

Spliceosome : Metal Binding and Homeostasis

Srsf7	0.504	0.696	0.566	0.475	0.33
Sf3a2	0.3	0.971	0.687	−0.145	0.434
Prpf8	0.202	−0.444	−0.53	0.817	0.771
Usp39	−0.108	0.743	0.0544	0.111	0.0214
Snrpc	0.0627	0.731	0.792	−0.653	−0.288
U2af114	−0.362	0.496	0.274	−0.862	−0.21
Rp9	−0.116	0.511	0.408	−0.503	−0.739
Slu7	−0.00902	0.316	−0.516	−0.434	−0.532
Sf3a3	−0.274	0.343	−0.268	−0.676	−0.674
Rbm22	−0.699	−0.0216	−0.0901	−0.363	−0.571
Phf5a	−0.482	0.177	0.309	−0.807	−0.768
Fus	−0.37	−1.24	−0.185	−0.31	−0.419
U2af2	−0.556	−0.0287	−0.00681	−0.585	−1.09
U2af1	−0.7	−0.343	−0.145	−0.991	−1.19
Zmat2	−1.15	−0.773	−0.52	−1.31	−1.43
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Retrograde endocannabinoid signaling : Mitochondrial Metabolis

mt	Ndufa4	-1.1	-0.425	-0.422	-1.4	-1.56
		-1.06	-0.374	-0.449	-1.25	-1.58
mt	Ndufb1	-1.09	-0.511	-0.455	-1.28	-1.44
		-0.995	-0.49	-0.294	-1.33	-1.46
mt	Ndufa3	-0.968	-0.389	-0.374	-1.35	-1.45
		-0.929	-0.473	-0.286	-1.23	-1.27
mt	Ndufa1	-1.13	-1.42	-0.755	-0.85	-1.46
		-0.858	0.239	-0.302	-1.36	-1.08
mt	Ndufa12	-0.82	0.132	-0.305	-1.1	-1.26
		-0.738	0.00346	-0.142	-1.24	-1.11
mt	Ndufb3	-0.733	0.0129	-0.116	-1.2	-1.13
		-0.969	-1.06	-0.537	-0.841	-1.23
mt	Ndufv2	-0.716	0.273	-0.0826	-1.06	-1.16
		-0.603	-0.00104	-0.0426	-1.09	-1.15
mt	Ndufa32	-0.557	0.0321	-0.161	-1.08	-1.16
		-0.639	0.192	0.0872	-1.22	-0.991
mt	Ndufb10	-0.677	0.105	-0.203	-1.06	-1.09
		-0.686	0.0641	-0.0706	-1.11	-0.97
mt	Ndufb5	-0.664	0.149	0.00468	-0.865	-1.16
		-0.57	0.148	0.0213	-1.03	-1.08
mt	Ndufb5	-0.681	0.11	-0.171	-1.01	-1.01
		-1.14	-0.214	-0.517	-0.801	-0.88
mt	Ndufb13	-0.58	0.321	0.271	-0.999	-1.04
		-0.605	0.286	0.104	-1.09	-0.886
mt	Ndufa11	-0.604	-0.019	-0.132	-0.969	-0.986
		-0.694	0.167	-0.00558	-0.835	-0.988
mt	Ndufb6	-0.562	0.344	-0.115	-0.984	-0.851
		-0.548	0.556	-0.066	-0.888	-0.863
mt	Ndufb9	-0.496	0.358	0.239	-0.931	-0.784
		-0.344	0.0402	-0.435	-0.431	-1.2
mt	Ndufa10	-0.342	0.432	0.0637	-1.01	-0.607
		-0.584	0.139	0.3	-0.61	-0.785
mt	Ndufb2	-0.353	0.531	0.2	-0.838	-0.666
		-0.41	0.376	0.136	-0.669	-0.763
mt	Ndufa11	-0.253	0.62	0.322	-0.675	-0.768
		-0.435	0.454	-0.00137	-0.629	-0.695
mt	Ndufb8	-0.463	0.315	0.166	-0.873	-0.484
		-0.305	0.639	0.214	-0.817	-0.59
mt	Ndufb7	-0.172	0.575	0.369	-0.783	-0.528
		-0.144	0.516	0.161	-0.789	-0.437
mt	Ndufb2	-0.119	0.64	0.391	-0.528	-0.662
		-0.357	0.0832	0.294	-0.56	-0.356
mt	Ndufb8	-0.0555	0.879	0.452	-0.484	-0.546
		-0.488	-0.423	-1.21	-0.609	-0.121
mt	Ndufb5	0.00183	-0.0284	0.142	-0.669	0.129
		-0.197	-0.389	0.0316	-0.195	-0.145
mt	Mapk1	-0.148	0.347	0.301	-0.315	0.0325
		-0.499	-0.631	-0.692	0.191	-0.168
mt	Pikfb2	-0.25	-0.0262	-0.557	-0.347	0.281
		-0.193	0.336	-0.24	0.0625	-0.0413
mt	Ndufa412	0.0954	0.946	0.732	-0.0599	0.142
		-0.287	-0.782	-0.447	0.306	0.147
mt	Mapk3	0.151	1.19	0.511	0.0282	0.2
		-0.33	-0.987	-0.595	0.272	0.253
mt	Prkca	-0.19	-0.447	-0.466	0.452	0.131
		0.114	-0.0246	-0.00571	-0.00349	0.359
mt	Cnr1	-0.101	-0.772	-0.272	-0.104	0.609
		0.566	0.000967	0.0396	-0.062	0.582
mt	Itpb3	0.545	0.0586	0.29	0.106	0.507
		0.335	-0.427	-0.37	0.212	0.664
mt	Mapk9	0.0872	-0.153	-0.701	0.538	0.599
		0.0348	-0.378	-0.405	0.714	0.486
mt	Itpb1	0.176	-0.609	-0.406	0.361	0.932
		0.56	-0.203	0.136	1.03	0.675

WT/WT

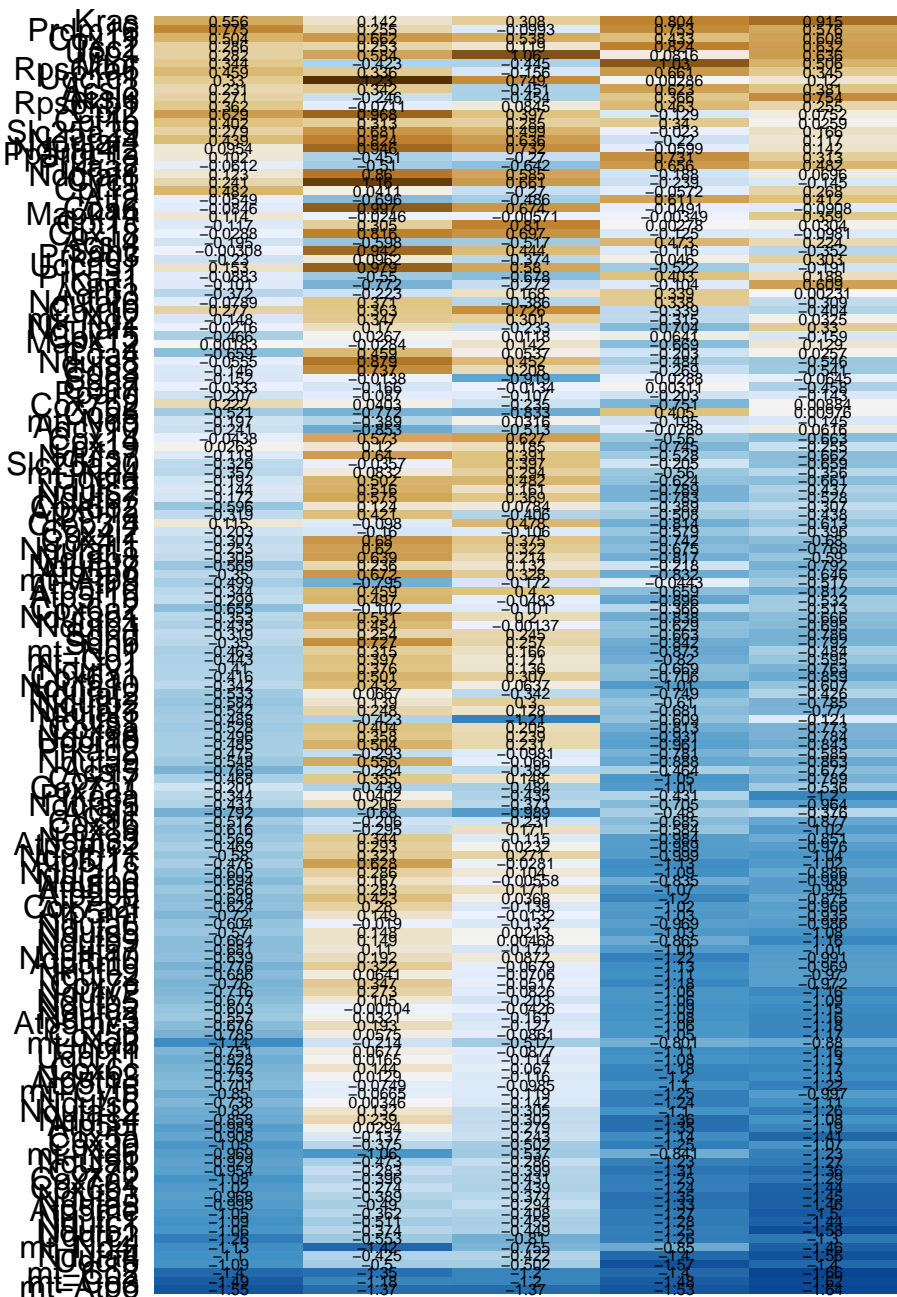
WT/VS

VS/VS

WT/FC

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Thermogenesis : Mitochondrial Metabolism



