

**Supplementary information, Figure S1**  $AP2\gamma$  is induced by BMP4 dose-dependently in P19 cell neural differentiation.

(A) RT-PCR analysis of  $AP2\gamma$  expression of non-induced P19 cells (lane 1) and P19 cells aggregates (Agg) cultured in N2B27 serum-free medium for 3 hours (lane 2-6), 2 days (lane 7, 9) or 4 days (lane 8, 10) without or with BMP4 (lane 3-6: 2, 5, 10, 20 ng/ml, lane 9-10: 10 ng/ml). D, day.

(B) AP2γ protein level was examined with AP2γ antibody by immunoblot after BMP4 treatment for 2 or 4 days during P19 cells neural differentiation in N2B27 serum-free medium.