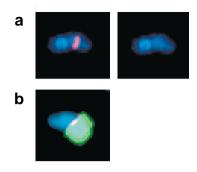
Supplementary Figure 3



Chromosomal FISH (fluorescence in situ hybridization) analysis of selected heterochromatic landmarks. a, left panel: Hybridization of a DYZ19 BAC (red; BAC RP11-1325K03; GenBank accession AC079261) to a DAPI (blue)stained metaphase Y chromosome. Right panel: DAPI staining alone, revealing slight diminution of DAPI staining ("grey band") at site of DYZ19 hybridization. b, Co-hybridization of two BACs to a DAPI (blue)-stained metaphase Y chromosome. The first BAC (red; RP11-1136L22; GenBank AC073880) spans the Yq11 euchromatin/Yq12 heterochromatin boundary; its heterochromatic portion is composed exclusively of DYZ18 sequences. The second BAC (green; RP11-242E13; GenBank AC068123) is composed exclusively of DYZ1 sequences. The observed yellow signal at the proximal edge of the heterochromatic region results from the superposition of red and green signals.