WT/WT

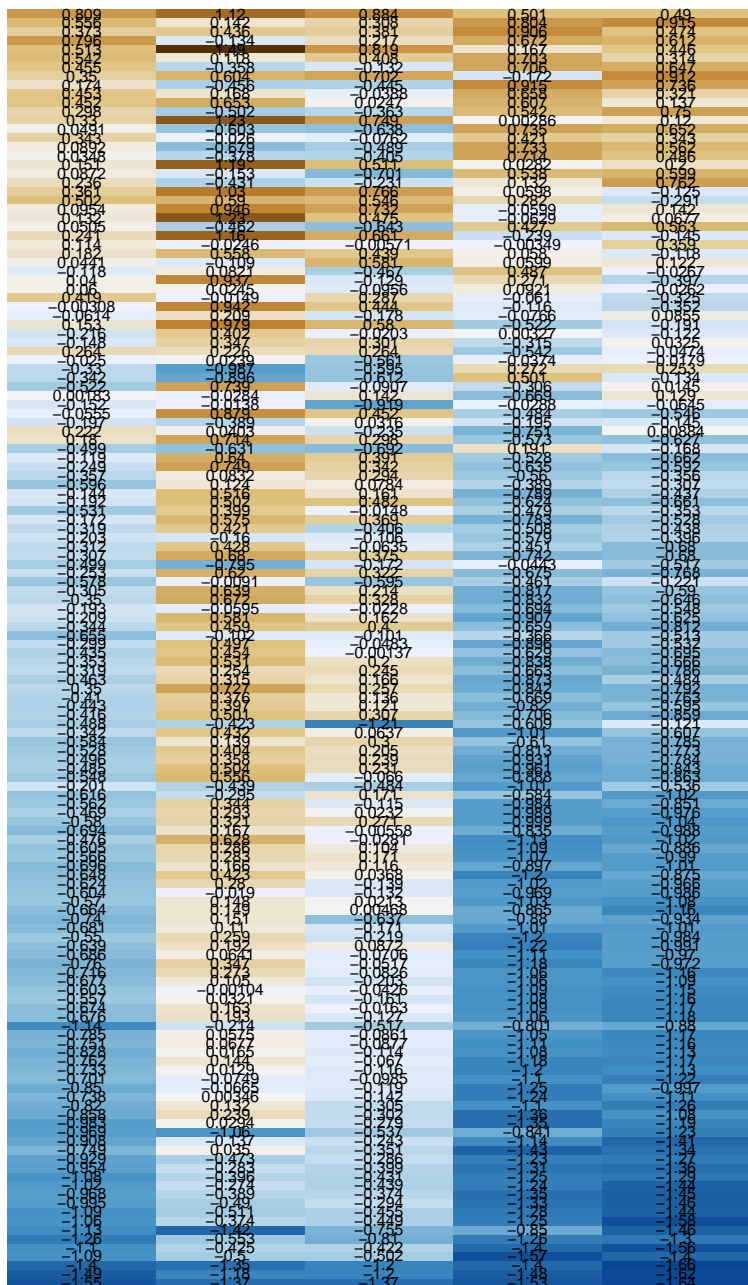
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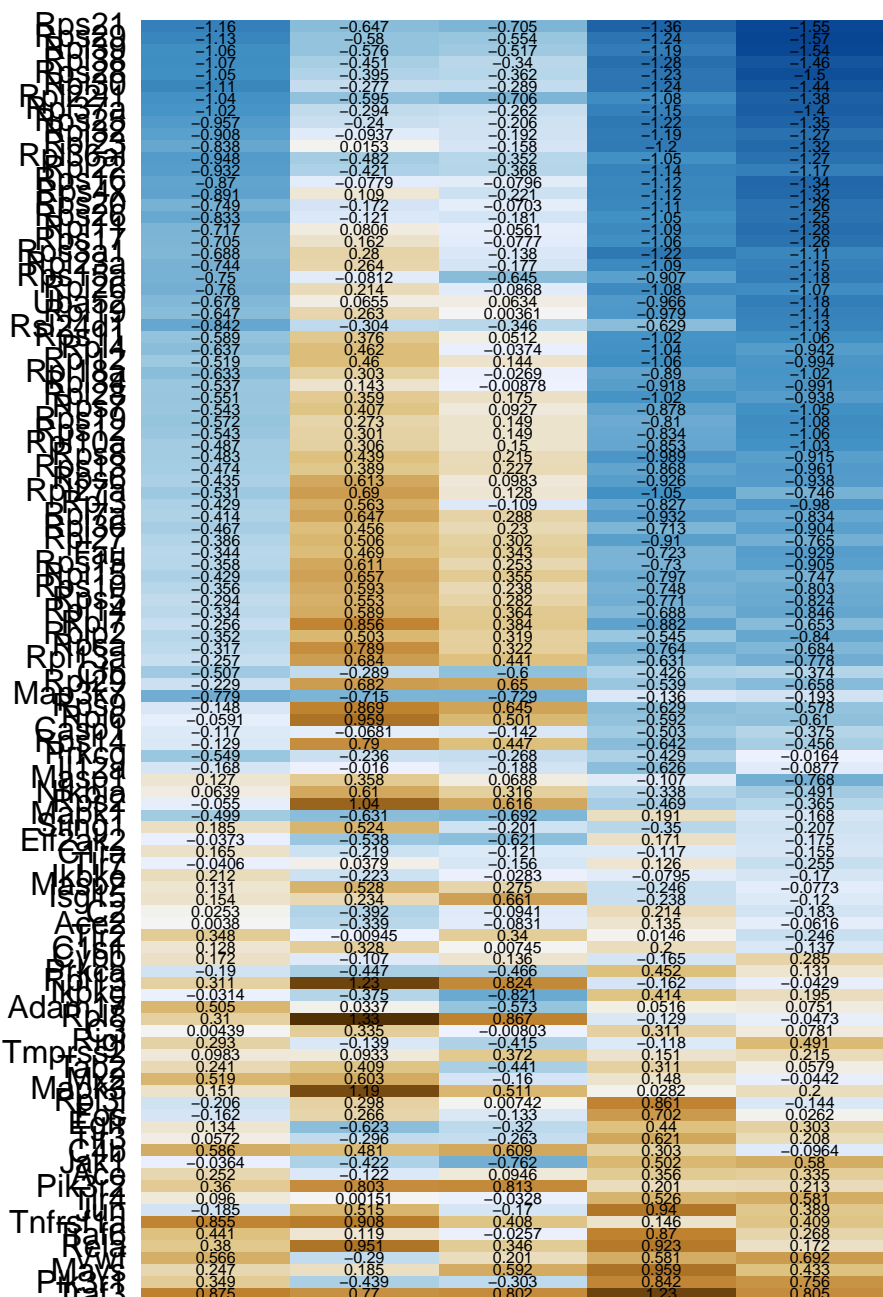
FC/FC

