



Fig. S1 a) RNAseq track (visualized using Integrated Genome Viewer) of *Eed* locus in *MLL-AF9* transduced *Eed^{ff}/Cdkn2a^{ko}* and *Eed^{Δ/Δ}/Cdkn2a^{ko}* cells. Excised floxed Exons E3-E6 in *Eed^{Δ/Δ}* cells are highlighted (red rectangle). b) Excision of floxed exons was confirmed by RT-qPCR in *Eed^{ff}* (n=2) and *Eed^{Δ/Δ}* (n=4) *MLL-AF9* clones. Error bars indicate SD. * p<0.05. c) CFC per 1000 cells plated for 2 *Eed^{ff}* *MLL-AF9* control and 3 *Eed^{Δ/Δ}* *MLL-AF9* clones. Clones were plated in triplicate, error bars indicate SEM.