Fig. S1 Results from the Blood cohort. **A** Normalized expression of L1 elements. **B** Espression ratio of L1 elements between ASD and control siblings.

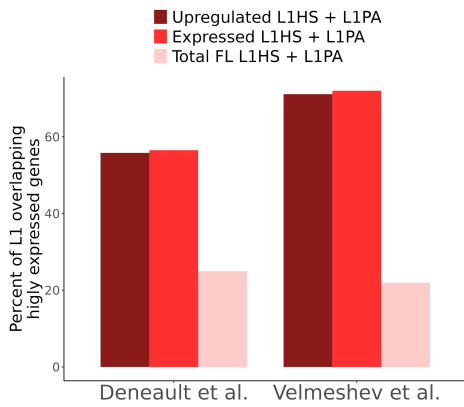
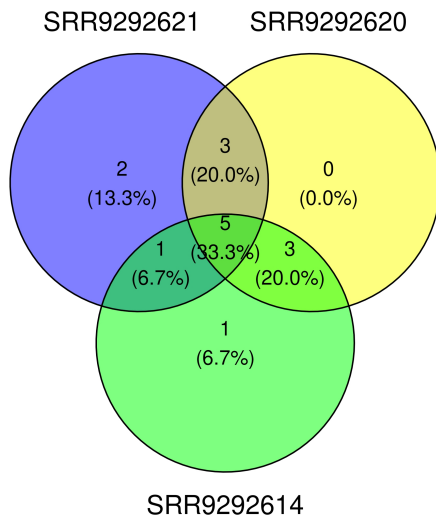**Fig. S2** Overlap between different groupings of L1 and expressed genes.

Fig. S3 Overlaps between negatively correlated genes from the 3 ACC significant samples of the Velmeshev dataset.
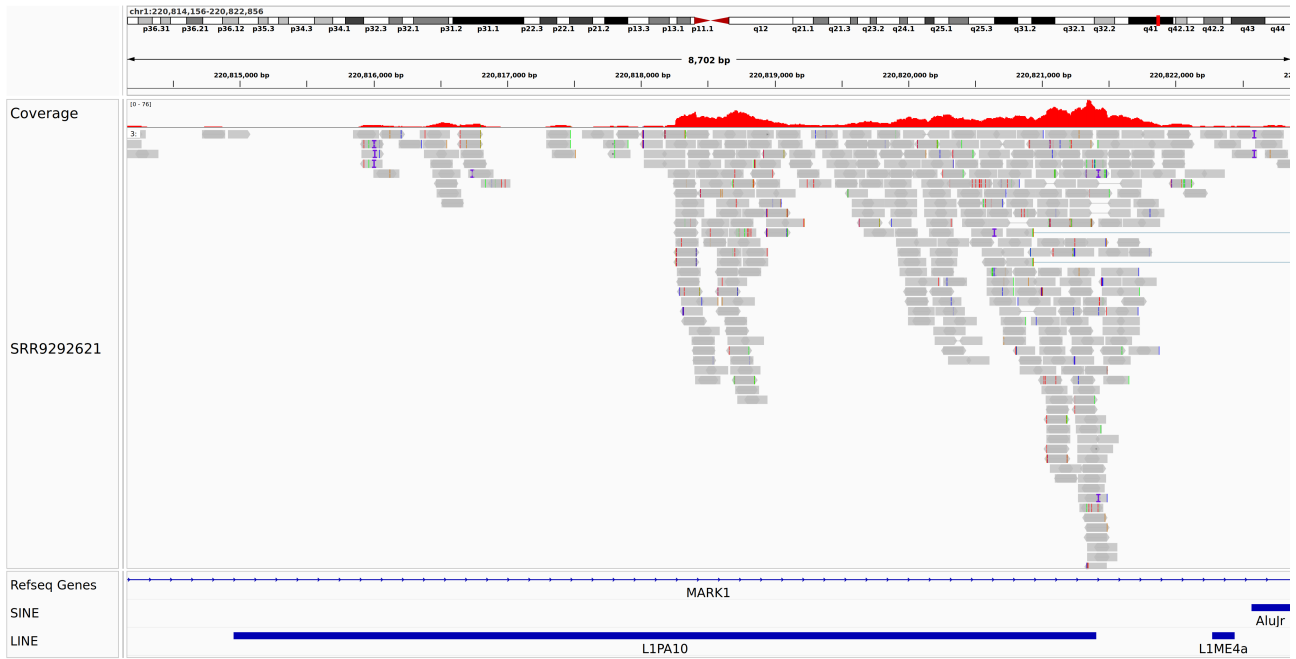
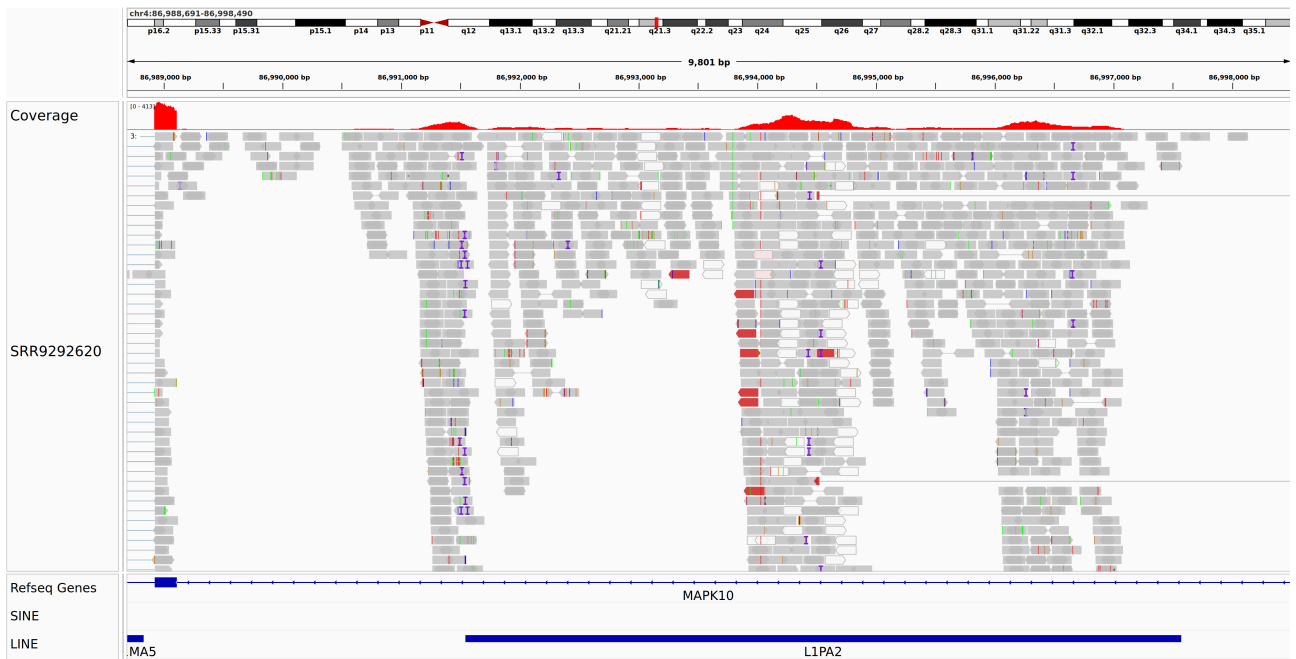**Fig. S4** Reads mapping on L1 intronic to the MARK1 gene in the SRR9292621 sample.

