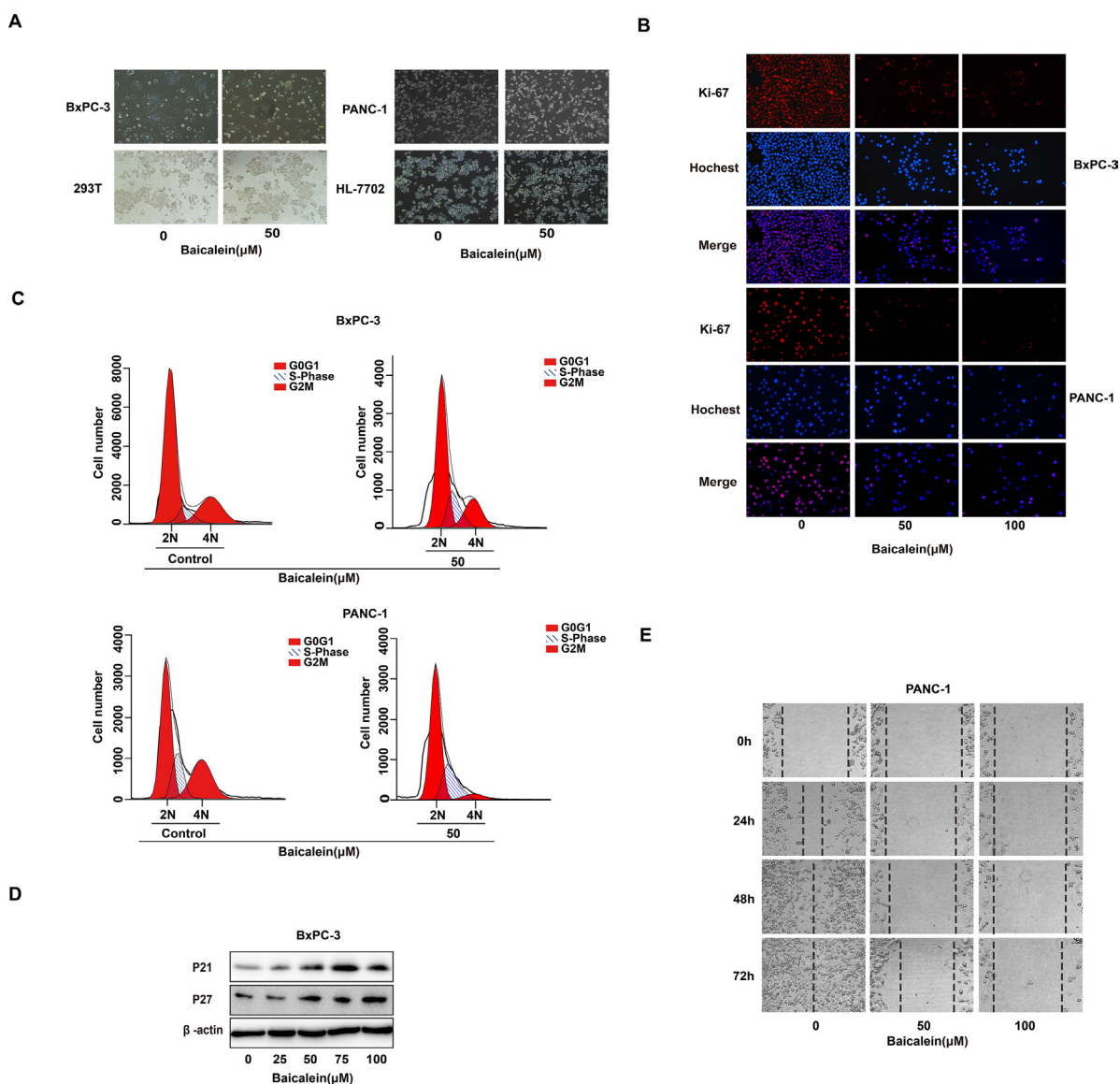


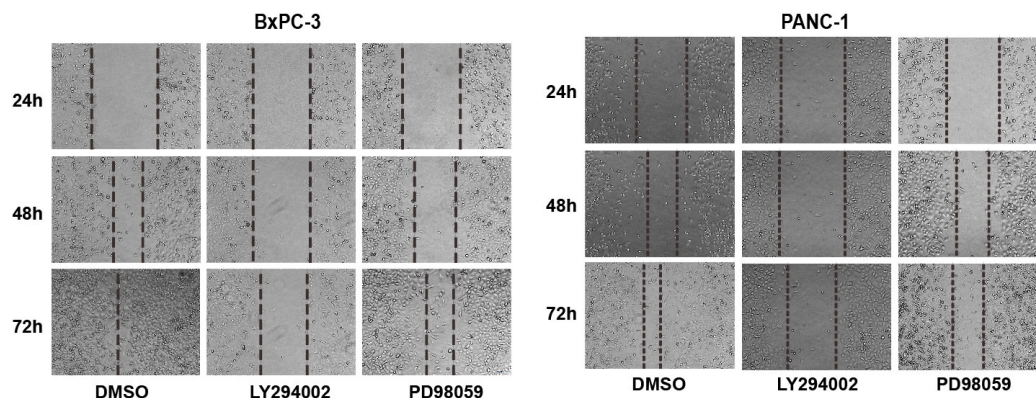
## Baicalein inhibits pancreatic cancer cell proliferation and invasion via suppression of NEDD9 expression and its downstream Akt and ERK signaling pathways