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FC/FC

Coronavirus disease – COVID-19 : Proteostasis



WT/WT

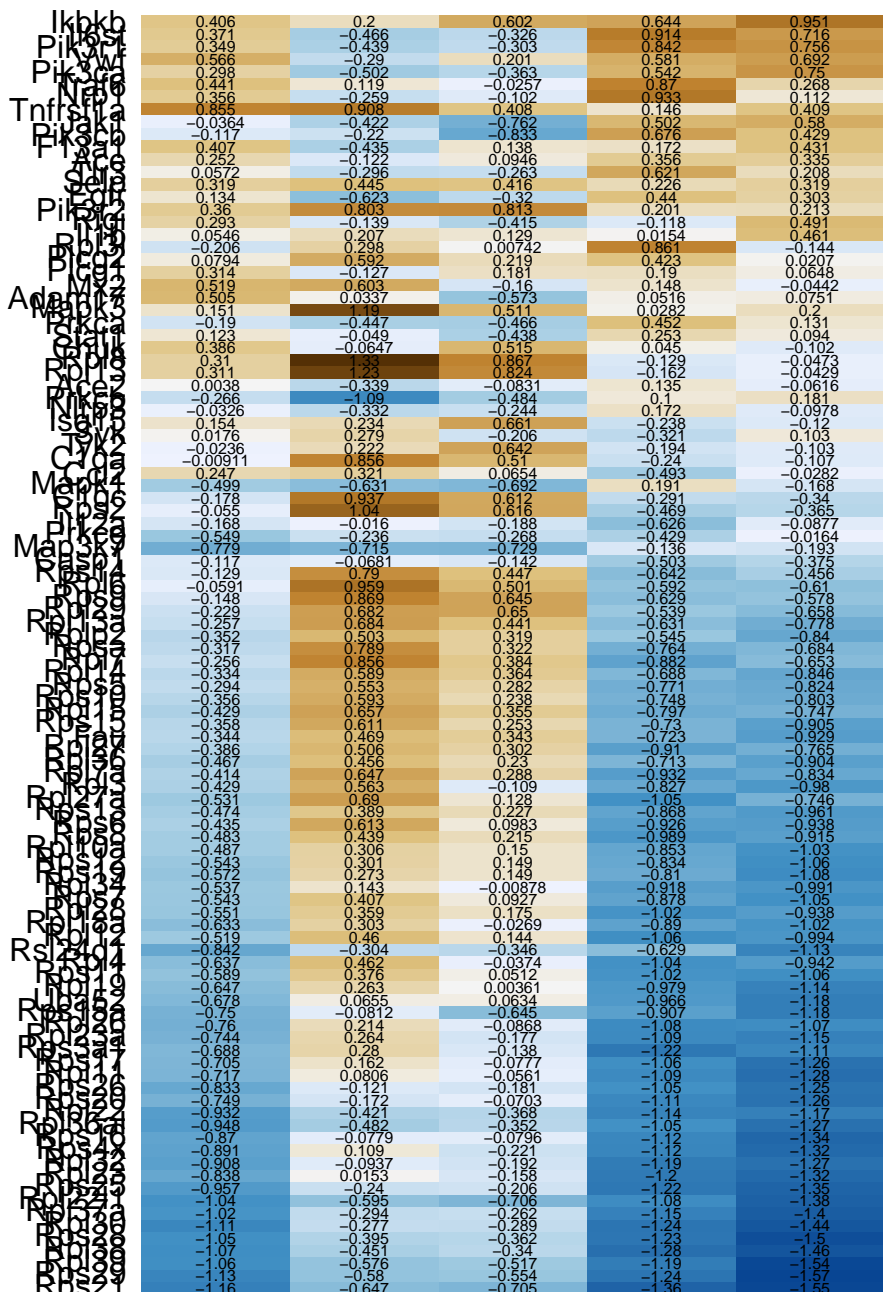
WT/VS

VS/Vs

WT/FC

FC/FC

Coronavirus disease – COVID-19 : Structural Stabilization



WT/WT

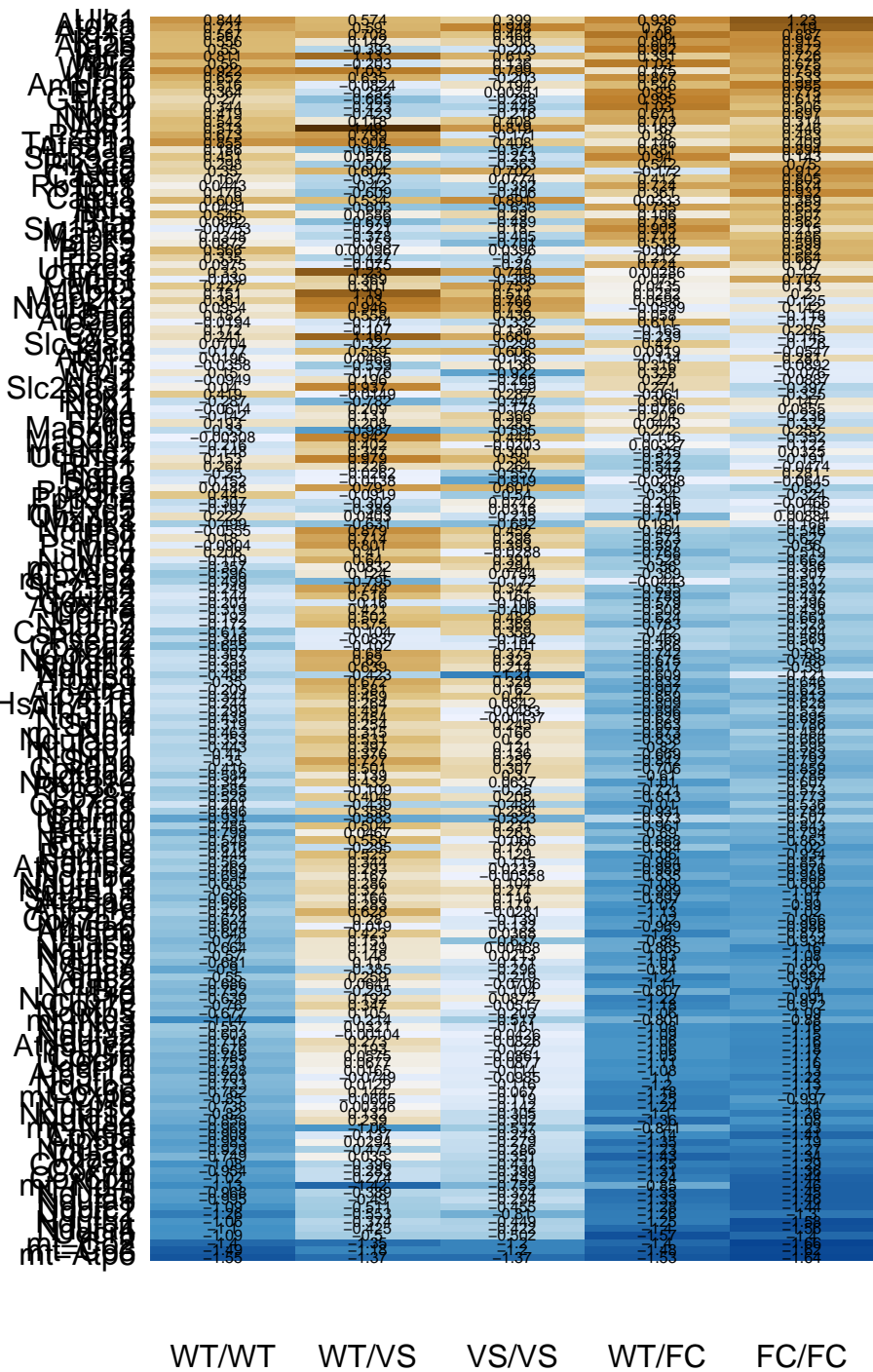
WT/VS

VS/VS

WT/FC

FC/FC

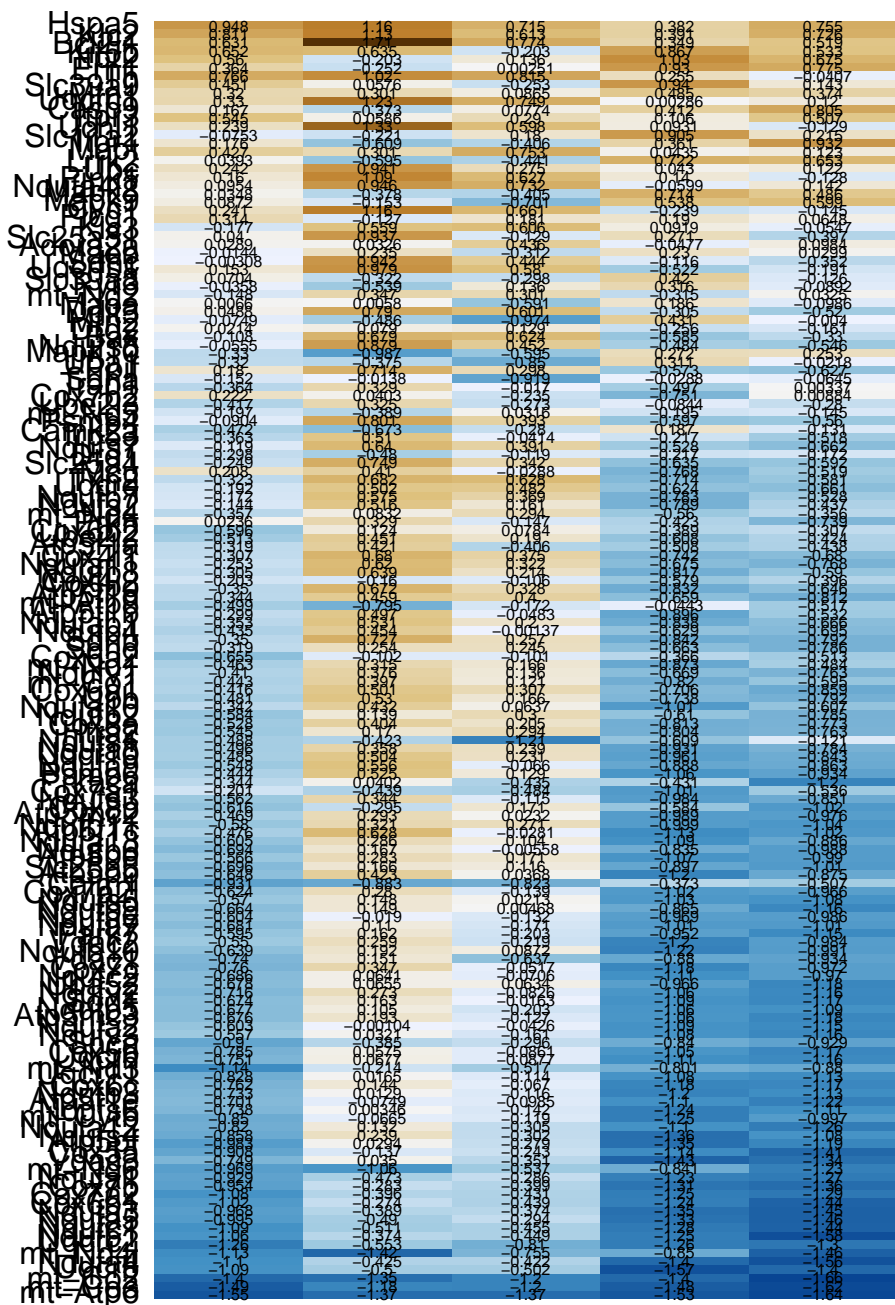
Alzheimer disease : Mitochondrial Metabolism



Parkinson disease : DNA Repair

Sem1	-0.825	-0.244	-0.0377	-1.29	-1.28
Psmd14	-0.85	0.0389	-0.705	-0.895	-1.03
Casp3	-0.691	-0.615	0.105	-1.06	-0.897
Park7	-0.595	0.162	-0.203	-0.952	-1.15
Htra2	-0.545	0.17	0.294	-0.804	-0.763
Uba7	0.229	-0.0753	-0.352	-0.601	-0.462
Uba1	-0.32	-0.375	-0.85	0.311	-0.0218
Trp53	-0.363	0.51	-0.0414	-0.217	-0.518
Bax	-0.108	0.679	0.624	-0.585	-0.33
Ddit3	0.0488	0.79	0.601	-0.305	-0.52
Casp9	0.167	-0.373	0.0774	0.412	0.805
Mapt	0.427	0.301	0.753	0.0435	0.123
Bcl2l1	0.631	1.71	0.774	0.349	0.519
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Parkinson disease : Mitochondrial Metabolism



