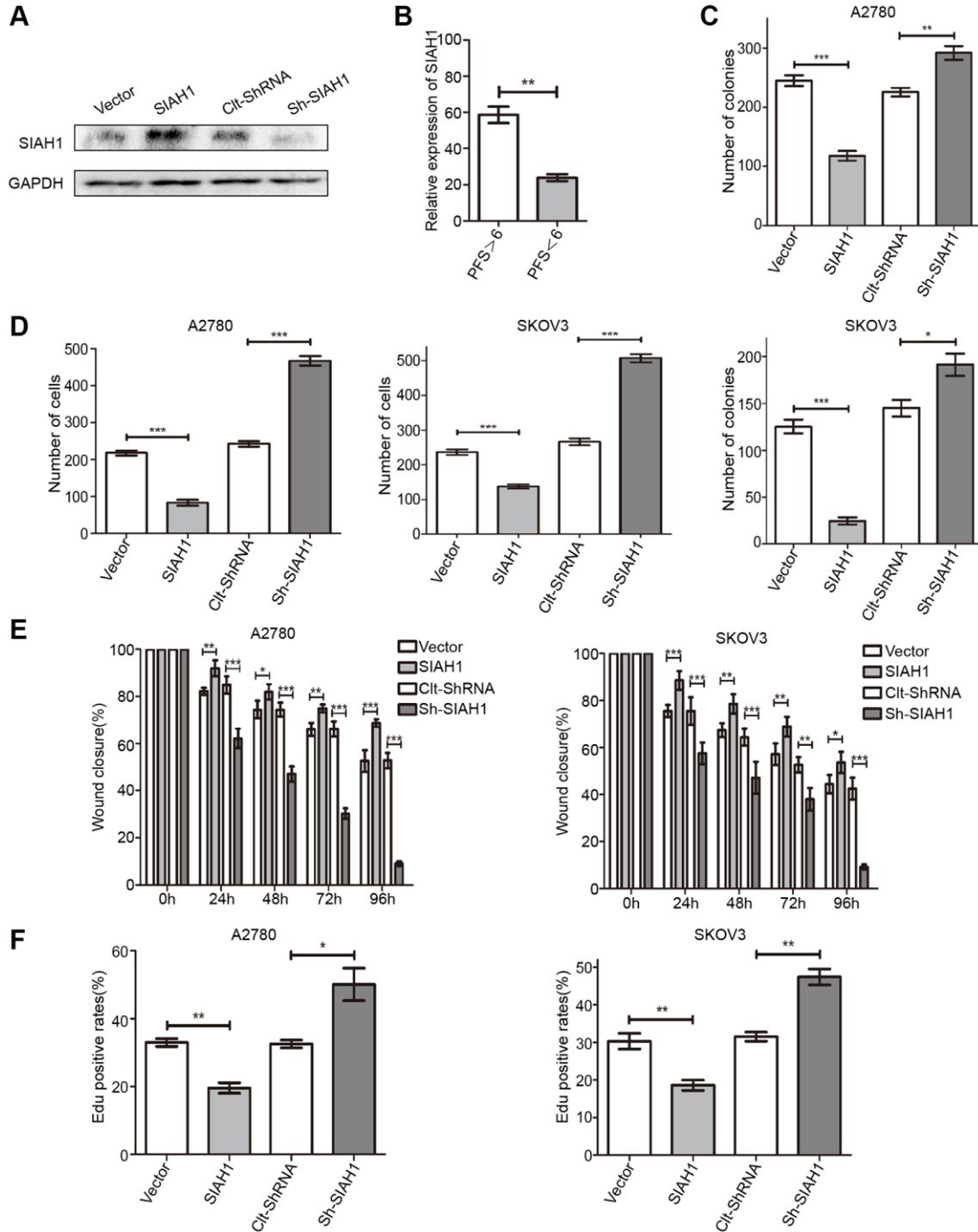
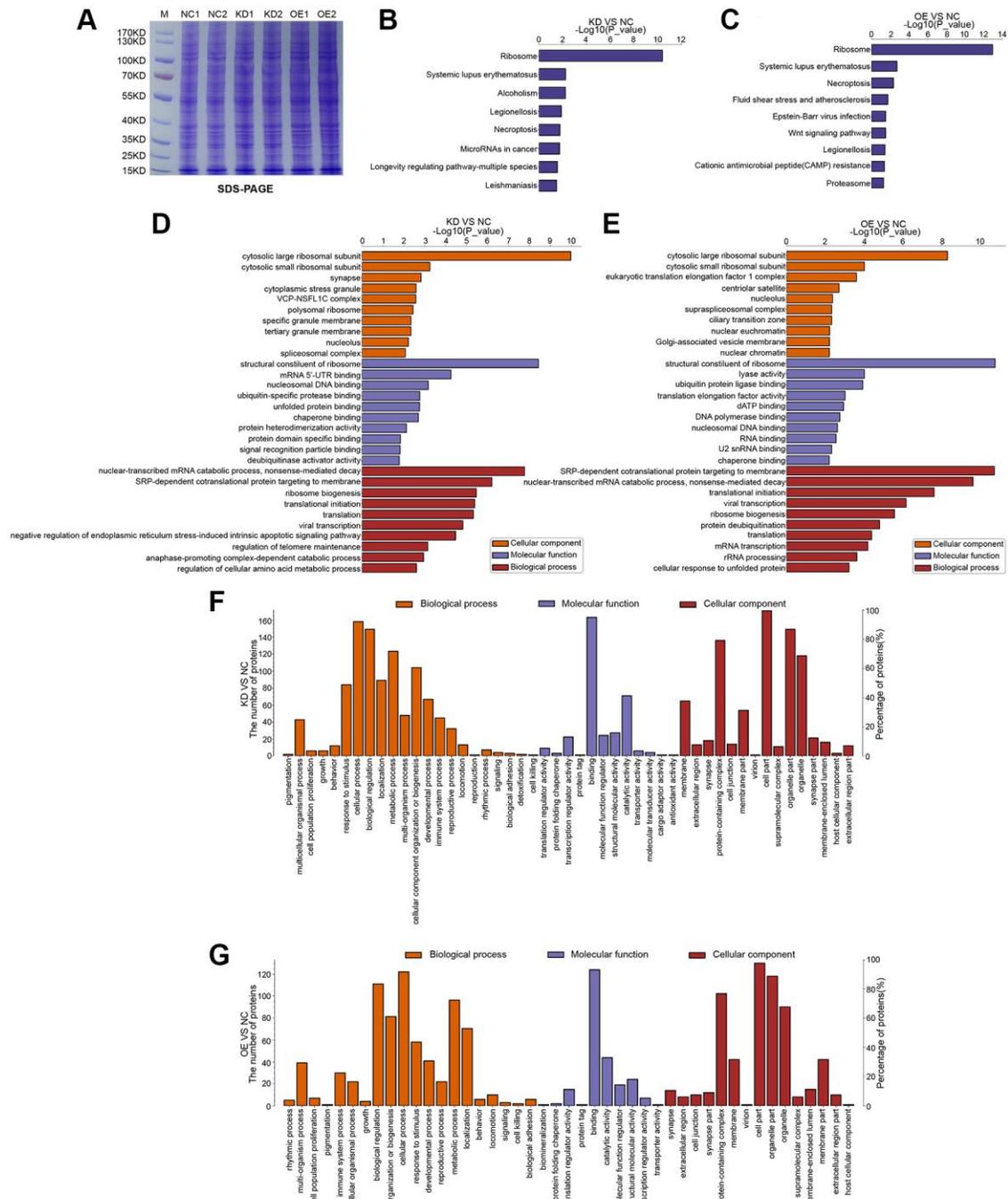


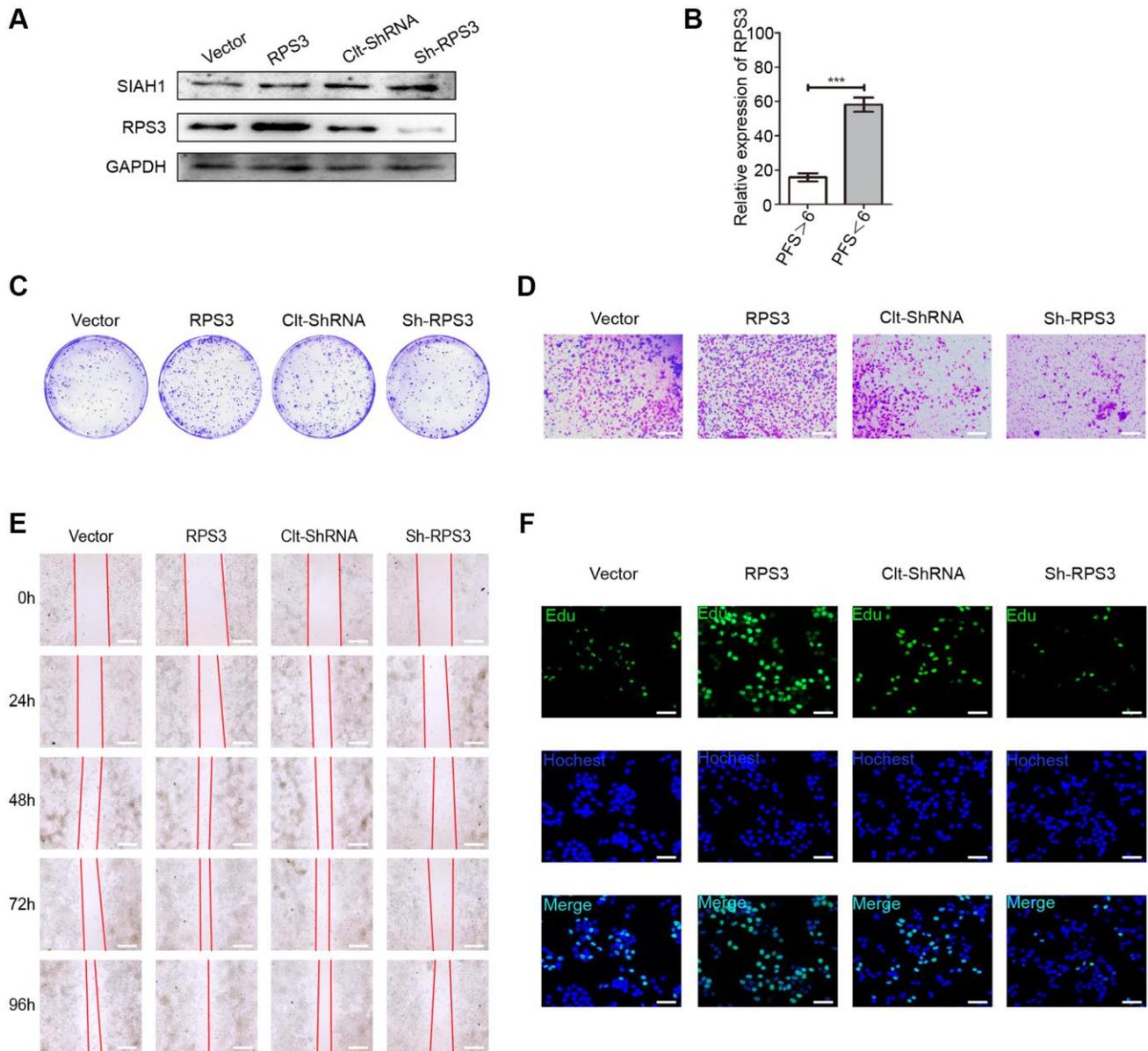
**SUPPLEMENTARY FIGURES**



**Supplementary Figure 1. SIAH1 sensitizes ovarian cancer cells to cDDP.** (A) Western blotting for SIAH1 in A2780 cells transfected with Vector, SIAH1, CIt-shRNA and sh-SIAH1 were shown. (B) Relative SIAH1 expression in tumor specimens form ovarian cancer patients with PFS > 6 months vs. PFS < 6 months. A2780 cells and SKOV3 cells were separately transfected with Vector, SIAH1, CIt-shRNA and sh-SIAH1 for 48 h, the number of cell colons (C), the cell number of transwell (D), the calculation of wound closure percentage (0, 24, 48, 72 and 96 h) (E), Edu positive rates (F) were