



SUPPLEMENTARY FIG. S4. Differentiation of hESCs along the vascular lineage. **(A)** Time-course qRT-PCR analysis on the differentiation process of both H9 and H1 hESC lines. Under the same differentiation protocol, both cell lines showed approximately similar transcription profiles. Data were normalized to β -actin as endogenous control and presented as expression levels (fold) relative to their respective day 0, with undifferentiated hESC line as controls. **(B)** FACS analysis showing the percentage of cells expressing *CD34*, *PDGFR α* , and *KDR* after 4 days of differentiation using our differentiation protocol in H9 hESC line. Similarly, an analysis was provided for the H1 hESC line using the same protocol but with CHIR98014 as the GSKi. **(C)** The representative morphology of GSKi-treated hESCs at different time points of differentiation. Day 2: after 24 h of BMP4 treatment, Day 3: addition of VEGF. Note that by day 4, spindle-shaped cells were observed at the periphery of the differentiated colony. Scale bar represents 500 μ m. **(D)** FACS analysis of pre-sort and post-sort cell populations as well as the post-sorted *CD34⁺KDR⁺* and *CD34⁻PDGFR α ⁺* populations after three passages. VEGF, vascular endothelial growth factor.