

Orgcode™ Mito 50 panel

Mitochondria-focused protein panel.

PANEL LIST / 01

Gene	Gene description	Ensembl	UniProt	Common pathway
ATAD1	ATPase family AAA domain containing 1	ENSG00000138138	Q8NBU5	Protein import and homeostasis
BAD	BCL2 associated agonist of cell death	ENSG00000002330	Q92934	Apoptosis
BAK1	BCL2 antagonist/killer 1	ENSG00000030110	Q16611	Apoptosis
BAX	BCL2 associated X, apoptosis regulator	ENSG00000087088	Q07812	Apoptosis
BCL2	BCL2 apoptosis regulator	ENSG00000171791	P10415	Apoptosis
BCL2L1	BCL2 like 1	ENSG00000171552	Q07817	Apoptosis
BNIP3	BCL2 interacting protein 3	ENSG00000176171	Q12983	Apoptosis
CISD1	CDGSH iron sulfur domain 1	ENSG00000122873	Q9NZ45	Metal and redox homeostasis
CYB5B	Cytochrome b5 type B	ENSG00000103018	O43169	Xenobiotic and redox metabolism
FIS1	Fission, mitochondrial 1	ENSG00000214253	Q9Y3D6	Mitochondrial dynamics — fission
FUNDC2	FUN14 domain containing 2	ENSG00000165775	Q9BWH2	Organelle contacts and signaling
GPAM	Glycerol-3-phosphate acyltransferase, mitochondrial	ENSG00000119927	Q9HCL2	Lipid and steroid metabolism
HK1	Hexokinase 1	ENSG00000156515	P19367	Glucose metabolism
HK2	Hexokinase 2	ENSG00000159399	P52789	Glucose metabolism
IFI27	Interferon alpha inducible protein 27	ENSG00000165949	P40305	Immune-response signaling
KCNA5	Potassium voltage-gated channel subfamily A member 5	ENSG00000130037	P22460	Ion and metabolite transport
KMO	Kynurenine 3-monooxygenase	ENSG00000117009	O15229	Kynurenine metabolism
LETMD1	LETM1 domain containing 1	ENSG00000050426	Q6P1Q0	Ion and metabolite transport
MARCHF5	Membrane associated ring-CH-type finger 5	ENSG00000198060	Q9NX47	Mitophagy and ubiquitin quality control
MFF	Mitochondrial fission factor	ENSG00000168958	Q9GZY8	Mitochondrial dynamics — fission
MFN1	Mitofusin 1	ENSG00000171109	Q8IWA4	Mitochondrial dynamics — fusion
MFN2	Mitofusin 2	ENSG00000116688	O95140	Mitochondrial dynamics — fusion
MIEF1	Mitochondrial elongation factor 1	ENSG00000100335	Q9NQG6	Mitochondrial dynamics — fission
MTARC1	Mitochondrial amidoxime reducing component 1	ENSG00000186205	Q5VT66	Xenobiotic and redox metabolism
MTCH1	Mitochondrial carrier 1	ENSG00000137409	Q9NZJ7	Ion and metabolite transport
MTCH2	Mitochondrial carrier 2	ENSG00000109919	Q9Y6C9	Ion and metabolite transport
MTX1	Metaxin 1	ENSG00000173171	Q13505	Protein import and homeostasis

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MTX2	Metaxin 2	ENSG00000128654	O75431	Protein import and homeostasis
MUL1	Mitochondrial E3 ubiquitin protein ligase 1	ENSG00000090432	Q969V5	Mitophagy and ubiquitin quality control
MYO19	Myosin XIX	ENSG00000278259	Q96H55	Mitochondrial trafficking
PGAM5	PGAM family member 5, mitochondrial serine/threonine protein phosphatase	ENSG00000247077	Q96HS1	Mitophagy and ubiquitin quality control
PINK1	PTEN induced kinase 1	ENSG00000158828	Q9BXM7	Mitophagy and ubiquitin quality control
RHOT1	Ras homolog family member T1	ENSG00000126858	Q8IXI2	Mitochondrial trafficking
RHOT2	Ras homolog family member T2	ENSG00000140983	Q8IXI1	Mitochondrial trafficking
SAMM50	SAMM50 sorting and assembly machinery component	ENSG00000100347	Q9Y512	Protein import and homeostasis
SLC11A2	Solute carrier family 11 member 2	ENSG00000110911	P49281	Metal and redox homeostasis
SLC25A46	Solute carrier family 25 member 46	ENSG00000164209	Q96AG3	Mitochondrial membrane organization
SLC30A9	Solute carrier family 30 member 9	ENSG00000014824	Q6PML9	Metal and redox homeostasis
TMEM14A	Transmembrane protein 14A	ENSG00000096092	Q9Y6G1	Apoptosis
TMEM243	Transmembrane protein 243	ENSG00000135185	Q9BU79	Uncharacterized mitochondrial membrane protein
TMEM70	Transmembrane protein 70	ENSG00000175606	Q9BUB7	OXPHOS assembly
TOMM20	Translocase of outer mitochondrial membrane 20	ENSG00000173726	Q15388	Protein import and homeostasis
TOMM22	Translocase of outer mitochondrial membrane 22	ENSG00000100216	Q9NS69	Protein import and homeostasis
TOMM34	Translocase of outer mitochondrial membrane 34	ENSG00000025772	Q15785	Protein import and homeostasis
TOMM40	Translocase of outer mitochondrial membrane 40	ENSG00000130204	O96008	Protein import and homeostasis
TOMM6	Translocase of outer mitochondrial membrane 6	ENSG00000214736	Q96B49	Protein import and homeostasis
TOMM70	Translocase of outer mitochondrial membrane 70	ENSG00000154174	O94826	Protein import and homeostasis
TSP0	Translocator protein	ENSG00000100300	P30536	Lipid and steroid metabolism
USP30	Ubiquitin specific peptidase 30	ENSG00000135093	Q70CQ3	Mitophagy and ubiquitin quality control
VDAC1	Voltage dependent anion channel 1	ENSG00000213585	P21796	Ion and metabolite transport
VDAC2	Voltage dependent anion channel 2	ENSG00000165637	P45880	Ion and metabolite transport
VDAC3	Voltage dependent anion channel 3	ENSG00000078668	Q9Y277	Ion and metabolite transport
DNM1L	Dynamin 1 like	ENSG00000087470	O00429	Mitochondrial dynamics — fission

Annotation source: The Human Protein Atlas. Panel targets may be adjusted during future product optimization.