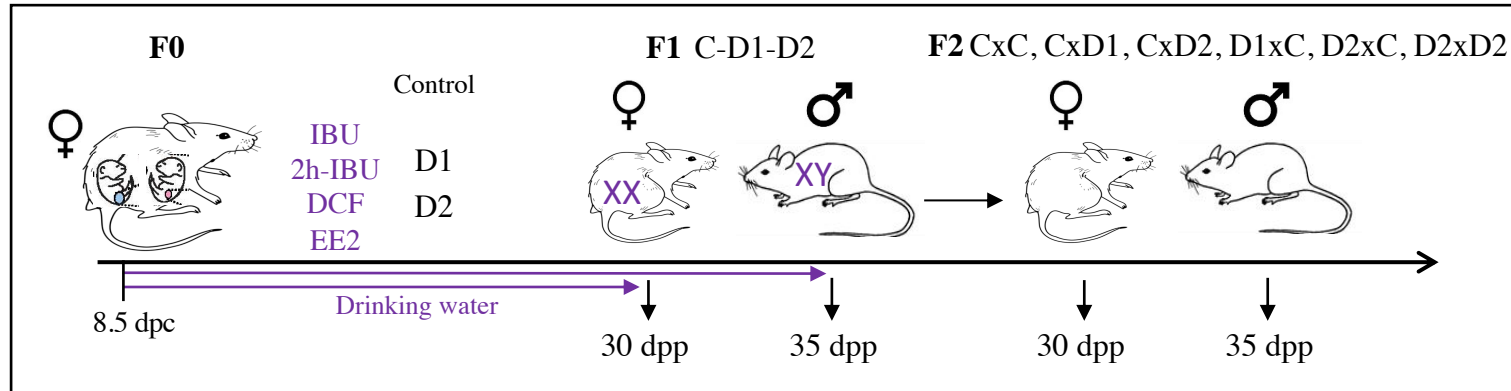
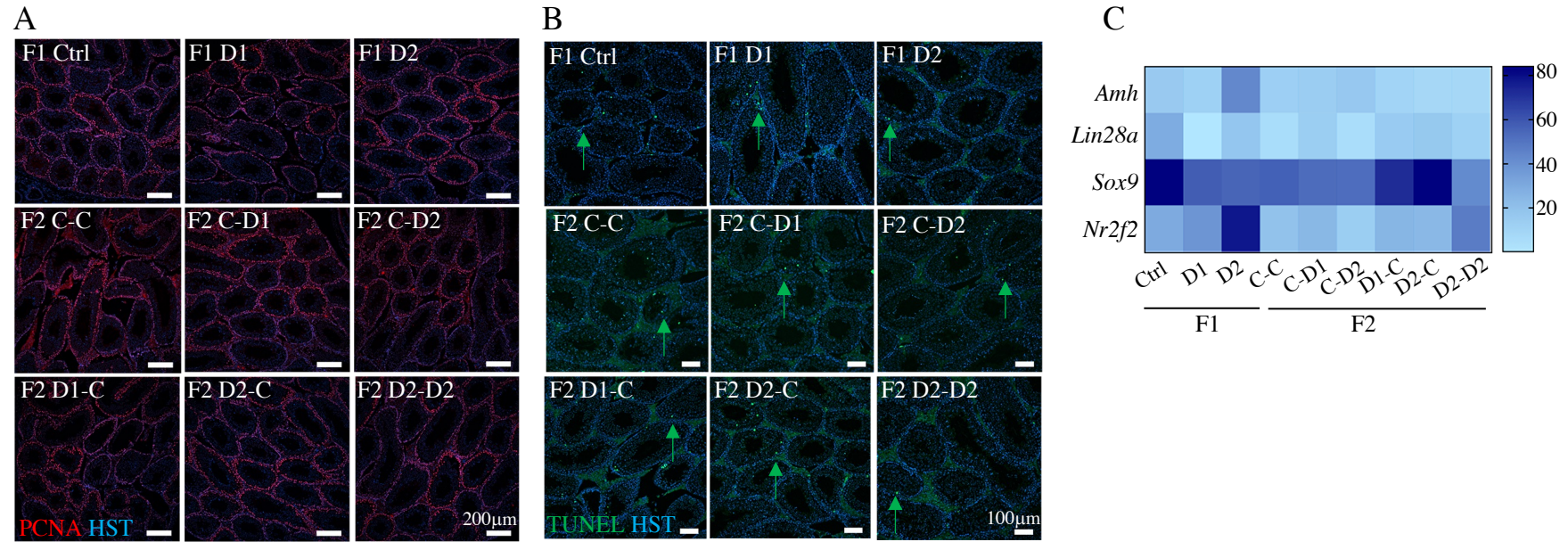


