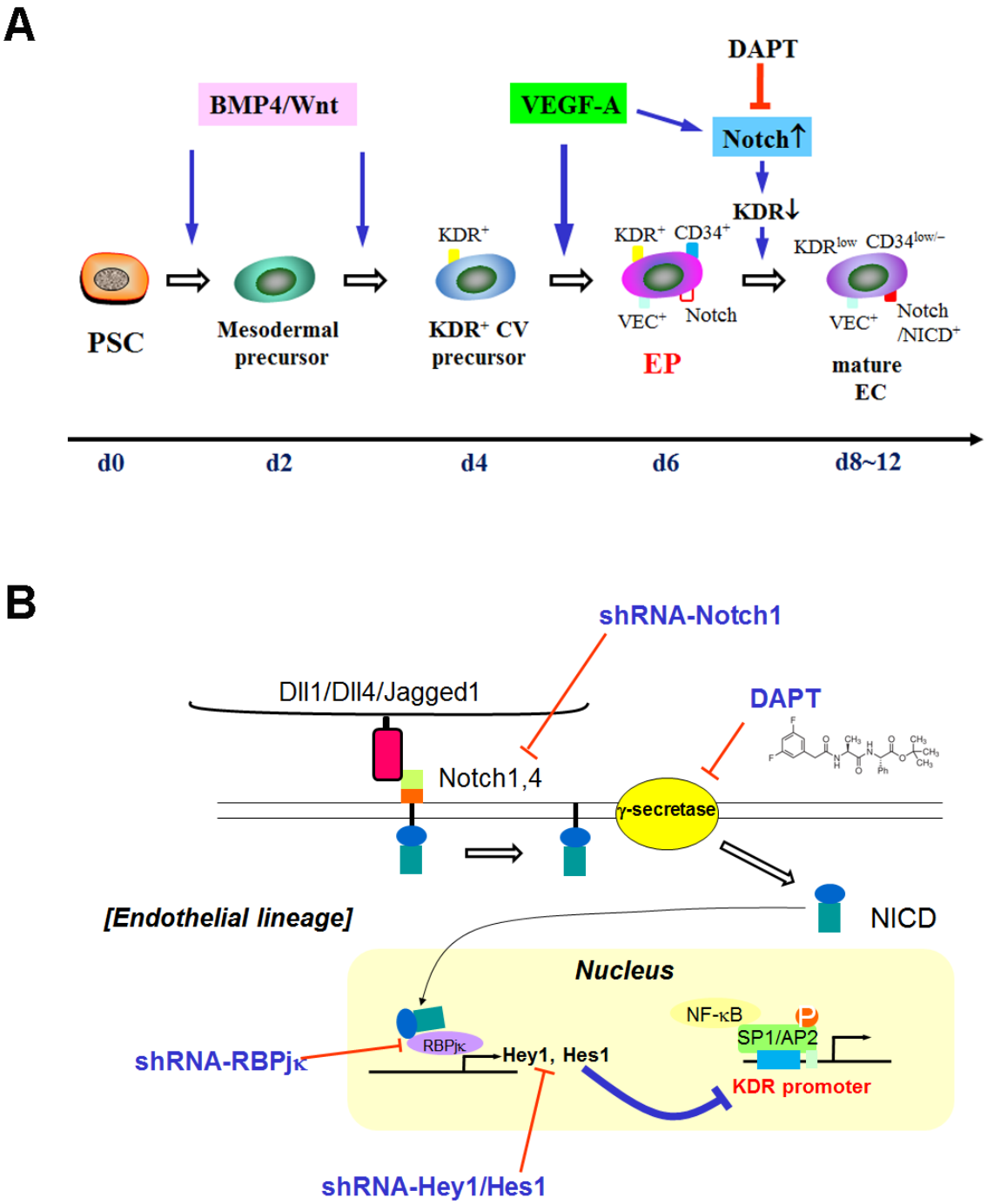

Supplementary information, Figure S8 Schematic of the cellular pathway for hPSC differentiation into endothelial lineage cells and machinery mechanisms of Notch signaling inhibition maintaining the KDR promoter activity.

(**A**) The schematic cascade of hPSC-derived KDR$^+$ precursors' differentiation into endothelial lineage cells, including EPs and mature ECs. VEGF-A is essential for endothelial

differentiation derived from KDR^{+} precursors but concurrently attenuated the KDR activity in the differentiated cells through the Notch signaling, resulting in the maturation of the differentiated endothelial lineage cells (KDR^{low}, $CD34^{low/-}$). By blocking the function of the Notch signaling, DAPT in combination with VEGF-A promotes the induction of KDR^{+} precursor-derived EPs. (**b**) Schematic of machinery mechanisms by which DAPT or genetical knockdown of Notch signaling with shRNA maintains the KDR promoter activity. NICD, Notch intracellular domain.