

Anillin promotes prostate cancer progression

Table S1. The sequences of siRNAs

SiRNAs	Sense (5'-3')	Antisense (5'-3')
si-ANLN-1	UCACAUCUUAUACCACAAATT	UUUGUGGUUUAUAGAUGUGAGG
si-ANLN-2	GCCUCUUUGAAUAAAGCCCUA	UAGGGCUUUUUAUCAAGAGGC
si-IGF2BP1	CCAUCCGCAACAUCACAAATT	UUUGUGAUGUUGCGGAUGGTT
si-NC	UUCUCCGAACGUGUCACGU	ACGUGACACGUUCGGAGAA

Table S2. The sequences of gene fragments cloned into plasmids

ShRNAs	Sequence (5'-3')
sh-ANLN-1	CCGGCCTCACATCTATAACCACAACTCGAGTTTGTGGTTATAGATGTGAGG TTTTGG
sh-ANLN-2	CCGGGCAAACAAC TAGAAACCAACTCGAGTTGGTTTCTAGTTGTTTGTCTTTTGG
sh-NC	TTCTCCGAACGTGTCACGTCTCGAGACGTGACACGTTCCGAGAATTTTT

Table S3. The sequences of primers for qRT-PCR

Primers	Forward (5'-3')	Reverse (5'-3')
ANLN	TGCCAGGCGAGAGAATCTTC	CGCTTAGCATGAGTCATAGACCT
IGF2BP1	GCGGCCAGTTCTTGGTCAA	TTGGGCACCGAATGTTCAATC
β -actin	CATGTACGTTGCTATCCAGGC	CTCCTTAATGTCACGCACGAT
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG

Table S4. Primary antibodies used in this study

Target	Dilution	Company	Catalog Number
ANLN	1:800	SantaCruz	sc-271814
IGF2BP1	1:5000	Proteintech	22803-1-AP
Total-ERK1/2	1:2000	Proteintech	11257-1-AP
phospho-ERK1/2	1:5000	Proteintech	28733-1-AP
phospho-p38 MAPK	1:1000	Proteintech	28796-1-AP
Total-p38 MAPK	1:1000	Proteintech	14064-1-AP
c-MYC	1:5000	Proteintech	10828-1-AP
GAPDH	1:5000	Proteintech	10494-1-AP
Alpha Tubulin	1:5000	Proteintech	11224-1-AP

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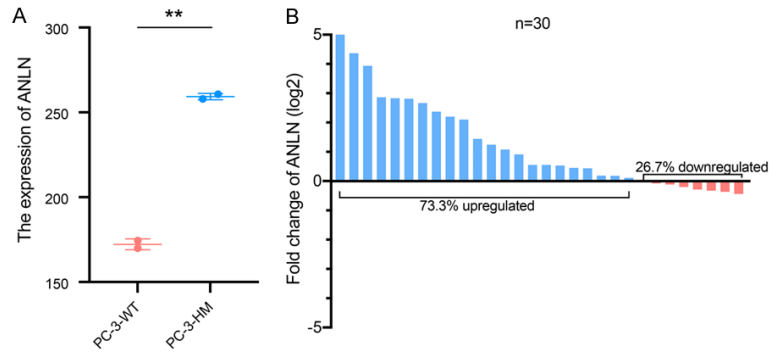


Figure S1. A. The normalized intensity of ANLN in two pairs of wild-type and highly invasive PC-3 cells. $**P < 0.01$. B. The expression ratio of ANLN in PCa and ANP tissues of 30 patients.

