

**Supplementary information, Figure S2** Knockdown of VEGF but not PDGF prevents mESC differentiation induced by LIF-withdrawal.

(A) Morphology and AP staining of E14 cells cultured in mES medium (LIF+) supplemented with 10 ng/mL hPDGF-BB for 48 hrs (Scale bar: 50  $\mu$ m). (B and C) qRT-PCR analysis of the knockdown efficiency by shRNAs targeting *VEGFA* or *PDGFB*. Data are mean  $\pm$  SEM (n=3), \*\*p < 0.01, \*\*\*p < 0.001vs scramble shRNA. (D) Morphology and AP staining of E14 cells expressing the indicated shRNA cultured in mES medium without LIF for 3 days (Scale bar: 50  $\mu$ m). (E) The percent of undifferentiated and differentiated colonies corresponding to (D).