

Supplementary Tables for

**TFEB Regulates Pluripotency Transcriptional Network in
Mouse Embryonic Stem Cells Independent of
Autophagy-lysosomal Biogenesis**

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Supplementary Table 1. Sequences for siRNA and gRNA

gRNA sequences for lentiCRISPRv2	
TFEB gRNA-1	CACCGCATATTCACACCCGACGGCG
TFEB gRNA-2	CACCGCAGCCCGATGCGTGACGCCA
TFEB gRNA-3	CACCGTCGGGCTCCCTGTAGTCGAG
TFE3 gRNA-1	CACCGACAACGTTCCATGTATCGGG
TFE3 gRNA-2	CACCGGGCGATTCAACATTAACGAT
TFE3 gRNA-3	CACCGAGCGTGTAGGGTTCTCGAGG
siRNA sequences	
si-GFP sense	G TTCAGCGTGTCCGGCGAG
si-GFP antisense	CTCGCCGGACACGCTGAAC
si-Oct4 sense	GCCGACAACAATGAGAACCTT
si-Oct4 antisense	AAGGTTCTCATTGTTGTCGGC
si-Sox2 sense	GAAGGAGCACCCGGATTA
si-Sox2 antisense	TAATCCGGGTGCTCCTTC
si-Nanog sense	GTTAAGACCTGGTTTCAA
si-Nanog antisense	TTTGAAACCAGGTCTTAAC
si-TFE3 sense	GCCTAACATCAAACGCGAGAT
si-TFE3 antisense	ATCTCGCGTTTGATGTTAGGC
si-ATG7 sense	CTCAAGCTGATGTGCTGGCTT
si-ATG7 antisense	GCCAGCACATCAGCUTGAGTT

Supplementary Table 2. Sequences for ChIP-qPCR

Primers used for ChIP-qPCR	
Nanog promoter	
T1-F	AGAGAGAGAGAGAGAGAGTGGTGTAAA
T1-R	ATAATTAAACCAGCCATTTCTTTTTTGT
T2-F	GCAGTGGAGACAGTAGTAGTATGGT
T2-R	GTTATTATTCTAGGCAGGGTTTCTCTG
T3-F	GCTTAGTCTTTTGTAGAATAAAACCCAG
T3-R	CTTCCTATTTCCACATCCCAAGTTCAAA
T4-F	GAGGATGCCCCCTAAGCTTTCCCTCCC
T4-R	CCTCCTACCCTACCCACCCCCTATTCTCCC
Oct4-F	GAGGATGCCCCCTAAGCTTTCCCTCCC
Oct4-R	CCTCCTACCCTACCCACCCCCTATTCTCCC
Sox2 promoter	
F	CGGTGAGAAGAGGGGGTGAGTGGGTGCTGGCGACAAGG
R	GGATACATAAGGGTGGATGGGGCGCGGAAGCTGGGGC
TFEB promoter	
Sox2-F	CCAGTCTCATGTACTCAGACTGCCAGGCACTG
Sox2-R	CGTATCTGAGACCATGACAGTACAGTTAGGGAC
Oct4-F	CCCAACGGCTAGAGGCCGAAGGTCTAGCAGTAAACAAACAG
Oct4-R	ACCTCCTCCGAGAGACTCTAATGTCACCTCAGAGTGCCATTTTCAGGA CCTGTGC

Nanog-F	CCCAACGGCTAGAGGCCGAAGGTCTAGCAGTAAACAAACAG
Nanog-R	ACCTCCTCCGAGAGACTCTAATGTCACCTCAGAGTGCCATTTTCAGGA CCACTGTGC
Lysosomal promoter	
CLCN7-F	GGATTTTGAGTTCTAGGTTTCTACCCTGGGCTGCAACGACC
CLCN7-R	CAAGACACTTTCTTAGAGACGTTGGCCATGGCCCACTGAG
CTSA-F	GGGAACCCTTCTGTCAACACCAAGATCACCTGATCTCTGG
CTSA-R	CCGTACCTCTGCTTCCTTGCGTCCTTGCTCTCCAGGA
CTSD-F	GACCACATCCTGGTAGTGGGCACCCCAATTATGCAAAAA
CTSD-R	ACTCCAGGCCTACGCACGGCTCTCGGGAACG
LAMP1-F	TCACGTGCGGAACGGAGCCTCCCGAAGAAGTGAGGAG
LAMP1-R	TTGCGCGGGCGGCGAGGCCGGCGGGAGGG
MCOLN1-F	CCTTTTGTTAGAGTTGCTATCGGCACTAGGACCGCGCG
MCOLN1-R	TCACTGCAGCCTCGCTCCCTCCCGGCGCCGCTTCAAA
TPP1-F	GCTCAACACAGCATAGAATTCTAATAGCAGCCCCAGCATTTCAG
TPP1-R	ATGTAATCCCTCTAATGTAATCCCCCTTAGCTACCCTCCCCA

