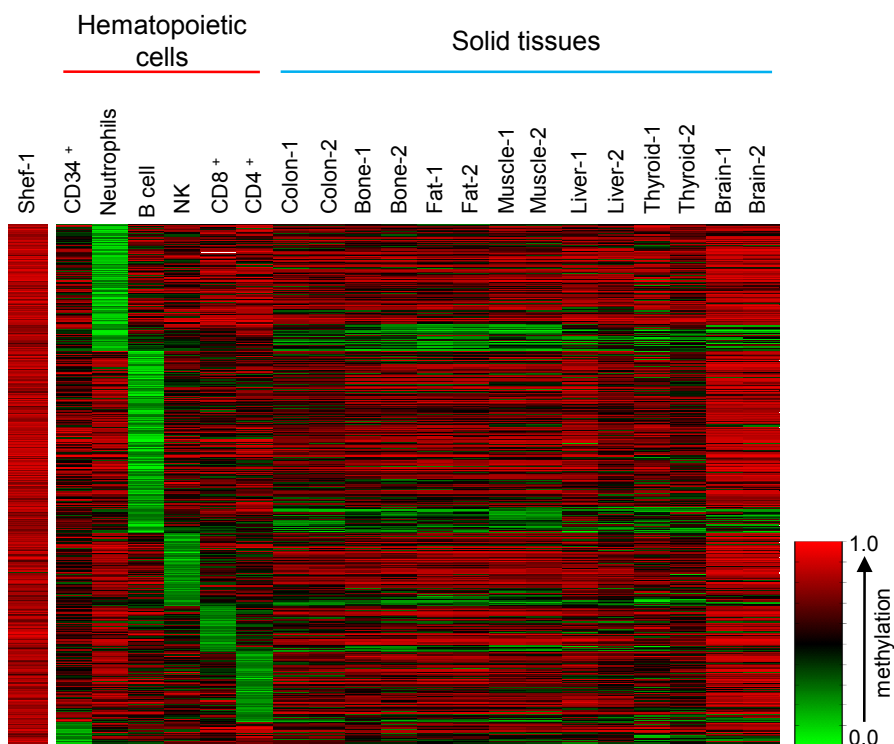
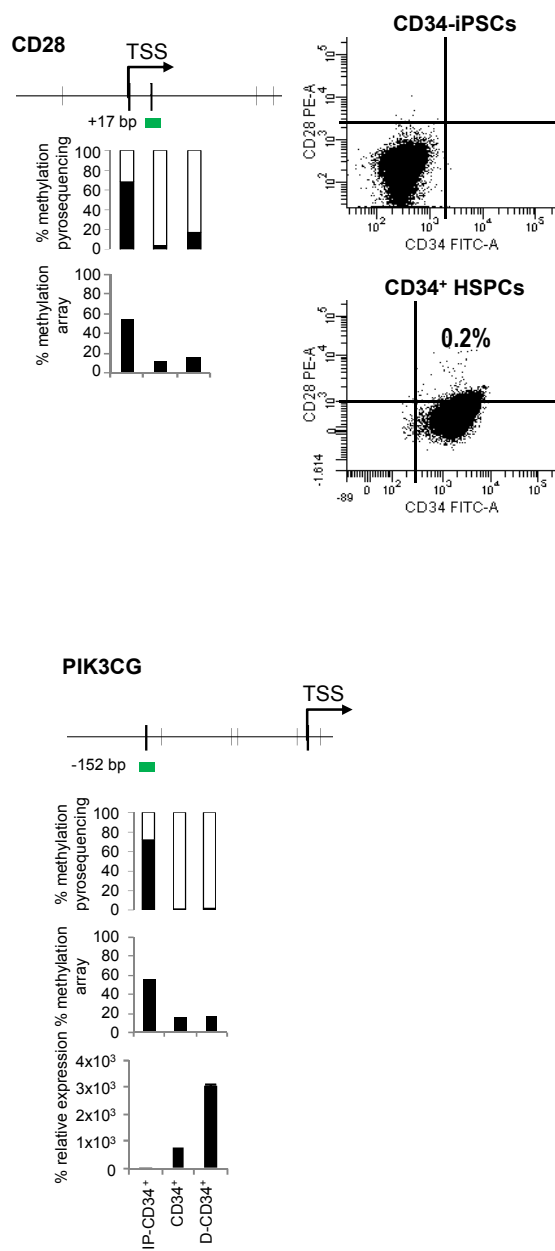


