

Inhibition of SMYD2 suppresses tumor progression by down-regulating microRNA-125b and attenuates multi-drug resistance in renal cell carcinoma

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Figure S1

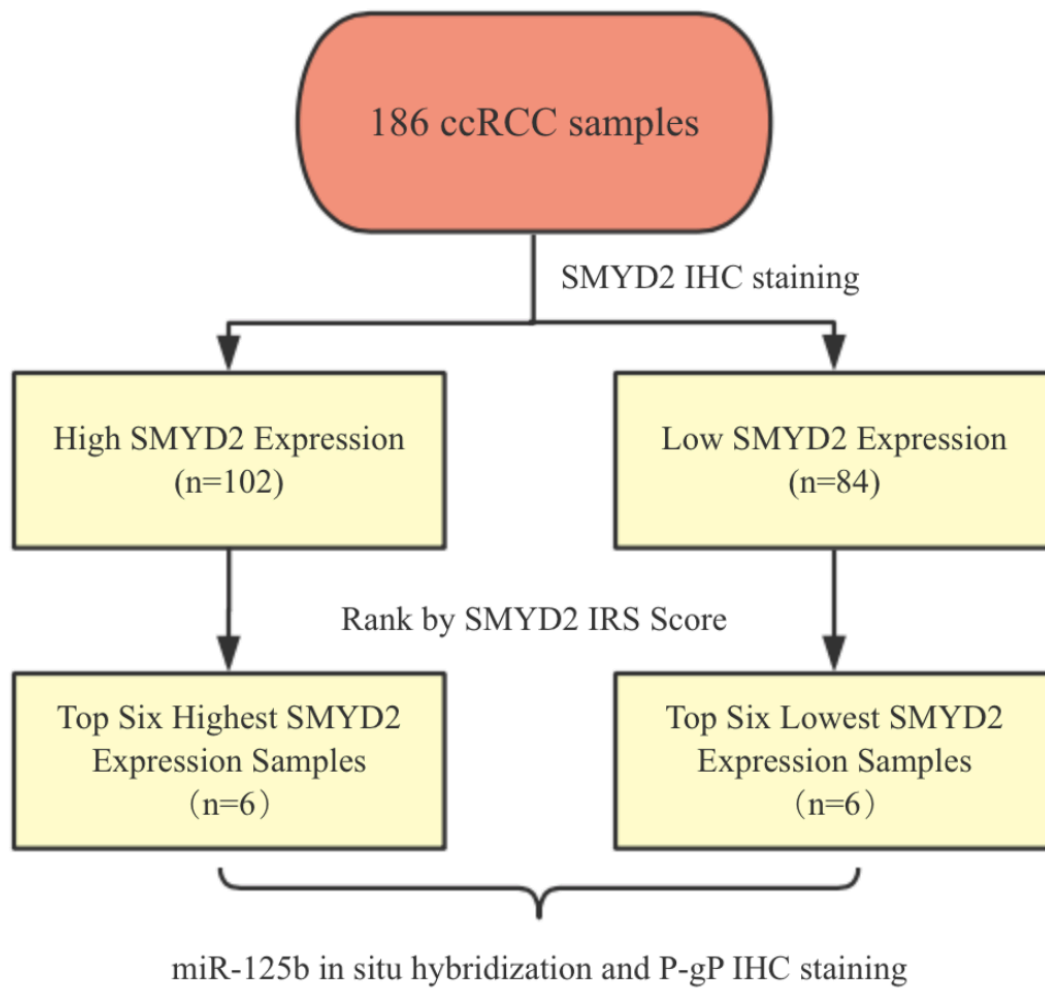


Figure S1 The flowchart was drawn to expound the criterion of sample selection for miR-125b in situ hybridization and P-gP IHC staining.