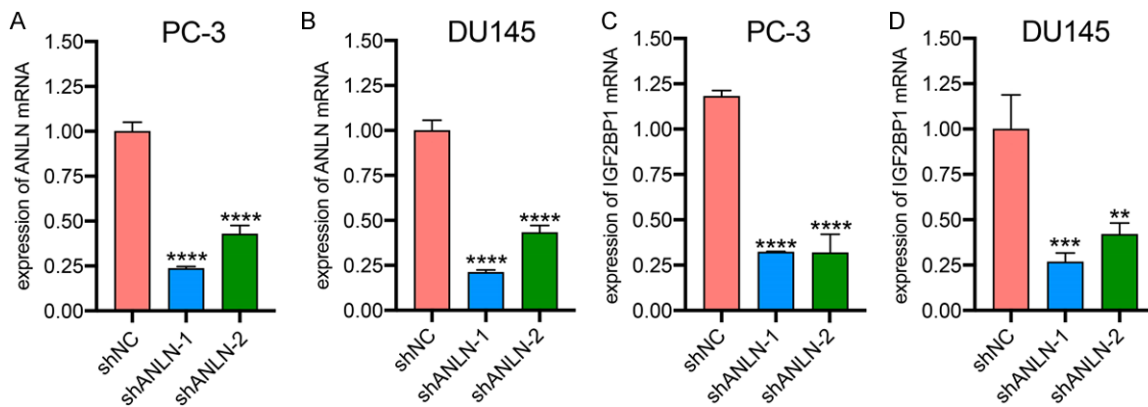


Figure S2. A, B. RT-qPCR was used to detect the efficiencies of ANLN knockdown. $****P < 0.0001$. C, D. RT-qPCR result showing the expression of IGF2BP1 in PC-3 and DU145 cells treated with ANLN knockdown. $**P < 0.01$, $***P < 0.001$, $****P < 0.0001$.

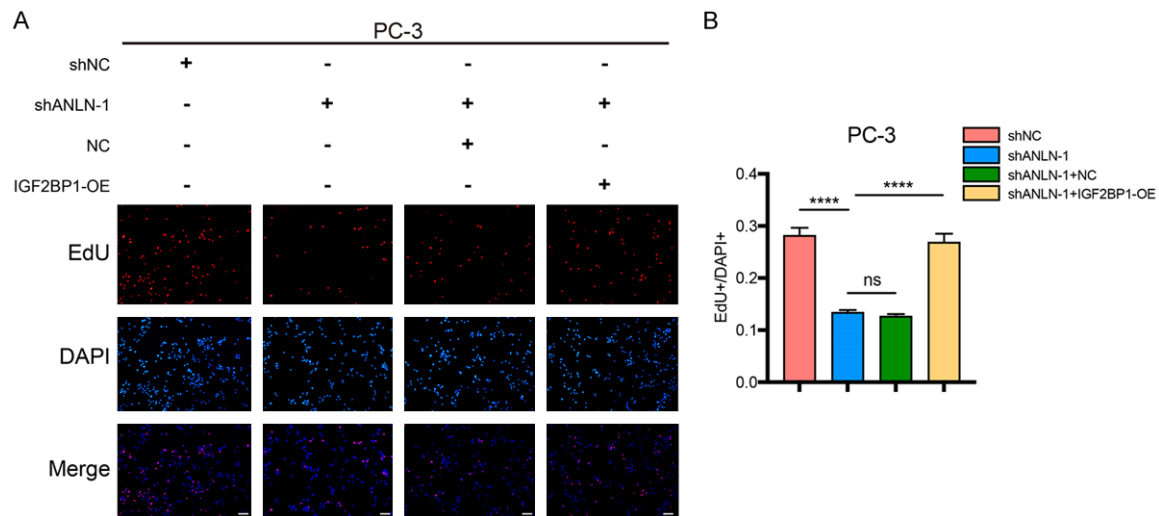


Figure S3. A, B. Result of EdU assay showing the cell proliferation in PC-3 cell expressing the different constructs. ns $P \geq 0.05$, $****P < 0.0001$. Scale bar = 100 μ m.

