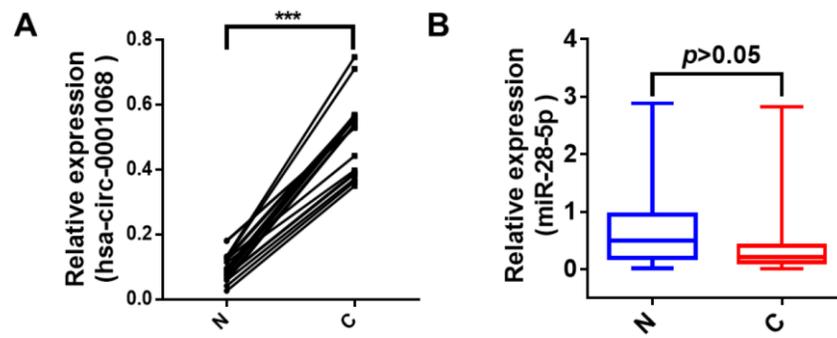
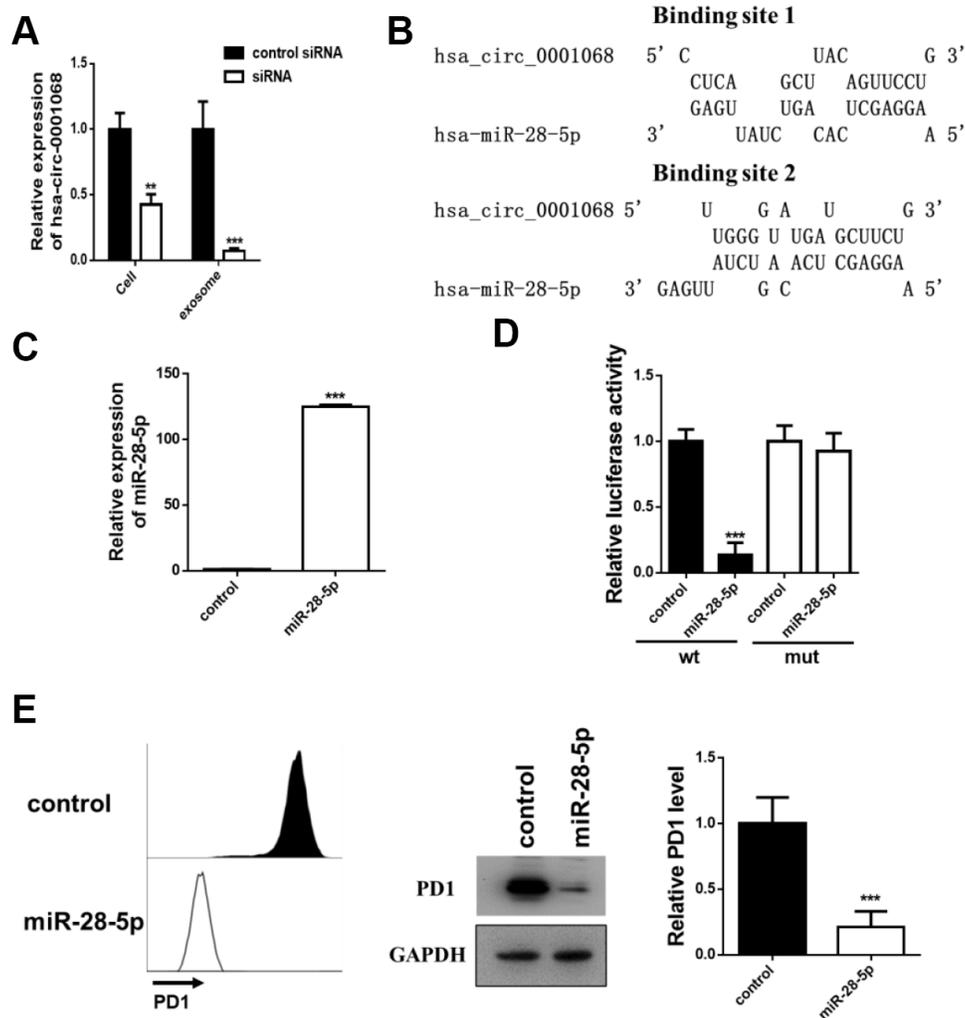


## SUPPLEMENTARY FIGURES



**Supplementary Figure 1.** The relative levels of circ-0001068 in ovarian cancer tissues (A) and the relative levels of miR-28-5p in the serum exosomes (B) by qRT-PCR. N: non-cancerous tissues; C: ovarian cancer tissues. \*\*\*P < 0.001.



**Supplementary Figure 2. miR-28-5p suppress PD1 expression in T cells.** (A) The efficiencies of siRNA of circ-0001068. (B) The interaction between circ-0001068 and miR-28-5p. (C) The relative levels of miR-28-5p in the Jurkat cells transfected with scramble RNA and miR-28-5p mimic. (D) The luciferase activity in the Jurkat cells transfected with wild type circ-0001068 luciferase report plasmid plus scramble RNA (control), wild type circ-0001068 luciferase report plasmid plus miR-28-5p mimic (miR-28-5p), muted circ-0001068 luciferase report plasmid plus scramble RNA (control), and muted circ-0001068 luciferase report plasmid plus miR-28-5p mimic (miR-28-5p). (E) The expression level of PD1 in the Jurkat cells transfected with scramble RNA and miR-28-5p mimic by flow cytometry and western blotting. \*\*\*P < 0.001.