

**Table S1. Oligonucleotide sequences for transfection**

Gene	Oligonucleotide sequence (5'-3')
scRNA (control RNA)	UCACAACCUCCUAGAAAGAGUAGA
siFLII	CUGAACUGGGAGAUCUACU
siFLII2	GCCCACGGGAGCUGGAGAAU

**Table S2. Primer list and conditions for *q*RT-PCR**

Gene	Primer sequence (5'-3')		Product size	Annealing Temperature	Concentration		Cycle
					cDNA	Primer	
U6	F.P	CTCGCTTCGGCAGCACA	100	58	2 ng/μl	0.5 μM	40
	R.P	AACGCTTCACGAATTTGCGT					
PCNA	F.P	GAACCTGCAGAGCATGGACTC	201	58			
	R.P	GGTGTCTGCATTATCTTCAGCCC					
CCND1	F.P	ACCAATCTCCTCAACGACCG	228	58			
	R.P	ACGGAAGGGAAGAGAAGGG					
CCNB1	F.P	GAGCTATCCTCATTGACTGG	125	58			
	R.P	CATCTTCTTGGGCACACAAC					

**Table S3. Antibodies list**

Antibody	Type	Targeted species	Manufacturer	Cat. No.	Dilution ratio*
FLII	Monoclonal	Mouse	Santa Cruz Biotechnology, Dallas, TX, USA	sc-21716	1:5,000
MyHC	Monoclonal	Mouse	DSHB, Iowa, IA, USA	MF20	1:1,000
MyoD	Monoclonal	Mouse	Santa Cruz Biotechnology, Dallas, TX, USA	sc-377460	1:1,000
MyoG	Monoclonal	Mouse	Santa Cruz Biotechnology, Dallas, TX, USA	sc-12732	1:1,000
YAP1	Monoclonal	Rabbit	Cell Signaling Technology, Danvers, MA, USA	14074S	1:10,000
pYAP1	Polyclonal	Mouse	Cell Signaling Technology, Danvers, MA, USA	4911S	1:10,000
Lamin B2	Monoclonal	Rabbit	Abcam, Cambridge, United Kingdom	ab151735	1:2,500
$\alpha$ -Tubulin	Monoclonal	Mouse	DSHB, Iowa, IA, USA	12G10	1:2,000
$\beta$ -actin	Monoclonal	Rabbit	Sigma-Aldrich Chemical, St. Louis, USA	A2066	1:10,000
Antibodies HRP-linked anti-rabbit IgG			Cell Signaling Technology, Danvers, MA, USA	#7074	1:10,000
Goat anti-mouse(H+L)			Thermofisher Sci., Waltham, MA, USA	#32430	1:2,000

\*All blots were visualized using a Femto reagent (Thermofisher Scientific).