

## SUPPLEMENTARY TABLE

Supplementary Table 1. List of experimental resources.

Primers			
Name	Sequence (5' to 3')	Experiment	
pcDNA3-Flag-F2	ACAAGTGAGATATCCATCACACTGGCG	PCR for pcDNA3-G3BP1-AcGFP	
pcDNA3-Flag-R1	TCCATCACGAATTCGCCCTTGTCATCA	PCR for pcDNA3-G3BP1-AcGFP	
G3BP1-F3	CGAATTCGTGATGGAGAAGCCTAGTC	PCR for full-length G3BP1 cDNA	
G3BP1-R4	CGGTGGATCCTGCCGTGGCGCAAGC	PCR for full-length G3BP1 cDNA	
AcGFP-F1	CGGCAGGATCCACCGGTCATGGT	PCR for AcGFP cDNA	
AcGFP-R1	GGATATCTCACTTGTACAGCTCATCCA	PCR for AcGFP cDNA	
mDsR-F2	GTCGCCTCGAGGACAACACCGAGGACGT	PCR for mDsRed cDNA	
mDsR-R2	GCCCTCTAGACTACTGGGAGCCGGAGT	PCR for mDsRed cDNA	
pFG3BP2-F1	AGTAGTCTAGAGGGCCCTATTCTATAG	PCR for pcDNA3-G3BP2-mDsRed	
pFG3BP2-R1	TGTCCTCGAGGCGACGCTGTCCTGTGA	PCR for pcDNA3-G3BP2-mDsRed	
GAPDH-qPCR-F	CTAGCCTCCCGGGTTTCTCT	qPCR for GAPDH	
GAPDH-qPCR-R	TCGACAGTCAGCCGCATCT	qPCR for GAPDH	
G3BP1-qPCR-F	CTTGGGCATCTGTGACCAGT	qPCR for G3BP1	
G3BP1-qPCR-R	GGGCTGTGAAGCTGGTACTT	qPCR for G3BP1	
G3BP2-qPCR-F	TGTGGAACCTTCGCATCAATACC	qPCR for G3BP2	
G3BP2-qPCR-R	AAACGTACTTCCCCTCGAAACA	qPCR for G3BP2	
SPTBN1-qPCR-F1	CGGTGGACACAAGCGAAATG	qPCR for SPTBN1	
SPTBN1-qPCR-R1	TACGATCAGAGGTCCGGGAG	qPCR for SPTBN1	
PRKCA-qPCR-F1	AGAGGGACGTGAGAGAGCAT	qPCR for PRKCA	
PRKCA-qPCR-R1	CCTTTGCCACACACTTTGGG	qPCR for PRKCA	
TCF4-qPCR-F1	TGGGGGTTAAGGAGAAGTGTTT	qPCR for TCF4	
TCF4-qPCR-R1	TCCAAGTTGCCACATTGCTTC	qPCR for TCF4	
EBPL-qPCR-F1	GTGGAAATTCTGACCGTCGC	qPCR for EBPL	
EBPL-qPCR-R1	TCTGCAGGAAATGCCGGTAA	qPCR for EBPL	
MIF-qPCR-F1	GAACCGCTCCTACAGCAAGC	qPCR for MIF	
MIF-qPCR-R1	GGCCGCGTTCATGTCGTAAT	qPCR for MIF	
TPT1-qPCR-F1	TCAGCCACGATGAGATGTTCT	qPCR for TPT1	
TPT1-qPCR-R1	TCCTACTGACCATCTTCCCCT	qPCR for TPT1	
NGDN-qPCR-F1	GAGAAAGGACGGCGAAAACG	qPCR for NGDN	
NGDN-qPCR-R1	AGTTCCCCCTGTCAAAGCAC	qPCR for NGDN	
NDUFS2-qPCR-F1	CCCAAGCAAAGAAACAGCCC	qPCR for NDUFS2	
NDUFS2-qPCR-R1	GGGCCCAAAGTTCAGGGTAA	qPCR for NDUFS2	
HMOX2-qPCR-F1	CAGCGGAAGTGGAACCTCA	qPCR for HMOX2	
HMOX2-qPCR-R1	TCCGAGAGGTCAGCCATTCT	qPCR for HMOX2	
HTT-qPCR-F1	CTCGTCAGCTTGGTTCCCAT	qPCR for HTT	
HTT-qPCR-R1	AGAGATTTGGGAGCACTGGC	qPCR for HTT	
siRNAs			
Name	Sense (5' to 3')	Antisense (5' to 3')	Note
siG3BP2	CCGUAGAAUAAUUCGCUAUC	AUAGCGAAUUAUUCUACGGUU	Silencer Select siRNA
eCLIP-seq adapters			
Name	Sequence (5' to 3')	Note	
RNA_X1A	/5Phos/AUUAAGGNNNNNAGAUCGGAAGAGCGUCGUGUAG/3SpC3/	3' adapter for IP	
RNA_X1B	/5Phos/AAUAGCANNNNNAGAUCGGAAGAGCGUCGUGUAG/3SpC3/	3' adapter for IP	

RiL19	/5phos/AGAUCGGAAGAGCGUCGUG/3SpC3/	3' adapter for SMInput
AR17	ACACGACGCTCTCCGA	Reverse transcription
rand103Tr3	/5Phos/NNNNNNNNNAGATCGGAAGAGCACACGTCTG/3SpC3/	5' linker

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**Antibodies**

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<b>Name</b>	<b>Experiment</b>	<b>Source</b>	<b>Identifier</b>
Anti-G3BP1	eCLIP, SG RNA	BD Biosciences	611126
Anti-G3BP1	Western blotting	ABclonal	A3968
Anti-G3BP2	eCLIP	abcam	ab86135
Anti-G3BP2	Western blotting	ABclonal	A6026
Anti-Actin	Western blotting	FUJIFILM Wako	010-27841
Non-immune IgG (n.i.)	Negative control	IBL	17314

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**Software and algorithms**

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<b>Name</b>	<b>Version</b>	<b>URL</b>
STAR	2.7.10a	<a href="https://github.com/alexdobin/STAR">https://github.com/alexdobin/STAR</a>
HISAT2	2.1.0	<a href="http://daehwankimlab.github.io/hisat2/">http://daehwankimlab.github.io/hisat2/</a>
Samtools	1.10	<a href="http://www.htslib.org/">http://www.htslib.org/</a>
fastp	0.23.2	<a href="https://github.com/OpenGene/fastp">https://github.com/OpenGene/fastp</a>
StringTie	2.1.6	<a href="https://ccb.jhu.edu/software/stringtie/">https://ccb.jhu.edu/software/stringtie/</a>
CLIPper	2.1.2	<a href="https://github.com/YeoLab/clipper">https://github.com/YeoLab/clipper</a>
R	4.2.0	<a href="https://www.r-project.org/">https://www.r-project.org/</a>
RStudio	Build 461	<a href="https://www.rstudio.com">https://www.rstudio.com</a>

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