

S2 Table. Oligos used in this work			
Name	Sequence	Tm	Use
Primers used in strain genotyping			
ceMTO1-L	CTGCCAGATTTCTTGGTCGT	64.2°C	mtcu-2 gene amplification (750 pb in WT and 1 kb in mutant)
ceMTO1-R	ACGCTGTTGATTTTTGCCTT	63.5°C	
MTO1-int	TCCCGTAGTGATTACAACAC	57.5°C	
ecMTU1-L	TCTCTCCTCCACCAAGGCAT	80.4°C	mttu-1 gene amplification (1,3 kb in WT and 650 pb in mutant)
ecMTU1-R	GGGACATCACATTGTCCACG	71.6°C	
F39+351-R	ACAATTTCTGTATTTCATC	59.3°C	mtcu-1 gene amplification (1,3 kb in WT and 650 pb in mutant)
F39-870-F	AACAAATCAAACACAATACAACC	59.2°C	
ceMSS1-L	GGCACTGGAAAAGAGACAAGA	63.3°C	mtcu-1 gene amplification to detect ok3674 variation
ceMSS1-R	ACGTGCTCAAAAACGAATCC	63.9°C	
Primers used in mttu-1(RNAi) construction			
F-BamHImttu	CGAGTTGGGATCCGAATGTCCGGCGGTGTGG	86.8°C	mttu-1(RNAi) cloning in L4440
R-Xholmttu-B	ATAAAGTCTCGAGAATATTCATAATCTCTCCTCCACC	71.1°C	
Primers used in GFP recombinant proteins constructed by homologous recombination			
reB00-F	GAATTCGATATCAAGCTTATCGATACCGTCGACAATGAAAATGCCACGAGTTG	84.2°C	MTTU-1:GFP recombinant protein construction (underlined region recombines with pGREG600)
reB00-R2	AGTTCTTCTCCTTTACTCATTCTCGAGGTCGATAAAGTTTCTTGAATATTC	76.7°C	
reF52-F	GAATTCGATATCAAGCTTATCGATACCGTCGACAATGTCGACAATCTTCGCCC	85.5°C	MTCU-2:GFP recombinant protein construction (underlined region recombines with pGREG600)
reF52-R	AGTTCTTCTCCTTTACTCATTCTCGAGGTCGATTTTCCGATACAAAATTTGC	81°C	
reGTPBP3-F	GAATTCGATATCAAGCTTATCGATACCGTCGACAATGTGGCGGGGGCTTTGGAC	88.3°C	MTCU-1:GFP recombinant protein construction (underlined region recombines with pGREG600)
reGTPBP3-R	AGTTCTTCTCCTTTACTCATTCTCGAGGTCGACTTGCCACACAGAAGTCC	84.3°C	
Primers used for Northern Blot			
DIG-Gln	[DIG]GCAATCAAACCTCTTTGCACCAAAAAACAA	71.3°C	mt-tRNA ^{Gln} detection
DIG-Leu	[DIG]AGTTGACGGATATCTTTGCGCTTAAAACA	72°C	mt-tRNA ^{Leu} detection
DIG-5S rRNACe	[DIG]CCGTCTCCGATCCAAGTACTAA	64°C	5s rRNA detection
DIG-cyt-Lys	[DIG]ATGCTCTACCGACTGAGCTAGCCGGGC	77°C	cyt-tRNA ^{Lys} detection
Primers used for mtDNA/nDNA ratio			
MTCE.21-F	GTTTATGCTGCTGTAGCGTG	61.1°C	ctb-1 (mitochondrial)
MTCE.21-R	CTGTTAAAGCAAGTGGACGAG	61.4°C	
F36A4.7-F	TGGAActCTGGAGTCACACC	62.9°C	ama-1 (nuclear)
F36A4.7-R	CATCCTCCTTCATTGAACGG	64.4°C	
Primers used for mRNA levels quantitation (qRT-PCR)			
act1_F	GAAGGAAATCACCGCTCTTG	63.6°C	act-1 (normalyzer)
act1_R	TCCACATCTGTTGGAAGGTG	63.7°C	
F-cts-1b	ACGGATTGGCTAACCAAGAG	62.9°C	cts-1 (citrate sinthase)
R-cts-1b	TACGGCATGTCCATATCCTG	63.3°C	
SOD3-F	TGGTGGTGGACACATCAATC	64.5°C	sod-3 (antioxidant response)
SOD3-R	TGCAAGTTATCCAGGGAACC	63.8°C	
SOD1-F	CTCATGGTGGACCAAAATCC	64.1°C	sod-1 (antioxidant response)
SOD1-R	ACAACCATAGATCGGCCAAC	63.7°C	
CTL2-F	CGTATCCAAAACCCCAAGTG	64°C	ctl-2 (antioxidant response)
CTL2-R	CGAAATGAGCCATCTCATCC	64.5°C	
GST4-F	TGCTCAATGTGCCTTACGAG	64°C	gst-4 (antioxidant response)
GST4-R	CCGAATTGTTCTCCATCGAC	64.4°C	
GCS1-F	GTCTCATCGCTTGCTTCAAC	62.6°C	gcs-1 (antioxidant response)
GCS1-R	ACTTCCGGGAATGTGAATCC	64.9°C	
Fgt1_F	AGACAAGTGGGCCAGCTACTCA	67.2°C	fgt-1 (glycolysis)
Fgt1_R	GGTCCGGTGGCAAAGGA	67.4°C	
Glna1_F	AGCCAAGTGGACGGCTTTT	65.9°C	glna-1 (glutaminase)
Glna1_R	TGCGCCAGCATTGATTAGC	67.3°C	
Acs17_F	GGAGACTATCACTGGAGAAGCTATG	63.2°C	acs-17 (fatty acid oxidation)
Acs17_R	GAActGCTTCGTCTCCAAGAGTAG	64.4°C	
Ldh1_F	GAGAGAAGACTGACAACGAACACTG	65.3°C	ldh-1 (glycolysis)
Ldh1_R	GAACGACTGGAAGAGAAAGGTAGAC	64.3°C	
Ucp4_F_a	CGAACTTAAAGATAATTGGCTAACTCA	63.3°C	ucp-4 (succinate transport)
Ucp4_R_a	CGACATCTGATGGAAGTGATACAA	64.9°C	
Acdh12_F	CCGATGTTTTCACTGTGTTTGC	66.4°C	acdH-12 (fatty acid oxidation)
Acdh12_R	CAAACGCTCTTTCGACAATGAAT	66°C	
Pfk1.1_F	GCTCGACTTTATCCGTCAGC	63.8°C	pfk-1.1 (glycolysis)
Pfk1.1_R	CAGCGCTGTTCATACCTTGA	64°C	
Clpp1_F	GTCATTCTGTGCCGAAGAAAT	63.9°C	clpp-1 (UPR ^{mt})
Clpp1_R	TTGATCCGTTGTGAGTCTCG	64°C	
Icl1_F	ACTGCCTTGTCAGGATCCAC	64.2°C	icl-1 (glyoxilate)
Icl1_R	GAATTCGGTGTTGAGGTCGT	63.9°C	
F48E8.3_F	CTTTTGGCAGACCTGCTTTC	63.8°C	F48E8.3 (malate dismutation)
F48E8.3_R	GCAGACACTGGGAACACCTT	64.2°C	
UBL5-F	CACAACTGGAACACGATGG	64.1°C	ubl-5 (UPR ^{mt})
UBL5-R	CCCTCGTGAATCTCGTAATCC	64.5°C	