### SUPPLEMENTARY FIGURES AND TABLES

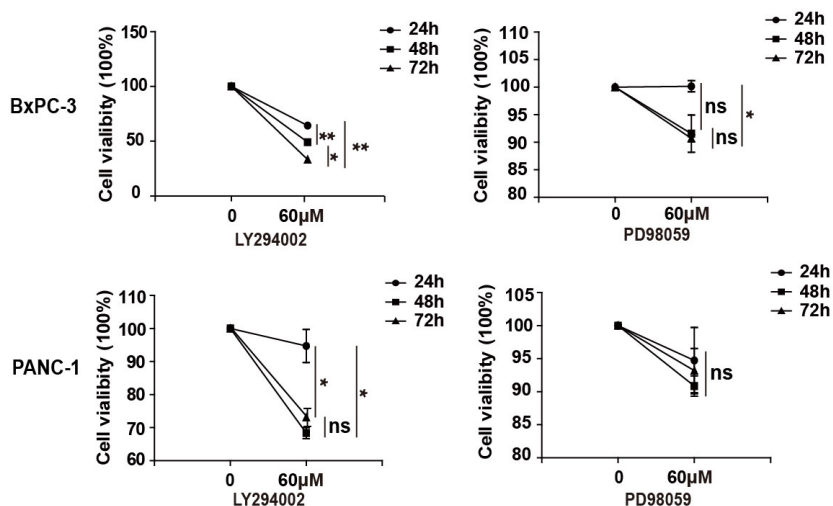


**Supplementary Figure 1: Effect of Baicalein on the proliferation, apoptosis, cell cycle and motility of pancreatic cancer cells.** (A) The cell morphologies were observed and photographed after BxPC-3, PANC-1, 293T and HL7702 cells were treated with 50  $\mu$ M Baicalein for 48 h. (B) After BxPC-3 and PANC-1 cells were treated with 50  $\mu$ M Baicalein for 48 h, cell proliferation was presented by Ki-67 immunofluorescent staining. (C) BxPC-3 and PANC-1 were treated with 50  $\mu$ M Baicalein for 48 h, the changes in cell cycle were detected by PI staining. (D) After BxPC-3 and PANC-1 cells were treated with Baicalein for 72 h, the protein levels of P21 and P27 were detected. (E) The migration ability of PANC-1 cells treated with 50 or 100  $\mu$ M Baicalein was examined by the wound healing assay at 24 h, 48 h and 72 h, respectively.

