

Figure S1. Knockdown and overexpression efficiency of the transfected pancreatic cancer cells (representative results). The expression of K19 protein and K19 mRNA in the transfected pancreatic cancer cells was detected by western blot and reverse transcription-quantitative PCR, respectively. \*\*\*\* $P < 0.0001$ . K19, keratin 19; Ctrl, control; sh, short hairpin RNA.

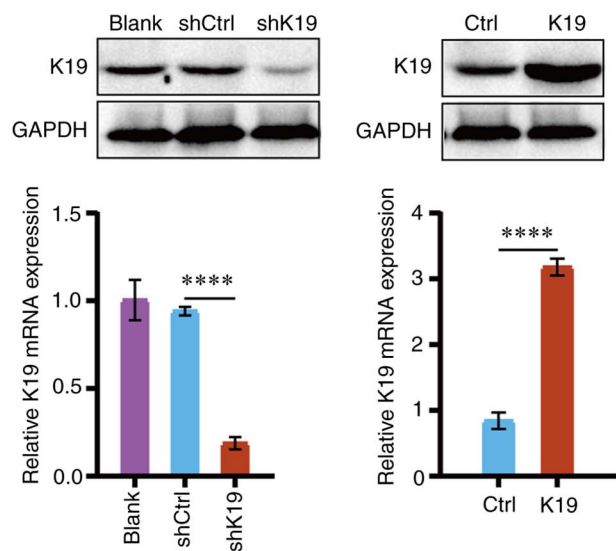


Figure S2. Overexpression efficiency in the PANC-1 cells stably overexpressing K19. The expression of K19 protein and K19 mRNA in the PANC-1 cells stably overexpressing K19 was detected by western blot and reverse transcription-quantitative PCR, respectively. \*\*\*\* $P < 0.0001$ . K19, keratin 19; Ctrl, control.

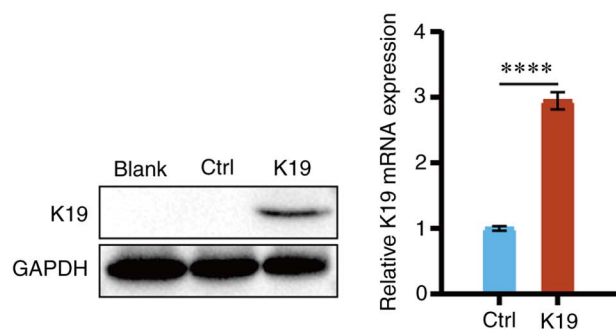


Figure S3. Semi-quantitative data of the western blot analysis. (A) Knockdown of K19 downregulated the expression of Ihh, PTCH, SMO, Gli1, c-Myc, CyclinD1, MMP2 and MMP9 in PANC-1 and MIA-PaCa-2 cells. (B) Overexpression of K19 upregulated the expression of Ihh, PTCH, SMO, Gli1, c-Myc, CyclinD1, MMP2 and MMP9 in PANC-1 and MIA-PaCa-2 cells. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , \*\*\*\* $P < 0.0001$ . K19, keratin 19; Ctrl, control; sh, short hairpin RNA; PTCH, transmembrane receptor patched; SMO, G protein-coupled-like receptor smoothened; Ihh, Indian hedgehog; Gli1, glioma-associated oncoprotein 1.

