



Supplementary Fig. S7

Supplementary Figure S7. Increasing IL3R α / β c ratios and enforced hexamer signaling lead to reduced differentiation in *in vivo* engraftments. **A-C**, Transduced OCI-AML22 xenografts in spleens (SPL), injected (IF) and non-injected femora (nIF) were analyzed for cell surface IL3R α / β c protein expression ratio (**A**), %human CD45+ (**B**) and %BFP+ (**C**) 12 weeks after transplantation. **D**, Subpopulation composition of xenografts (IF) according to CD34, CD38 and SSC. **E**, Representative flow plot showing the lack of a SSC^{high}CD66b+BFP⁺ population in IL3R α WT overexpression (high ratio) and IL3R α P248L (hexamer) xenografts. **F**, Correlation plot of the intersect hexamer vs. dodecamer signature vs. undifferentiated (%CD15-CD14-) and differentiated (%CD15+ and CD14+) cell output in primary AML patient xenografts (n=33 patient samples, 156 xenografts) (63). **G**, Differentiation analysis of AML xenografts from engrafted injected and non-injected femora of mice transplanted at matching cell doses (250K-350K for AML#140005, 15K-70K/NSG and 2M/NSG-SGM3 for AML#130578) of sorted high/med/low IL3R α / β c protein surface ratio fractions (see Fig. 1J and 1K).