

Fig. S1: Schematic representation of leukemic fusions used.

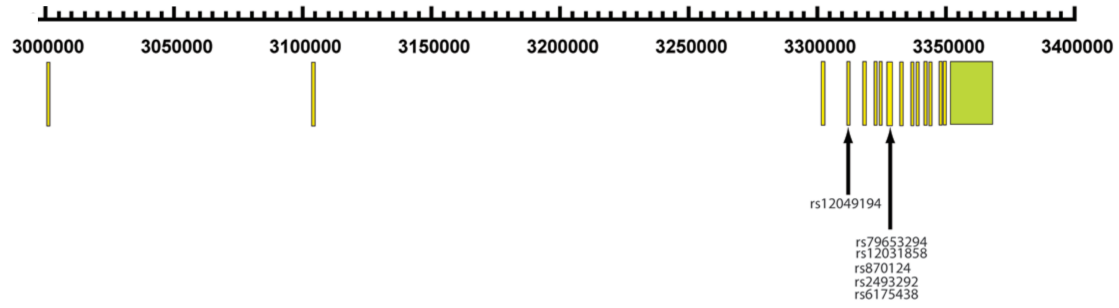


Fig. S2: Location of non-synonymous SNPs in the PRDM16 gene on chr. 1 in humans (yellow: exons, green: 3' UTR)

Table S1: Transduction efficiencies, number of injected cells, and mortality data

Retrovirus	Transduction efficiency (%)	Transduced cells (#)	Mortality	Observation period
MLL-ENL-GFP	WT (0.45 - 2.13%), Flt3KO (0.36 - 1.68%)	3,600 - 16,800	WT 10/34, Flt3KO 1/31	350 days
MLL-ENL-GFP	WT 7.05%, Flt3KO 7.77%	70,000	WT 6/10, Flt3KO 1/10	210 days
MLL-ENL-hNGFR	WT 25.4%, Flt3KO 23.9%	250,000	WT 5/5, Flt3KO 1/5	200 days
MLL-AF9-YFP	WT 0.68%, Flt3KO 0.40%	4,000	WT 5/5, Flt3KO 5/5	64 days
MLL-AF9-YFP	WT 2.56%, Flt3KO 3.29%	25,600	WT 5/5, Flt3KO 5/5	79 days
AML1-ETO9a-GFP	WT (0.98 - 6.21%), Flt3KO (1.23 - 5.12%)	9,800 - 51,200	WT 11/16, Flt3KO 9/15	200 days
p210 BCR-ABL-hNGFR	WT 9.02%, Flt3KO 12.00%	90,000	WT 5/5, Flt3KO 5/5	90 days
p210 BCR-ABL-hNGFR	WT 3.61%, Flt3KO 6.62%	36,100	WT 5/5, Flt3KO 5/5	76 days