## Supp Figure S1



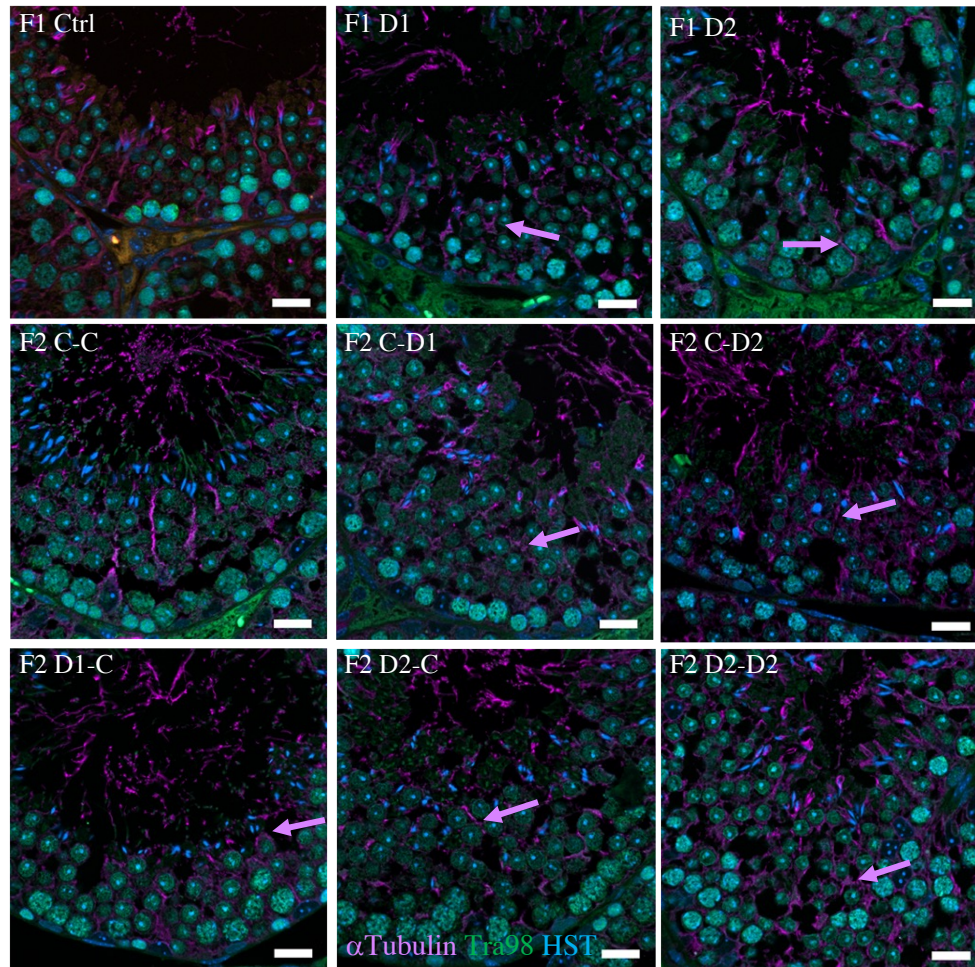
**Supplementary Figure S1.** Experimental design: the exposure to two mixtures (Dose 1 (D1) and Dose 2 (D2)) containing ibuprofen (IBU)/ 2hydroxyIbuprofen (2hIBU), diclofenac (DCF) and 17 $\alpha$ -ethinyl-estradiol (EE2) was carried out in drinking water of pregnant mice, from 8.5 dpc (days post coitum) until sacrifice (30 dpp for the females; 35 dpp for the males) (dpp: days postpartum) to generate F1 D1 and F1 D2 ; the control (C) animals are generated after exposure to 0.001% ethanol. F1 male (m) or female (f) animals were mated with control male (m) or female (f) animals (n=6 groups: mCtrlxfCtrl (CxC), mCtrlxfD1 (CxD1), mCtrlxfD2 (CxD2), mD1xfCtrl, (D1xC), mD2xfCtrl (D2xC)) and mD2xfD2 (D2xD2)).

