



**Supplementary information, Figure S7** The effects of *cAP2γ* knockdown or overexpression on the expression of *cSox2*, *cKer14* and *cSox3*.

(A) Diagram of the electroporation procedure for overexpression constructs and siRNAs mixed with pCAGGS-IRES-GFP in chick embryos. The plasmids and/or siRNAs were electroporated into the specific area of the chick embryos epiblast at HH stage 3 according to the experimental requirements. The electroporated embryos were cultured in vitro to the indicated stages and then analyzed.

(B) Control or *AP2γ* siRNA mixed (50 ng/μl) with pCAGGS-IRES-GFP (0.15 μg/μl) was electroporated into the *AP2γ* expressing area of the chick epiblast and the

knockdown efficiency of *AP2γ* siRNA was examined by whole-mount ISH.

(C) Control or *AP2γ* siRNA (50 ng/μl) (mixed with GFP, 0.15 μg/μl) electroporated embryos were stained using *cSox2* probe.

(D) Control or *AP2γ* siRNA (50 ng/μl) and m*AP2γ* (1 μg/μl) were co-electroporated into chick embryos, which were subsequently stained with *cKer14* probes.

(E) Embryos electroporated with GFP or *cAP2γ* in the anterior epiblast and stained for *cKer14*. Transverse section (red line) of the embryo shows the induction of *cKer14* by *cAP2γ* overexpression.

(F) Control or *AP2γ* siRNA (50 ng/μl) (mixed with GFP, 0.15 μg/μl), pCAGGS-IRES-GFP or *cAP2γ* were electroporated embryos into epiblast and the embryos were collected for *cSox3* staining.