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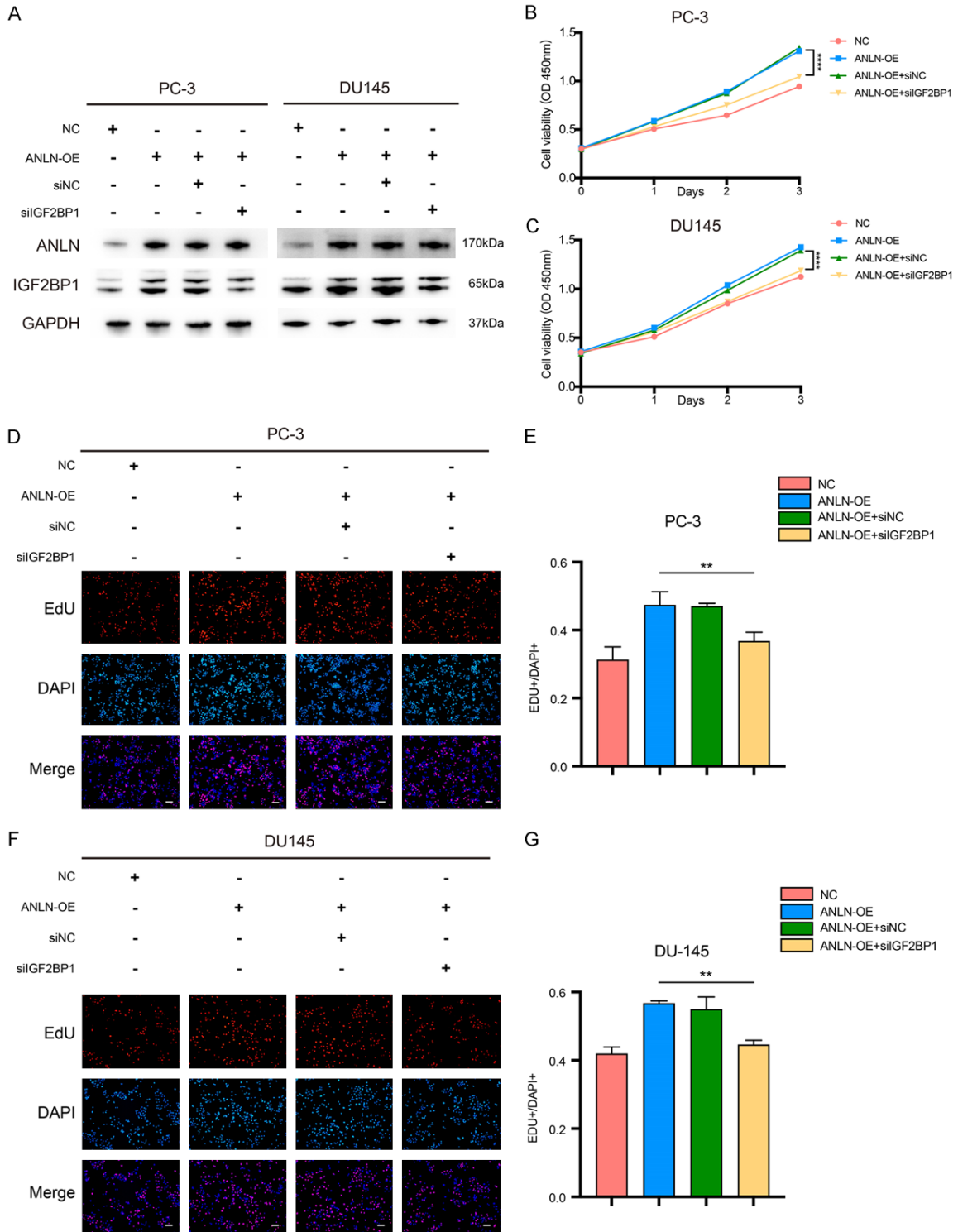


Figure S4. Knocking down IGF2BP1 in ANLN overexpression cells will rescue the promoting effect of ANLN overexpression on the proliferation of prostate cancer cells. A. Western blot analysis of ANLN and IGF2BP1 expression in PC-3 and DU145 cells expressing different vectors. B, C. Cell mobility was assessed by CCK-8 assays in cells expressing the different constructs. $****P < 0.0001$. D-G. Result of EdU assay showing the cell proliferation in PC-3 and DU145 cells expressing the different constructs. $**P < 0.01$. Scale bar = 100 μ m.

