



**Supplemental Fig S10.** In addition to A's, T, C and G also show consensus patterns on human young L1s, after adjustment for multiple factors that may confound SMRT-seq based modification detection (as done for A's, Supplemental Fig S10). The consensus analyses (IPD ratio >3) were conducted for all three nucleotides across the +/-6,000bp beyond the 5' and 3' UTRs of Human young L1s with different adjustments: **(a)** adjustment for false positive modification calling due to neighboring m<sup>5</sup>C events (**Methods**), **(b)** adjustment for outlier effect resulting from sequencing errors in SMRT-seq (**Methods**), **(c)** adjustment for SNP effect (**Methods**) and **(d)** adjustment for *in silico* control bias (**Methods**).