

Supplementary Figure S1

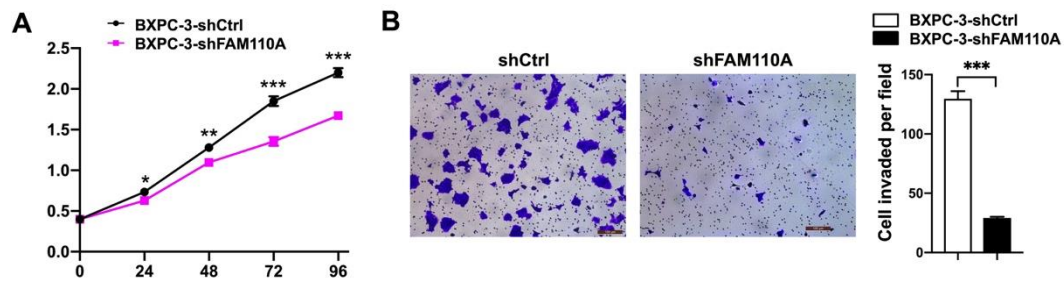


Figure S1. FAM110A enhances the proliferation and invasion of pancreatic cancer.

A, Proliferation of BXPC-3 cells expressing shFAM110A and shCtrl. **B**, Transwell assays were used to evaluate the invasive potential of FAM110A knockdown and control cells (scale bar: 100 μ m). shFAM110A inhibited the proliferation and invasion of BXPC-3 cells. Data are shown as the mean \pm SD. $n = 3$ * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$ were considered significant.

Supplementary Figure S2

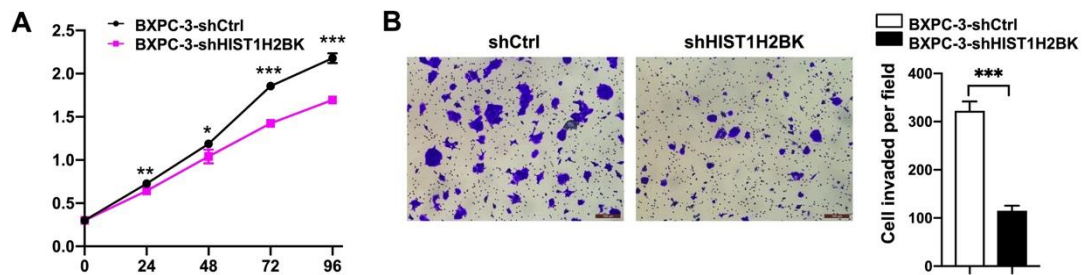


Figure S2. HIST1H2BK enhances the proliferation and invasion of pancreatic cancer.

A, Proliferation of BXPC-3 cells expressing shHIST1H2BK and shCtrl. **B**, Transwell assays were used to evaluate the invasive potential of HIST1H2BK knockdown and control cells (scale bar: 100 μ m). shHIST1H2BK inhibited the proliferation and invasion of BXPC-3 cells. Data are shown as the mean \pm SD. n = 3 *P < 0.05, **P < 0.01 and *** P < 0.001 were considered significant.

Supplementary Figure S3

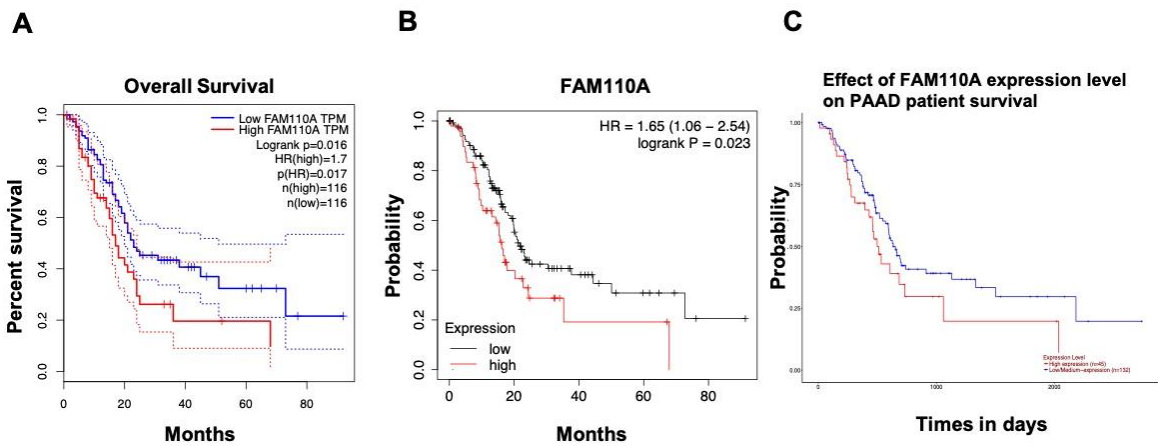


Figure S3. Bioinformatics analysis indicated that FAM110A was correlated with poor survival.

A GEPIA, B Kaplan–Meier Plotter and C Ualcan databases were used for survival analysis to evaluate the influence of FAM110A on the overall survival of PC patients.

