**SUPPLEMENTARY FIGURES**

**Figure S1.** The CO-IP of Nrf2 and Sirt1 in mouse ovarian tissues. Ovarian tissue extracts were immunoprecipitated with anti-Nrf2 protein antibody and immunoblots were probed with anti-Sir1 antibody. The “input” panel shows target proteins prior to immunoprecipitation in the extracts.

**Figure S2.** Summary of Nrf2-related events during mouse oocyte maturation. Nrf2 can control polar body extrusion by organizing microtubules and cell cycle that is regulated via the Sir1-Nrf2-Cyclin B1 signaling pathway.

**Figure S3.** Effects of Nrf2 knockdown on downstream genes. (A) Nrf2 knockdown causes the reduction of HO-1, NQO-1 and GCLM. (B) No significant difference in the expression of Wee1, CDC25A and MYT1 between control and Nrf2-KD oocytes. Bars represent the mean ± SD. *P<0.05 vs. controls.