Figure S2

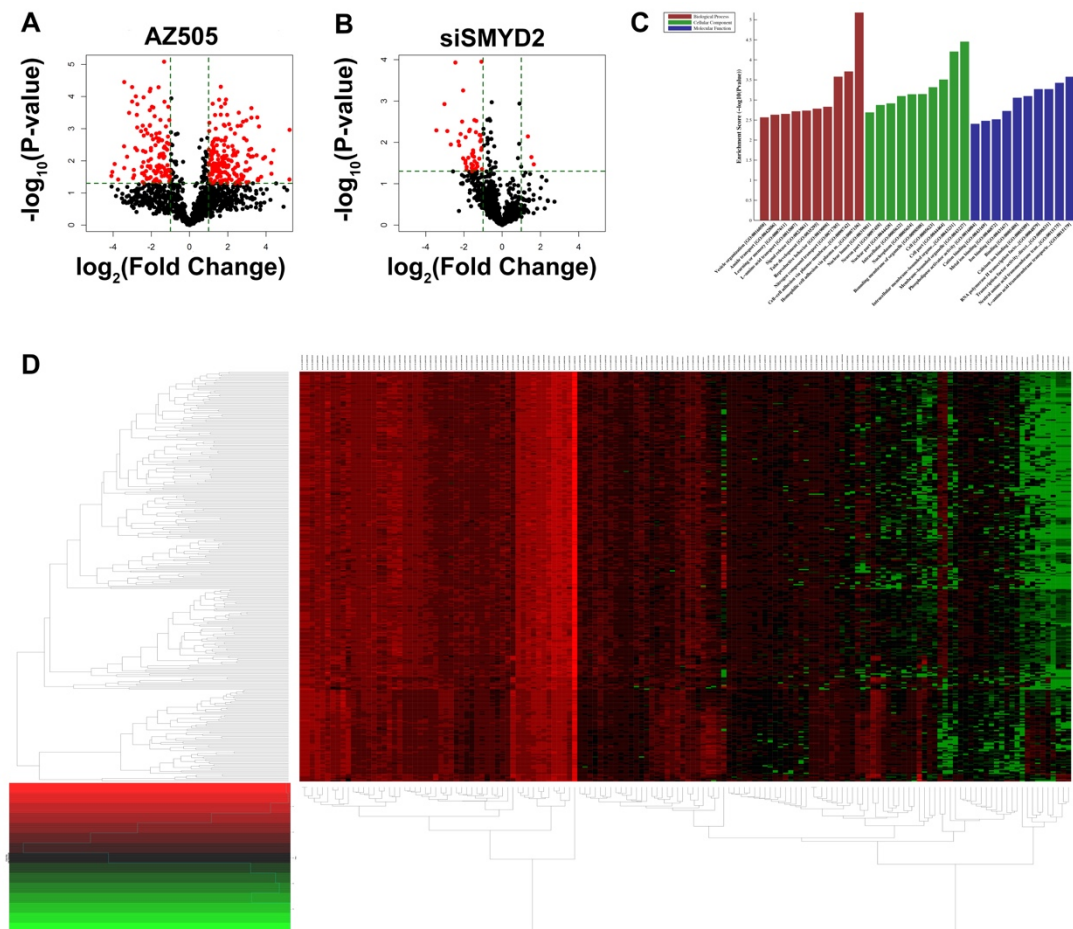


Figure S2. **Process of screening miRNAs.**

(A) and (B) Volcano map describes the differentially expressed miRNAs after AZ505 and siSMYD2 interference.

(C) Gene Ontology Enrichment analysis of target genes of the 6 selected miRNAs.

(D) Differentially expressed miRNAs in ccRCC from TCGA database.

$|\log_2(\text{Foldchange})| > 1$ and $P < 0.05$.

Figure S3

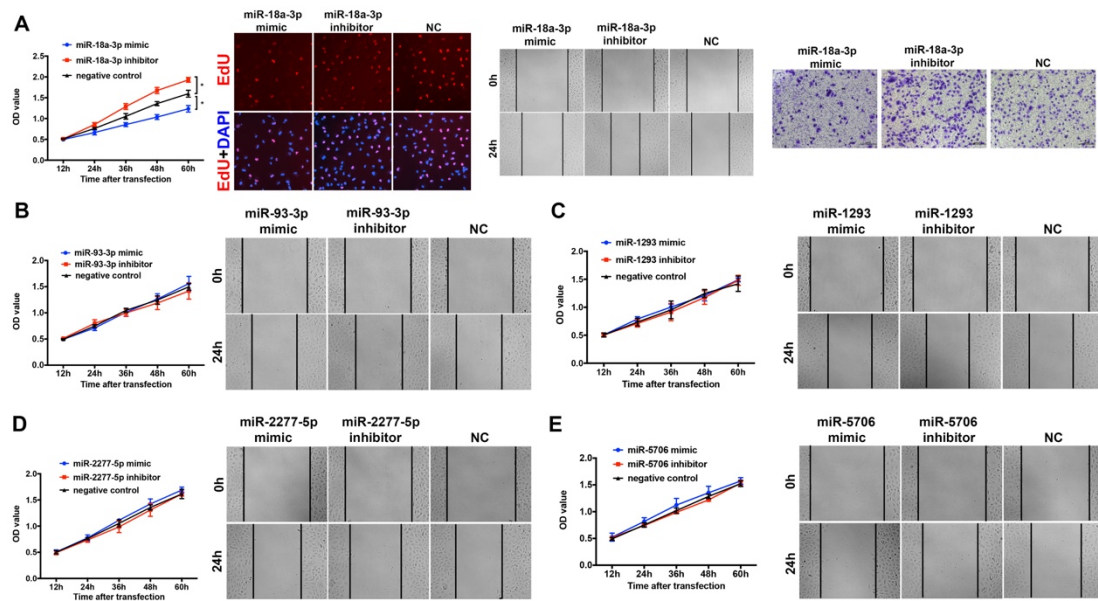


Figure S2. Verifying the effects of candidate miRNAs on RCC cells.

(A) miR-18a-3p inhibited the growth, invasion and migration of renal cancer cells.

(B),(C),(D) and (E) miR-93-3p, miR-1277-5p, miR-5706 and miR-1293 showed no obvious effect on cell proliferation and migration.

Table.S2 Sequences of siRNA and miRNA oligonucleotides

Name	Sequence (5'-3')
siSMYD2	Sense GAUUUGAUUCAGAGUGACA
	Antisense UGUCACUCUGAAUCAAAUC
hsa-miR-1293 mimic	UGGGUGGUCUGGAGAUUUGUGC
hsa-miR-1293 inhibitor	GCACAAAUCUCCAGACCACCCA
hsa-miR-2277-5p mimic	AGCGCGGGCUGAGCGCUGCCAGUC
hsa-miR-2277-5p inhibitor	GACUGGCAGCGCUCAGCCCGCGCU
hsa-miR-5706 mimic	UUCUGGAUAACAUGCUGAAGCU
hsa-miR-5706 inhibitor	AGCUUCAGCAUGUUAUCCAGAA
hsa-miR-93-3p mimic	ACUGCUGAGCUAGCACUUCCCG
hsa-miR-93-3p inhibitor	CGGGAAGUGCUAGCUCAGCAGU
hsa-miR-18a-3p mimic	ACUGCCCUAAGUGCUCUUCUGG
hsa-miR-18a-3p inhibitor	CCAGAAGGAGCACUUAGGGCAGU
hsa-miR-125b mimic	UCCCUGAGACCCUAACUUGUGA
hsa-miR-125b inhibitor	UCACAAGUUAGGGUCUCAGGGA