Supplementary Figure S4

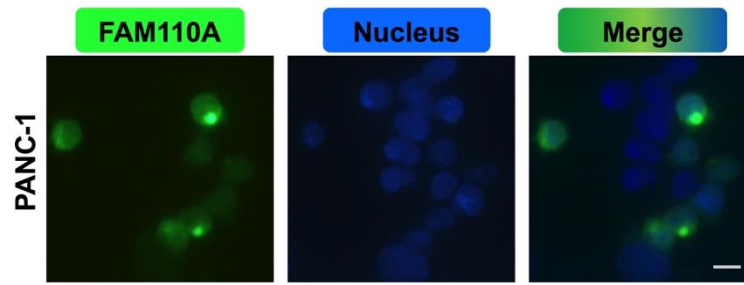


Figure S4. Subcellular localization of FAM110A in PANC-1 cells.

Immunofluorescent images of FAM110A (green) in PANC-1 cells. Nuclei stained with DAPI in blue. Scale bar = 10 μm .

Supplementary Table S1. Primer sequences for quantitative PCR

| Target Gene | Primers (5'-3') |
|----------------|--|
| β -Actin | F: CATGTACGTTGCTATCCAGGC R: CTCCTTAATGTCACGCACGAT |
| HIST1H2BK | F: CGACATCTTCGAACGCATCG R: GTGTACTIONGGTGACGGCCTTG |
| FAM110A | F: GTCCCTGGCTACCTGCTAC R: CTGTCACACAAGTCGATGAGG |
| EHMT2 | F: TCCAATGACACATCTTCGCTG R: CTGATGCGGTCAATCTTGGG |
| POU5F1 | F: GGGAGATTGATAACTGGTGTGTT R: GTGTATATCCCAGGGTGATCCTC |
| HSPA1L | F: TTACCGTGCCAGCCTATTTCA R: AGCACATTAAGTCCAGCAATCA |
| TNF-F | F: GAGGCCAAGCCCTGGTATG R: CGGGCCGATTGATCTCAGC |
| DDR1 | F: CCGACTGGTTCGCTTCTACC R: CGGTGTAAGACAGGAGTCCATC |
| TNXB | F: GCCCTGCTCACTTGGACTG R: GGAGCCGTGCATTGTAGGAG |
| STK19 | F: GACCTTTGGAGTTAAGAGGCG R: CTGGACGATTCTGATCTCCCC |
| CYP21A2 | F: CAAGCTGGTGTCTAGGAACTACC R: TCTCATGCGCTCACAGAACTC |
| SLC44A4 | F: CAAGGCTGTGGGACAGATGAT R: CCCAGTAGGCAATGCAGATGA |
| CLIC1 | F: CTGGGCTGGACATATTTGCCA R: GCTCGTTGCCATCCAAAAACT |
| TCF19 | F: TTACCATCCCACGGTCTAGGG R: GCTGCCTATGGAGTTTAGGATCA |

F, Forward; R, Reverse

Supplementary Table S2. Characteristics of antibodies used in the study

| Antigen or description | Application | Origin | Dilution |
|---|-------------|------------------------|----------|
| <i>Primary antibodies</i> | | | |
| FAM110A | WB | orb166688, Biorbyt, UK | 1:1000 |
| HIST1H2BK | WB | orb548476, Biorbyt, UK | 1:5000 |
| P53 | WB | orb99409, Biorbyt, UK | 1:1000 |
| CDKN1A | WB | orb48324, Biorbyt, UK | 1:1000 |
| PCNA | WB | orb48485, Biorbyt, UK | 1:1000 |
| BAX | WB | orb31066, Biorbyt, UK | 1:1000 |
| BCL2 | WB | orb99416, Biorbyt, UK | 1:1000 |
| Beta-Actin | WB | orb378579, Biorbyt, UK | 1:5000 |
| GAPDH | WB | Orb555879, Biorbyt, UK | 1:5000 |
| <i>Secondary antibodies</i> | | | |
| Goat Anti-Rabbit IgG antibody (HRP) | WB | orb43514, Biorbyt, UK | 1:5000 |
| Goat Anti-Mouse IgG (H+L) antibody (HRP) | WB | orb506151, Biorbyt, UK | 1:5000 |

HRP, horseradish peroxidase; WB, Western blotting

Supplementary Table S3.

Surgical specimens of pancreatic cancer and peritumor samples

| Sample No. | Age | Sex | Pathology diagnosis | Grade | Tumor diameter |
|-------------------|------------|------------|----------------------------------|--------------|-----------------------|
| 01 | 62 | Male | pancreatic ductal adenocarcinoma | II | 17 |
| 02 | 50 | Male | pancreatic ductal adenocarcinoma | II | 24 |
| 03 | 57 | Female | pancreatic ductal adenocarcinoma | II | 18 |
| 04 | 51 | Male | pancreatic ductal adenocarcinoma | I | 12 |
| 05 | 42 | Female | pancreatic ductal adenocarcinoma | II | 23 |
| 06 | 52 | Male | pancreatic ductal adenocarcinoma | I | 10 |
| 07 | 61 | Female | pancreatic ductal adenocarcinoma | I | 14 |
| 08 | 60 | Male | pancreatic ductal adenocarcinoma | I | 15 |
| 09 | 56 | Male | pancreatic ductal adenocarcinoma | II | 21 |
| 10 | 58 | Male | pancreatic ductal adenocarcinoma | I | 16 |
| 11 | 39 | Female | pancreatic ductal adenocarcinoma | II | 20 |
| 12 | 65 | Male | pancreatic ductal adenocarcinoma | I | 13 |