

Supplementary Table1: Mitochondrial protein changes after SiNP exposure, protein IDs, subcellular localization and protein responses expressed as an increase or decrease in fold changes (normalized to controls)

Protein Name	Accession #	Gene Symbol	Subcellular Location	5 Tio2	15 Tio2	5 SiNP12	15 SiNP12	5 C3 15	15 C3 15	5 C11 15	15 C11 15	5 NH2 15	15 NH2 15	5 PEG 15	15 PEG 15	5 P15	15 P15	5 P30	15 P30	5 P75	15 P75
Probable Xaa-Pro aminopeptidase 3	B7ZMP1	Xpnpep3	Mitochondrion; Cytoplasm	-	-	↑	↑	↑	-	-	-	↑	-	-	-	-	-	-	-	-	-
Glutaminase kidney isoform, mitochondrial	D3Z7P3	Gls	Isoform 2: Mitochondrion	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Dihydropolyl dehydrogenase, mitochondrial	O08749	Dld	Mitochondrion matrix; Nucleus; Cell projection->cilium->flagellum; Cytoplasmic vesicle->secretory vesicle->acrosome	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
3-hydroxyacyl-CoA dehydrogenase type-2	O08756	Hsd17b10	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Prohibitin-2	O35129	Phb2	Mitochondrion inner membrane; Cytoplasm; Nucleus	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
ATPase inhibitor, mitochondrial	O35143	Atpif1	Mitochondrion	↓	↓	↑	↓	↑	↓	↑	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Complement component 1 Q subcomponent-binding protein, mitochondrial	O35658	C1qbp	Mitochondrion matrix; Nucleus; Cell membrane; Secreted; Cytoplasm; Nucleus->nucleolus	↑	-	↑	-	↑	-	↑	-	-	-	↑	-	↑	-	↑	-	-	-
Branched-chain-amino-acid aminotransferase, mitochondrial	O35855	Bcat2	Mitochondrion	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Mitochondrial import inner membrane translocase subunit TIM44	O35857	Timm44	Mitochondrion inner membrane	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Fra1x, mitochondrial;Fra1x intermediate form;Fra1x mature form	O35943	Fxn	Cytoplasm->cytosol; Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↑
Aldehyde dehydrogenase, cytosolic 1    "Aldehyde dehydrogenase, mitochondrial"    Aldehyde dehydrogenase family 1 member A3    Retinal dehydrogenase 2    Retinal dehydrogenase 1 {ECO:0000305}    "Aldehyde dehydrogenase X, mitochondrial"	O35945; P47738; Q9JHW9; Q62148; P24549; Q9CZS1	Aldh1a7; Aldh2; Aldh1a3; Aldh1a2; Aldh1a1; Aldh1b1	Cytoplasm    Mitochondrion matrix    Cytoplasm    Cytoplasm    Cytoplasm->cytosol    Mitochondrion matrix	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
39S ribosomal protein L23, mitochondrial	O35972	Mrpl23	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
ATP-dependent Clp protease proteolytic subunit, mitochondrial	O88696	Clpp	Mitochondrion matrix	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Isocitrate dehydrogenase [NADP] cytoplasmic    "Isocitrate dehydrogenase [NADP], mitochondrial"	O88844; P54071	Idh1; Idh2	Cytoplasm    Mitochondrion	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial	O88986	Gcat	Mitochondrion; Nucleus	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Dihydrofolate reductase	P00375	Dhfr	Mitochondrion; Cytoplasm	↑	↑	↑	↓	↑	↓	↓	↑	↑	↑	↑	↑	↑	↓	↑	↓	↓	↑
Aspartate aminotransferase, mitochondrial	P05202	Got2	Mitochondrion matrix; Cell membrane	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓

