**Supplementary materials**

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**Supplementary Figure 1.** The efficiency of shRNA sequences for UBE2T knockdown. The target sequences for shRNA1 (sh1), shRNA 2 (sh2) and shrRNA3 (sh3) are TGAGGAAGAGATGCTTGATAA, GAAATTTCATCCCTGATGTTTA, TTATCATCCAAACATTGATTC, separately. (**A**) UBE2T protein expression level in SMCC-7721 and Huh-7 cells tranfected with sh1,sh2 and sh3 compared with control. UBE2T was normalized to the expression of GAPDH. (**B**) The quantitative protein expression ratio of protein expression in UBE2T-sh1, sh2, sh3 and control groups. UBE2T protein level of sh1 group was significantly decreased compared with control in both SMCC-7721 and Huh-7 cell lines. UBE2T-sh1 was selected to conduct following experiments.

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**Supplementary Figure 2**. Lentivirus-mediated knockdown and over-expression of UBE2T in HCC cells. (**A**) UBE2T mRNA expression level in HCC cell lines by qPCR. The average UBE2T mRNA expression of UBE2T was normalized to the expression of GAPDH. (**B**) UBE2T protein expression level in HCC cell lines by western blot analysis. (**C**) The quantitative protein expression ratio of protein expression in UBE2T-KD and UBE2T-OE groups. UBE2T-KD: UBE2T stable interference cells; UBE2T-OE: UBE2T stable over-expression cells. GAPDH was used as the internal loading control. Each assay was performed in triplicate. Data are mean ± SD. \*\**P* < 0.01, \*\*\**P* < 0.001.



**Supplementary Figure 3.** Knockdown or over-expression of UBE2T had no significant effect of the apoptosis of liver cancer cells. (**A**) Apoptosis of SMCC-7721 and Huh-7 cell lines was determined by flow cytometry. (**B**) Apoptosis of SK-Hep1 and HepG2 cell lines was determined by flow cytometry. Each assay was performed in triplicate. Data are mean ± SD. \**P* <0.05.