measured in A2780 cells and SKOV3 cells respectively. \**p* < 0.05, \*\**p* < 0.01, \*\*\**p* < 0.001.



**Supplementary Figure 2. Advanced bioinformatics analysis with SIAH1 knockdown or overexpression. (A)** SDS-PAGE assay was performed for the six samples (NC1, NC2, KD1, KD2, OE1 and OE2) in HEK-293T cells. **(B)** Significantly enriched KEGG pathway statistics (KD vs. NC). **(C)** Significantly enriched KEGG pathway statistics (OE vs. NC). **(D)** Significantly enriched GO term statistics (KD vs. NC) (top 10). **(E)** Significantly enriched GO term statistics (OE vs. NC) (top 10). **(F)** Level 2 Statistics of GO annotation results (KD vs. NC). **(G)** Level 2 Statistics of GO annotation results (OE vs. NC).



**Supplementary Figure 3. SIAH1 down-regulates the protein level of RPS3.** (A) Western blotting for SIAH1 and RPS3 in A2780 cells transfected with Vector, RPS3, CIt-shRNA and sh-RPS3 for 48 h. (B) Relative RPS3 expression in tumor specimens from ovarian cancer patients with PFS > 6 months vs. PFS < 6 months. Cell colonies assay (C) and Transwell assay (D) of A2780 cells transfected with Vector, RPS3, CIt-shRNA and sh-RPS3 were shown. Scale bar: 400  $\mu$ m. The wound-healing assay was used to assess the effects of RPS3 on cellular motility over time as shown (0, 24, 48, 72 and 96 h; Scale bar: 400  $\mu$ m) (E) and Cell Edu assay (Scale bar: 200  $\mu$ m) (F) were analyzed in A2780 cells respectively. \*\*\* $p$  < 0.001.