



**Fig. 2.** Locations and orientations of Yp–Yq inverted repeats on the human Y chromosome. (A) Schematic representation of the human Y chromosome. The male-specific region of the Y chromosome, or MSY, is flanked by two pseudoautosomal regions, PAR1 and PAR2 (green), and contains blocks of heterochromatin (orange). (B) Inverted repeats IR1 and IR4 are composed of one amplicon on the short arm (Yp) and one amplicon on the long arm (Yq). In addition, segments of IR1 are repeated distally to IR1 on Yq in the highly ampliconic AZFc region: IR1-b3, IR1-g2, IR1-g3, and IR1-b4. (C) Triangular dot plot of the reference sequence shows length and orientation of each repeat pair. Each dot represents a 100% match over a window of 100 bp. Repeat elements have been masked. Inverted repeats appear as vertical lines, direct repeats as horizontal lines. Diagonal shading added to highlight the inverted repeats studied here. A magnification of the region bounded by the rectangle is schematized at bottom left.