

Figure S1. Overall survival of patients with miR-218 high expression and low expression. The data were downloaded from the TCGA database.

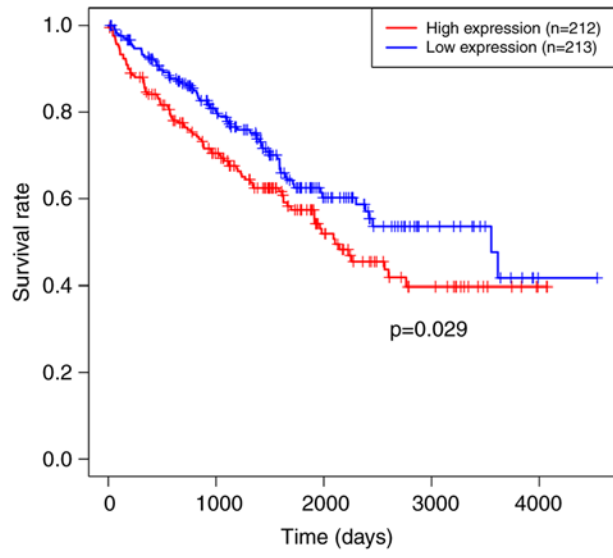


Figure S2. The expression levels of EMT-related markers E-cadherin and vimentin were analyzed by mRNA real-time PCR in miR-218-overexpressing ACHN cells (left) and GAB2-knockdown ACHN cells (right). EMT, epithelial-mesenchymal transition; GAB2, GRB2-associated binding protein 2. The values are presented as mean \pm standard deviation (SD). * $P < 0.05$.

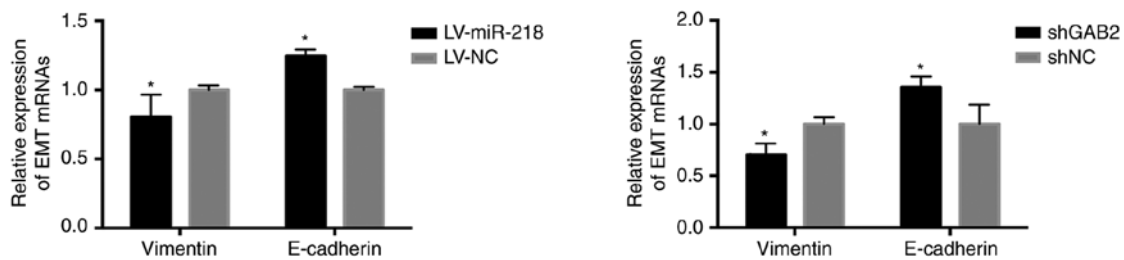


Figure S3. Protein levels of total AKT and mTOR in miR-218-overexpressing RCC cells (left), and GAB2-knockdown RCC cells (right) by western blot analysis. GAPDH was used as an internal control. GAB2, GRB2-associated binding protein 2; RCC, renal cell carcinoma; mTOR, mammalian target of rapamycin.

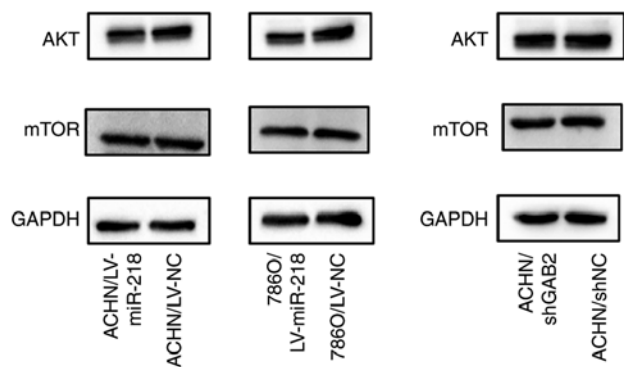


Figure S4. The tumor volumes of subcutaneous xenografts four weeks after inoculation.

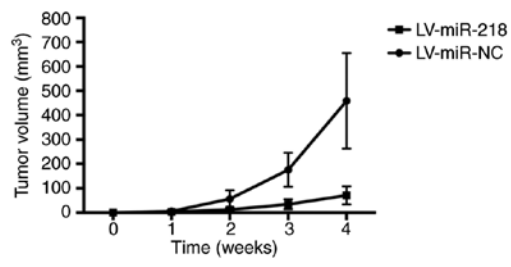


Table SI. Primers used for PCR.

Gene	Forward	Reverse
hsa-miR-218	ACACTCCAGCTGGGTTGTGCTTGATCTAA	TGGTGTTCGTGGAGTCG
U6	CTCGCTTCGGCAGCACA	AACGCTTCACGAATTTGCGT
VEGFA	GAGCCTTGCCTTGCTGCTCT	CACCAGGGTCTCGATTGGATG
GAB2	CCCTGTGTCAAACCACATGC	CTGCTCTTCGGCTTATGCACT
GAPDH	ATGGGGAAGGTGAAGGTCGG	GACGGTGCCATGGAATTTGC
E-cadherin	CGAGAGCTACACGTTACGG	GGGTGTCGAGGGAAAAATAGG
Vimentin		CTTTGTCGTTGGTTAGCTGGT
GAB2, GRB2-associated binding protein 2.		

Table SII. Correlation between miR-218 and the clinical pathological characteristics of the RCC samples.

Characteristics	Variables	miR-218 expression level		P-value
		High (n)	Low (n)	
Sex	Male	133	152	0.07369
	Female	79	61	
Age (years)	≥60	103	126	0.03677
	<60	109	87	
T	T1+T2	115	138	2.489x10 ⁻¹⁰
	T3+T4	97	75	
N	N0	100	93	0.9136
	N1	6	7	
	Nx	106	113	
M	M0	169	117	0.3191
	M1	42	33	
	Mx	1	3	
Grade	G1 + G2	87	92	0.01906
	G3 + G4	124	119	
	Gx + not available	1	2	
Stage	Stage I + Stage II	108	130	0.05173
	Stage III + Stage IV	103	83	
	Not available	1	0	

RCC, renal cell carcinoma.