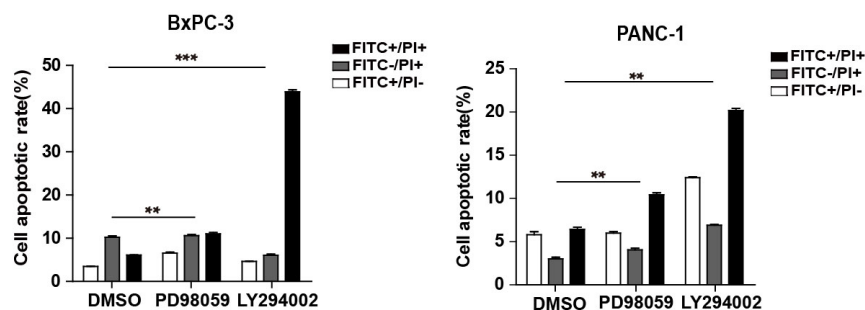
A



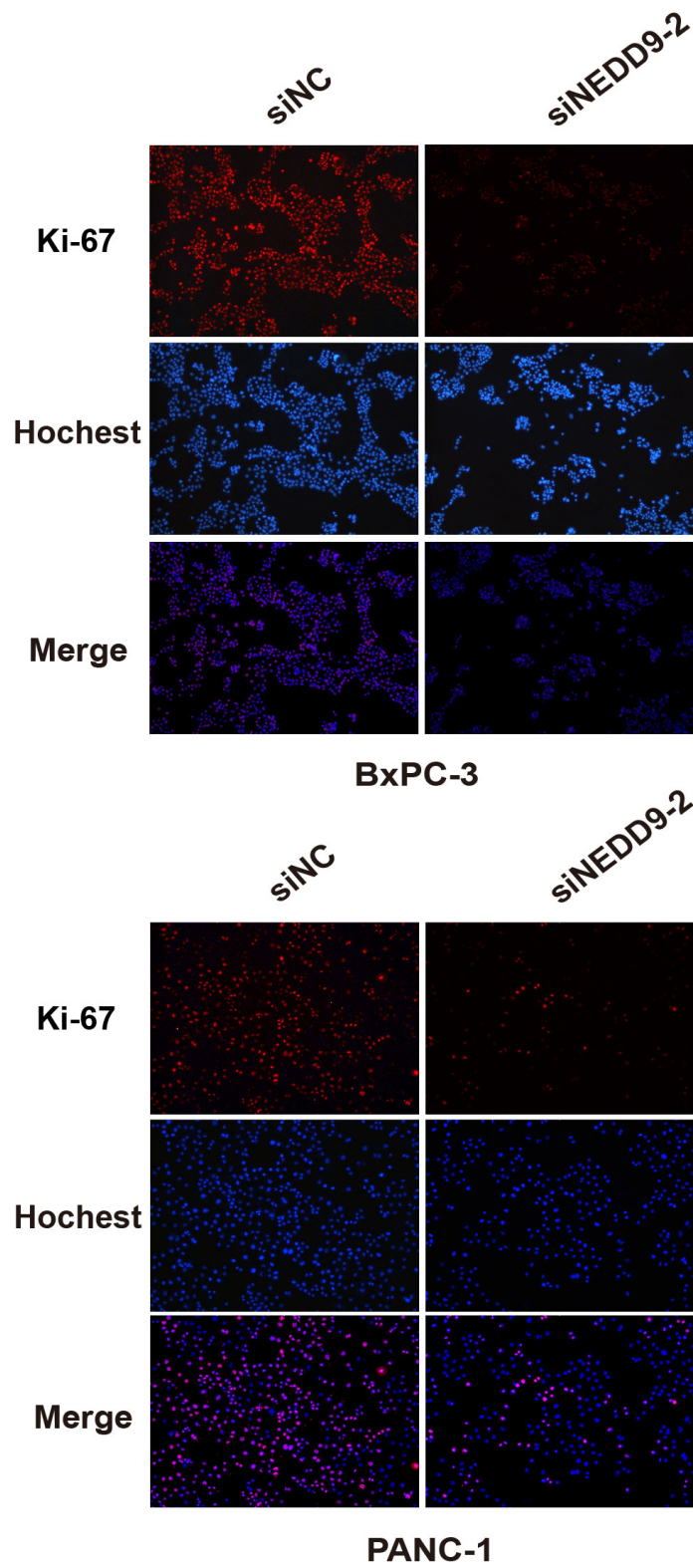
B



C



**Supplementary Figure 2: Effect of LY294002 and PD98059 on pancreatic cancer cell proliferation, apoptosis and mobility.** (A) BxPC-3 and PANC-1 cells were treated with 60  $\mu$ M LY294002 or PD98059. Equal volume of DMSO was used as control. The migration ability of BxPC-3 and PANC-1 was examined by the wound healing assay at 24 h, 48 h and 72 h, respectively. (B) The proliferation of BxPC-3 and PANC-1 cells treated with LY294002 or PD98059 was analyzed by the CCK8 assay at 24 h, 48 h and 72 h, respectively. The line graphs represent statistical results. (C) BxPC-3 and PANC-1 cells were treated with LY294002 or PD98059 for 48 h, and then subjected to double staining with Annexin V-FITC and PI for apoptosis analysis. The number of the cells in different apoptotic stages was denoted by quantitative graph. \* $p$  < 0.05, \*\* $p$  < 0.01, \*\*\* $p$  < 0.001.



**Supplementary Figure 3: Effect of NEDD9 knockdown on the proliferation of pancreatic cancer cells.** The proliferation of BxPC-3 and PANC-1 cells upon NEDD9 knocked-down was represented by Ki-67<sup>+</sup> cells.

**Supplementary Table 1: The primer sequences of human NEDD9 and  $\beta$ -actin for qRT-PCR assay**

<b>Primer names</b>	<b>Sequence</b>
human NEDD9	Sense 5'-CTGAGCGGAGTTGGATGGATGA-3' Antisense 5'-CGTCGATGGCGTTGAGTAGGGA-3'
human $\beta$ -actin	Sense 5'-CCTGGCGTGGGTAGATTGCTGT-3' Antisense 5'-ACGTGGGAAGAGGTGAAGATAAGG-3'

**Supplementary Table 2: The siRNA sequences for NEDD9 knock-down**

siRNA names	Sequence
siNEDD9-2	Sense 5'-GAGACACCAUCUACCAAGU-3' Antisense 5'-ACUUGGUAGAUGGUGUCU C-3'
siNEDD9-1	Sense 5'-CCCACCAGAUUCUAAGCCAAA-3' Antisense 5'-UUUGGCUUAGAAUCUGGUGGG-3'