## Supp Figure S2



**Supplementary Figure S2.** Immunofluorescence staining of 35 dpp F1 and F2 testes. Paraffin-embedded testis tissue sections were used to assess **(A)** PCNA expression (cell proliferation marker; red). Scale bars: 200µm; and **(B)** cell apoptosis (TUNEL assay). Green arrows: apoptotic cells. Scale bars: 100µm. Nuclei were counterstained with Hoechst (HST, in blue). **(C)** Heatmap of DEGs in F1 and F2 males: testicular genes, *Amh*, *Lin28a*, *Sox9* and *Nr2f2*.

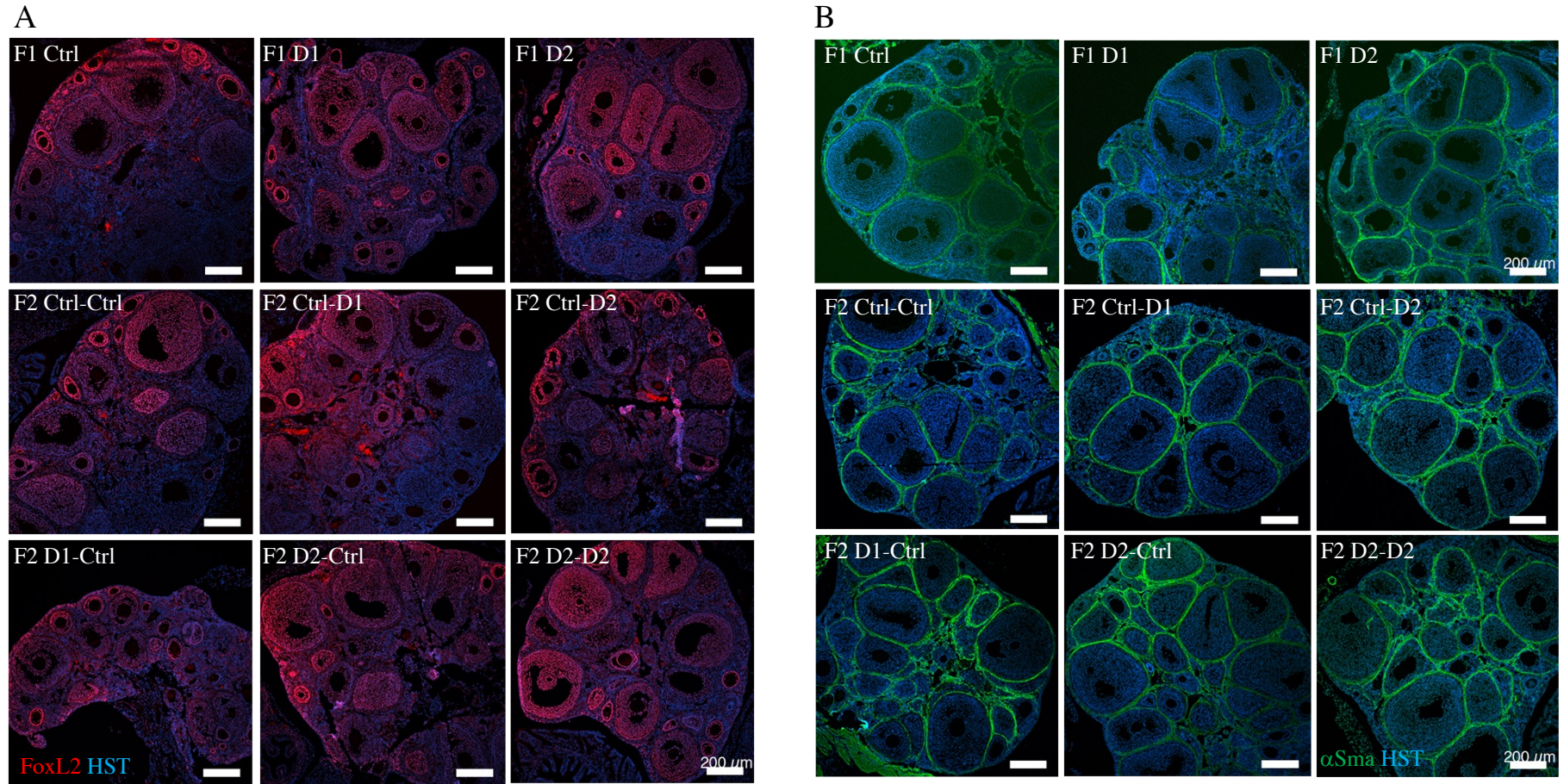
## Supp Figure S3



**Supplementary Figure S3.** Immunofluorescence staining of 35 dpp F1 and F2 testes (stage IV-VII tubules). Paraffin-embedded testis tissue sections were incubated with antibodies against  $\alpha$ -tubulin (purple) and TRA98 (germ cells; green). Scale bars: 100 $\mu$ m. Nuclei were counterstained with Hoechst (HST; blue).



