## Supplemental Figure Legend



Supplemental Figure S1. Genotype identification in adiponectin-deficient mice. A. PCR-based genotyping of genomic DNA from WT, APN+/- and APN-/- mice. B and C. Serum adiponectin protein were measured by western blotting and ELISA in WT, APN+/- and APN-/- mice. (***, p<0.001, APN+/- or APN-/- vs WT mice, \#\#\#, $\mathrm{p}<0.001$, APN-/- vs APN+/- mice). Data were represented as mean $\pm$ SEM. $\mathrm{N}=7$ per genotype. Significant differences were determined using one-way ANOVA, followed by the Tukey post hoc test.


Supplemental Figure S2. The serum insulin levels, insulin sensitivity, body weight, and ovarian weight of adiponectin deficient female mice. A. No difference in serum insulin levels was observed among WT, APN+/- and APN-/- mice at 4 months of age. B. Glucose tolerance tests were performed at 4 months of age. Although blood glucose level was modestly lower in APN-/- mice than in WT mice
after overnight fasting, the glucose curves were essentially similar among the three groups. (*, $\mathrm{p}<0.05$, APN+/- vs WT mice; **, $\mathrm{p}<0.01$, APN-/- vs WT mice). C. No difference in body weight was observed among WT, APN+/- and APN-/- mice at 32-day-old following PMSG/hCG injection. D. No difference in ovarian weight was observed among WT, APN+/- and APN-/- mice at 4 months of age. $\mathrm{N}=5$ per genotype. Data were represented as mean $\pm$ SEM. Significant differences were determined using one-way ANOVA, followed by the Tukey post hoc test.


Supplemental Figure S3. Localization of AdipoR1 and AdipoR2 in ovary. AdipoR1 and AdipoR2 were detected in granulosa cells (GC), oocytes (Oo), theca cells (T) and interstitial cells (I). No difference of AdipoR1 and AdipoR2 in ovaries was observed among WT, APN+/- and APN-/- mice at 4 months of age. Scale bar $=100 \mu \mathrm{~m}$ (low magnification, $\times 200$; high magnification, $\times 400$ ). $\mathrm{N}=5$ per genotype . Data were represented as mean $\pm$ SEM. Significant differences were determined using one-way ANOVA, followed by the Tukey post hoc test.

