

**Supplementary information, Figure S7.** Transcriptome analysis of WT and *Smad5* KO hESCs. (**A**) Schematic depiction of the strategy in construction of *Smad5* KO cell lines. (**B**, **C**) Genomic PCR (**B**) and western blotting (**C**) show *Smad5* KO efficiency in hESCs. (**D**, **E**) Western blotting shows *Smad5* KO efficiency in HEK293 (**D**) and HeLa (**E**) cells. (**F**) Volcano plot shows gene expression changes between *Smad5* KO and WT hESCs. Blue dots represent genes that are significantly down-regulated in KO cells, while the red dots represent genes that are significantly up-regulated in KO cells. (**G**) Number of up- or down-regulated genes in triplicate *Smad5* KO hESCs as compared with WT hESCs. (**H**) There is a significant overlap between up- or down-regulated genes in three biological replicates of hESCs.