

**Supplementary Figure 1:** (A) The expression level of s-COL11A1 in the four pancreatic cancer cells (BxPC-3, Capan-1, Mia PaCa-2, PANC-1) treated with coating-COL11A1 for 48h were tested by ELISA. (B) The expression level of s-COL11A1 and L-COL11A1 in the four pancreatic cancer cells (BxPC-3, Capan-1, Mia PaCa-2, PANC-1) treated for 0h, 12h, 24h, 48h were detected by western blotting. (C) Western blotting analysis was performed to test the effect of GEM on s-COL11A1, L-COL11A1, integrin  $\alpha 1\beta 1$  and DDR2. (D) Knockdown efficiency of siRNA targeting COL11A1, integrin  $\alpha 1\beta 1$  and DDR2 were detected by western blotting. Data represent the mean  $\pm$  SD. (n = 3, \*P < 0.05).

# Supplementary Figure 1