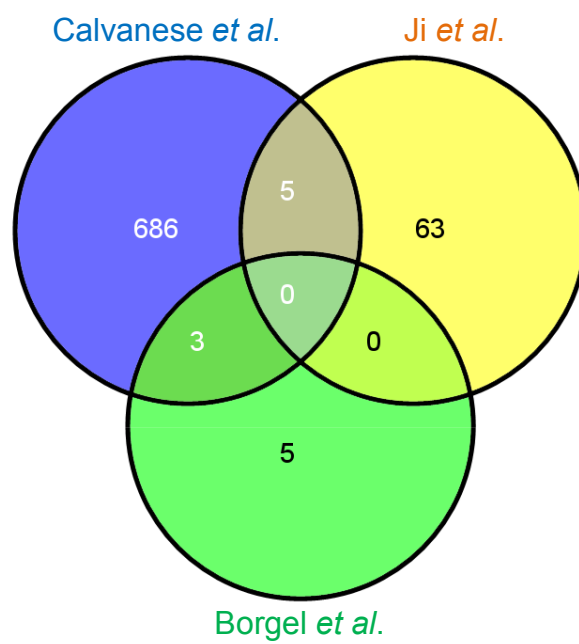
**Supplementary Figure 1.** Heatmap showing the methylation status of cell type-specifically demethylated genes (461 genes/490 CpG sites) in various blood cell types and in non-hematopoietic tissues.



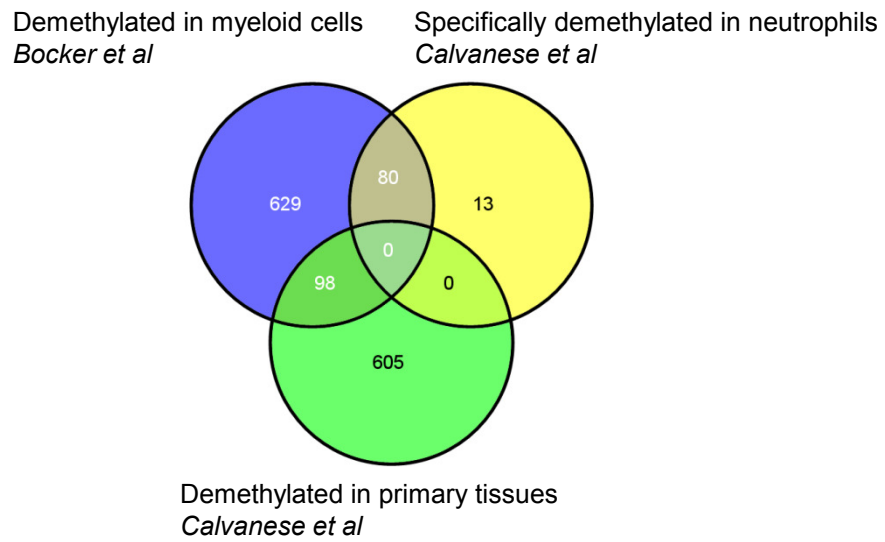
**Supplementary Figure 2.** Methylation and expression values for CD28 and PIK3CG (see Fig. 3). Expression by flow cytometry of CD28 in CD34-iPSC (top panel) and CD34<sup>+</sup> HSPCs (bottom panel).



**Supplementary Figure 3.** Venn diagram showing genes demethylated during hematopoietic differentiation commonly identified in three independent studies: Ji et al., Nature 2010; Borgel et al., Nature Genetics 2011; Calvinese et al., this study.



**Supplementary Figure 4.** Venn diagram showing CpG sites demethylated in myeloid cells (Bocker *et al*, 2011), neutrophils and primary tissues (our study).



**Supplementary Figure 5.** Heatmaps showing the methylation profile of adult CD34<sup>+</sup> cells (Bocker *et al.*) and our CD34<sup>+</sup> together with the terminally differentiated hematologic cells.

