**Suppl 4.** Verification of the special expression of DEGs identified via transcriptomic analysis in SMMC-7721 cells via real-time PCR. SMMC-7721 cells were treated with UBCS039 and then cultured with CD4+ T cells. Cells treated with DMSO or left untreated were used as controls. The mRNA levels of BASP1, CPS1, GNG11, MFAP5, NNMT and SMOC1 were significantly decreased, and the levels of FOXA2, GSTP1, HSPA1, RASEF, SERPINA6 and ZNF844 were significantly elevated in SMMC-7721 cells following UBCS039 treatment. \*Represents a P value less than 0.05, \*\*less than 0.01, \*\*\*less than 0.001, and \*\*\*\*less than 0.0001.

