

Supplementary Table 1. Genes related to complexes of the Electronic Chain Transport.

ID		GENE	PROTEIN NAME
Complex I - N-module			
001	ENSG00000184752	NDUFA12	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12
002	ENSG00000131495	NDUFA2	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2
003	ENSG00000023228	NDUFS1	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial
004	ENSG00000164258	NDUFS4	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial
005	ENSG00000145494	NDUFS6	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial
006	ENSG00000167792	NDUFV1	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial
007	ENSG00000178127	NDUFV2	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial
008	ENSG00000160194	NDUFV3	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial
Complex I - Q-module			
009	ENSG00000128609	NDUFA5	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5
010	ENSG00000184983	NDUFA6	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6
011	ENSG00000267855	NDUFA7	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 7
012	ENSG00000139180	NDUFA9	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial
013	ENSG00000158864	NDUFS2	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial
014	ENSG00000213619	NDUFS3	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial
015	ENSG00000115286	NDUFS7	NADH dehydrogenase [ubiquinone] iron-sulfur protein 7, mitochondrial
016	ENSG00000110717	NDUFS8	NADH dehydrogenase [ubiquinone] iron-sulfur protein 8, mitochondrial
Complex I - P-module: β -subcomplex subunits			
017	ENSG00000183648	NDUFB1	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 1
018	ENSG00000140990	NDUFB10	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 10
019	ENSG00000147123	NDUFB11	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 11, mitochondrial
020	ENSG00000090266	NDUFB2	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 2, mitochondrial
021	ENSG00000119013	NDUFB3	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 3

022	ENSG00000065518	<i>NDUFB4</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 4
023	ENSG00000136521	<i>NDUFB5</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 5, mitochondrial
024	ENSG00000165264	<i>NDUFB6</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 6
025	ENSG00000099795	<i>NDUFB7</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7
026	ENSG00000166136	<i>NDUFB8</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial
027	ENSG00000147684	<i>NDUFB9</i>	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 9
Complex I - P-module: α -subcomplex, acyl-carrier protein, subunit C, iron sulfure protein			
028	ENSG00000125356	<i>NDUFA1</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1
029	ENSG00000130414	<i>NDUFA10</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial
030	ENSG00000174886	<i>NDUFA11</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 11
031	ENSG00000186010	<i>NDUFA13</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13
032	ENSG00000170906	<i>NDUFA3</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 3
033	ENSG00000189043	<i>NDUFA4</i>	Cytochrome c oxidase subunit NDUFA4
034	ENSG00000119421	<i>NDUFA8</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8
035	ENSG00000004779	<i>NDUFAB1</i>	Acyl carrier protein, mitochondrial
036	ENSG00000109390	<i>NDUFC1</i>	NADH dehydrogenase [ubiquinone] 1 subunit C1, mitochondrial
037	ENSG00000151366	<i>NDUFC2</i>	NADH dehydrogenase [ubiquinone] 1 subunit C2
038	ENSG00000168653	<i>NDUFS5</i>	NADH dehydrogenase [ubiquinone] iron-sulfur protein 5
Complex I - P-module: mtDNA encoded proteins			
039	ENSG00000198888	<i>MT-ND1</i>	NADH-ubiquinone oxidoreductase chain 1
040	ENSG00000198763	<i>MT-ND2</i>	NADH-ubiquinone oxidoreductase chain 2
041	ENSG00000198840	<i>MT-ND3</i>	NADH-ubiquinone oxidoreductase chain 3
042	ENSG00000198886	<i>MT-ND4</i>	NADH-ubiquinone oxidoreductase chain 4
043	ENSG00000212907	<i>MT-ND4L</i>	NADH-ubiquinone oxidoreductase chain 4L
044	ENSG00000198786	<i>MT-ND5</i>	NADH-ubiquinone oxidoreductase chain 5
045	ENSG00000198695	<i>MT-ND6</i>	NADH-ubiquinone oxidoreductase chain 6
Complex I - Assembly			
046	ENSG00000137038	<i>DMAC1</i>	Distal membrane-arm assembly complex protein 1
047	ENSG00000105341	<i>DMAC2</i>	Distal membrane-arm assembly complex protein 2
048	ENSG00000110074	<i>FOXRED1</i>	FAD-dependent oxidoreductase domain-containing protein 1
049	ENSG00000137806	<i>NDUFAF1</i>	Complex I intermediate-associated protein 30, mitochondrial

