

Supplementary figures

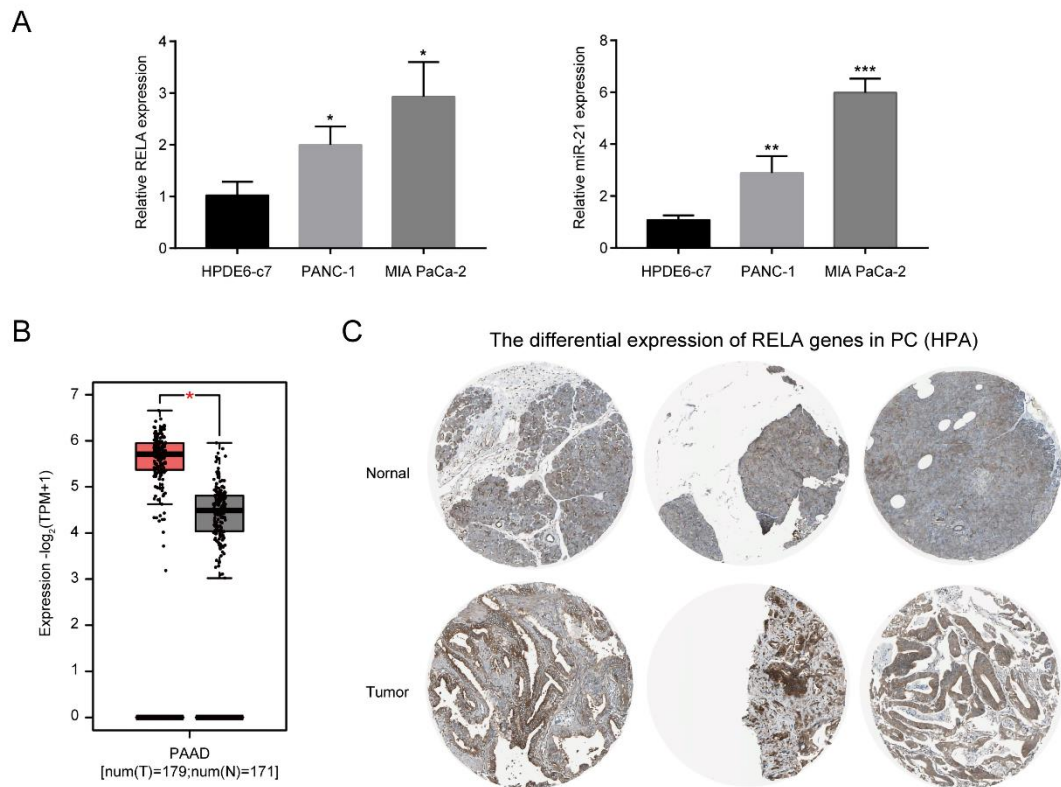


Figure S1. Expression levels of RELA in pancreatic cancer. (A) Reverse transcription-quantitative PCR was used to determine RELA and miR-21 expression levels in pancreatic cancer cells and normal pancreatic ductal epithelial cell (HPDE6-c7). (B) and (C) The expression of RELA in pancreatic cancer tissue through analysis of GEPIA2 and HPA databases. All experiments were performed in triplicate. Data are presented as the mean \pm SD. * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$.