WT/WT

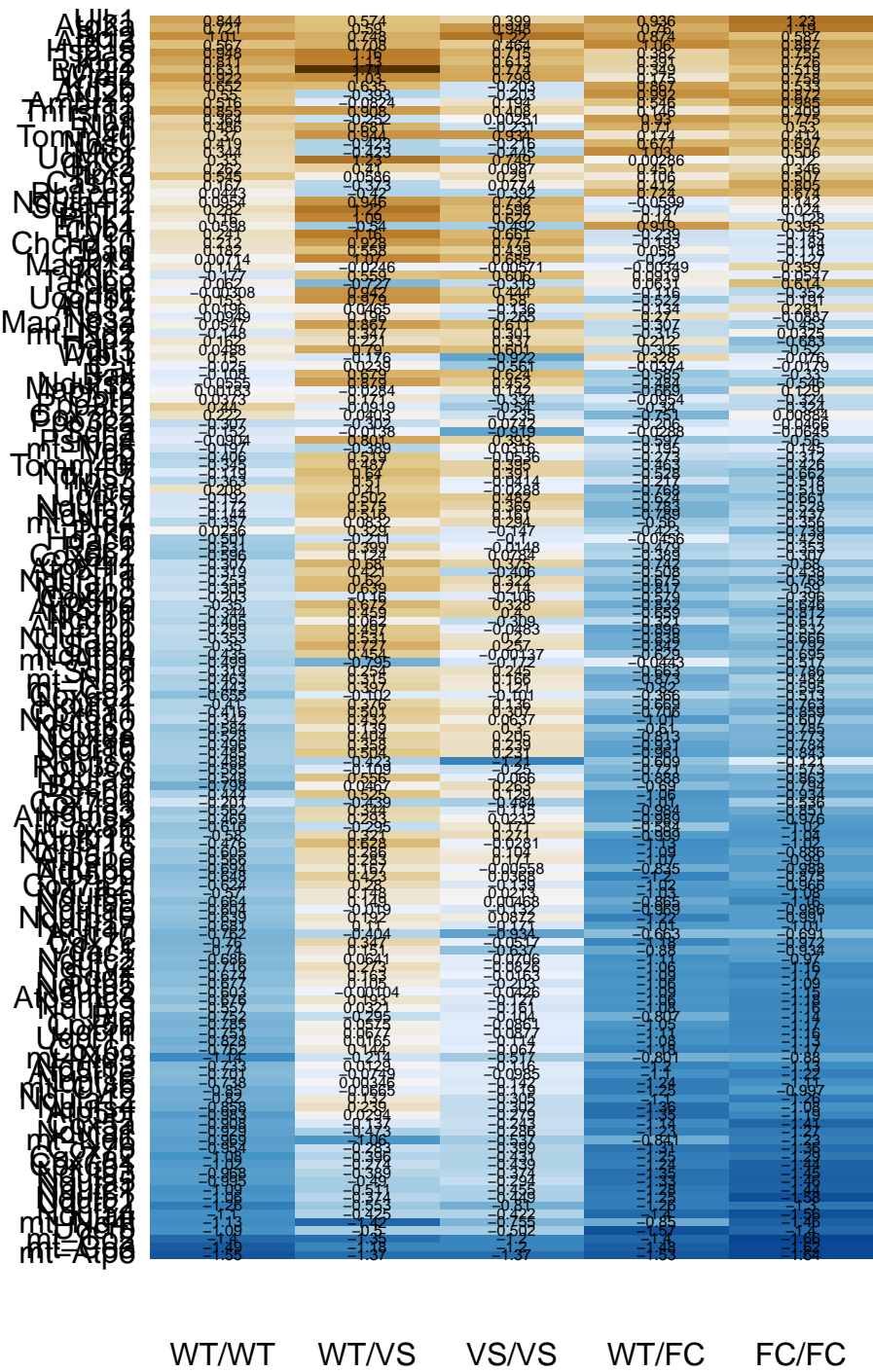
WT/VS

VS/VS

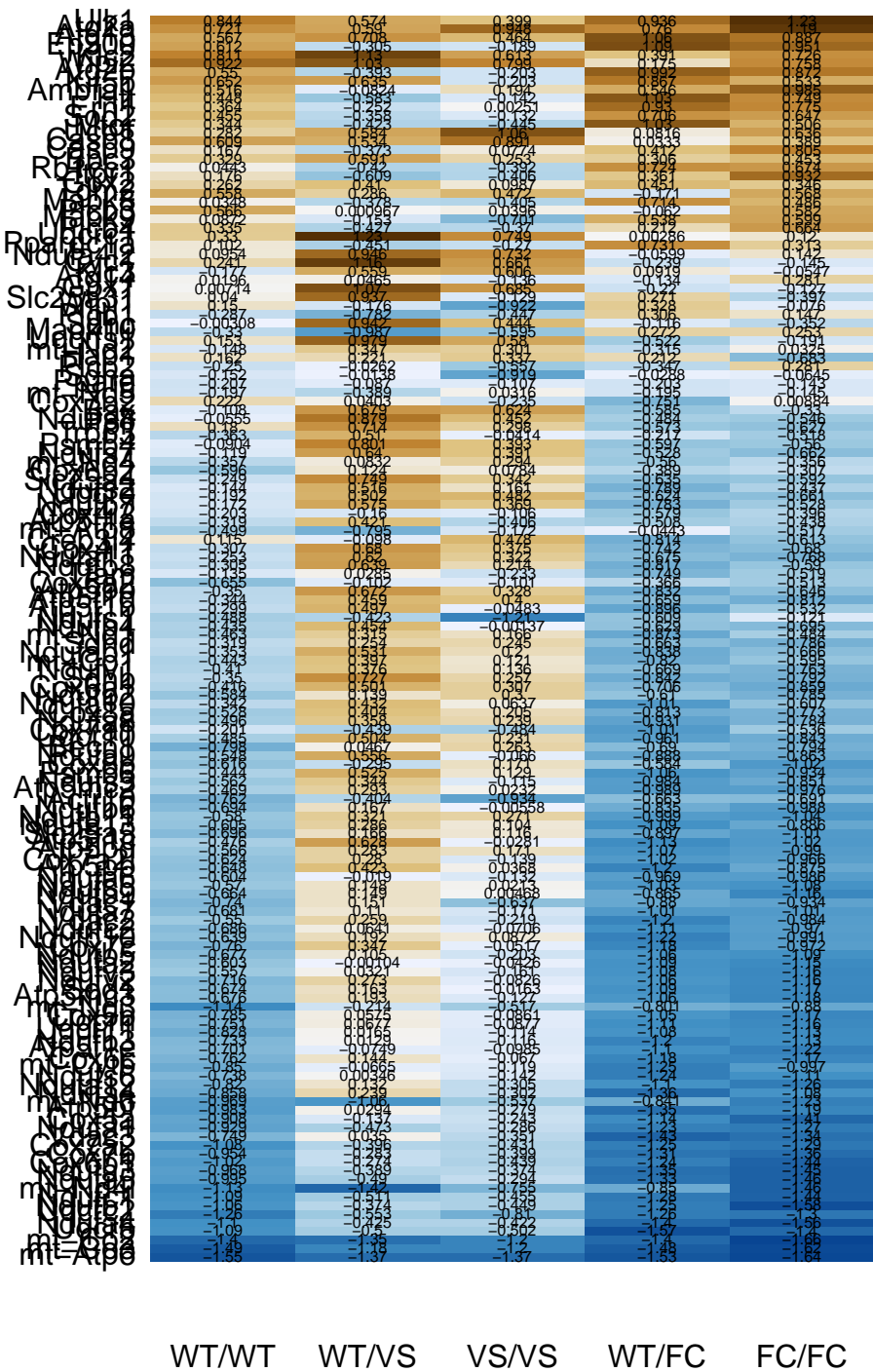
WT/FC

FC/FC

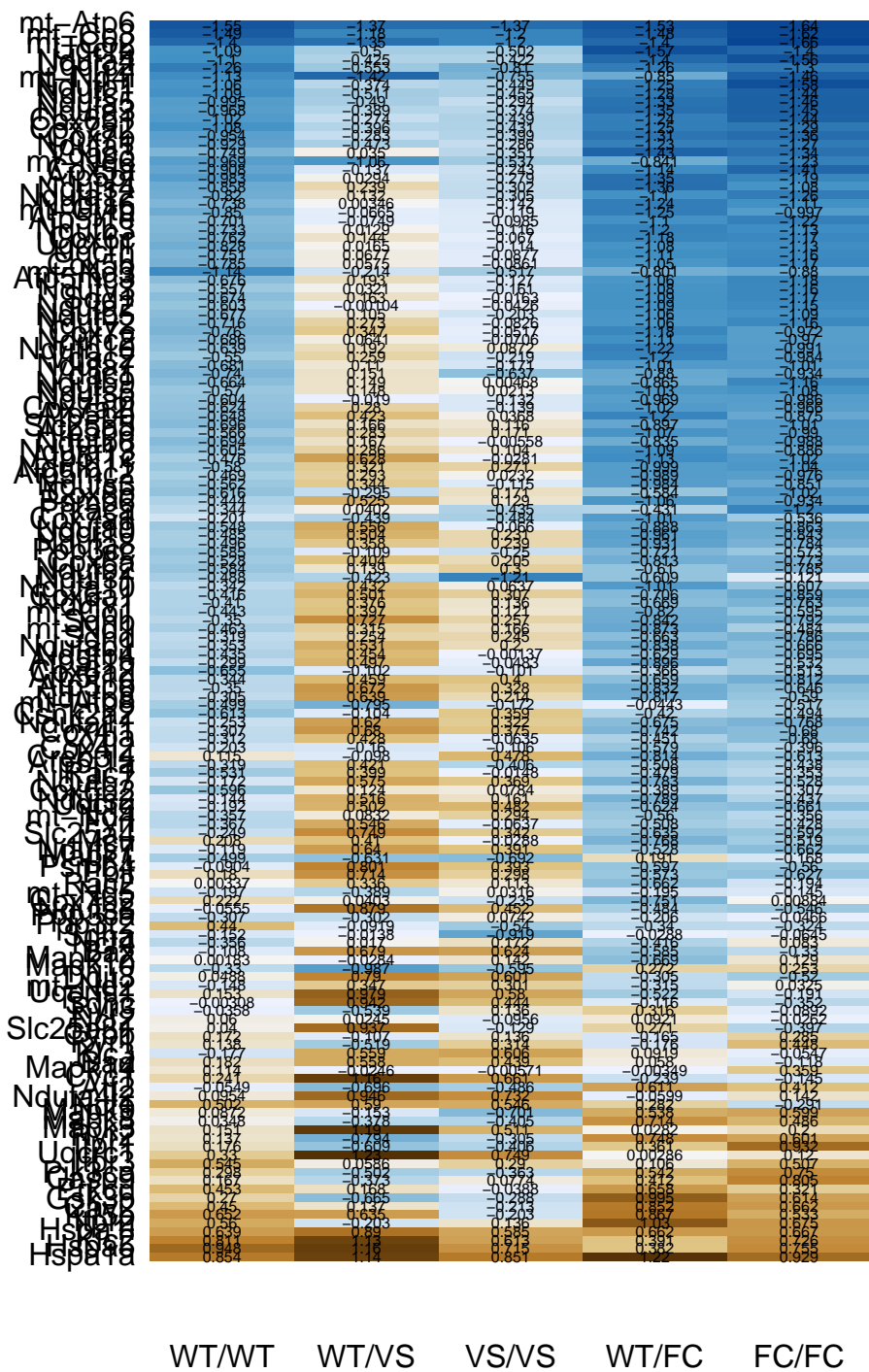
Amyotrophic lateral sclerosis : Mitochondrial Metabolism