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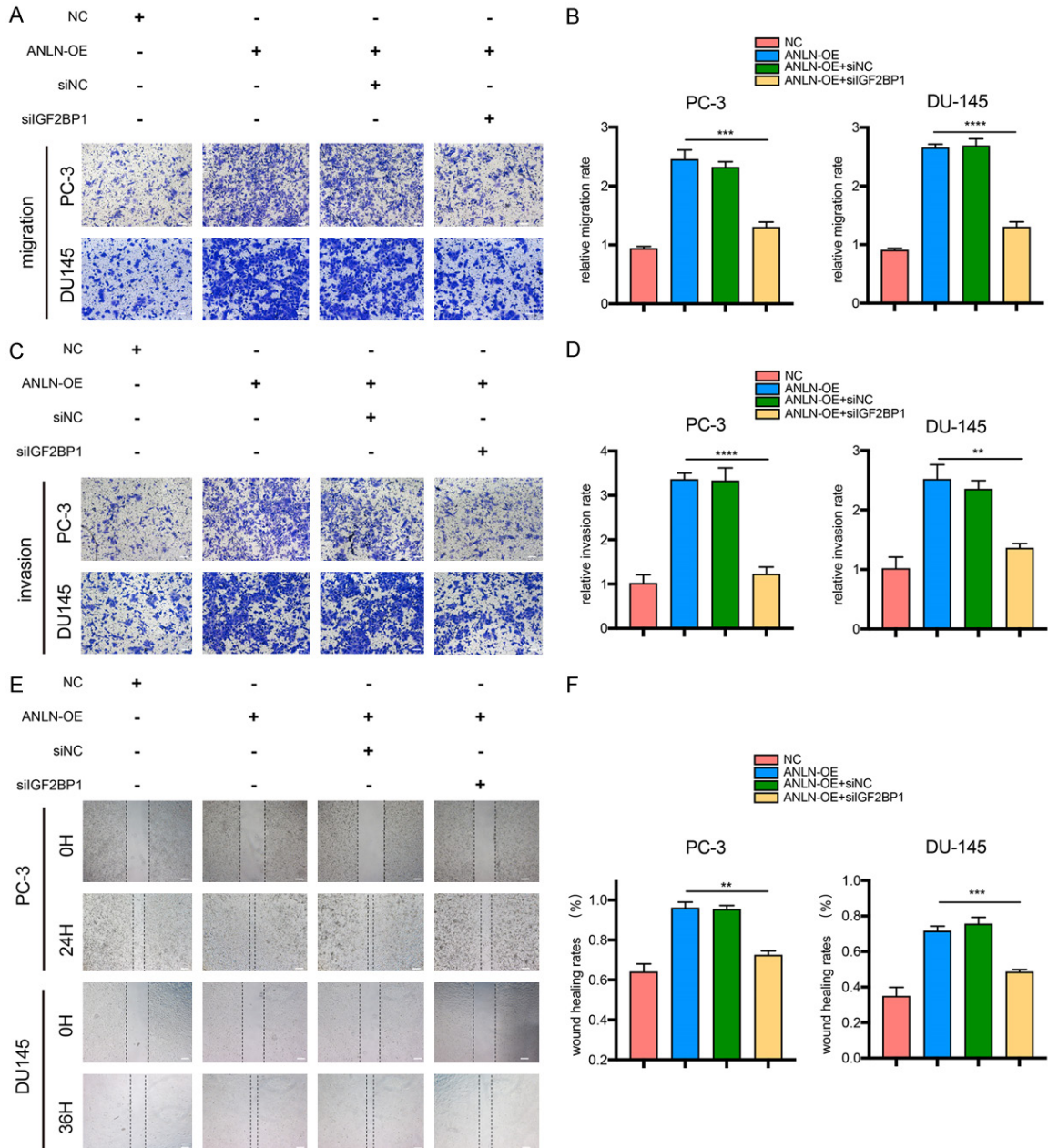


Figure S5. Knocking down IGF2BP1 in ANLN overexpression cells will rescue the promoting effect of ANLN overexpression on the migration and invasion of prostate cancer cells. A-D. Representative images and quantification of cell migration and invasion in DU145 and PC-3 cells were measured using transwell assays. $**P < 0.01$, $***P < 0.001$, $****P < 0.0001$. E, F. Representative images of the wound-healing assays for prostate cancer cells expressing different vectors. $**P < 0.01$, $***P < 0.001$. Scale bar = 100 μm .