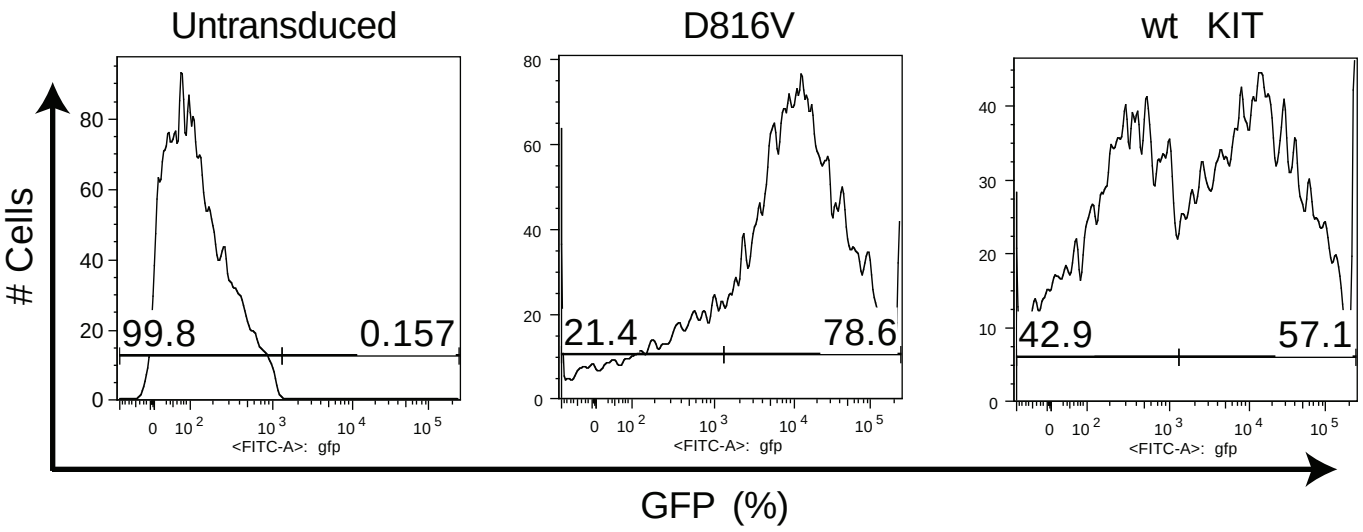
Table S1

Transduction efficiency (%) of BM cells using stable viral producing lines (co-culture)

BM cells transduced	816V (%)	816Y(%)	Wt (%)	GFP (%)
MxCre-CM	12-79 (N = 7)	10-78 (N =9)	8-57 (N =10)	52-77 (N = 3)
wt	12-47 (N = 6)	9-69 (N = 6)	15-43 (N = 6)	34-56 (N = 2)

