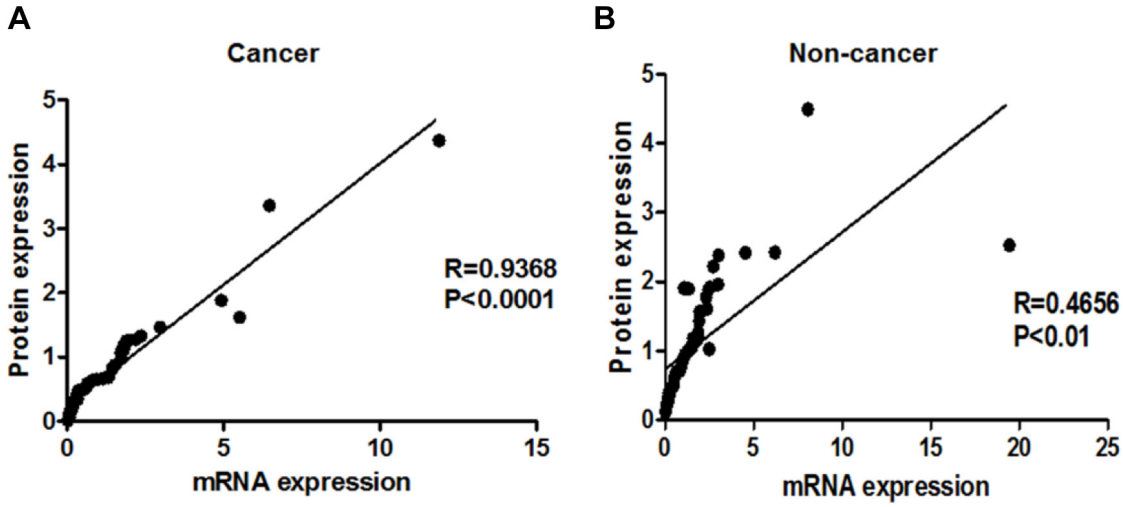
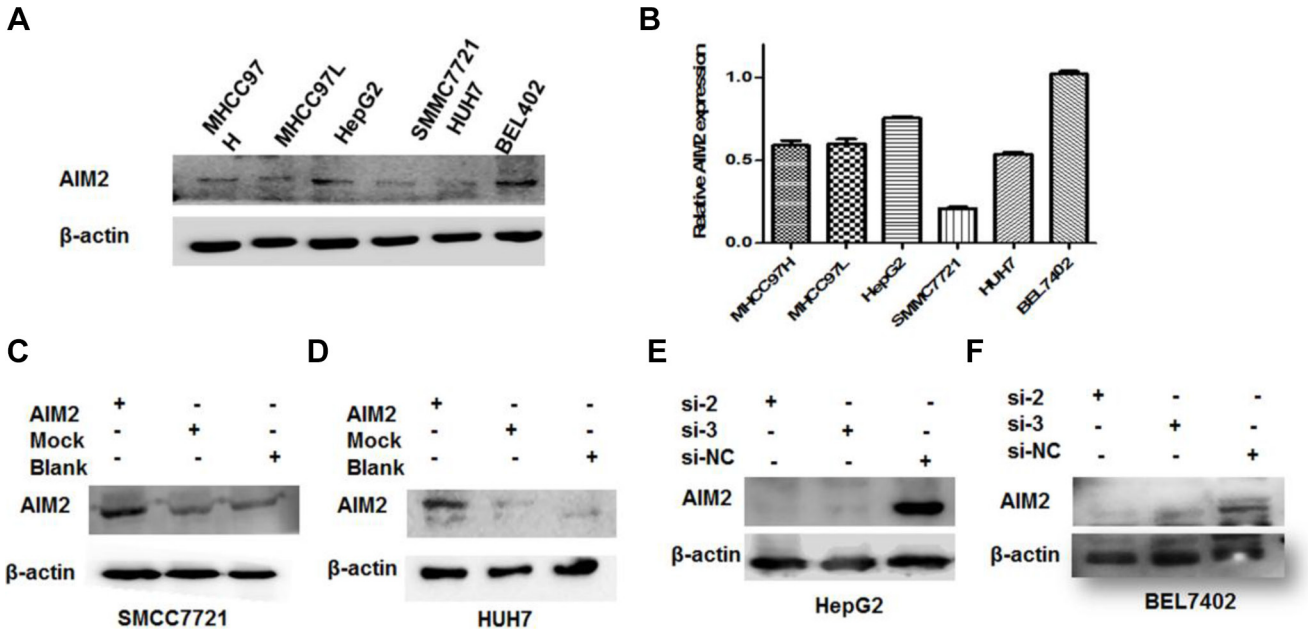
Loss of AIM2 expression promotes hepatocarcinoma progression through activation of mTOR-S6K1 pathway