050	ENSG00000140527	WDR93	WD repeat-containing protein 93
Complex II			
051	ENSG00000073578	<i>SDHA</i>	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial
052	ENSG00000117118	<i>SDHB</i>	Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial
053	ENSG00000143252	<i>SDHC</i>	Succinate dehydrogenase cytochrome b560 subunit, mitochondrial
054	ENSG00000204370	<i>SDHD</i>	Succinate dehydrogenase [ubiquinone] cytochrome b small subunit, mitochondrial
Complex III			
055	ENSG00000074582	<i>BCS1L</i>	Mitochondrial chaperone BCS1
056	ENSG00000179091	<i>CYC1</i>	Cytochrome c1, heme protein, mitochondrial
057	ENSG00000198727	<i>MT-CYB</i>	Cytochrome b
058	ENSG00000010256	<i>UQCRC1</i>	Cytochrome b-c1 complex subunit 1, mitochondrial
059	ENSG00000184076	<i>UQCR10</i>	Cytochrome b-c1 complex subunit 9
060	ENSG00000127540	<i>UQCR11</i>	Cytochrome b-c1 complex subunit 10
061	ENSG00000140740	<i>UQCRC2</i>	Cytochrome b-c1 complex subunit 2, mitochondrial
062	ENSG00000204922	<i>UQCC3</i>	Ubiquinol-cytochrome-c reductase complex assembly factor 3
063	ENSG00000156467	<i>UQCRB</i>	Cytochrome b-c1 complex subunit 7
064	ENSG00000173660	<i>UQCRH</i>	Cytochrome b-c1 complex subunit 6, mitochondrial
065	ENSG00000169021	<i>UQCRRF1</i>	Cytochrome b-c1 complex subunit Rieske, mitochondrial
066	ENSG00000164405	<i>UQCRQ</i>	Cytochrome b-c1 complex subunit 8
Complex IV			
067	ENSG00000131143	<i>COX4I1</i>	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial
068	ENSG00000131055	<i>COX4I2</i>	Cytochrome c oxidase subunit 4 isoform 2, mitochondrial
069	ENSG00000178741	<i>COX5A</i>	Cytochrome c oxidase subunit 5A, mitochondrial
070	ENSG00000135940	<i>COX5B</i>	Cytochrome c oxidase subunit 5B, mitochondrial
071	ENSG00000111775	<i>COX6A1</i>	Cytochrome c oxidase subunit 6A1, mitochondrial
072	ENSG00000156885	<i>COX6A2</i>	Cytochrome c oxidase subunit 6A2, mitochondrial
073	ENSG00000126267	<i>COX6B1</i>	Cytochrome c oxidase subunit 6B1
074	ENSG00000160471	<i>COX6B2</i>	Cytochrome c oxidase subunit 6B2
075	ENSG00000164919	<i>COX6C</i>	Cytochrome c oxidase subunit 6C
076	ENSG00000161281	<i>COX7A1</i>	Cytochrome c oxidase subunit 7A1, mitochondrial
077	ENSG00000112695	<i>COX7A2</i>	Cytochrome c oxidase subunit 7A2, mitochondrial
078	ENSG00000115944	<i>COX7A2L</i>	Cytochrome c oxidase subunit 7A-related protein, mitochondrial
079	ENSG00000131174	<i>COX7B</i>	Cytochrome c oxidase subunit 7B, mitochondrial
080	ENSG00000170516	<i>COX7B2</i>	Cytochrome c oxidase subunit 7B2, mitochondrial
081	ENSG00000127184	<i>COX7C</i>	Cytochrome c oxidase subunit 7C, mitochondrial
082	ENSG00000176340	<i>COX8A</i>	Cytochrome c oxidase subunit 8A, mitochondrial
083	ENSG00000187581	<i>COX8C</i>	Cytochrome c oxidase subunit 8C, mitochondrial