Supplementary Table 3. Primers for qPCR

qPCR primers	
mATG7-F	GTTTCGCCCCCTTTAATAGTGC
mATG7-R	TGAACTCCAACGTCAAGCGG
mUVRAG -F	GCAGACCACGAGACAGTTGA
mUVRAG -R	CATCGTGACGTTGCACACAG
mWIP1-F	CACAGGATGGAGGAGAATGTG
mWIP1-R	TGCAGCATAAGATGGAGGTAAG
mATG9b -F	AGCTATCATCAGCGGAATGG
mATG9b -R	GCGAAGGAGGAAGGTTGTAA
SOX2-F	CATGAGAGCAAGTACTGGCAAG
SOX2 -R	CCAACGATATCAACCTGCATGG
OCT4-F	CCAATCAGCTTGGGCTAGAG
OCT4-R	CCTGGGAAAGGTGTCCTGTA
NANOG-F	TCTTCCTGGTCCCCACAGTTT
NANOG-R	GCAAGAATAGTTCTCGGGATGAA
mTFEB-F	CGGACAGATTGACCTTCAGAG
mTFEB-R	GCTGCTGCTGTTGCATATAAT
mTFE3-F	GGAAACAGAGAAGTCTCCCTTAAA

mTFE3-R	CTGAGTGGGTGGGTTCAATAA
MITF-F	AGGACCTTGAAAACCGACAG
MITF-R	GGTGGATGGGATAAGGGAAAG
TFEC-F	AGTGATACAATATGCCCTTTGG
TFEC-R	GTTGATGTCTTGAGCCTGTTTG
SOX17-F	ATACGCCAGTGACGACCAGAG
SOX17-R	ACCACCTCGCCTTTCACCTTT A
OTX2-F	GCGAAGGGAGAGGACGACTTT
OTX2-R	CTGCTGTTGGCGGCACTTAG
NEURO D1-F	TATTGCGTTGCCTTAGCACT
NEURO D1-F	CATCCTCTTGAGTGTTATGG
GATA4-F	GAGGGTGAGCCTGTATGTAATG
GATA4-R	CTAGTGGCATTGCTGGAGTTA
HAND1-F	CACCACCTACCACCGCAGTA
HAND1-R	CCTTCTTGGGTCCTGAGCCTTT
BRACHYURY-F	TCTCTGGTCTGTGAGCAATGGT
BRACHYURY-R	TGCGTCAGTGGTGTGTAATGTG
m β -actin-F	ATGGAGCCACCGATCCACA
m β -actin-R	CCGTAAAGACCTCTATGCCAAC

mATG4b-F	TATGATACTCTCCGGTTTGCTGA
mATG4b-R	GTTCCCCCAATAGCTGGAAAG
mLAMP1-F	CAGCACTCTTTGAGGTGAAAAC
mLAMP1-R	ACGATCTGAGAACCATTGCA
mATP6v0E1-F	GCATACCACGGCCTTACTGT-
mATP6v0E1-R	GAGGATTGAGCTGTGCCAGA
mATP6v1h-F	ACTCCCCGAGGCTATCCAG
mATP6v1h-R	CACGAACTTCAGCAGCCTTG
mCSTD-F	TACTCCATGCAGTCATCGCC
mCSTD-R	GACGACTGTGAAACACTGCG
mMCOLN1-F	TCATTGCACTCATCACCGGC
mMCOLN1-R	CCAGATGTGGGGCTATCCTG
mCLCN7-F	CACGGCCAGGGAAGTAATGAG
mCLCN7-R	CGCAGGATCAAGCCTTGGAG
mCTSA-F	CAGCCCCTTCCAACCTACCTC
mCTSA-R	CCGTTGTAGAGCAGGATCTGG
hVSP11-F	AAGAACCTCATGCCACCTCTTC
hVSP11-R	GGTAGTCCCTGATGACGGAGA
hCTSF-F	ACAGAGGAGGAGTTCCGCACTA

hCTSF-R	GCTTGCTTCATCTTGTTGCCA
hLAMP1-F	ACGTTACAGCGTCCAGCTCAT
hLAMP1-R	TCTTTGGAGCTCGCATTGG
hATPv0E1-F	CATTGTGATGAGCGTGTTCTGG
hATPv0E1-R	AACTCCCCGGTTAGGACCCTTA
hLAMP2-F	GCCGTTCTCACACTGCTCTA
hLAMP2-R	TGAAATGCTCCAGACACTGAA
hTFEB-F	CCAGAAGCGAGAGCTCACAGAT
hTFEB-R	TGTGATTGTCTTTCTTCTGCCG
hUVRAG-F	CTGTTTGGATGGGCTGAAAT
hUVRAG-R	TGCGAACACAGTTCTGATCC
hATG9b-F	TGTGAGCCAGAAAAACAAGCAAA
hATG9b-R	GGTATGGGGGTGGGGTCTAA
h β -actin-F	GAGATCACTGCCCTGGCACC
h β -actin-R	GATGGAGGGGCCGGACTCG
hUVRAG -F	CTGTTTGGATGGGCTGAAAT
hUVRAG -R	TGCGAACACAGTTCTGATCC