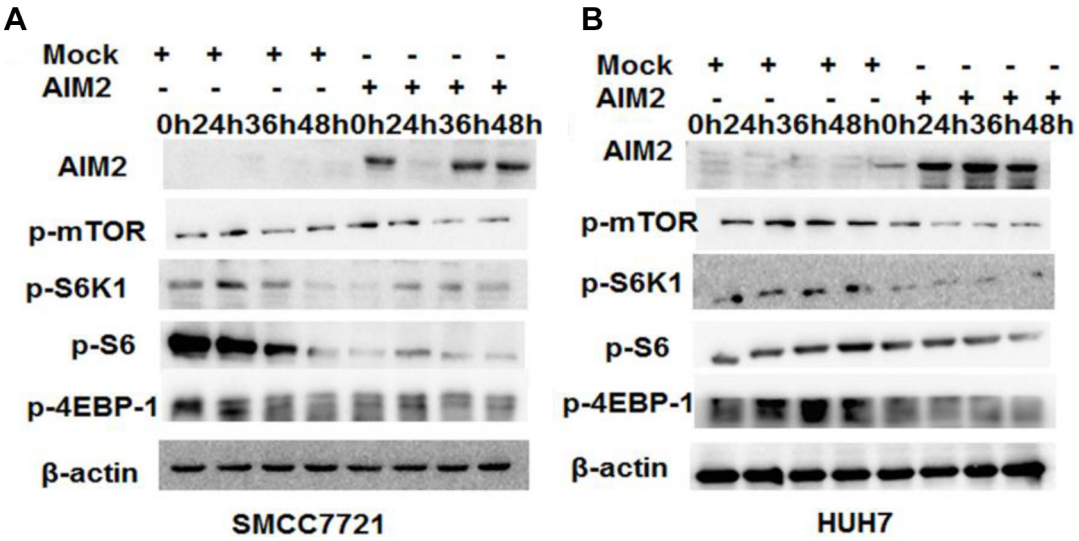
Supplementary Materials



Supplementary Figure S1: Correlation analysis of the mRNA and protein level of AIM2 expression. (**A–B**) AIM2 mRNA and protein expression were detected by real-time PCR and western blot, respectively. Correlation of AIM2 mRNA and protein levels in liver cancer tissues (A) and non-cancerous liver tissues (B) were presented.



Supplementary Figure S2: AIM2 expression was detected in six human liver cancer cell lines. (**A**) Western blot was used to determine the AIM2 protein expression in 6 human HCC cell lines. (**B**) Band intensity analysis was done to compare the relative level of AIM2 in these 6 detected HCC cell lines. (**C–D**) SMCC7721(C) and Huh7 cells (D) were transfected with 2ug EGFP-AIM2 plasmid to confirmed the efficiently overexpression of AIM2 in these HCC cells. Cells transfected with empty vectors were used as mock control. (**E–F**) Western blot was performed in two AIM2 highly expressed HCC cell lines(E for HepG2 cells and F for BEL7402 cells) to detect the inhibitory efficacy of three synthesized siRNA(siRNA-1and siRNA-3) specifically targeting AIM2.



Supplementary Figure S3: Effect of exogenous overexpression of AIM2 on the activation of mTOR-S6K1 pathway. (**A–B**) After transfection of AIM2 expression plasmid or mock plasmid to SMCC7721(A) and HUH7 (B) cells, the cells were further cultured for 0 h, 24 h, 36 h and 48 h before harvested for western blot analysis of the mTOR-S6K1 pathway activation.