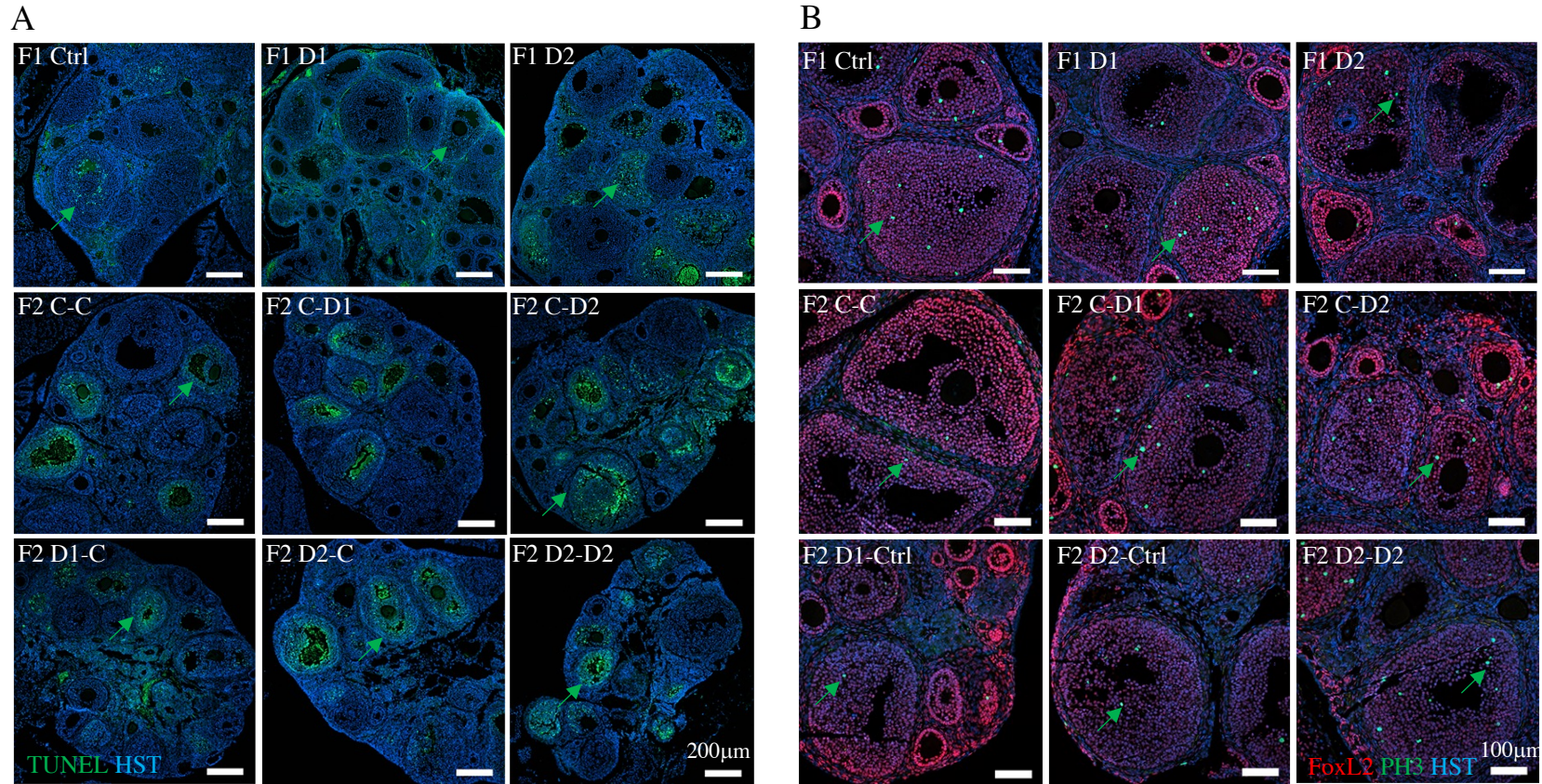
## Supp Figure S4



**Supplementary Figure S4.** Immunofluorescence staining of 30 dpp F1 and F2 ovaries. Paraffin-embedded ovary tissue sections were incubated with antibodies against (A) FOXL2 (granulosa cell marker; red) and (B) alpha-smooth muscle actin ( $\alpha$ -SMA) to delineate ovarian follicles (green). Nuclei were counterstained with Hoechst (HST; blue). Scale bars: 200  $\mu$ m.



