



Figure S6. Age-associated changes in DBA/2

(A-B) Overview of sorting strategy for DBA/2 mice. Bone marrow cells were subjected to FACS sorting to obtain individual cells and matching populations from young (A, same plots as in Figure 6A) and old mice (B). (C) Shown are frequencies of LT-HSC, ST-HSC, and MPPs (x-axis) in young (black) and old (white) DBA/2 mice as percentage of stem cell compartment (lineage- Sca1+cKit⁺, LSK). Statistically significant differences are indicated by ** (p<0.01). (D) Lower frequency of G1 cells among LT-HSCs based on FACS analysis. Shown are cell frequencies in G1 (black) and S-G2-M (grey) in cells from old (y-axis) and young (x-axis) mice based on intracellular staining with Ki67/Hoechst. (E-H) HSC aging and differentiation are associated with opposite expression programs. PCA was performed for all non-cycling cells, and each of the top 2 PCs distinguish cells by their cell type and age, with higher scores for young and differentiated HSCs and lower scores for old and less-differentiated cells. Each plot shows the loadings of PC1 and PC2, colored based on their cell type and age; all six populations in (E), and the same plot is shown with only specific pairs of populations that differ by aging in (F), by differentiation in (G), and by both in (H).