

Table S1
siRNA sequences.

siRNA	Sequence(5'→3')
Negative control	sense: UUCUCCGAACGUGUCACGUTT antisense: ACGUGACACGUUCGGAGAATT
MNT siRNA	sense: GGUGGGCCAGACAGUGCUUTT antisense: AAGCACUGUCUGGCCCACCTT
YTHDF2 siRNA	sense: GCAGUGGGUUCGGUCAUAATT antisense: UUAUGACCGAACCCACUGCTT

Table S2
Primer sequences for real-time qPCR.

Gene	Primer Sequence (5'-3')	Annealing temp.(°C)	Size (bp)	Genebank No.
<i>β-actin</i>	F: TTGATCTTCATTGTGCTGGGTG R: CTCCTGGGCATGGAATCCT	54-64	189	NM_173979.3
<i>Bax</i>	F: CGAGTTGATCAGGACCATCAT R: ATGTGGGTGTCCCAAAGTAG	54	168	XM_015458140.2
<i>Bcl2</i>	F: TGGATGACCGAGTACCTGAA R: GAGACAGCCAGGAGAAATCAAA	54	124	NM_001166486.1
<i>Caspase-3</i>	F: TGGCGAAATGCAAAGAACGG R: TGTGAGCGTGCTTTTTCAGC	56	70	NM_001077840.1
YTHDF2	F: GGCAGTGGGTTCGGTCATAA R: ACCGAAGCTTCTCCAAGACG	58	109	NM_001076253.1
ALKBH5	F: TGTCTTCCAGGCCTAGTGT R: CCCTTCCTAGGGGGATGACA	60	182	NM_001205517.3
FTO	F: CTGCCAGCGTGCCTGAGTTG R: GTACCGTGAAGAGCCTGGTGTTC	63	189	NM_001098142.1
METTL3	F: AGCAGGACTCCACCACAGCAG R: CTTGGTTGGCTCCTTGGCTACTTC	63	92	NM_001102238.2
METTL14	F: TGCCCCGAATTCCTATTTGACTGG R: CACCTCTTCCGCCTCCTCTGG	63	122	NM_001083714.1
SOD	F: AGAGGCATGTTGGAGACCTG R: CAGCGTTGCCAGTCTTTGTA	57	189	NM_174615.2
CAT	F: TGGGACCCAACATCTCCAG R: AAGTGGGTCCTGTGTTCCAG	57	178	NM_001035386.2
Nrf2	F: CCCAGTCTTCACTGCTCCTC R: TCAGCCAGCTTGTCATTTTG	56	165	NM_001011678.2
NQO1	F: AACCAACAGACCAGCCAATCAGC R: AGCCTCTATGGCAGCCTCCTTC	62	124	NM_001034535.1
BMP4	F: AGAGGGGCTGGAAGAAAAACAG R: GCTCTGGATGGCACTACGG	58	93	NM_001045877.1
MNT	F: GGCTGTTTCATGCTCCAAGACA	58	121	NM_001206899.2

VASH1	R: GCAGCTCCGTCTCGGGTTT F: CAGGGAGCTGCAGTACAATCA R: AAATTCCCAGGATCACCGCTT	58	146	NM_001206803.1
TRIM14	F: GCTGAGAAGCTCAAGGCTCAT R: ATTTGCTCTGTGTATGCCTGC	58	155	XM_024996224.1
VCAN	F: GCTTCCCTACCCCTGATAGC R: GTGGGTGAGACAGTTTCTGC	58	112	NM_181035.2
GALNT16	F: CTGCCACCTCCACCTCTGTCTC R: TCCTCCATCTCTGCCTGCCTTC	61	84	NM_001101127.1
WNT5A	F: TTCTCTCCTTCGCCCAGGTT R: AGAGAGGCTGCGCTCCTATG	59	108	NM_001205971.1

Table S3

The information of antibodies used for Western Blot.

