

Fig. S4: Forced high level expression of *GATA2* in *MLL-AF9* cells alters colony morphology and interferes with growth. *Eed^{ff}/Cdkn2a^{-/-}* LSK cells were co-transduced with MSCV-*MLL-AF9*-IRES-*GFP* and either MSCV-empty-pgk-*Puro* (Puro-CTL) or MSCV-*GATA2*-pgk-*Puro* (*GATA2-Puro*). Cells were selected in Puromycin for 48 hours after transduction and then sorted for GFP expression and plated in methylcellulose. Individual clones were picked, expanded and further characterized. a) and b) Two separate Puro-selected control clones showed the typical compact colony morphology associated with *MLL-AF9* transformed cells. c)-e) Three *GATA2*-transduced *MLL-AF9* clones with high level overexpression of *GATA2* show dispersed morphology and grow poorly ex vivo. f) Relative *GATA2* mRNA-expression levels of control-transduced *MLL-AF9* clones and *GATA2*-transduced *MLL-AF9* clones. (RT Q-PCR) g) Clones were plated in methylcellulose in duplicate with IL3, IL6 and SCF and cells were harvested and counted 6 days later. *GATA2*-transduced clones with high level overexpression lag in growth compared to control-transduced clones. *p<0.05 **p<0.01

Relative Expression