



Supplemental Figure 1: SVA 3' transduction events on chromosome 19. SVA denotations marked by an asterisk were initially reported by Xing et al. 2006. Source loci of three SVA elements (H19_73, H19_54, H19_130) are derived from annotated genes. Transduced sequences are in antisense orientation and encompass the 115-nts exon 69-intron junction of the gene *MACF1* (M) (microfilament and actin filament crosslinker, Entrez GeneID:23499), a 446-nts intron-4 sequence of gene *GRIA4* (glutamate receptor, ionotropic, AMPA 4; Entrez GeneID: 2893), and a 462-nts intron-8 sequence of the *FUT8* gene (fucosyltransferase 8, Entrez GeneID: 2530). Source loci of SVAs H19_26, H19_4, H19_120, and H19_17 are retroelement sequences. The 3' transduction of H19_26 covers 297 nts of a member of the LTR62 repeat family which is linked to the foamy virus-like (ERV-L) elements (Cordonnier et al. 1995; Smit 1996; Smit 1999). The transduced sequence is covering a fragment of LTR62 which includes the promoter region in functional ERV LTRs.

The source locus of the 944-nts transduction of H19_120 encloses three separate tandem LTR49-int sequences into which an *AluSq* element had retrotransposed. H19_120 is one out of seven members of the H3_186 3' transduction group (Xing et al. 2006) and its source element could be localized. H19_4 is one member of a 3' transduction group of four SVA insertions which are localized on chromosomes 12q21.2, 1p36.11, 5q14.3 and 19p13.3. The source locus contains 74 nts of unknown genomic sequence followed by 146 nts of ORF2 of a member of the LINE-1 subfamily L1ME3B (Smit et al. 1995). Source loci of the 45- and 209-nts 3' transductions of H19_13 and H19_23 could be allocated to chromosomes 15q24.1. and 19p13.2, respectively. Due to the shortness of the 3' transduction of H19_17 its source locus could not be identified. 3'-transduced sequences are shown as yellow bars. Names of genes and retroelements that served as source loci for the transductions are boxed. Chromosomal positions of both SVAs and source loci of transduced sequences are listed in supplemental table 1. Lengths of VNTR regions and 3' transductions in nucleotides are indicated. Red ovals and arrowheads, TSDs flanking SVA and *AluSp* insertions, respectively. Note that TSDs of SVA H19_13 and *AluSp* are overlapping in 10 out of 15 nucleotides. Open boxes, genes (e.g. *ZNF28*) and repetitive sequences (ERV-1, ERV-K, *AluJo*) into which SVA elements retrotransposed. Vertical black bar, short addition of 12 nucleotides at the genomic DNA/5' SVA junction of SVA H19_4. L1, L1ME3B; int, LTR49-int