

**SUPPLEMENTARY FIG. S3.** Endoderm marker genes expression profile of wild-type (WT) and HIF- $1\alpha^{-/-}$  mESCs differentiating under hypoxia. WT (*gray bars*) and HIF- $1\alpha^{-/-}$  (KO; *white bars*) mESCs (generously provided by Dr. Celeste Simone, University of Pennsylvania) were cultured for 6 days in the SP media or 20 ng/mL AA-containing media (AA) under hypoxia (1% O<sub>2</sub>), as described in the Materials and Methods section. The relative expression of AA-induced endodermal marker genes was measured using qPCR and is presented as fold of day 0 cultures (mean  $\pm$  SEM, n=5-7, \*P<0.05 WT vs. KO).