



Supplementary information, Figure S4 AP2 γ doesn't mediate mesendoderm induction by BMP4 during ESC neural differentiation.

(A) qRT-PCR analysis of *Sox1*, *Nestin*, *CK1* and *CK18* expression in EBs following the culture condition in Fig 3C.

(B) qRT-PCR analysis of mesoderm (*T*), endoderm (*Gata6*), and extraembryonic (*Eomes*) markers expression in EBs following the culture condition in Fig. 3A.

(C) qRT-PCR analysis of *T*, *Gata6* and *Eomes* mRNA level response to BMP4 after *AP2γ* knockdown in ESCs. EBs or aggregates (Agg) derived from ESCs with control or *AP2γ* shRNAs were cultured in KSR medium for 6 days and supplemented without or with BMP4 (10 ng/ml) at day 2-3 (D2-3). The day 6 EBs were subjected for analysis.

D, Day; B, BMP4.