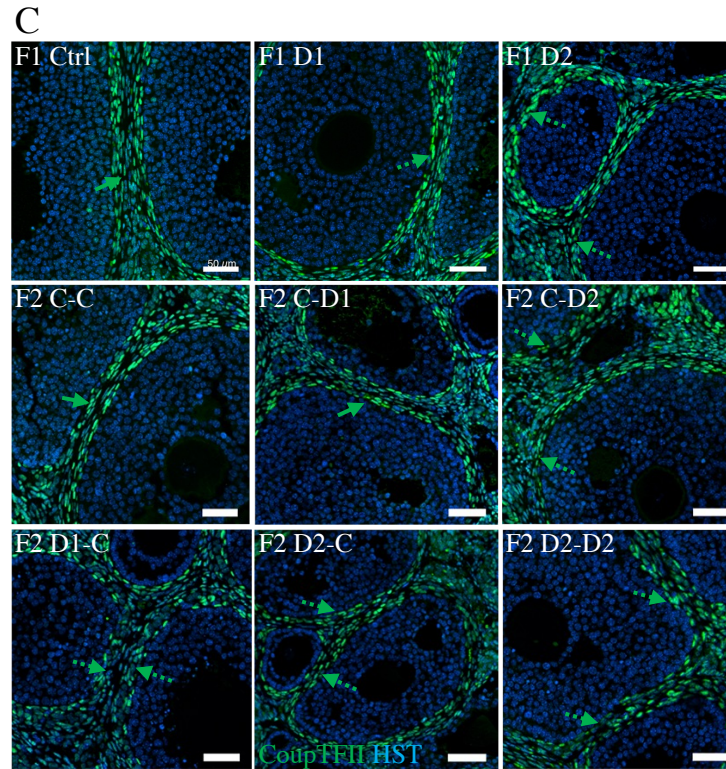
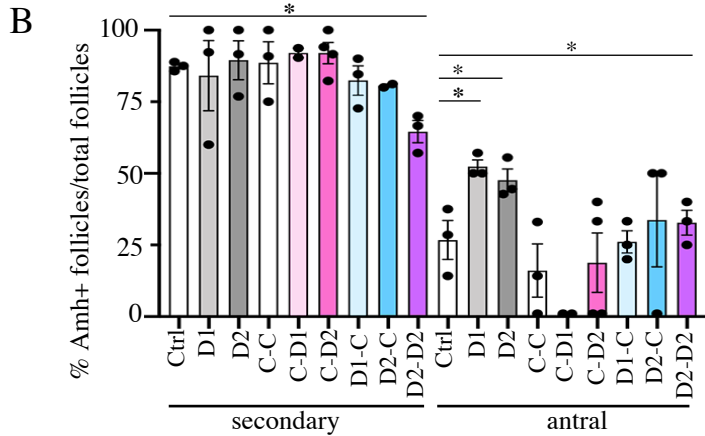
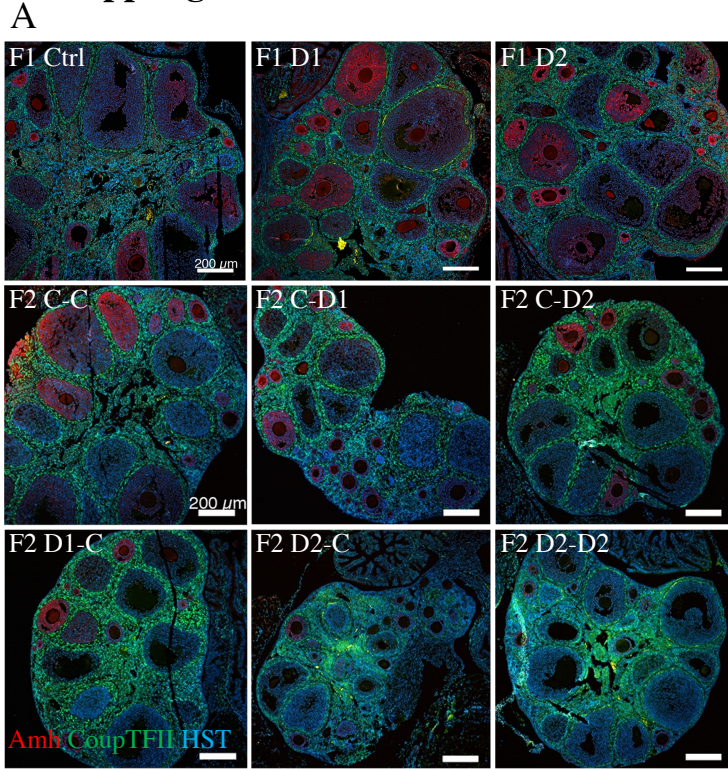
## Supp Figure S5



**Supplementary Figure S5.** Immunofluorescence staining of 30 dpp F1 and F2 ovaries. Paraffin-embedded ovary sections were stained with **(A)** TUNEL for apoptosis analysis; scale bars: 200µm. Green arrows: apoptotic follicles; and **(B)** PH3 (cell proliferation, S-phase, marker; red; scale bars: 100µm. Green arrows: proliferating follicular cells. Nuclei were counterstained with Hoechst (HST; blue).



# Supp Figure S6



**Supplementary Figure S6.** Immunofluorescence staining of 30 dpp F1 and F2 ovaries. Paraffin-embedded ovary tissue sections were incubated with antibodies against (A) AMH (red) and COUPTFII (N2rf2; green). Scale bars: 200μm, and (C) COUPTFII (N2rf2; green) at higher magnification to highlight abnormal theca cell layers (dashed green arrows), scale bars: 50μm. Nuclei were counterstained with Hoechst (HST; blue). (B) Percentage of AMH-positive secondary or antral follicles among total number of follicles (represented as means +/- SEM (n= 2-3 ovaries/group)).