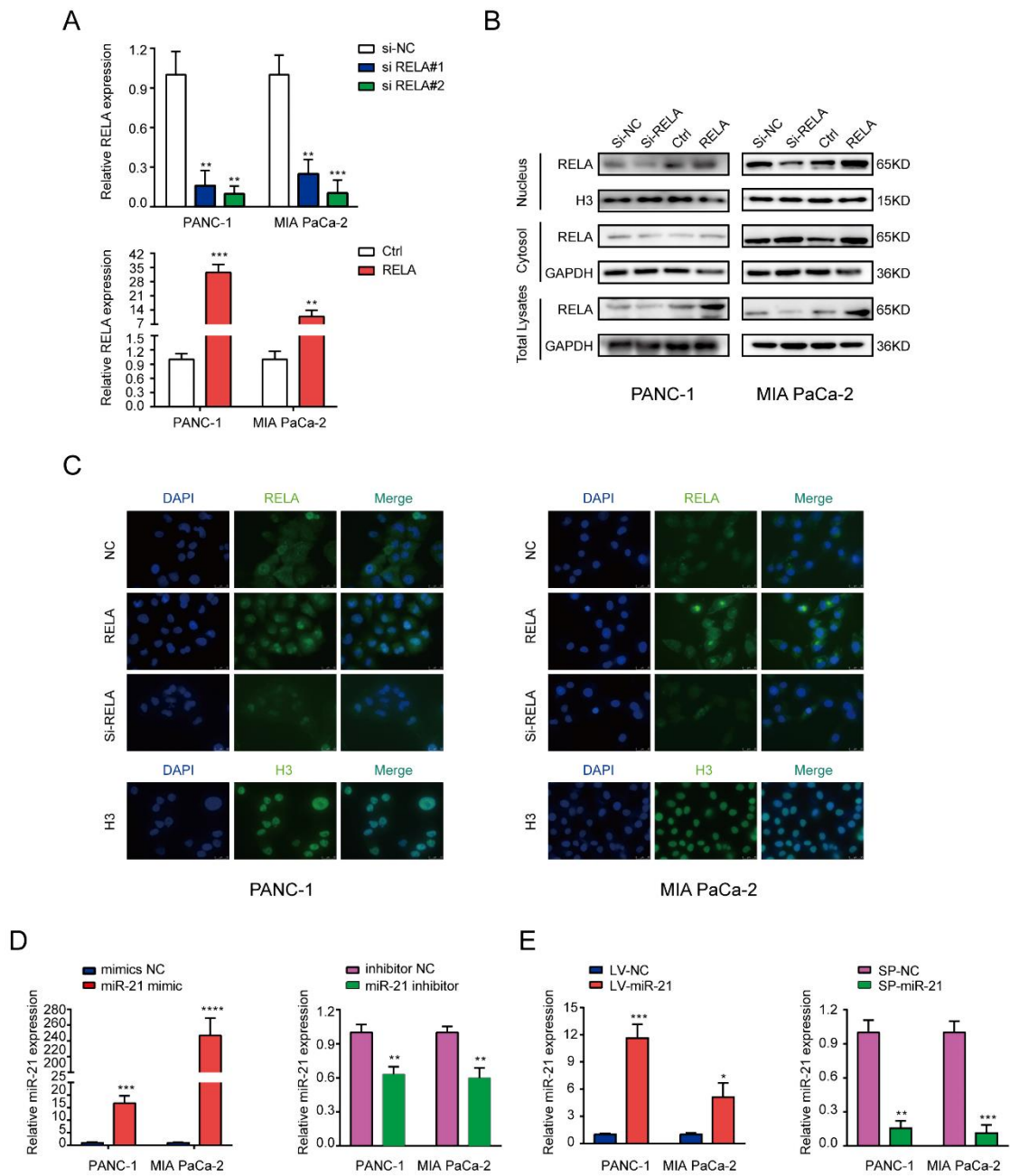


Figure S2. Expression levels of RELA or miR-21 in PDAC cells following transfection.

(A) Reverse transcription-quantitative PCR was used to determine RELA mRNA expression levels following transfection with si-RELA or RELA. (B) Western blotting was used to determine the RELA protein expression level following transfection with

si-RELA or RELA. (C) Representative fluorescence images of RELA protein expression levels in PDAC cells following transfection with si-RELA or RELA (scale bar, 25 μm ; magnification, x630). (D) miR-21 expression levels in PDAC cells following transfection with miR-21 mimic or miR-21 inhibitor. (E) miR-21 expression levels in PDAC cells following transduction with lentivirus-miR-21 or sponge-miR-21. All experiments were performed in triplicate. Data are presented as the mean \pm SD. * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$.