084	ENSG00000185633	<i>NDUFA4L2</i>	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4-like 2
085	ENSG00000198804	<i>MT-CO1</i>	Cytochrome c oxidase subunit 1
086	ENSG00000198712	<i>MT-CO2</i>	Cytochrome c oxidase subunit 2
087	ENSG00000198938	<i>MT-CO3</i>	Cytochrome c oxidase subunit 3
Complex V – Subcomplex F1			
088	ENSG00000152234	<i>ATP5A1</i>	ATP synthase subunit alpha, mitochondrial
089	ENSG00000110955	<i>ATP5B</i>	ATP synthase subunit beta, mitochondrial
090	ENSG00000165629	<i>ATP5C1</i>	ATP synthase subunit gamma, mitochondrial
091	ENSG00000099624	<i>ATP5D</i>	ATP synthase subunit delta, mitochondrial
092	ENSG00000124172	<i>ATP5E</i>	ATP synthase subunit epsilon, mitochondrial
093	ENSG00000180389	<i>ATP5EP2</i>	ATP synthase subunit epsilon-like protein, mitochondrial
094	ENSG00000130770	<i>ATP5IF1</i>	ATPase inhibitor, mitochondrial
Complex V – Subcomplex F0			
095	ENSG00000159199	<i>ATP5G1</i>	ATP synthase membrane subunit c locus 1
096	ENSG00000135390	<i>ATP5G2</i>	ATP synthase membrane subunit c locus 2
097	ENSG00000154518	<i>ATP5G3</i>	ATP synthase membrane subunit c locus 3
098	ENSG00000169020	<i>ATP5I</i>	ATP synthase membrane subunit e
099	ENSG00000241468	<i>ATP5J2</i>	ATP synthase membrane subunit f
100	ENSG00000167283	<i>ATP5L</i>	ATP synthase membrane subunit g
101	ENSG00000156411	<i>ATP5MJ</i>	ATP synthase subunit ATP5MJ, mitochondrial
102	ENSG00000173915	<i>ATP5MK</i>	ATP synthase membrane subunit K, mitochondrial
103	ENSG00000116459	<i>ATP5PB</i>	ATP synthase F(0) complex subunit B1, mitochondrial
104	ENSG00000167863	<i>ATP5PD</i>	ATP synthase subunit d, mitochondrial
105	ENSG00000154723	<i>ATP5PF</i>	ATP synthase-coupling factor 6, mitochondrial
106	ENSG00000241837	<i>ATP5PO</i>	ATP synthase subunit O, mitochondrial
107	ENSG00000249222	<i>ATP5L2</i>	Putative ATP synthase subunit g 2, mitochondrial
108	ENSG00000198899	<i>MT-ATP6</i>	ATP synthase subunit a
109	ENSG00000228253	<i>MT-ATP8</i>	ATP synthase protein 8

WDR93, *COX6B2* and *COX7B2* expression was detected through mRNA-seq but did not have sufficient capacity to carry out its statistical study.

Supplementary Table 2. miRNA whose targets are *ATP5I* and *ATP5IF1*.

	ID	GENE	NAME
<i>ATP5I</i> regulators			
01	ENSG00000211991	<i>MIR676</i>	miR-676-5p
02	ENSG00000199038	<i>MIR210</i>	miR-210
03	ENSG00000207805	<i>MIR483</i>	miR-483-3p
04	ENSG00000216101	<i>MIR877</i>	miR-877-3p
05	ENSG00000215991	<i>MIR208B</i>	miR-208b-3p
<i>ATP5IF1</i> regulators			
06	ENSG00000199122	<i>MIR148B</i>	miR-148b-5p
07	ENSG00000284032	<i>MIR29A</i>	miR-29a-3p
08	ENSG00000207571	<i>MIR615</i>	miR-615-3p
09	ENSG00000199053	<i>MIR324</i>	miR-324-3p