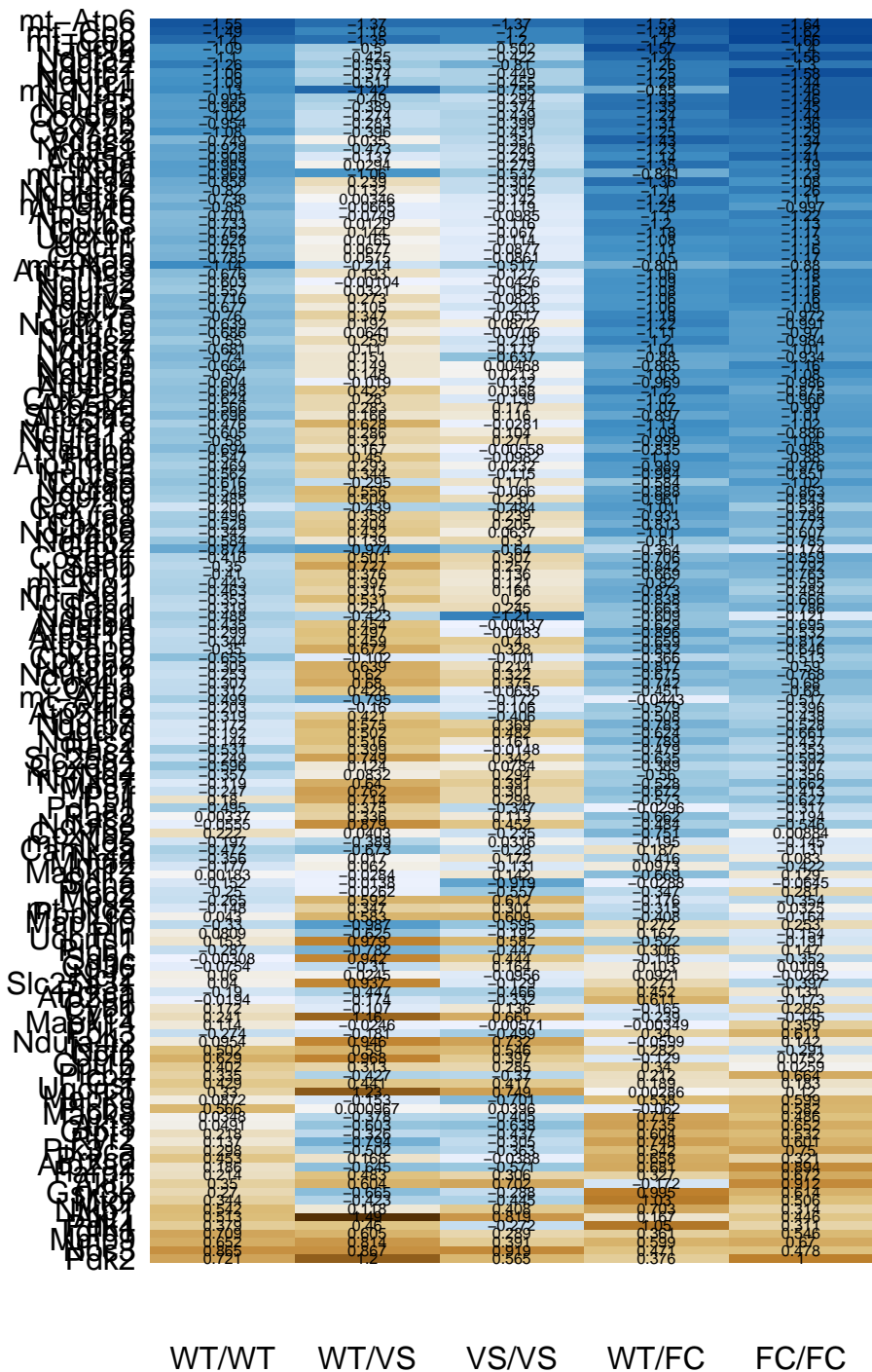
Huntington disease : Mitochondrial Metabolism



Prion disease : Mitochondrial Metabolism

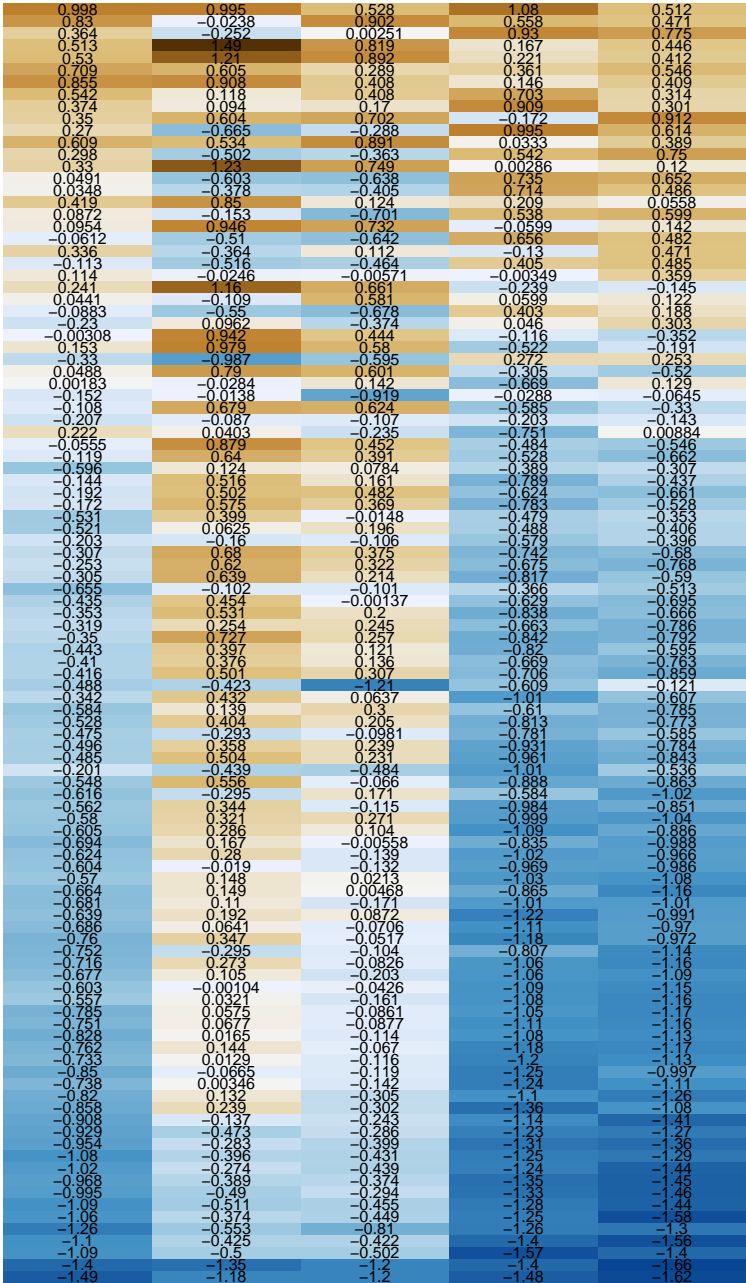


Diabetic cardiomyopathy : Mitochondrial Metabolism



Non-alcoholic fatty liver disease : Mitochondrial Metabolism

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Oxidative phosphorylation : Endolysosome

Atp6v0a1	0.394	0.118	0.026	1.01	1.15
Tcirk1	0.619	1.19	0.802	0.357	0.165
Atp6v0a2	0.423	0.104	0.561	0.211	0.624
Atp6v1b1	0.812	0.0256	0.487	0.168	0.141
Atp6v1a	−0.0866	−0.185	−0.673	0.562	0.412
Atp6v0c	0.0349	1.05	0.666	−0.242	−0.183
Atp6v0b	0.0592	0.995	0.626	−0.264	−0.197
Atp6v0e	0.168	0.423	0.51	−0.68	−0.291
Atp6v1b2	−0.366	0.32	−0.708	−0.0385	0.0975
Atp6ap1	−0.226	0.734	0.345	−0.698	−0.129
Atp6v0a4	−0.14	−0.392	−0.545	−0.147	−0.49
Atp6v1c2	−0.323	0.0526	−0.296	−0.359	−0.464
Atp5f1a	−0.319	0.421	−0.406	−0.508	−0.438
Atp6v0e2	−0.395	0.441	−0.0283	−0.588	−0.545
Atp5f1b	−0.299	0.497	−0.0483	−0.896	−0.532
Atp6v1d	−0.602	0.562	0.157	−0.69	−0.646
Atp6v0d1	−0.386	0.393	0.0687	−0.761	−0.947
Atp6v1e1	−0.529	0.406	−0.166	−0.909	−0.803
Atp5mc2	−0.469	0.293	0.0232	−0.989	−0.976
Atp6v1g1	−0.574	0.274	0.315	−0.998	−1.05
Atp6v1g2	−0.85	0.214	−0.0621	−1.03	−0.94
Ndufc2	−0.686	0.0641	−0.0706	−1.11	−0.97
Atp5mc3	−0.676	0.193	−0.127	−1.06	−1.18
Atp6v1f	−0.707	0.0552	−0.228	−1	−1.15
Atp6v1h	−0.822	−0.00173	−0.803	−0.863	−0.997
Atp6v1c1	−1.35	−0.583	−1.11	−1.21	−1.15