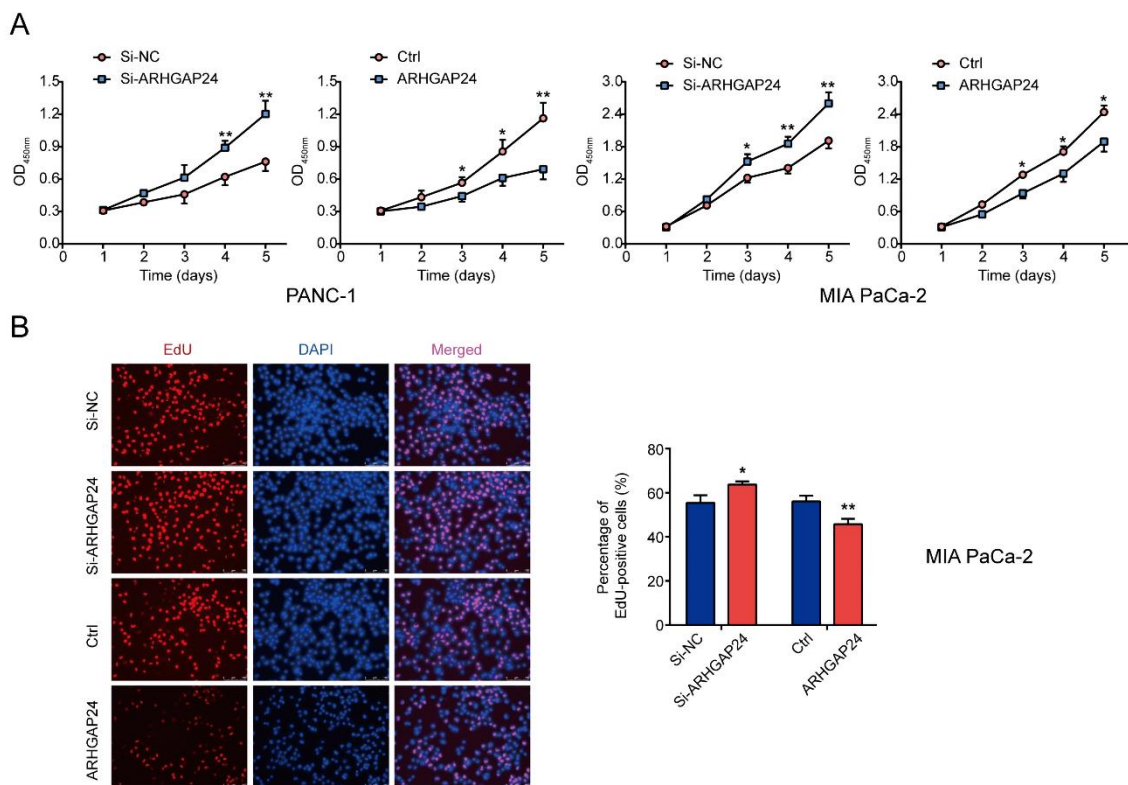


Figure S3. ARHGAP24 promotes cell growth in pancreatic ductal adenocarcinoma. (A and B) Cell viability and EdU assays were performed to measure cell proliferation (scale bar, 100 μm ; magnification, x200). All experiments were performed in triplicate. Data are presented as the mean \pm SD. * $P < 0.05$ and ** $P < 0.01$.

Supplementary Table S1. Oligos and primers used in this study.