Proto-oncogene tyrosine-protein kinase LCK   Tyrosine-protein kinase Lyn   Fibroblast growth factor receptor 2   Tyrosine-protein kinase Blk   Serine/threonine-protein kinase MAK   Tyrosine-protein kinase HCK   Tyrosine-protein kinase Yes   Serine/threonine-protein kinase ICK   Tyrosine-protein kinase Fgr   Fibroblast growth factor receptor 1   Fibroblast growth factor receptor 3   Tyrosine-protein kinase Fyn   Fibroblast growth factor receptor 4   Cyclin-dependent kinase 20	P06240; P25911; P21803; P16277; Q04859; P08103; Q04736; Q9JKV2; P14234; P16092; Q61851; P39688; Q03142; Q9JHU3	Lck; Lyn; Fgfr2; Blk; Mak; Hck; Yes1; Ick; Fgr; Fgfr1; Fgfr3; Fyn; Fgfr4; Cdk20	Cytoplasm; Cell membrane   Cell membrane; Nucleus; Cytoplasm; Cytoplasm->perinuclear region; Golgi apparatus; Membrane   Cell membrane->Single-pass type I membrane protein; Golgi apparatus; Cytoplasmic vesicle   Cell membrane   Nucleus; Cytoplasm->cytoskeleton->microtubule organizing center->centrosome; Cytoplasm->cytoskeleton->spindle; Midbody; Cell projection->cilium->photoreceptor outer segment; Photoreceptor inner segment   Isoform 2: Cell membrane Lipid-anchor; Membrane->caveola; Cell junction->focal adhesion; Cytoplasm->cytoskeleton; Golgi apparatus; Cytoplasmic vesicle; Lysosome; Nucleus   Cell membrane; Cytoplasm->cytoskeleton->microtubule organizing center->centrosome; Cytoplasm->cytosol   Cytoplasm->cytosol; Cell projection->cilium; Nucleus; Cytoplasm->cytoskeleton->cilium basal body   Cell membrane; Cell membrane; Cell projection->ruffle membrane; Cytoplasm->cytosol; Cytoplasm->cytoskeleton; Mitochondrion inner membrane; Mitochondrion intermembrane space   Isoform 5: Cell membrane->Single-pass type I membrane protein   Cell membrane->Single-pass type I membrane protein; Cytoplasmic vesicle; Endoplasmic reticulum   Cytoplasm; Nucleus; Cell membrane   Cell membrane; Endosome; Endoplasmic reticulum   Nucleus; Cytoplasm; Cell projection->cilium	-	-	↑	-	↑	-	↑	-	-	-	-	-	↑	-	-	-	-	-
Malate dehydrogenase, mitochondrial	P08249	Mdh2	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Superoxide dismutase [Mn], mitochondrial	P09671	Sod2	Mitochondrion matrix	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Cytochrome c oxidase subunit 5A, mitochondrial	P12787	Cox5a	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Methylmalonyl-CoA mutase, mitochondrial	P16332	Mut	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial; NAD-dependent methylenetetrahydrofolate dehydrogenase; Methylenetetrahydrofolate cyclohydrolase	P18155	Mthfd2	Mitochondrion	↓	↓	↑	↑	↑	↓	↑	↓	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓
Cytochrome c oxidase subunit 5B, mitochondrial	P19536	Cox5b	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Thioredoxin-dependent peroxide reductase, mitochondrial	P20108	Prdx3	Mitochondrion; Cytoplasm; Early endosome	↓	↓	↑	↓	↓	↓	↑	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Glutamate dehydrogenase 1, mitochondrial	P26443	Glud1	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Ornithine aminotransferase, mitochondrial	P29758	Oat	Mitochondrion matrix	↑	↓	↑	↓	↑	↓	↑	↓	↓	↓	↓	↑	↓	↑	↓	↓	↓	↑
Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial	P35486	Pdha1	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓

Hydroxymethylglutaryl-CoA lyase, mitochondrial	P38060	Hmgcl	Mitochondrion matrix; Peroxisome	↓	↑	↑	↑	↑	↓	↓	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓
Stress-70 protein, mitochondrial	P38647	Hspa9	Mitochondrion; Nucleus->nucleolus	↓	↓	↑	↓	↑	↓	↑	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓
