



**Figure S1.** Porcine follicular granulosa cells identification and the expression of BDNF and TrkB in GCs. Top series, porcine GCs were incubated with primary antibody dilution buffer (NC), anti-FSHR, anti-TrkB or anti-BDNF, and then incubated with secondary antibody of FITC-conjugated (FITC, green). Middle series, the nuclei of GCs were located with PI (PI; red). Bottom series, the merged images of two fluorescences. The porcine GCs were stained and displayed two colures. The calculated mean percentage of positive cells with FSHR expression was  $97.8 \pm 1.3\%$  (data shown as mean  $\pm$  SD,  $n > 200$  cells per sample,  $N = 3$ ) and according to the green fluorescence, BDNF and TrkB were abundantly expressed. Scale bar = 50  $\mu\text{m}$ . NC, negative control; FSHR, follicle-stimulating hormone receptor; BDNF, brain-derived neurotrophic factor; TrkB, tyrosine kinase receptor B; FITC, fluorescein isothiocyanate; PI, propidium iodide.