

Supplementary data

Interleukin-7 induced Stat-5 acts in synergy with Flt-3 signaling to stimulate expansion of hematopoietic progenitor cells.

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Running head: Direct synergistic functions between FL and IL-7.

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Supplementary Figure 1. Stimulation of BaF3Flt-3, Il-7R cells with Flt-3 and Il-7

does not induce expression of anti-apoptotic genes. Expression of the apoptosis related genes *Bcl-2*, *Bcl-xl* and *Mcl-1* was evaluated by qPCR after stimulation of BaF3^{Flt-3, Il-7R} cells with 2 ng/ml Flt-3L and 2 ng/ml Il-7. Gene expression levels in cytokine deprived, non-stimulated cells at 24 hours were set to 1 and used for relative comparison. Each column is derived from triplicate data and represents one representative out of two independent experiments. Error bars represent experimental error mean.

Supplementary Figure 2. Flt-3L and Il-7 act in synergy to stimulate expansion of

CLPs. CLPs were plated in triplicate at 8000 cells/well in a 96-well plate for each of the indicated conditions (10 ng/ml of each cytokine). At 24, 48 and 70 hours equal volumes from all individual wells were analyzed for CFSE-staining and the absolute number of cells/well was calculated. Data is from one representative out of two separate sorting experiments. Error bars represent SD from three individual wells.

Supplementary Figure 3. Inhibition of the MAPK signaling can prevent the Flt-3 mediated reduction of pro-apoptotic genes in BaF3 cells. Expression of the apoptosis related genes *Bim* and *Bad* was evaluated by qPCR after stimulation of BaF3^{caStat-5,Flt-3} cells with 5 ng/ml Flt-3L in combination with MEK1/2 inhibitor U0126. Gene expression levels in vehicle control cells at 24 hours were set to 1 and used for relative comparison. Each column is derived from triplicate data and represents one representative out of two independent experiments. Error bars represent experimental error mean.

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