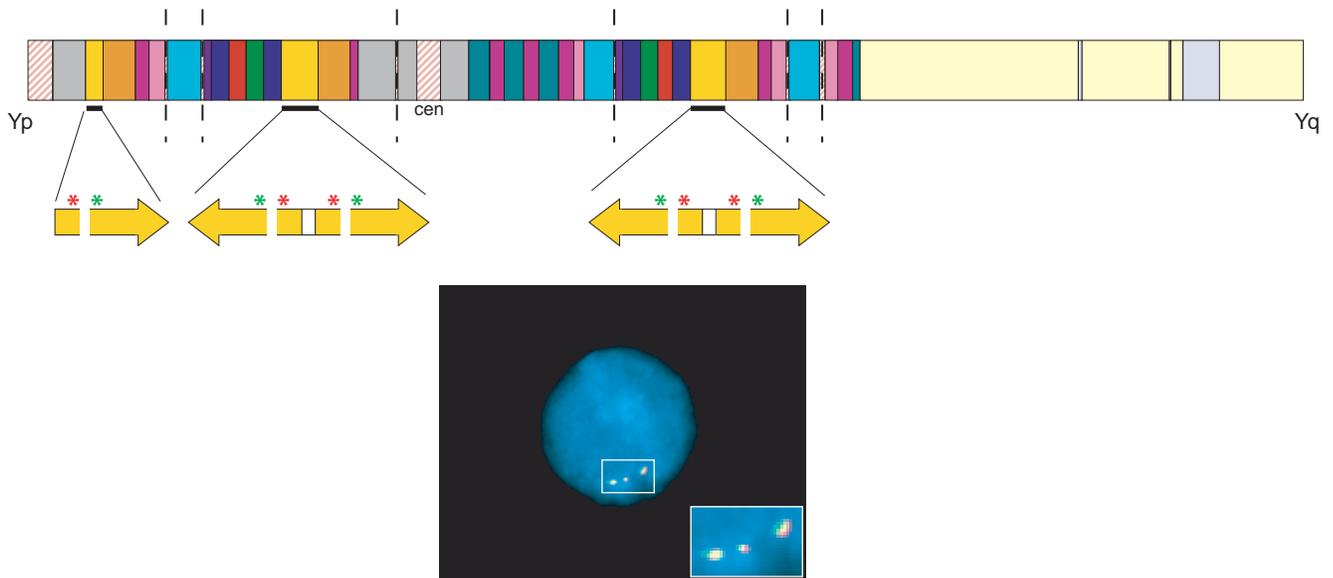


a AZFc gap - CH1251-6348J07 (red), CH1251-4427P11 (green)



b CDY gap - RP11-268K13 (red), RP11-144F19 (green)



Supplementary Figure 4 Two-color interphase FISH results support the conclusion that gaps within contigs 1, 2, and 4 are small. For all experiments, nuclei are in G1. a. Gaps within AZFc-like regions in contigs 2 and 4. Gaps are in the blue amplicon. There are two copies of the blue amplicon in each contig 2 and 4, but only one copy of the blue amplicon in each contains a gap. The two chimpanzee fosmid probes border each side of the gap. One was labeled red and the other green. In all cases, the red and green probes were seen to overlap (producing a yellow signal) or nearly overlap. Alignment of sequence bordering gaps to un-gapped blue amplicon sequence elsewhere in the chimp MSY indicates that the gaps are roughly 30 kb in size. b. Gaps within the P5-like palindromes in contigs 1, 2 and 4. Gaps are in each of the arms of the two full copies and one partial copy of the palindrome. The two human BAC probes border each side of the gap. One was labeled red and the other green. In all cases, the red and green probes were seen to overlap (producing a yellow signal). The two arms of the full-length palindromes do not produce distinct signals. Alignment of sequence bordering gaps to un-gapped human sequences indicates that the gaps are roughly 15 kb in size.