

*Molecular and Cellular Biology*

**Supplemental Material**

## **RNF20 Suppresses Tumorigenesis by Inhibiting SREBP1c–PTTG1 Axis in Kidney Cancer**

**Table S1. Primer sequences for qRT-PCR**

**Table S2. Sequences of siRNA oligos**

\*Correspondence and requests for materials should be addressed to Jae Bum Kim, Ph.D.  
(E-mail: jaebkim@snu.ac.kr).

**Table S1. Primer sequences for qRT-PCR**

Species	Function	Gene	Sequence (5' to 3')	Direction
Human	E3 Ub ligase	RNF20	CACAGGAGAGCCAAAAGGAG	Forward
			GCATCCTCATCAGCCATTTT	Reverse
	Fatty acid metabolism	SREBP1c	CCATGGATTGCACTTTTCGAA	Forward
			CCAGCATAGGGTGGGTCAAA	Reverse
		FASN	GCCTACACCCAGAGCTACCG	Forward
			GCCATGGTACTTGGCCTTG	Reverse
		ACC1	CAACGAGATTTCACTGTGGCT	Forward
			TTCTGCATTGGCTTTAAGGTCT	Reverse
	SCD1	ACAAACCTGGCTTGCTGATG	Forward	
		CCACAGCTCCAAGTGAAACC	Reverse	
	ELOVL6	CTCTGGTCTCTGACCCTTGC	Forward	
		CTCCTAGTTCCGGTGCTTTG	Reverse	
	Cholesterol metabolism	SREBP2	CAAGCTTCTAAAGGGCATCG	Forward
			GGCTCATCTTTGACCTTTGC	Reverse
		LDLR	CCGCCAAGATCAAGAAAGG	Forward
	AAGGAGAAGGGGTGGGC		Reverse	
	HMGR	ATTTGGCAGCTCAGCCATT	Forward	
		TGAGGAGAAGGATCAGCTATCC	Reverse	
	Cell cycle	PTTG1	GGGTCTGGACCTTCAATCAA	Forward
			GGCAGGAACAGAGCTTTTTTG	Reverse
PCNA		CATGGGCGTGAACCTCACC	Forward	
		CACAGCTGTACTCCTGTTCTGG	Reverse	
Cyclin A		CCTTAGGGAAATGGAGGTTAAA	Forward	
		CCAAATGCAGGGTCTCATT	Reverse	
Cyclin D1	TTCCTCTCCAAAATGCCAGA	Forward		
	CAGTCCGGGTCACACTTGAT	Reverse		
Cyclin E	TCAGTGGTGCACATAGAGAA	Forward		
	TGTCCAGCAAATCCAAGCTG	Reverse		
Apoptosis	Bax	TTTGCTTCAGGGTTTCATCC	Forward	
		CAGTTGAAGTTGCCGTCAGA	Reverse	
	Bid	CCTGTGACCACAACATGAGG	Forward	
		AAGCTTTTGCCCACTTTCAA	Reverse	
	Bcl2	AAGATTGATGGGATCGTTGC	Forward	
GCGGAACACTTGATTCTGGT		Reverse		
cIAP2	TATAGGGCAGGGCCTGTATG	Forward		
	CAGCCTCATTCTCCCTGAAG	Reverse		
XIAP	GGGGTTCAGTTTCAAGGACA	Forward		
	CGCCTTAGCTGCTCTTCAGT	Reverse		
Housekeeping	GAPDH	TTCACCACCATGGAGAAGG	Forward	
		CTAAGCAGTTGGTGGTGCAG	Reverse	

**Table S2. Sequences of siRNA oligos**

Species	Function	Gene	Sequence (5' to 3')	Direction
Human	E3 Ub ligase	RNF20	<b>GGAUAAAGAGAAAGGCAAA</b>	Sense
			<b>UUUGCCUUUCUCUUUAUCC</b>	Antisense
	Fatty acid metabolism	SREBP1	<b>CCACCGUUUCUUCGUGGAU</b>	Sense
			<b>AUCCACGAAGAAACGGUGG</b>	Antisense
		FASN	<b>UCAACCUGGACAGCUCACU</b>	Sense
			<b>AGUGAGCUGUCCAGGUUGA</b>	Antisense
Cell cycle	PTTG1	<b>CUCAGAUGAAUGCGGCUGU</b>	Sense	
		<b>ACAGCCGCAUUCAUCUGAG</b>	Antisense	