

S1 Table. Taqman Probes and oligonucleotides used in this study

Taqman Assays	
DmMTPNPase	Dm02146799_g1
DmSUV3	Dm02136650_g1
DmRpL32	Dm02151827_g1
DmMT-ND1	AI70K4C
DmMT-ND2	AI20SFG
DmMT-CYTB	AILJEB
DmMT-ND5	AIHSOVN
DmMT-COX1	AII1M1V
DmMT-COX3	AI89JAK
DmMT-ND3	AIFASI7
DmMT-ND4L	AI5IORW
DmMT-ND6	AI6RMX4
Primers for cloning PNP-GFP and PNP-FLAG constructs 5'-3'	
DmPNPase_Xhal_F	ATGGCCATGATTTTCACAC
DmPNPase_FLAG_Xbal_R	CTCTCCTCTAGACTACTTATCGTCGTCATCCTTGTAATCCGT TCCGCTCTCTCCGGCAG
DmPNPase_Kpn1_R	ATGGTACCCGTTCCGCTCTCTCC
Primers for generating gRNA and screening for PNPaseKO lines	
pCFD4_PNP-1_F	TATATAGGAAAGATATCCGGGTGAACTTCGACCTTCAGTTCC GGCCGCCGTTTTAGAGCTAGAAATAGCAAG
pCFD4_PNP-2_R	ATTTTAACTTGCTATTTCTAGCTCTAAAACAATCTAATATTCT GGACATCGACGTTAAATTGAAAATAGGTC
MTPNP_927_ScrPCR1_F	AGCTGCTCAACTATCGCCTC
MTPNP_ScrPCR1_R	CTGGCCGGGATTTGGCTTCG
MTPNPKO_ScrPCR2_F	GACCTTCAGTTCCGGCGA
Primers for qRT-PCR quantification of mRNAs	
DmBSF_3809_F	GAGGGATTGATATTGCGGCA
DmBSF_3680_R	CTTGACCACAGAAATCGAT
His2B_F	CTGGCAAGGCTCAGAAGAAC
His2B_R	AAATTCCGGTGTTCAGGATGG
12S_F	GATAACGACGGTATATAAACTGATTACA
12S_R	GAGGAACCTGTTTTTTAATCGA
16S_F	ACCTGGCTTACACCGGTTT
16S_R	GGGTGTAGCCGTTCAAATTT
Primers for qPCR quantification of mtDNA	
12S_F	GATAACGACGGTATATAAACTGATTACA
12S_R	GAGGAACCTGTTTTTTAATCGA
COX3_F	CAGACTCAATTTATGGATCAACATT
COX3_R	AAAGTTGTTCCGATTAATACATGAA
COX1_F	CAGGATGAACTGTTTATCCACCTTT
COX1_R	AATCCCTGCTAAATGTAGAGAAAAAATAG

ND1_F	AGCCAAACCCCCTCTTCTA
ND1_R	TTTTGATTTTGCTGAAGGAGAAT
RP49_F	CGGATCGATATGCTAAGCTGT
RP49_R	CGACGCACTCTGTTGTCG

Primers for 3'RACE

Linker	ATGTGAGATCATGCACAGTCATA
Anti-linker	GACTGTGCATGATCTCAC
COX1_F	GCTTACACAACATGAAATATTGTATCA
ND1_F (R2)	GGAACCTTACCTCGATTT
16S_F (R2)	GACCTCGATGTTGGATTAAGATATAAT

Northern blot oligonucleotide probes and primers for double stranded probes

tRNA-Gln	AACTTTTGTGCATCATACACCAA
tRNA-Trp	CTTTATTTATAGCTTTGAAGGTTATTAG
tRNA-Cys	GCCTTAGTAAAACCTTACTCCTTCAAAA
tRNA-Tyr	ATCTATCGCCTAAACTTCAGCC
tRNA-Gly	AATAGACCTTATGATTGGAAGTCAA
tRNA-Ala	AATGTTATATTTAACTACAACCCT
tRNA-Asn	TCATTAACAGTGATATGCCTC
tRNA-Phe	CTTCAATGTCAAACCTCTAGT
tRNA-Thr	TTTTTGATTTACAAGACCAATGTTTT
tRNA-Pro	AGAAATTTCTTTTTCATTAATCCCCAAA
tRNA-Val	TTTGCACAAAAATCTTTTCAATG
tRNA-Met	TGGGGTATGAACCCAGTAG
tRNA-Ser1	CAAAACATATGCTTATTCAAGCTCA
tRNA-Leu2	TTATTGCACTAATCTGCCAAAATAGT
anti-tRNA-Cys	TTTTGAAGGAGTAAGTTTTACTAAGGC
Cytosolic tRNA-Val	GTGATAACCGCTACACTACGGAAA