

Table S1. Primer design for the PCR assays.

Gene	Accession Number	Sequence 5' to 3'
<i>BAG3</i>	NM_0010111936	<i>F:</i> ACCGGTTCACTGCCCATC <i>R:</i> GTTTTCGGGTTGGGTGACAG
<i>BNIP3</i>	NM_053420	<i>F:</i> GGACGAAGCAGCTCCAAGAG <i>R:</i> CACCAAAGCTGTGGGTGTCT
<i>BNIP3L</i>	NM_080888	<i>F:</i> CAGCATGAGTCGGGACAGAG <i>R:</i> CCTGCTGGTGTGCATCTCA
<i>DYNC1H1</i>	NM_019226	<i>F:</i> TCAGCAAATTTGGGCAGATG <i>R:</i> GTGTCAACGGAGTGTGCTC
<i>FUNDC1</i>	NM_001025027	<i>F:</i> GGCTGGTGTGCAGGATTTTT <i>R:</i> CCACTGTGACTGGCAACCTG
<i>DYSF</i>	NM_001107869	<i>F:</i> ACCAGACTCGGCTACCTGGA <i>R:</i> CGGGCATTCAATATCGTCCT
<i>HSPB8</i>	NM_053612	<i>F:</i> CAGCTTCCTGCAGAAGTGGGA <i>R:</i> GGGTGAGTAAGGAGGGACCTG
<i>KIF5B</i>	NM_057202	<i>F:</i> CCACCAGAAGAAACGAGCAG <i>R:</i> CCCTCCGGTTGCTTTACATC
<i>LAMP2</i>	NM_017068	<i>F:</i> GCCTTTATGCAGAATGGGAGA <i>R:</i> TGTACCTTGTGAGGCACTGT
<i>MIRO1</i>	NM_001107026	<i>F:</i> ACAAATGAAAGCGGCTGGAT <i>R:</i> GCCCAGATACTCCAGACAACG
<i>NRF1</i>	NM_001100708	<i>F:</i> GGGGCAACAGTAGCCACATT <i>R:</i> CACCTCTCCATCAGCCACAG
<i>TFAM</i>	NM_031326	<i>F:</i> AATGTGGGGCGTGCTAAGAA <i>R:</i> GCTGACAGGCGAGGGTATG
<i>TRAK1</i>	NM_001134565	<i>F:</i> AACCTGCGGAACAAGACGAT <i>R:</i> CGCATGGTTCCTCAATTC
<i>YAP1</i>	NM_001034002	<i>F:</i> CATGCTCTCCCAACTGAACG <i>R:</i> TCCCATCCATCAGGAAGAGG
<i>18S</i>	NM_003278	<i>F:</i> AATCAGTTATGGTTCCTTGTGCG <i>R:</i> GGTCTAGAATTACCACAGTTATCCAA

F forward, *R* reverse; *BAG3*, Bcl2-associated athanogene 3; *BNIP3*, BCL2-interacting protein 3; *BNIP3L*, BCL2-interacting protein 3-like; *DYSF*, *DYNC1H1*, Cytoplasmic dynein 1 heavy chain 1; Dysferlin; *FUNDC1*, FUN14 domain-containing protein 1; *HSPB8*, heat shock protein family B (small) member 8; *KIF5B*, Kinesin-1 heavy chain; *LAMP2*, lysosomal-associated membrane protein 2; *MIRO1*, Mitochondrial Rho GTPase 1; *NRF1*, Nuclear respiratory factor 1; *TFAM*, Mitochondrial transcription factor A; *TRAK1*, Trafficking kinesin-binding protein 1; *YAP1*, yes-associated protein 1.

Table S2. Primary antibodies used for Western blots.

Antibody	Dilutions	Source
Goat anti-PGC1A	1:500	Abnova, #PAB7302
Rabbit anti-MFN2	1:2000	Abcam, #Ab124773
Mouse anti-OPA1	1:1000	BD Biosciences, #612606
Rabbit anti-FIS1	1:1000	Abcam, #Ab71498
Mouse anti-PARKIN	1:10000	Sigma-Aldrich, #P6248
Anti-SQSTM1	1:5000	Interchim, #8878-M01
Rabbit anti-LC3	1:1000	Sigma-Aldrich, #L7543
Rabbit Anti-UBE2L3	1:1000	Sigma-Aldrich, #SAB2501081

PGC1A, Peroxisome proliferator-activated receptor gamma coactivator 1-alpha; MFN2, mitofusin 2; OPA1, mitochondrial Dynamin Like GTPase; FIS1, mitochondrial fission 1 protein; PARKIN, E3

ubiquitin-protein ligase; SQSTM1, ubiquitin-binding protein p62; LC3, Microtubule-associated proteins 1A/1B light chain 3B; UBE2L3, ubiquitin-conjugating enzyme E3 L3.