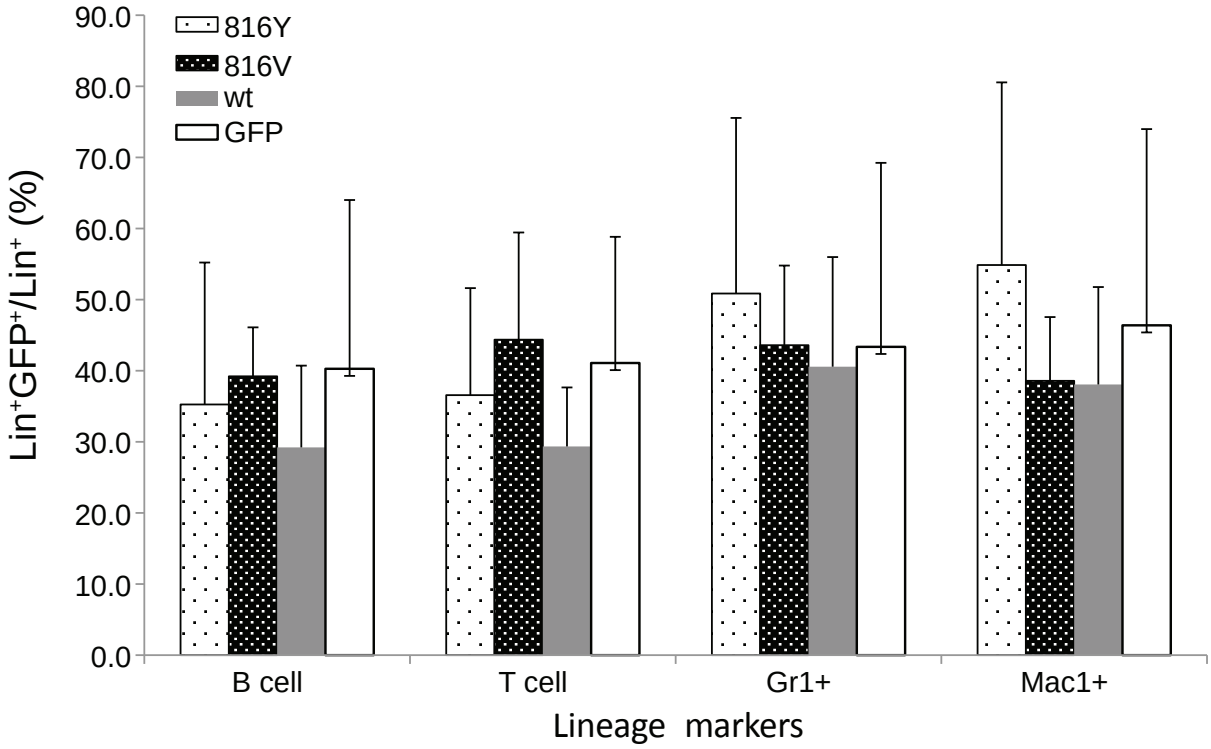
N: number of experiments

Figure S1



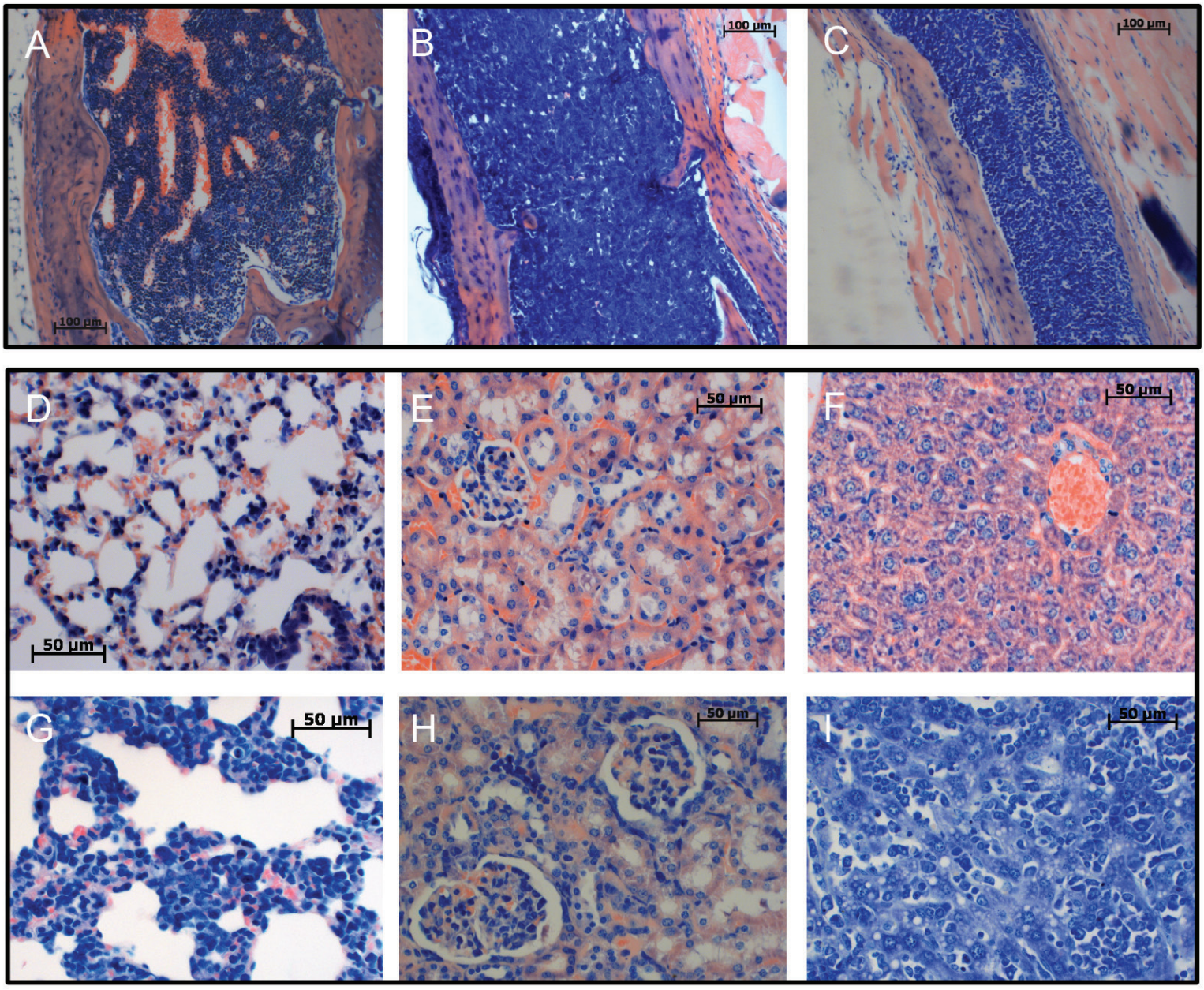
Transduction efficiency of Cbfb$^{+/56m}$; Tg(Mx1-Cre) BM cells co-cultured with stable retroviral producing lines for D816V KIT or wt KIT. The Y-axis is the number of cells and the X-axis is GFP.

Figure S2



Contribution of KIT or GFP vector transduced Cbfb$^{+/56m}$; Tg(Mx1-Cre) BM cells to different lineages in the peripheral blood, 12 weeks after transplantation. White dotted bars, D816Y KIT (n = 12); black dotted bars: D816V KIT (n = 9); grey solid bars: wt KIT (n = 6); white solid bars: GFP vector (n = 7).

Figure S3



Sections of leukemia infiltrated tissues by Wright-Giemsa staining. A: WT BM; **B:** BM from Cbfb$^{+/56m}$; Tg(Mx1-Cre) /KIT^{D816Y} leukemic mouse; **C:** BM from secondary transplantation of Cbfb$^{+/56m}$; Tg(Mx1-Cre) /KIT^{D816Y} leukemic cells; **D:** WT lung; **E:** WT kidney; **F:** WT liver; **G:** lung from a Cbfb$^{+/56m}$; Tg(Mx1-Cre) /KIT^{D816Y} leukemic mouse; **H:** kidney from a Cbfb$^{+/56m}$; Tg(Mx1-Cre) /KIT^{D816Y} leukemic mouse; **I:** liver from a Cbfb$^{+/56m}$; Tg(Mx1-Cre) /KIT^{D816Y} leukemic mouse.