

Supplementary Table S1. Sequences of siRNA/gRNA.

siRNA/mimic/inhibitor/agomir	Sequence (5'→3')
scramble siRNA	sense: UUCUCCGAACGUGUCACGUdTdT antisense: ACGUGACACGUUCGGAGAAdTdT
YTHDC1-siRNA	sense: CAAGGAGUGUUAUCUUAAUdTdT antisense: AUUAAGAUAAACACUCCUUGdTdT
gRNA-1	AGCTGGCAGTAGAAGGAATGGCACCAACTCAACAAATCCA
gRNA-2	ATCACCTTAGTGGGTGGTCTAGGCAATGCATAGGTGAGG
gRNA-3	CTTTTAATATAGTCTGTATTTTCAGTTACCATGTGGC
gRNA-4	ATAGAGGAAAATAGGGACAGAATTGGAAGAGAGGAGG

Supplementary Table S2. Primers used in this study

LncRNA/mRNA	Forward Primer (5'→3')	Reverse Primer (5'→3')
GAPDH	CAGCCTCAAGATCATCAGCA	TGTGGTCATGAGTCCTTCCA
IPW	GCCCTTGCCTTAACTTAGA	GCAGTAGAAGGAATGGCACC
MEG3	CAGCCAGCTGTCCCTTAC	TCGACAAAGACTGACACCCCC
MerTK	CGCTCTGGCGTAGAGCTATC	AGGCTGGGTTGGTGAAAACA
Na ⁺ /K ⁺ ATPase	TCTCCCGCTAACGGTCCCTC	GACAGCTTGTGGTCATCCATTG
U6	Bulge-loop™ miRNA qRT-PCR Primer Sets designed by RiboBio	
SELECT-IPW-Up	tagccagtaccgttagtgcggtgAAGGGAAACAGTCACCATGCCAAATTAAAG	
SELECT-IPW-Down	5phos/CTCATCGATGATATCCCAACATGAGCATTCTcagaggctgagtcgctgcat	

Supplementary Table S3. Antibodies used in this study

Anti-protein	Host	Dilution and Application	Supplier	Catalog
m ⁶ A	Rabbit	1:100, MeRIP-qPCR	Merck	ABE572
m ⁶ A	Rabbit	1:100, MeRIP-Seq	Synaptic system	SS-202 003-50
GAPDH	Mouse	1:20000, Immunoblotting	Proteintech	60004-1-Ig
YTHDC1	Rabbit	1:50, RIP	Proteintech	14392-1-AP
MerTK	Rabbit	1:1000, Immunoblotting; 1:400, Immunofluorescence	Cell Signaling Technology	4319
Na ⁺ /K ⁺ ATPase subunits	Rabbit	1:1000, Immunoblotting;	Beyotime	AG1183
alpha-1, beta-1 and alpha-4		1:50, Immunofluorescence		
ZO-1	Rabbit	1:1000, Immunoblotting; 1:50, Immunofluorescence	Invitrogen	40-2200
β-catenin	Rabbit	1:1000, Immunoblotting; 1:250, Immunofluorescence	Abcam	ab32572
Caspase 3	Rabbit	1:1000, Immunoblotting	Proteintech	19677-1-AP
Cleaved caspase-3	Rabbit	1:1000, Immunoblotting	Cell Signaling Technology	9661
Bax	Rabbit	1:1000, Immunoblotting	Proteintech	50599-2-Ig

Bcl-2	Rabbit	1:1000, Immunoblotting	Proteintech	12789-1-AP
p-AKT	Rabbit	1:1000, Immunoblotting	Cell Signaling Technology	4060
AKT	Rabbit	1:1000, Immunoblotting	Cell Signaling Technology	9272
p-mTOR	Rabbit	1:1000, Immunoblotting	Cell Signaling Technology	5536
mTOR	Rabbit	1:1000, Immunoblotting	Cell Signaling Technology	2983

Supplementary Table S4. Sample information and IPW expression level.