Oligonucleotides	Supplier	Catalog number or sequence
Si-h-RELA_001	RiboBio	5'-GCTGCAGTTTGATGATGAA-3
Si-h-RELA_002	RiboBio	5'-CTTCCAAGTTCCTATAGAA-3
GenOFFTM st-h-ARHGAP24_001	RiboBio	5'-GGAGGATACTGTTTCGTTAT-3
GenOFFTM st-h-ARHGAP24_002	RiboBio	5'-GAAGGTATCTGGTACCAAA-3
siR NC #1	RiboBio	5'-GGCTCTAGAAAAGCCTATGC-3
RELA in pcDNA3.1-C-3*Flag	RiboBio	Cat# ST001295
ARHGAP24 in pcDNA3.1-C-3*Flag	RiboBio	Cat# ST001274
PcDNA3.1	RiboBio	Cat# ST00001
micrON hsa-miR-21-5p mimic	RiboBio	Sense: UAGCUUAUCAGACUGAUGUUGA Antisense: UCAACAUCAGUCUGAUAGCUA
micrON mimic NC #22	RiboBio	Sense: UUUGUACUACACAAAAGUACUG Antisense: CAGUACUUUUGUGUAGUACAAA
micrOFF hsa-miR-21-5p inhibitor	RiboBio	UCAACAUCAGUCUGAUAGCUA
micrOFF inhibitor NC #22	RiboBio	CAGUACUUUUGUGUAGUACAAA
ARHGAP24-3'UTR WT pmirGLO	RiboBio	Cat# ST008732
Amp		
ARHGAP24-3'UTR MUT pmirGLO	RiboBio	Cat# ST008733
Amp		
VIMP1 promoter luc pGL3-Basic-3	RiboBio	Cat# ST009833
Amp		
VIMP1 promoter luc pGL3-Basic-1	RiboBio	Cat# ST009831
Amp		
VIMP1 promoter luc pGL3-Basic-2	RiboBio	Cat# ST009832
Amp		
PRL-TK	RiboBio	Cat# ST00009
has-miR-21 reverse transcription primer	EnzyArtisan	5'- GTCGTATCCAGTGCAGGGTCCGAGGTATTCCGACTGGATACGACT CAACA-3'
hsa-U6 reverse transcription	EnzyArtisan	5'-CTCAACTGGTGTCTGGAGTCGGCAATTC

primer		AGTTGAGAAAAATAT -3'
hsa-U6 forward primer for qPCR	EnzyArtisan	5'- CAAGGATGACACGCAA -3'
hsa-U6 reverse primer for qPCR	EnzyArtisan	5'- TCAACTGGTGTCTGG -3'
GAPDH forward primer for qPCR	EnzyArtisan	5'-GTCTCCTCTGACTTCAACAGCG -3'
GAPDH reverse primer for qPCR	EnzyArtisan	5'-ACCACCCTGTGTAGCCAA-3'
RELA forward primer for qPCR	EnzyArtisan	5'-TGAACCGAAACTCTGGCAGCTG-3'
RELA reverse primer for qPCR	EnzyArtisan	5'-CATCAGCTTGC AAAAGGAGCC-3'
ARHGAP24 forward primer for qPCR	EnzyArtisan	5'-ACCTCCGAGAACTTCCAGAACC-3'
ARHGAP24 reverse primer for qPCR	EnzyArtisan	5'-CCACTGGCAAACCTTTCACCTG-3'
miR-21-5p forward primer for qPCR	EnzyArtisan	5'- CGCGCGTAGCTTATCAGACTGA-3'
miR-21-5p reverse primer for qPCR	EnzyArtisan	5'- ATCCAGTGCAGGTCCGAGG-3'
Pri-miR-21 forward primer for qPCR	EnzyArtisan	5'-ACACTCATCCCATTCTAAACTATGTG-3'
Pri-miR-21 reverse primer for qPCR	EnzyArtisan	5'-CCAACACTCTGAAATCTCCATTACTC-3'
Vmp1#1 forward primer for Chip-qPCR	EnzyArtisan	5'-TCAGGCTGGGAGGTGGAAA-3'
Vmp1#1 reverse primer for Chip-qPCR	EnzyArtisan	5'-TGGAGACAGGTTTTGCATTG-3'
Vmp1#2 forward primer for Chip-qPCR	EnzyArtisan	5'-CTGGGATTACAGGCACGCG-3'
Vmp1#2 reverse primer for Chip-qPCR	EnzyArtisan	5'-AGGCTGATGTGGCGGATC-3'
Vmp1#3 forward primer for Chip-qPCR	EnzyArtisan	5'-GAAACCAATTCTTTCCACGCAG-3'
Vmp1#3 reverse primer for Chip-qPCR	EnzyArtisan	5'-ATTGATAAAATAGCGAGCAGGCC-3'