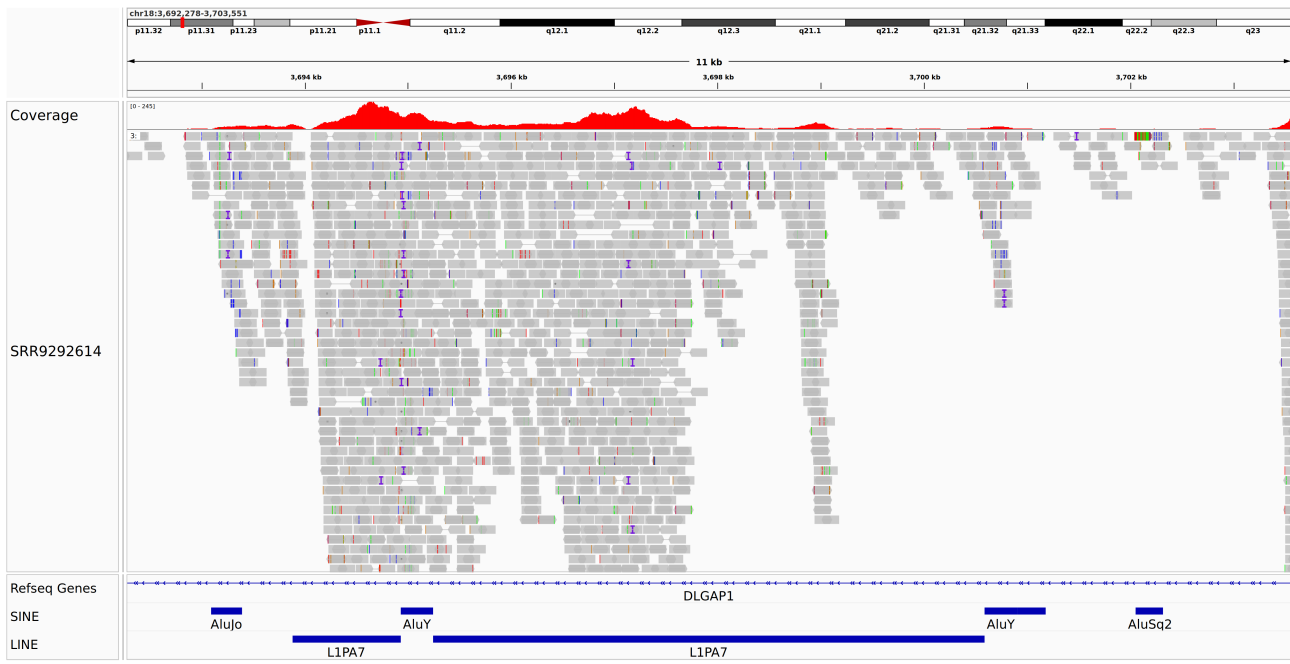**Fig. S5** Reads mapping on L1 intronic to the MAPK10 gene in the SRR9292620 sample.

Fig. S6 Reads mapping on L1 intronic to the DLGAP1 gene in the SRR9292614 sample.