GSM No.	tissue	Clinical diagnosis	Age	Gender	IPW expression
GSM738433	macular	normal	9	male	34.4
GSM738435	macular	normal	10	male	21.8
GSM738437	macular	normal	18	female	31.1
GSM738439	macular	normal	21	female	26.5
GSM738441	macular	normal	34	male	14.6
GSM738443	macular	normal	36	female	21.8
GSM738445	macular	normal	37	male	38.3
GSM738447	macular	normal	40	female	8.5
GSM738450	macular	normal	45	male	23.7
GSM738452	macular	normal	47	male	19.3
GSM738453	macular	normal	48	male	27.8
GSM738455	macular	normal	48	male	18.1
GSM738457	macular	normal	49	female	14
GSM738459	macular	normal	49	male	43
GSM738461	macular	normal	49	male	18.3
GSM738464	macular	normal	61	male	25.1
GSM738466	macular	normal	63	male	22.9
GSM738469	macular	normal	65	male	17
GSM738471	macular	normal	65	male	23.5
GSM738472	macular	normal	65	female	13.2
GSM738474	macular	normal	66	female	30.8
GSM738476	macular	normal	67	male	44.7
GSM738478	macular	normal	68	female	16.3
GSM738480	macular	normal	68	male	18.9
GSM738483	macular	normal	69	male	17
GSM738484	macular	normal	73	male	15.6
GSM738486	macular	normal	73	male	24.9

GSM738488	macular	normal	74	male	42.9
GSM738491	macular	normal	75	female	9.7
GSM738494	macular	normal	76	female	20.3
GSM738495	macular	normal	76	female	15.9
GSM738497	macular	normal	78	male	13.5
GSM738498	macular	normal	78	female	25.7
GSM738500	macular	normal	78	female	20.4
GSM738503	macular	normal	81	male	39.8
GSM738505	macular	normal	82	female	14.9
GSM738506	macular	normal	83	male	24.2
GSM738508	macular	normal	84	male	20
GSM738510	macular	normal	84	male	12.5
GSM738511	macular	normal	85	female	21.2
GSM738512	macular	normal	86	female	26
GSM738514	macular	normal	86	male	27.5
GSM738515	macular	normal	87	female	13
GSM738516	macular	normal	88	male	20.2
GSM738518	macular	normal	88	female	21.1
GSM738520	macular	normal	88	male	12.7
GSM738521	macular	normal	90	female	20.3
GSM738523	macular	normal	91	male	24.8
GSM738525	macular	normal	92	male	23.2
GSM738527	macular	normal	93	female	16.2
GSM738554	macular	MD2	78	female	39.5
GSM738597	macular	MD2	91	male	28.8
GSM738603	macular	MD2	93	female	23.8
GSM738562	macular	MD2	79	male	20.1
GSM738568	macular	MD1	83	male	22
GSM738584	macular	MD1	86	female	19.2

GSM738593	macular	MD1	90	female	21
GSM738533	macular	MD1	63	male	29.2
GSM738535	macular	MD1	64	male	22.3
GSM738537	macular	MD1	65	female	22.9
GSM738541	macular	GA	74	female	31
GSM738591	macular	GA	90	male	20.6
GSM738551	macular	CNV	78	male	34
GSM738558	macular	CNV	79	male	25.4
GSM738560	macular	CNV	79	female	18.7
GSM738570	macular	CNV	84	female	32.6
GSM738587	macular	CNV	87	male	31.7
GSM738556	macular	Clinical diagnosis	78	male	24
GSM738572	macular	Clinical diagnosis	84	male	29.4
GSM738574	macular	Clinical diagnosis	85	male	15.9
GSM738585	macular	Clinical diagnosis	86	female	43.1
GSM738589	macular	Clinical diagnosis	88	female	18
GSM738601	macular	Clinical diagnosis	92	female	24.4
GSM738578	macular	GA/CNV	86	female	18.8
GSM738599	macular	GA/CNV	92	male	28.6
GSM738529	macular	dry AMD	43	male	21.2
GSM738531	macular	dry AMD	63	female	29.9
GSM738539	macular	dry AMD	71	male	17.2
GSM738543	macular	dry AMD	76	female	22.5
GSM738545	macular	dry AMD	77	male	41
GSM738547	macular	dry AMD	77	female	73
GSM738549	macular	dry AMD	77	female	19.7
GSM738553	macular	dry AMD	78	male	27.1
GSM738564	macular	dry AMD	80	female	21.7
GSM738566	macular	dry AMD	83	female	40.2

GSM738576	macular	dry AMD	86	female	17.2
GSM738580	macular	dry AMD	86	female	38.2
GSM738582	macular	dry AMD	86	female	21.8
GSM738595	macular	dry AMD	91	female	30.2
GSM738605	macular	dry AMD	94	female	17
GSM738607	macular	dry AMD	101	female	32.5
