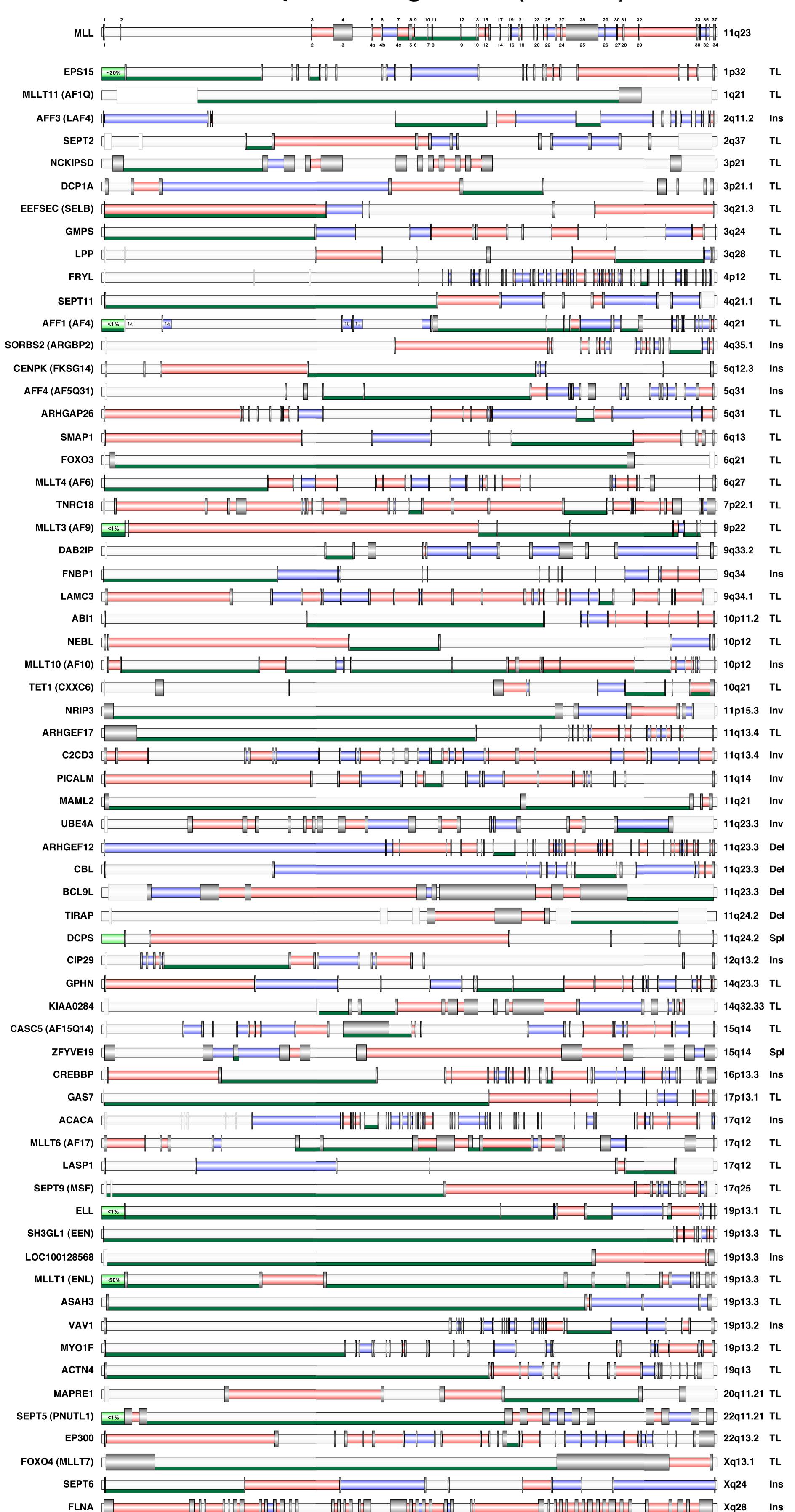


## The MLL Recombinome

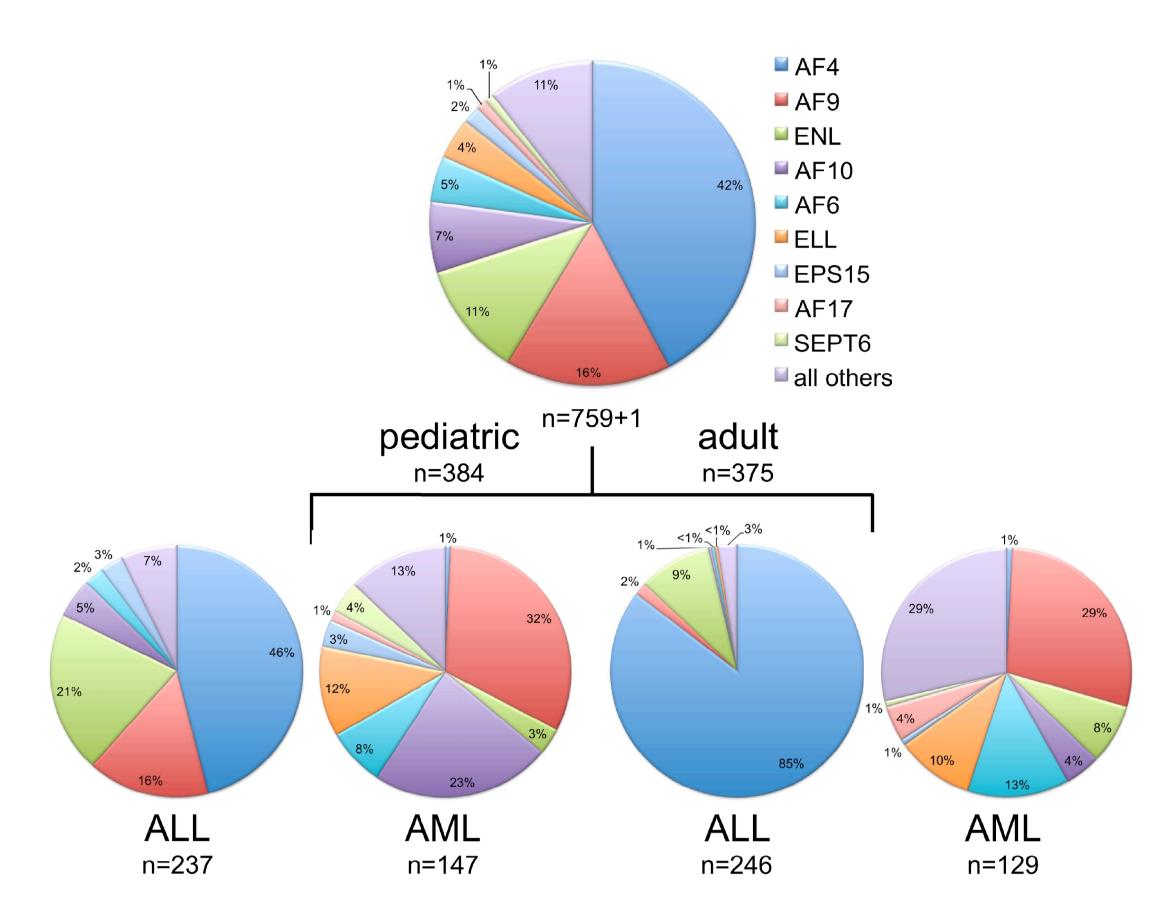
of Acute Leukemia

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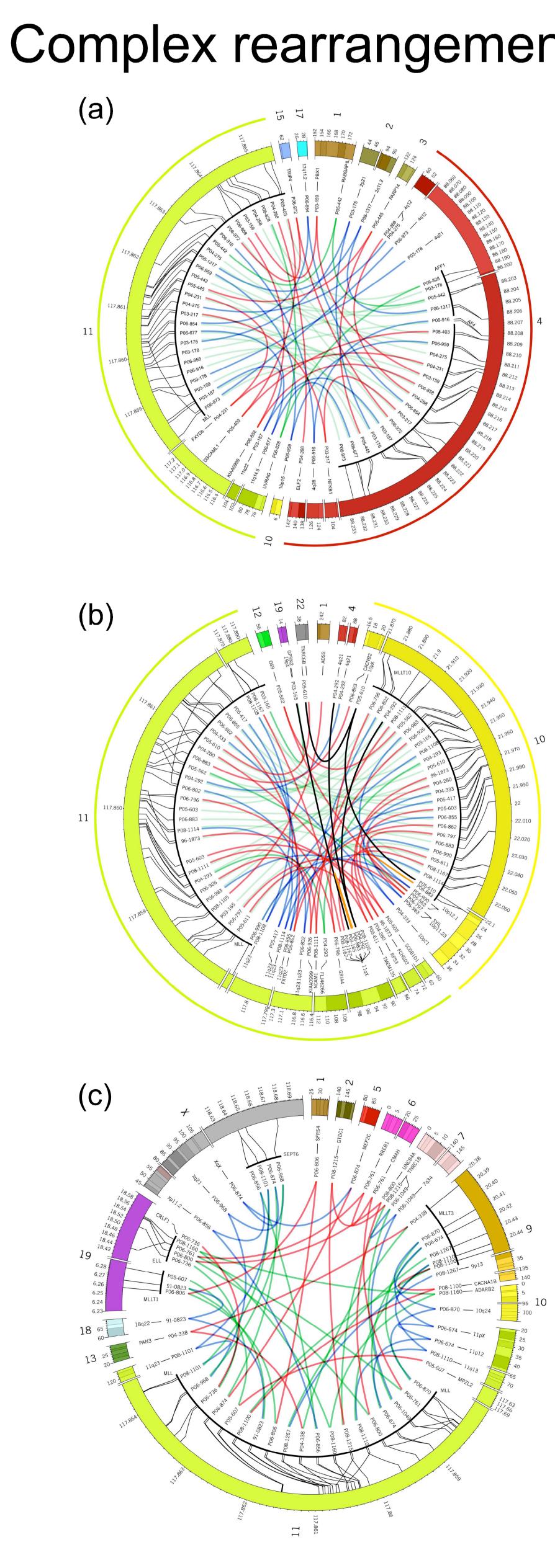
## A. Translocation partner genes (TPGs)



## **B.** Distribution of TPGs



## C. Complex rearrangements



A. All currently known TPGs are shown according to their chromosomal localization (listed from chromosoma 1 to X). Gene names are given on the left, chromosomal positions are given on the right. TL = translocation; Ins = insertion; Spl = spliced fusion; Del = deletion; Inv = inversion. Dark green bars below introns or exons indicate the BCRs involved in MLL translocations. Light grey boxes: non-translated regions. Top: MLL gene structure with the two published exon nomenlatures. Below: exon/intron structures of all known TPGs. Introns are shown in white, red or blue, depending on the specific intron type (intron type 0 = white; intron type 1 = red; intron type 2 = blue). B. Distribution of different TPGs in pediatric and AML patients. Numbers indicate the amount of analyzed patients. C. Circos diagrams (http://mkweb.bcgsc.ca/circos) of the most frequently occuring complex rearrangements involving the human genes (a) AFF1/AF4, (b) MLLT10/AF10 and (c) MLLT3/AF9, SEPT6, MLLT1/ENL and ELL. Colored lines: green lines: in-frame fusions; red lines: out-of-frame fusions; blue lines: no partner gene present at the recombination site.