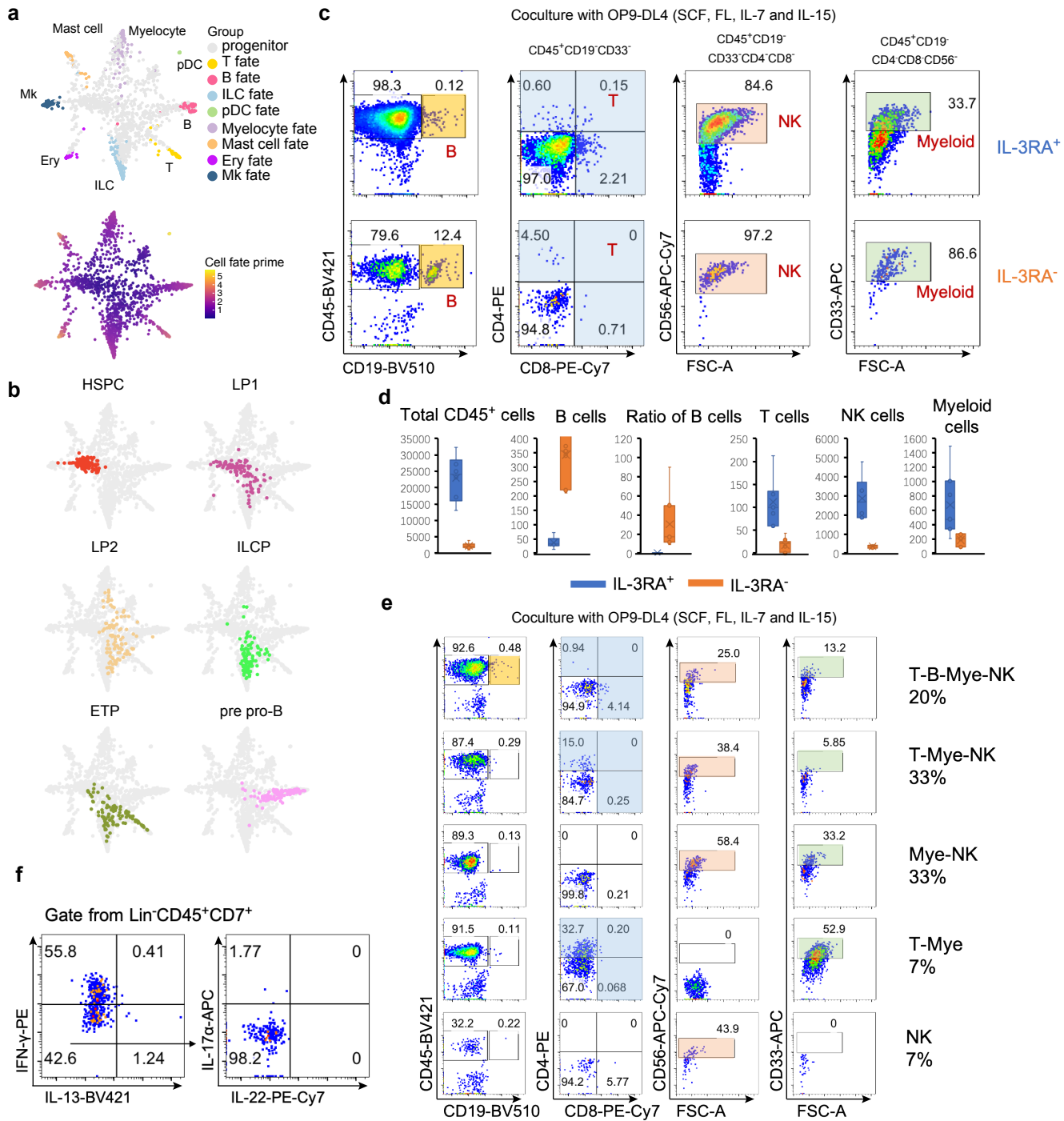


Figure S6



**Supplementary Figure 6 (related to Figure 3) In vitro bulk and clonal assay of IL-3RA<sup>+</sup> and IL-3RA<sup>-</sup> lymphoid progenitors**

(a) Fully annotated STEMNET map visualizes the probabilities of progenitors to develop toward mature lineages including T, B, ILC, pDC (GEO: GSE143002), myelocyte, mast cell, erythrocyte and megakaryocyte. Colors indicate the mature cell types (upper panel) and the possibility of progenitor cells developing into the individual lineage (below panel). (b) Visualization of the probabilities of progenitor clusters in Fig. S6a to develop toward specific lineages. (c) IL-3RA<sup>+</sup> and IL-3RA<sup>-</sup> Lin<sup>-</sup> CD45<sup>+</sup>CD34<sup>+</sup>CD127<sup>+</sup> lymphoid progenitors (150 cells for each subset) were sorted into 24-well plate pre-seeded with OP9-DL4 and cocultured with SCF, FL, IL-7 and IL-15. The IL-3RA<sup>+</sup> lymphoid progenitors generate more CD45<sup>+</sup> hematopoietic cells including more T cells, NK and myeloid cells (upper panel) while IL-3RA<sup>-</sup> lymphoid progenitors show more B (below panel) lineage potential suggested by coculture experiments. T, B, NK and myeloid cells were identified as positive for its respective lineage markers and negative for other lineage markers. (d) Numbers of total CD45<sup>+</sup> cells, B cells, the percentage of B cells in total CD45<sup>+</sup> cells, T cells, NK cells as well as myeloid cells after co-cultured for 12 days on OP9-DL4 are shown in the bar graph. (e,f) Representative FACS

analysis of single cultured IL-3RA<sup>+</sup> Lin<sup>-</sup>CD45<sup>+</sup>CD34<sup>+</sup>CD127<sup>+</sup>  
lymphoid progenitors on OP9-DL4 with SCF, FL, IL-7 and IL-15 **(e)**  
and under ILC-induction condition (IL-2, IL-7, IL-1 $\beta$ , IL-23, IL-25  
and IL-33) **(f)** for 14 days.