WT/WT

WT/VS

VS/VS

WT/FC

FC/FC

Oxidative phosphorylation : Lipid Metabolism

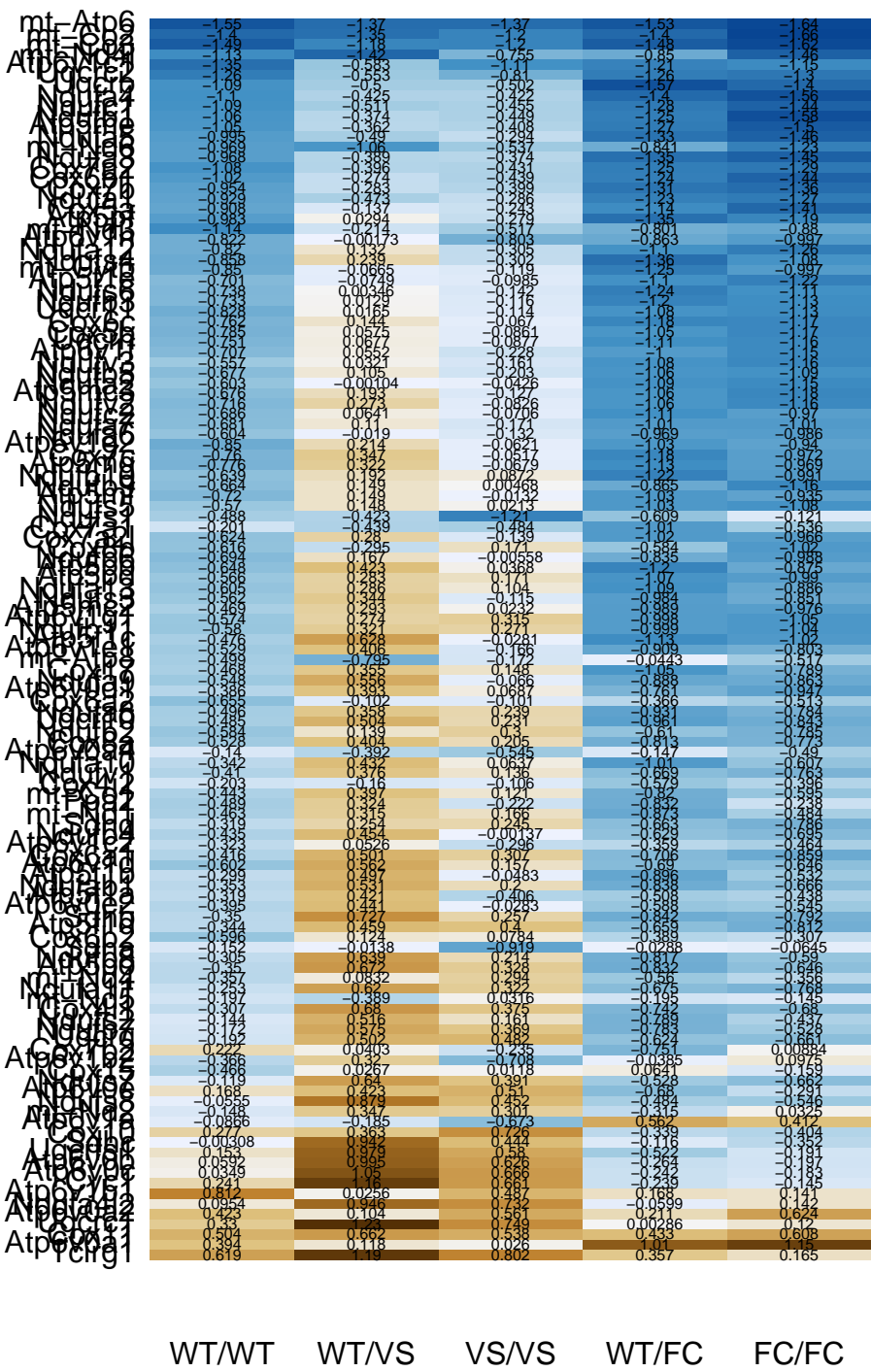
mt–Nd3	–1.14	–0.214	–0.517	–0.801	–0.88
Atp5mc3	–0.676	0.193	–0.127	–1.06	–1.18
Atp5mc2	–0.469	0.293	0.0232	–0.989	–0.976
Atp5f1b	–0.299	0.497	–0.0483	–0.896	–0.532
Ndufab1	–0.353	0.531	0.2	–0.838	–0.666
Atp5f1a	–0.319	0.421	–0.406	–0.508	–0.438
Atp6v0a4	–0.14	–0.392	–0.545	–0.147	–0.49
Cox10	0.277	0.363	0.726	–0.339	–0.404
Atp6v1b1	0.812	0.0256	0.487	0.168	0.141
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Oxidative phosphorylation : Metal Binding and Homeostasis

mt–Co2	–1.4	–1.35	–1.2	–1.4	–1.66
Uqcrc2	–1.26	–0.553	–0.81	–1.26	–1.3
Cox5a	–0.908	–0.137	–0.243	–1.14	–1.41
mt–Cytb	–0.85	–0.0665	–0.119	–1.25	–0.997
Cox5b	–0.785	0.0575	–0.0861	–1.05	–1.17
Ndufv2	–0.716	0.273	–0.0826	–1.06	–1.16
Ndufs1	–0.488	–0.423	–1.21	–0.609	–0.121
Atp6v1g1	–0.574	0.274	0.315	–0.998	–1.05
Cox17	–0.468	0.355	0.148	–1.05	–0.789
Atp6v0d1	–0.386	0.393	0.0687	–0.761	–0.947
Ppa2	–0.489	0.324	–0.222	–0.832	–0.238
Ndufv1	–0.41	0.376	0.136	–0.669	–0.763
mt–Co1	–0.443	0.397	0.121	–0.82	–0.595
Sdhd	–0.319	0.254	0.245	–0.663	–0.786
Ppa1	–0.233	0.619	–0.118	–0.809	–0.626
Ndufab1	–0.353	0.531	0.2	–0.838	–0.666
Sdhb	–0.35	0.727	0.257	–0.842	–0.792
Atp5f1d	–0.344	0.459	0.4	–0.659	–0.812
Ndufs2	–0.144	0.516	0.161	–0.789	–0.437
Atp4a	–0.238	0.215	0.112	–0.415	–0.272
Lhpp	–0.338	0.484	0.519	–0.658	–0.402
Ndufs7	–0.119	0.64	0.391	–0.528	–0.662
Atp6ap1	–0.226	0.734	0.345	–0.698	–0.129
Atp6v1a	–0.0866	–0.185	–0.673	0.562	0.412
Ndufs8	–0.0555	0.879	0.452	–0.484	–0.546
Sdhc	–0.00308	0.942	0.444	–0.116	–0.352
Uqcrcs1	0.153	0.979	0.58	–0.522	–0.191
Cyc1	0.241	1.16	0.661	–0.239	–0.145
Atp6v0a2	0.423	0.104	0.561	0.211	0.624
Uqcrc1	0.33	1.23	0.749	0.00286	0.12
Cox11	0.504	0.662	0.538	0.433	0.608

WT/WT WT/VS VS/VS WT/FC FC/FC

Oxidative phosphorylation : Mitochondrial Metabolism



Oxidative phosphorylation : Oxidative Stress

mt-Co2	-1.4	-1.35	-1.2	-1.4	-1.66
mt-Nd6	-0.969	-1.06	-0.537	-0.841	-1.23
mt-Nd3	-1.14	-0.214	-0.517	-0.801	-0.88
Ndufs1	-0.488	-0.423	-1.21	-0.609	-0.121
Ndufa12	-0.82	0.132	-0.305	-1.1	-1.26
Ndufs4	-0.858	0.239	-0.302	-1.36	-1.08
Ndufa6	-0.604	-0.019	-0.132	-0.969	-0.986
Ndufc2	-0.686	0.0641	-0.0706	-1.11	-0.97
Ndufs3	-0.562	0.344	-0.115	-0.984	-0.851
Ndufa13	-0.605	0.286	0.104	-1.09	-0.886
mt-Nd5	-0.197	-0.389	0.0316	-0.195	-0.145
Ndufb4	-0.435	0.454	-0.00137	-0.629	-0.695
mt-Co1	-0.443	0.397	0.121	-0.82	-0.595
Ndufs2	-0.144	0.516	0.161	-0.789	-0.437
mt-Nd2	-0.148	0.347	0.301	-0.315	0.0325
Ndufs8	-0.0555	0.879	0.452	-0.484	-0.546
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Oxidative phosphorylation : Proteostasis

Uqcrc2	-1.26	-0.553	-0.81	-1.26	-1.3
Ndufb1	-1.06	-0.374	-0.449	-1.25	-1.58
Ndufa7	-0.681	0.11	-0.171	-1.01	-1.01
Ndufab1	-0.353	0.531	0.2	-0.838	-0.666
Ndufb8	-0.305	0.639	0.214	-0.817	-0.59
Ndufs2	-0.144	0.516	0.161	-0.789	-0.437
Atp6ap1	-0.226	0.734	0.345	-0.698	-0.129
Atp6v0c	0.0349	1.05	0.666	-0.242	-0.183
Atp6v1a	-0.0866	-0.185	-0.673	0.562	0.412
Uqcrc1	0.33	1.23	0.749	0.00286	0.12
Atp6v0a1	0.394	0.118	0.026	1.01	1.15
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Oxidative phosphorylation : Synapse

Atp6v0a1	0.394	0.118	0.026	1.01	1.15
Atp6v1b1	0.812	0.0256	0.487	0.168	0.141
Atp6v1a	-0.0866	-0.185	-0.673	0.562	0.412
Atp6v0c	0.0349	1.05	0.666	-0.242	-0.183
mt-Nd2	-0.148	0.347	0.301	-0.315	0.0325
Atp6v1b2	-0.366	0.32	-0.708	-0.0385	0.0975
Atp6ap1	-0.226	0.734	0.345	-0.698	-0.129
Atp6v0a4	-0.14	-0.392	-0.545	-0.147	-0.49
Ndufs7	-0.119	0.64	0.391	-0.528	-0.662
Atp6v0e2	-0.395	0.441	-0.0283	-0.588	-0.545
Ppa2	-0.489	0.324	-0.222	-0.832	-0.238
Atp6v1d	-0.602	0.562	0.157	-0.69	-0.646
Atp6v0d1	-0.386	0.393	0.0687	-0.761	-0.947
Atp6v1e1	-0.529	0.406	-0.166	-0.909	-0.803
Atp6v1g1	-0.574	0.274	0.315	-0.998	-1.05
Atp6v1g2	-0.85	0.214	-0.0621	-1.03	-0.94
Atp6v1h	-0.822	-0.00173	-0.803	-0.863	-0.997
Atp6v1f	-0.707	0.0552	-0.228	-1	-1.15
Atp6v1c1	-1.35	-0.583	-1.11	-1.21	-1.15
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Base excision repair : Epigenetic

Parp1	0.214	0.483	0.306	0.327	0.672
Rfc1	-0.279	-0.37	-0.413	-0.2	0.268
Pnkp	0.118	0.464	0.555	-0.712	-0.167
Xrcc1	-0.00675	0.679	0.629	-0.5	-0.336
Tdg	-0.372	-0.485	-0.12	-0.722	-0.0114
Pole3	-0.182	0.18	-0.0999	-1.19	-0.229
Hmgb1	-0.513	0.333	0.218	-0.885	-0.537
Neil1	-0.184	0.0807	-0.436	-0.87	-0.841
Pcna	-0.398	0.169	0.3	-0.744	-1.11
Apex1	-0.659	0.104	-0.422	-0.465	-1.03
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

