

#220110 MITOCHONDRIAL COMPLEX IV DEFICIENCY

OMIM Gene ID	HGNC	UniProtAC
124089	COX6B1	P14854
602125	COX10	Q12887
612322	FASTKD2	Q9NYY8
612958	TACO1	Q9BSH4
613920	COA5	Q86WW8
614478	COX14	Q96I36
614698	COX20	Q5RI15
614770	PET100	P0DJ07

Table 1: OMIM - UniProtAC mapping

Legend

- N1: #input proteins associated to the significant GO term
- N2: #proteins associated to the significant GO term
- P-value: Bonferroni-corrected p-value of Fisher's exact test
- *red*: go terms not related to the input proteins
- *blue*: go terms related to the input proteins (enriched uniquely by network-based method)
- *green*: go terms ancestors of terms enriched with the standard method (enriched uniquely by network-based method)

1 Standard enrichment

GO Term	N1	N2	P-value	Description
GO:0008535	2	15	0.000167944	respiratory chain complex IV assembly
GO:0017004	2	25	0.000479584	cytochrome complex assembly
GO:0045333	2	44	0.00151077	cellular respiration
GO:0006091	3	531	0.00309098	generation of precursor metabolites and energy
GO:0022904	2	131	0.0135359	respiratory electron transport chain
GO:0022900	2	151	0.0179837	electron transport chain
GO:0015980	2	231	0.0420054	energy derivation by oxidation of organic compounds
GO:1902600	2	232	0.0423684	hydrogen ion transmembrane transport
GO:0006123	1	3	0.0453017	mitochondrial electron transport, cytochrome c to oxygen
GO:0006784	1	3	0.0453017	heme a biosynthetic process
GO:0046160	1	3	0.0453017	heme a metabolic process
GO:0048033	1	3	0.0453017	heme o metabolic process
GO:0048034	1	3	0.0453017	heme O biosynthetic process

Table 2: Overrepresented GO terms with the standard enrichment

2 Network-based enrichment

GO Term	N1	N2	P-value	Description
GO:0097034	1	6	0.0414104	mitochondrial respiratory chain complex IV biogenesis

Table 3: Overrepresented terms with the network-based enrichment. Only terms not detected with the standard method.