Enoyl-CoA delta isomerase 1, mitochondrial	P42125	Eci1	Mitochondrion matrix	↓	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	P45952	Acadm	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Adrenodoxin, mitochondrial	P46656	Fdx1	Mitochondrion matrix	-	↑	↑	↑	↑	-	-	-	↑	-	↑	-	↑	-	↑	-	-	-
Aldehyde dehydrogenase, mitochondrial	P47738	Aldh2	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Cytochrome c oxidase subunit 7A2, mitochondrial	P48771	Cox7a2	Mitochondrion inner membrane	-	↑	-	-	-	-	-	-	-	-	↑	-	-	-	↑	-	-	-
ADP/ATP translocase 1	P48962	Slc25a4	Mitochondrion inner membrane->Multi-pass membrane protein	-	-	-	-	-	-	-	-	-	-	-	-	↑	-	-	-	-	-
Hematopoietic lineage cell-specific protein	P49710	Hcls1	Mitochondrion	↑	↑	↑	-	-	↑	↑	-	-	-	↑	-	↑	-	↑	-	-	-
2-oxoisovalerate dehydrogenase subunit alpha, mitochondrial	P50136	Bckdha	Mitochondrion matrix	-	-	-	-	↑	-	-	-	-	-	-	-	↑	-	-	-	-	-
Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	P50544	Acadvl	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Long-chain specific acyl-CoA dehydrogenase, mitochondrial	P51174	Acadl	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
ADP/ATP translocase 2;ADP/ATP translocase 2, N-terminally processed	P51881	Slc25a5	Mitochondrion inner membrane->Multi-pass membrane protein	-	↑	↑	↑	↑	-	↑	-	-	-	-	-	↑	-	-	-	-	↑
Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial	P53395	Dbt	Mitochondrion matrix	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Isocitrate dehydrogenase [NADP], mitochondrial	P54071	Idh2	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Cytochrome c oxidase copper chaperone	P56394	Cox17	Mitochondrion intermembrane space; Cytoplasm	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
ATP synthase subunit beta, mitochondrial	P56480	Atp5b	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
28S ribosomal protein S21, mitochondrial	P58059	Mrps21	Mitochondrion	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Cytochrome c, somatic	P62897	Cycs	Mitochondrion intermembrane space	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
40S ribosomal protein S3	P62908	Rps3	Cytoplasm; Nucleus; Nucleus->nucleolus; Mitochondrion inner membrane; Cytoplasm->cytoskeleton->spindle	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
60 kDa heat shock protein, mitochondrial	P63038	Hspd1	Mitochondrion matrix	↑	↑	↑	↓	↑	↓	↑	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓
Isocitrate dehydrogenase [NAD] subunit gamma 1, mitochondrial	P70404	Idh3g	Mitochondrion	↓	↑	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓



Cytochrome c oxidase subunit NDUFA4	Q62425	Ndufa4	Mitochondrion inner membrane	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Synaptic vesicle membrane protein VAT-1 homolog	Q62465	Vat1	Cytoplasm; Mitochondrion outer membrane Peripheral membrane protein	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
10 kDa heat shock protein, mitochondrial	Q64433	Hspe1	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Leucine-rich PPR motif-containing protein, mitochondrial	Q6PB66	Lrpprc	Mitochondrion; Nucleus; Nucleus->nucleoplasm; Nucleus inner membrane; Nucleus outer membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
28S ribosomal protein S7, mitochondrial	Q80X85	Mrps7	Mitochondrion	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
28S ribosomal protein S10, mitochondrial	Q80ZK0	Mrps10	Mitochondrion	-	-	↑	-	↑	-	↑	-	-	-	↑	-	↑	-	-	-	-	-