RNA degradation : RNA Spliceosome

Lsm4	-0.0171	0.882	0.642	-0.0727	-0.444
Lsm1	0.0508	0.678	0.038	-0.675	-0.271
Pabpc1	-0.48	0.483	0.16	-0.768	-0.36
Lsm2	-0.0307	0.337	-0.135	-0.301	-0.217
Exosc10	-0.232	0.159	0.167	-0.833	-0.417
Lsm6	-0.375	0.469	-0.0952	-0.785	-0.524
Lsm7	-0.543	0.522	-0.00257	-0.624	-0.932
Dcps	-0.342	0.101	-0.111	-0.778	-0.896
Lsm3	-0.683	0.194	-0.119	-0.851	-0.706
Lsm8	-0.777	-0.166	-0.145	-0.699	-0.781
Lsm5	-0.994	-0.256	-0.326	-0.411	-1.08
Mtrex	-0.483	-0.507	-1.25	-0.267	-0.186
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Ribosome : Immune Response

Rpl39	−1.06	−0.576	−0.517	−1.19	−1.54
Rpl30	−1.11	−0.277	−0.289	−1.24	−1.44
Rpl22	−0.932	−0.421	−0.368	−1.14	−1.17
Rps15a	−0.75	−0.0812	−0.645	−0.907	−1.18
Rps16	−0.87	−0.0779	−0.0796	−1.12	−1.34
Mrpl15	−0.772	0.0296	−0.218	−1.21	−1.2
Rps17	−0.705	0.162	−0.0777	−1.06	−1.26
Rps19	−0.572	0.273	0.149	−0.81	−1.08
Rpl3	−0.429	0.563	−0.109	−0.827	−0.98
Rps6	−0.435	0.613	0.0983	−0.926	−0.938
Fau	−0.344	0.469	0.343	−0.723	−0.929
Rpsa	−0.317	0.789	0.322	−0.764	−0.684
Rpl13a	−0.257	0.684	0.441	−0.631	−0.778
Rps14	−0.129	0.79	0.447	−0.642	−0.456
	WT/WT	WT/VS	VS/VS	WT/FC	FC/FC

Ribosome : Mitochondrial Metabolism

Mrpl34	0.41	0.938	0.735	-0.138	-0.0998
Mrpl28	0.0911	1.01	0.455	-0.135	0.0428
Mrps11	0.0643	1	0.267	-0.37	-0.134
Mrps5	0.13	0.61	0.376	-0.000779	-0.317
Mrpl16	-0.194	0.667	0.195	-0.256	-0.0665
Mrpl19	0.116	0.689	-0.0342	-0.829	0.261
Mrpl4	-0.081	0.786	0.487	-0.454	-0.512
Mrpl21	-0.373	0.708	0.584	-0.612	-0.27
Mrps12	-0.288	0.698	0.231	-0.22	-0.46
Mrps6	-0.166	0.692	0.312	-0.329	-0.546
Mrps14	-0.237	0.779	0.246	-0.456	-0.544
Mrpl14	-0.13	0.5	0.411	-0.524	-0.477
Mrpl12	-0.168	0.687	0.531	-0.693	-0.57
Mrpl18	-0.21	0.621	0.664	-0.577	-0.693
Mrps17	-0.649	0.304	-0.124	-0.144	-0.0894
Mrpl36	-0.307	0.488	0.135	-0.498	-0.449
Mrps10	-0.257	0.482	-0.155	-0.75	-0.154
Mrpl35	-0.306	-0.297	-0.806	-0.0269	0.0789
Mrpl1	-0.556	0.288	-0.0502	-0.674	-0.249
Mrpl22	-0.289	0.369	0.235	-1.2	-0.418
Mrpl23	-0.249	0.477	0.264	-0.946	-0.86
Mrps2	-0.269	0.362	-0.0882	-0.721	-0.768
Mrps7	-0.412	0.328	0.335	-0.893	-0.761
Mrps18a	-0.731	0.362	-0.134	-0.679	-0.435
Mrpl17	-0.361	-0.0246	0.366	-0.83	-0.611
Mrpl3	-0.404	0.152	-0.87	-0.696	-0.165
Mrpl30	-0.38	0.413	-0.136	-0.874	-0.848
Mrpl32	-0.554	0.185	-0.187	-0.732	-0.673
Mrpl24	-0.454	0.123	0.113	-1.1	-0.608
Mrpl9	-0.537	0.0653	0.0367	-1	-0.627
Mrpl13	-0.536	0.257	-0.0299	-0.851	-0.938
Mrpl11	-0.649	0.227	0.129	-0.904	-1.06
Mrps9	-0.555	0.0759	-0.145	-1.01	-0.771
Mrps16	-0.435	0.164	-0.251	-1.07	-0.876
Mrpl10	-0.535	0.0545	-0.231	-0.807	-0.998
Mrpl2	-0.605	0.0177	-0.0832	-1.11	-0.87
Mrpl20	-0.555	0.0327	-0.0544	-1.13	-1.01
Uba52	-0.678	0.0655	0.0634	-0.966	-1.18
Mrpl27	-0.768	0.027	-0.19	-0.995	-0.922
Mrps15	-0.837	-0.0539	-0.0303	-0.798	-1.07
Mrps21	-0.783	-0.00448	-0.201	-1.21	-0.985
Mrpl15	-0.772	0.0296	-0.218	-1.21	-1.2
Mrpl33	-0.793	-0.243	-0.392	-0.949	-1.14
Mrps18c	-1.05	-0.15	-0.363	-0.921	-1.25

WT/WT

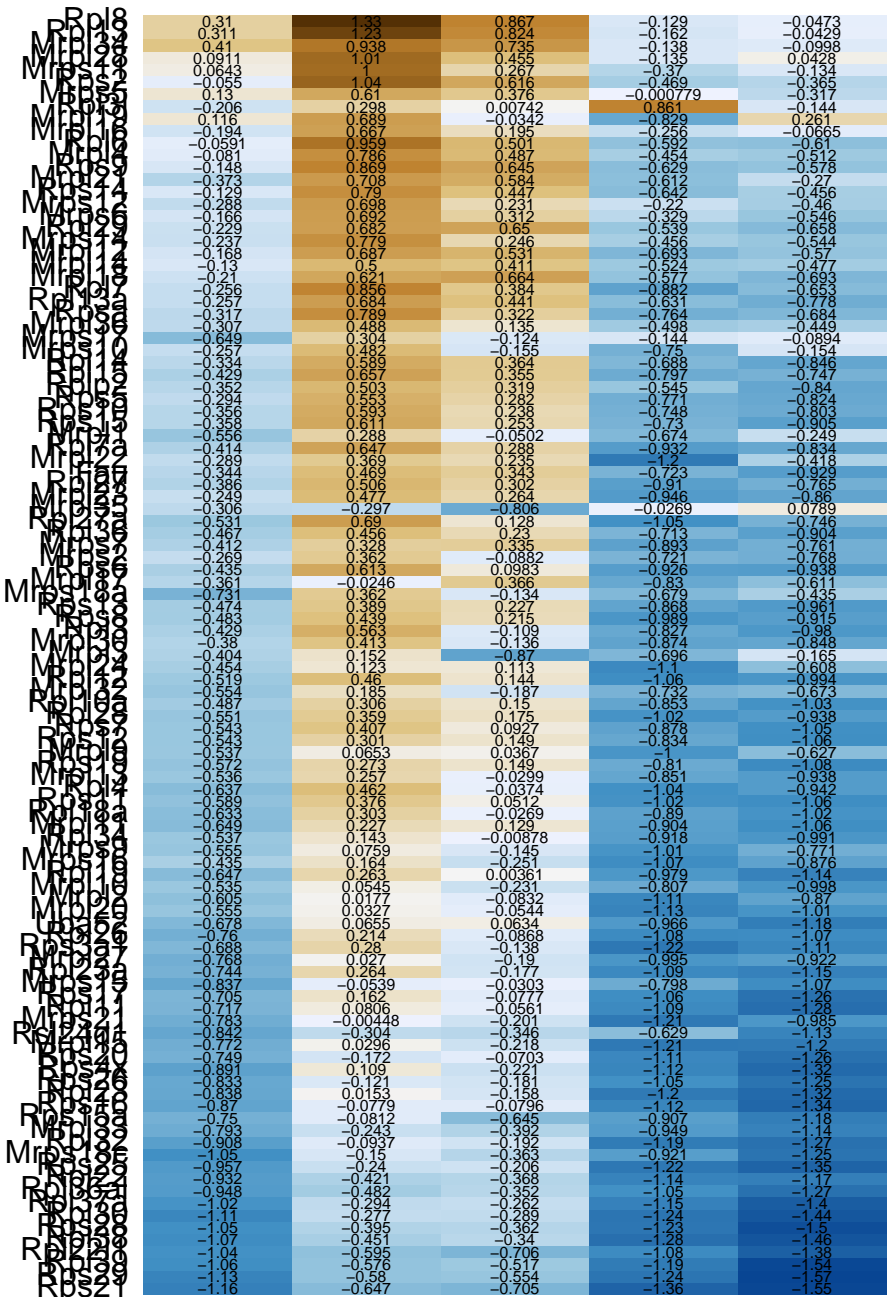
WT/VS

VS/VS

WT/FC

FC/FC

Ribosome : Proteostasis



WT/WT

WT/VS

VS/VS

WT/FC

FC/FC

[illegible]