Antibodies	Cat NO.	Source	Dilution
Nrf2	AF0639	Affinity,Changchun, China	1: 1 000
Cleaved-caspase 3	341034	ZENBIO, Chengdu, China	1: 1 000
AKT	R23412	ZENBIO, Chengdu, China	1: 1 000
P-AKT	R22961	ZENBIO, Chengdu, China	1: 1 000
FTO	R24361	ZENBIO, Chengdu, China	1: 1 000
Bcl2	BF9103	Affinity,Changchun, China	1: 1 000
Bax	50599-2-Ig	ProteinTech, Chicago, IL, USA	1: 2 000
MNT	DF4676	Affinity,Changchun, China	1: 1 000
β -actin	60008-1-Ig	ProteinTech, Rosemont, IL, USA	1: 1 0000
Goat Anti-Rabbit IgG	SA00001-2	ProteinTech, Rosemont, IL, USA	1: 1 0000
Goat Anti-mouse IgG	SA00001-1	ProteinTech, Rosemont, IL, USA	1: 1 0000

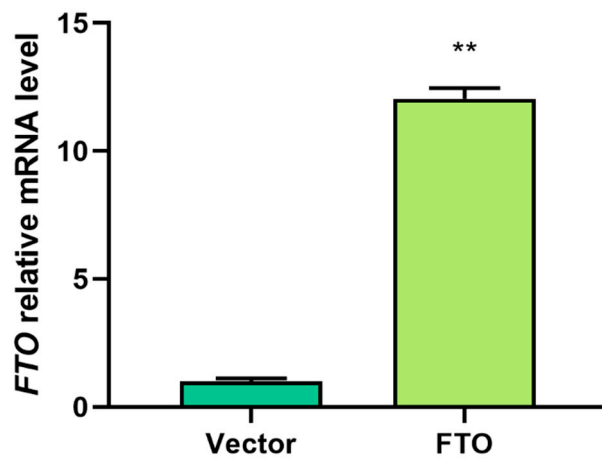


Fig. S1. Analysis of FTO expression levels after transfection pcDNA3.1-FTO or pcDNA3.1-Vector

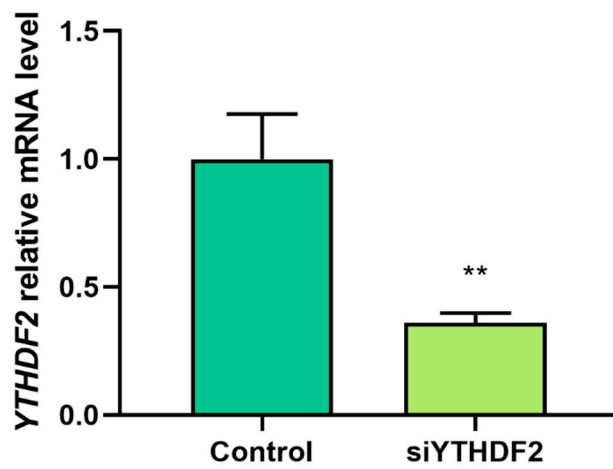


Fig. S2. Analysis of YTHDF2 expression levels after transfection siYTHDF2.

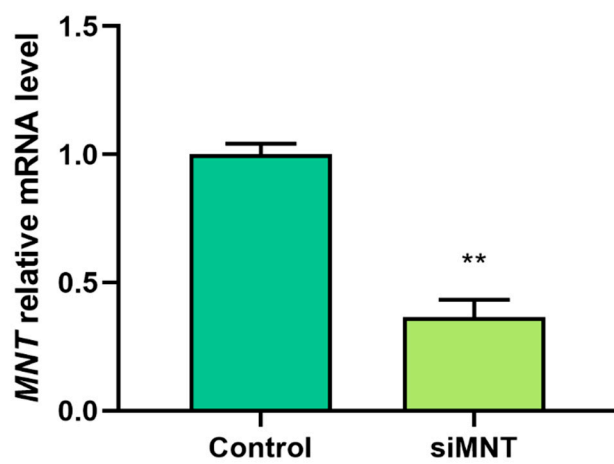


Fig. S3. Analysis of MNT expression levels after transfection siMNT.