## Figure S1





#### Figure S1

# Flow cytometric detection of T-, NK-, monocyte-, and granulocyte-lineage cells generated from PB HPCs in OP9-DL1 co-culture.

Representative flow cytogram of CD7<sup>+</sup>CD5<sup>+</sup> T-lineage, CD7<sup>+</sup>CD56<sup>+</sup>NK-lineage, CD7<sup>+</sup>CD5<sup>-</sup> CD56<sup>-</sup>, CD14<sup>+</sup>CD15<sup>-</sup> monocyte-lineage, and CD14<sup>1</sup>°CD15<sup>+</sup> granulocyte-lineage cells generated from PB HPCs in 4.5-week-OP9-DL1 co-culture (left) and of CD34 expression in CD7<sup>+</sup>CD5<sup>-</sup>CD56<sup>-</sup> cells (right).

## Figure S2

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#### Gated on Lin<sup>-</sup>HLA-DR<sup>+</sup>cells



#### Figure S2

Flow analyses of BDCA expression in PB mature cDCs and pDCs and of CD127 expression in PB mature NK cells, to compare with progenies generated in OP9-DL1 co-culture.

(A) Expression of BDCA1(CD1c), BDCA2(CD303), BDCA3(CD141), and BDCA4(CD304) in PB cDCs (upper panel) and pDCs (lower panel).
(B) Expressions of CD127 in PB CD16<sup>+</sup>CD56<sup>+</sup> and CD16<sup>-</sup>CD56<sup>+</sup> NK subsets.

### Figure S3



#### Figure S3 Flow cytometric detection of progenies generated from a single PB HPC.

Progenies generated from a single PB HPC in OP9-DL1 co-culture for 5 weeks were analyzed for the surface phenotypes of T cell (CD7<sup>+</sup>5<sup>+</sup>), NK (CD7<sup>+</sup>CD56<sup>+</sup>), monocyte (CD14<sup>+</sup>CD15<sup>-</sup>), granulocyte (CD14<sup>lo</sup>CD15<sup>+</sup>), cDC (Lin<sup>-</sup>HLA-DR<sup>+</sup>CD11c<sup>+</sup>CD123<sup>lo</sup>), and pDC ((Lin<sup>-</sup>HLA-DR<sup>+</sup>CD11c<sup>-</sup>CD123<sup>hi</sup>). The number of events in each gated region is shown in parentheses. Representative flow cytograms of progenies representing more than 20 evens (upper) and the minimum positive events (3 events of T cell, monocyte and pDC) (lower).



Clone size (No. progenies per clone)

#### Figure S4

#### Distributions of No. progeny cells generated from a single PB or CB HPC.

Numbers of T cell, NK cell, cDC, and pDC progenies generated from a single PB or CB HPC in OP9-DL1 co-culture for 5 weeks were counted by flow cytometry, as shown in Fig. S3. Histograms representing the number of progenies per HPC clone were prepared with SPSS software.