Ribosome : Synapse

Rps21	-1.16	-0.647	-0.705	-1.36	-1.55
Rpl38	-1.07	-0.451	-0.34	-1.28	-1.46
Rps28	-1.05	-0.395	-0.362	-1.23	-1.5
Rpl30	-1.11	-0.277	-0.289	-1.24	-1.44
Rpl37a	-1.02	-0.294	-0.262	-1.15	-1.4
Rpl22	-0.932	-0.421	-0.368	-1.14	-1.17
Rps25	-0.957	-0.24	-0.206	-1.22	-1.35
Rpl32	-0.908	-0.0937	-0.192	-1.19	-1.27
Rps15a	-0.75	-0.0812	-0.645	-0.907	-1.18
Rps16	-0.87	-0.0779	-0.0796	-1.12	-1.34
Rps26	-0.833	-0.121	-0.181	-1.05	-1.25
Rpl23	-0.838	0.0153	-0.158	-1.2	-1.32
Rps20	-0.749	-0.172	-0.0703	-1.11	-1.26
Rps17	-0.705	0.162	-0.0777	-1.06	-1.26
Rps3a1	-0.688	0.28	-0.138	-1.22	-1.11
Rpl26	-0.76	0.214	-0.0868	-1.08	-1.07
Uba52	-0.678	0.0655	0.0634	-0.966	-1.18
Rpl19	-0.647	0.263	0.00361	-0.979	-1.14
Rpl34	-0.537	0.143	-0.00878	-0.918	-0.991
Rps11	-0.589	0.376	0.0512	-1.02	-1.06
Rps19	-0.572	0.273	0.149	-0.81	-1.08
Rps7	-0.543	0.407	0.0927	-0.878	-1.05
Rpl28	-0.551	0.359	0.175	-1.02	-0.938
Rpl12	-0.519	0.46	0.144	-1.06	-0.994
Rps13	-0.474	0.389	0.227	-0.868	-0.961
Rps6	-0.435	0.613	0.0983	-0.926	-0.938
Rpl27	-0.386	0.506	0.302	-0.91	-0.765
Rpl7a	-0.414	0.647	0.288	-0.932	-0.834
Rpl14	-0.334	0.589	0.364	-0.688	-0.846
Rpl13a	-0.257	0.684	0.441	-0.631	-0.778
Rpl7	-0.256	0.856	0.384	-0.882	-0.653
Rps14	-0.129	0.79	0.447	-0.642	-0.456
Rps9	-0.148	0.869	0.645	-0.629	-0.578
Rpl6	-0.0591	0.959	0.501	-0.592	-0.61
Rpl13	0.311	1.23	0.824	-0.162	-0.0429
Rpl8	0.31	1.33	0.867	-0.129	-0.0473

WT/WT

WT/VS

VS/VS

WT/FC

FC/FC

Cardiac muscle contraction : Mitochondrial Metabolism

mt-Co3	-1.49	-1.18	-1.2	-1.48	-1.62
mt-Co2	-1.4	-1.35	-1.2	-1.4	-1.66
Uqcrb	-1.09	-0.5	-0.502	-1.57	-1.4
Uqcrc2	-1.26	-0.553	-0.81	-1.26	-1.3
Cox6b1	-1.02	-0.274	-0.439	-1.24	-1.44
Cox7a2	-1.08	-0.396	-0.431	-1.25	-1.29
Cox7b	-0.954	-0.283	-0.399	-1.31	-1.36
Cox5a	-0.908	-0.137	-0.243	-1.14	-1.41
mt-Cytb	-0.85	-0.0665	-0.119	-1.25	-0.997
Uqcr11	-0.828	0.0165	-0.114	-1.08	-1.13
Cox6c	-0.762	0.144	-0.067	-1.18	-1.17
Uqcrh	-0.751	0.0677	-0.0877	-1.11	-1.16
Cox5b	-0.785	0.0575	-0.0861	-1.05	-1.17
Cox7c	-0.76	0.347	-0.0517	-1.18	-0.972
Cox7a2l	-0.624	0.28	-0.139	-1.02	-0.966
Cox8b	-0.616	-0.295	0.171	-0.584	-1.02
Cox7a1	-0.201	-0.439	-0.484	-1.01	-0.536
Uqcr10	-0.485	0.504	0.231	-0.961	-0.843
Cox8a	-0.528	0.404	0.205	-0.813	-0.773
Cox6a2	-0.655	-0.102	-0.101	-0.366	-0.513
mt-Co1	-0.443	0.397	0.121	-0.82	-0.595
Cox6a1	-0.416	0.501	0.307	-0.706	-0.859
Cox4i2	-0.203	-0.16	-0.106	-0.579	-0.396
Cox4i1	-0.307	0.68	0.375	-0.742	-0.68
Cox6b2	-0.596	0.124	0.0784	-0.389	-0.307
Uqcrcq	-0.192	0.502	0.482	-0.624	-0.661
Cox7b2	0.222	0.0403	-0.235	-0.751	0.00884
Trdn	-0.149	0.19	0.259	0.207	-0.411
Atp2a1	-0.0194	-0.174	-0.332	0.611	-0.173
Uqcrrf1	0.153	0.979	0.58	-0.522	-0.191
Asph	0.128	-0.391	-0.137	-0.124	0.567
Cyc1	0.241	1.16	0.661	-0.239	-0.145
Ryr2	0.137	-0.794	-0.305	0.748	0.601
Atp2a2	0.186	-0.645	-0.571	0.681	0.894
Uqcrc1	0.33	1.23	0.749	0.00286	0.12
Slc8a3	0.941	0.142	0.393	0.712	0.191
Slc9a1	1.07	0.922	0.679	1.03	1.39

WT/WT

WT/VS

VS/VS

WT/FC

FC/FC

Protein export : Proteostasis

Bag6	0.831	1.08	0.662	0.904	0.863
Hspa5	0.948	1.16	0.715	0.382	0.755
Srp54b	0.907	1.39	0.357	0.552	0.718
Srprb	0.913	1.08	1.03	0.093	0.304
Srp68	0.103	1.05	0.606	−0.145	0.205
Sgta	0.115	0.891	0.81	−0.0623	−0.144
Arxes2	0.155	−0.00351	0.349	0.459	0.386
Sec61a1	0.465	0.232	0.219	−0.22	0.526
Spcs2	−0.0449	0.916	0.5	−0.0714	−0.291
Srpr	−0.000354	0.846	0.181	−0.121	−0.0267
Sec63	0.179	−0.407	−0.316	0.47	0.468
Get3	−0.122	1.03	0.432	−0.447	−0.408
Oxa1l	0.024	0.476	0.478	−0.278	−0.415
Get4	−0.266	0.843	0.578	−0.466	−0.436
Sec62	−0.0625	0.401	0.542	−0.587	−0.471
Sec11a	−0.208	0.295	0.433	−0.368	−0.649
Sec11c	−0.236	0.735	−0.0123	−0.758	−0.706
Immp2l	−0.112	−0.0587	0.00698	−0.43	−0.55
Immp1l	−0.437	0.475	−0.00814	−0.469	−0.651
Sec61b	−0.357	0.394	0.198	−0.855	−0.765
Srp14	−0.473	0.561	0.104	−0.966	−0.766
Tmem208	−0.777	0.0951	−0.131	−0.715	−0.598
Ubl4a	−0.659	0.0663	−0.286	−0.916	−0.446
Srp19	−0.377	0.0889	−0.0769	−0.632	−1.18
Srp72	−0.643	−0.111	−0.669	−0.545	−0.471
Srp9	−0.834	0.289	−0.247	−0.891	−1.03
Sec61a2	−0.816	−1.12	−1.11	−0.47	−0.998
Sec61g	−0.949	−0.413	−0.536	−1.34	−1.34
Spcs1	−1.14	−0.509	−0.531	−1.16	−1.42

WT/WT

WT/VS

VS/VS

WT/FC

FC/FC

Proteasome : Proteostasis

Psma6	-1.25	-0.489	-0.969	-1.42	-1.53
Psmd1	-0.873	-0.353	-0.882	-1.51	-1.16
Psma3	-0.924	-0.0733	-0.455	-1.28	-1.24
Sem1	-0.825	-0.244	-0.0377	-1.29	-1.28
Psmb7	-0.663	-0.0178	-0.254	-1.35	-1.29
Psma4	-0.815	0.00128	-0.22	-1.19	-1.25
Psmd14	-0.85	0.0389	-0.705	-0.895	-1.03
Psma5	-0.733	0.0706	-0.287	-0.941	-1.2
Psmc2	-0.801	0.142	-0.196	-0.967	-1.15
Psmc6	-0.816	0.156	-0.681	-1.1	-0.617
Psmd7	-0.912	-0.0776	-0.213	-0.665	-1.02
Pomp	-0.467	0.0185	0.0785	-1.23	-1.14
Psmb9	-0.63	-0.306	-0.476	-0.967	-0.444
Psmd12	-0.839	0.123	-0.223	-0.759	-0.948
Psma2	-0.448	0.466	0.0199	-1.22	-1.01
Psmd8	-0.718	0.496	0.096	-1.03	-0.746
Psmd11	-0.501	-0.352	-0.615	-0.147	-0.366
Psmb6	-0.444	0.525	0.129	-1.06	-0.934
Psmc3	-0.427	0.523	0.0874	-0.704	-0.991
Psma4	-0.48	0.537	0.15	-0.816	-0.833
Psmb1	-0.455	0.628	0.163	-0.862	-0.882
Psmd13	-0.342	0.603	0.201	-0.858	-0.968
Psma7	-0.394	0.614	0.0964	-0.982	-0.677
Psmd6	-0.219	0.739	-0.101	-0.802	-0.942
Psmb2	-0.269	0.554	0.0363	-0.871	-0.774
Psmb3	-0.339	0.59	0.254	-0.753	-0.838
Psme1	-0.353	0.697	-0.122	-0.247	-0.917
Psmb5	-0.171	0.476	0.229	-0.678	-0.77
Psmb10	-0.167	0.454	0.192	-0.623	-0.695
Psme2b	-0.296	0.494	0.181	-0.596	-0.618
Psma1	-0.23	0.836	0.202	-0.764	-0.52
Psmd9	-0.227	0.577	0.293	-0.839	-0.266
Psmb8	0.126	0.398	0.206	-0.462	-0.493
Psmb4	-0.0904	0.801	0.393	-0.597	-0.56
Psme3	0.155	0.5	-0.29	-0.144	-0.369
Psmc5	-0.0519	0.876	0.312	-0.653	-0.474
Psma8	-0.18	0.222	0.152	-0.446	0.214
Psmd2	0.0894	0.608	-0.283	-0.239	-0.204
Psmc1	-0.0479	0.871	0.411	-0.686	-0.446
Psma1	-0.142	0.513	0.371	-0.381	0.0936
Psmd4	-0.0215	1.03	0.553	-0.582	-0.318
Psme4	0.216	0.0248	0.0659	0.216	0.0596
Psmb11	0.178	0.915	0.182	-0.209	0.142
Psmd3	0.226	1.19	0.587	-0.105	-0.00612

WT/WT WT/VS VS/VS WT/FC FC/FC