28S ribosomal protein S26, mitochondrial	Q80ZS3	Mrps26	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Elongation factor Tu, mitochondrial	Q8BFR5	Tufm	Mitochondrion	↓	↓	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Ubiquinone biosynthesis protein COQ4 homolog, mitochondrial [ECO:0000255]   HAMAP-Rule:MF_031111	Q8BGB8	Coq4	Mitochondrion inner membrane	-	-	-	↑	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
Phosphoenolpyruvate carboxykinase [GTP], mitochondrial	Q8BH04	Pck2	Mitochondrion	↓	↑	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Enoyl-CoA hydratase, mitochondrial	Q8BH95	Echs1	Mitochondrion matrix	↓	↓	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Isoleucine--tRNA ligase, mitochondrial	Q8BIJ6	Iars2	Mitochondrion matrix	-	-	↑	↑	↑	-	-	-	-	-	-	-	↑	-	-	-	-	-
Aspartate--tRNA ligase, mitochondrial	Q8BIP0	Dars2	Mitochondrion matrix	↓	↓	↓	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
28S ribosomal protein S35, mitochondrial	Q8BJZ4	Mrps35	Mitochondrion	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
28S ribosomal protein S27, mitochondrial [ECO:0000305]	Q8BK72	Mrps27	Cytoplasm; Mitochondrion	-	-	-	-	↑	-	-	-	-	-	-	-	↑	-	-	-	-	-
Pyruvate dehydrogenase protein X component, mitochondrial	Q8BKZ9	Pdhx	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Trifunctional enzyme subunit alpha, mitochondrial; Long-chain enoyl-CoA hydratase; Long chain 3-hydroxyacyl-CoA dehydrogenase	Q8BMS1	Hadha	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
39S ribosomal protein L22, mitochondrial	Q8BU88	Mrpl22	Mitochondrion	↓	↓	↓	↑	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
3-ketoacyl-CoA thiolase, mitochondrial	Q8BWT1	Acaa2	Mitochondrion	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
G-rich sequence factor 1	Q8C5Q4	Grsf1	Cytoplasm; Mitochondrion matrix->mitochondrion nucleoid	-	-	-	-	↑	-	-	-	-	-	-	-	↑	-	-	-	-	-
Lon protease homolog, mitochondrial [ECO:0000255]   HAMAP-Rule:MF_03120	Q8CGK3	Lonp1	Mitochondrion matrix	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Acyl-CoA dehydrogenase family member 9, mitochondrial	Q8JZN5	Acad9	Mitochondrion	↓	↓	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Elongation factor G, mitochondrial [ECO:0000255]   HAMAP-Rule:MF_03061	Q8K0D5	Gfm1	Mitochondrion	↓	↑	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
CCA tRNA nucleotidyltransferase 1, mitochondrial	Q8K1J6	Trnt1	Mitochondrion	-	-	-	-	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
Polyribonucleotide nucleotidyltransferase 1, mitochondrial	Q8K1R3	Pnpt1	Cytoplasm; Mitochondrion; Mitochondrion intermembrane space	-	↑	↑	↑	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
Ubiquinone biosynthesis protein COQ9, mitochondrial	Q8K1Z0	Coq9	Mitochondrion	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓
Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial	Q8K2B3	Sdha	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓









Oligoribonuclease, mitochondrial	Q9D8S4	Rexo2	Mitochondrion intermembrane space; Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↑	↓	↓	↑
Glycine amidinotransferase, mitochondrial	Q9D964	Gatm	Mitochondrion inner membrane	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
39S ribosomal protein L12, mitochondrial	Q9DB15	Mrpl12	Mitochondrion	↓	↓	↑	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑
ATP synthase subunit O, mitochondrial	Q9DB20	Atp5o	Mitochondrion; Mitochondrion inner membrane	↓	↓	↑	↑	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Cytochrome b-c1 complex subunit 2, mitochondrial	Q9DB77	Uqcrc2	Mitochondrion inner membrane	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial	Q9DBL1	Acadsb	Mitochondrion matrix	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
ATP-binding cassette sub-family B member 6, mitochondrial	Q9DC29	Abcb6	Cell membrane; Mitochondrion outer membrane; Endoplasmic reticulum membrane; Golgi apparatus membrane; Endosome membrane	-	-	-	-	-	-	-	-	-	-	-	↑	-	-	-	-	-	-
Mitochondrial-processing peptidase subunit alpha	Q9DC61	Pmpca	Mitochondrion matrix; Mitochondrion inner membrane	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
28S ribosomal protein S15, mitochondrial	Q9DC71	Mrps15	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
28S ribosomal protein S11, mitochondrial	Q9DCA2	Mrps11	Mitochondrion	-	-	-	↑	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Persulfide dioxygenase ETHE1, mitochondrial	Q9DCM0	Ethe1	Cytoplasm; Nucleus; Mitochondrion matrix	-	↑	↑	↑	↑	-	↑	-	-	-	-	-	↑	-	-	-	-	-
Enoyl-[acyl-carrier-protein] reductase, mitochondrial	Q9DCS3	Mecr	Mitochondrion	-	-	-	-	-	↑	-	-	-	-	-	-	-	-	-	-	-	-
NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial	Q9DCT2	Ndufs3	Mitochondrion inner membrane	-	-	-	-	-	-	-	-	-	-	-	↑	-	-	-	-	-	-
39S ribosomal protein L4, mitochondrial	Q9DCU6	Mrpl4	Mitochondrion	-	↑	↑	↑	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
Electron transfer flavoprotein subunit beta {ECO:0000305}	Q9DCW4	Etfb	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
ATP synthase subunit d, mitochondrial	Q9DCX2	Atp5h	Mitochondrion; Mitochondrion inner membrane	-	-	-	-	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
39S ribosomal protein L46, mitochondrial	Q9EQI8	Mrpl46	Mitochondrion	-	-	↑	↑	↑	↑	-	-	-	-	-	-	↑	-	-	-	-	-
28S ribosomal protein S29, mitochondrial	Q9ER88	Dap3	Mitochondrion	-	-	-	↑	↑	-	-	-	-	-	-	-	↑	-	-	-	-	-
Isovaleryl-CoA dehydrogenase, mitochondrial	Q9JH15	Ivd	Mitochondrion matrix	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial	Q9JHS4	Clpx	Mitochondrion; Mitochondrion matrix->mitochondrion nucleoid	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
28S ribosomal protein S34, mitochondrial	Q9JIK9	Mrps34	Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Serine--tRNA ligase, mitochondrial	Q9JL8	Sars2	Mitochondrion matrix	-	-	-	-	↑	-	-	-	-	-	-	-	-	-	-	-	-	-
39S ribosomal protein L39, mitochondrial	Q9JKF7	Mrpl39	Mitochondrion	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↓
Long-chain-fatty-acid--CoA ligase 4	Q9QUJ7	Acs14	Mitochondrion outer membrane; Peroxisome membrane; Microsome membrane; Endoplasmic reticulum membrane	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↑	↓	↓	↓	↓	↑
Long-chain-fatty-acid--CoA ligase 4    Long-chain-fatty-acid--CoA ligase 3	Q9QUJ7; Q9CZW4	Acs14; Acs13	Mitochondrion outer membrane; Peroxisome membrane; Microsome membrane; Endoplasmic reticulum membrane    Mitochondrion outer membrane; Peroxisome membrane; Microsome membrane; Endoplasmic reticulum membrane	-	↑	↑	↑	↑	-	↑	-	-	-	-	-	↑	-	-	-	-	-
Chloride intracellular channel protein 4	Q9QYB1	Clic4	Cytoplasm; Cytoplasmic vesicle membrane; Nucleus; Cell membrane; Mitochondrion	↓	↓	↑	↓	↑	↓	↓	↓	↓	↓	↓	↑	↓	↑	↓	↓	↓	↓



