

### Supplementary Table 1 Primer sequences of the five genes

Genes	Primer sequence
<i>BECN2</i>	F:5' AATCAACTGTTTCACCGCCACG3'
	R:5' CAGGGTAAGGAGCAGCAAGG3'
<i>NFE2</i>	F:5' CACCACCCACAACCTTACTGC 3'
	R:5' AGTGGCTTGGAGACTGGTAT 3'
<i>METTL21A</i>	F:5' TCGTGCCCTATGAGGAGACCA3'
	R:5' GGTATGTGGAAAGAACGATGGC 3'
<i>TIPRL</i>	F:5' ATGAAGTCGGCGGATGTGGA3'
	R:5' TCTTGCCACTCTTCAGCACAGG 3'
<i>RBM15</i>	F:5' GCATCAGCCTCTCCCAAAC3'
	R:5' TGGGCCCTGCTACTTTGATG3'

Abbreviations: F: Forward; R: Reverse

### Supplementary Table 2. The top 20 most differentially expressed mRNAs

Regulation	Fold change	P value	GeneSymbol	RNAlength	Chromosome
up	24.74293084	7.64999E-05	<i>TRMT10B</i>	1881	chr9
up	17.08365337	0.002824555	<i>SLC14A1</i>	1048	chr18

up	16.68974388	0.00159457	<i>NFE2</i>	1658	chr12
up	14.84055624	0.000268185	<i>TRMT10B</i>	2281	chr9
up	12.04337394	0.005215486	<i>ZNF618</i>	3018	chr9
up	11.71914625	0.000575242	<i>CD59</i>	825	chr11
up	10.74637048	0.003202351	<i>ZNF410</i>	1722	chr14
up	10.59812962	0.00141286	<i>OPN1LW</i>	1248	chrX
up	10.56326003	0.000362076	<i>PAX6</i>	1794	chr11
up	9.91956076	0.007229094	<i>WFDC5</i>	1018	chr20
down	25.11541625	0.004938326	<i>PRSS35</i>	2632	chr6
down	25.10979547	0.000262393	<i>PABPC1L</i>	1910	chr20
down	25.07023201	0.001705011	<i>IL17RC</i>	2621	chr3
down	25.06906301	0.003998312	<i>USP53</i>	5936	chr4
down	25.01862231	0.00767059	<i>GIMAP8</i>	4184	chr7
down	24.67589296	0.000738547	<i>C2CD5</i>	3463	chr12
down	24.63985561	0.000690703	<i>PABPC1L</i>	2129	chr20
down	24.61450066	0.001267792	<i>CTC-295J13.3</i>	1210	chr5
down	24.60372167	0.009337298	<i>HTRA4</i>	2095	chr8
down	24.57288574	0.002697658	<i>HERPUD1</i>	1862	chr16
up	2.668613034	0.02971007	<i>RBM15</i>	4244	chr1
up	2.182999005	0.009420907	<i>ALKBH5</i>	2748	chr17

up	1.867959146	0.022844153	<i>YTHDF1</i>	3301	chr20
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**Supplementary Table 3: The four mRNAs selected for verification**

Type	Regulation	Fold change	P value	GeneSymbol	Chromosome
mRNA	up	3.51997925	0.006006118	<i>BECN2</i>	chr1
mRNA	up	2.349391712	0.000989907	<i>NFE2</i>	chr12
mRNA	down	0.06427563	0.00847196	<i>METTL21A</i>	chr2
mRNA	down	0.153996039	0.025212442	<i>TIPRL</i>	chr1

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