



Figure S2. Comparison of ovarian morphology and quantification of ovarian follicles. (A–F) Hematoxylin stained sections from mouse ovary at PD8, PD14 and PD24. At PD8, similar ovarian morphologies were seen in sections from *OoCdk1*^{+/AF}; *Zp3-Cre* and *Cdk1*^{+/SAF} ovaries (A and B). However, at PD14, *OoCdk1*^{+/AF}; *Zp3-Cre* ovaries were smaller (D) than *Cdk1*^{+/SAF} ovaries (C). At PD24, healthy preantral follicles and oocytes were seen in sections from control *Cdk1*^{+/SAF} ovaries (E, arrows), but most of the follicles were dying in *OoCdk1*^{+/AF}; *Zp3-Cre* ovaries (F, arrows). The experiments were repeated more than three times each, and for each time and each age, ovaries from one mouse of each genotype were used. (G) Quantification of ovarian follicle numbers in PD8 and PD16 control *Cdk1*^{+/SAF} and *OoCdk1*^{+/AF}; *Gdf9-Cre* mice. (H) Quantification of ovarian follicle numbers in PD8, PD14, PD24, 6 weeks and 3 months control *Cdk1*^{+/SAF} and *OoCdk1*^{+/AF}; *Zp3-Cre* mice. The numbers of total follicles per ovary (mean ± SEM) were quantified as described in *Materials and Methods*. The numbers of mice used (n) and results of statistical analyses are given. ****P* < 0.001. NS- Not statistically significant.