

Supplementary Table 12: list of mitochondrial proteins modulated in response to at least one size of polystyrene beads

acc number	gene_name	description	T test 10 µm	ratio 10µm/ctrl	T test 1 µm	Ratio 1 µm/ctrl	T test 0.1 µm	Ratio 0.1 µm/ctrl
Q9CQ62	Decr1	2,4-dienoyl-CoA reductase, mitochondrial	0.037996806	1.8938190913	0.179934717	1.49043262634	0.088307925	1.668740146
Q80ZK0	Mrps10	28S ribosomal protein S10, mitochondrial	0.423927438	0.6706168752	0.105463371	1.43013039763	0.041608268	1.592797033
Q9CQV5	Mrps24	28S ribosomal protein S24, mitochondrial	0.25283222	2.0819785431	0.060063091	2.22692435431	0.028338945	2.613732175
Q924T2	Mrps2	28S ribosomalProtein S2, mitochondrial	0.002420457	1.7477248433	0.002368733	1.73320890387	0.000549841	1.95207922
Q9CXW2	Mrps22	28S ribosomalProtein S22, mitochondrial	0.042268639	1.4128538107	0.330370704	1.15453144274	0.170767991	1.265931815
Q8BK72	Mrps27	28S ribosomalProtein S27, mitochondrial	0.038443087	2.1565791319	0.605745038	0.75512394294	0.150703815	1.686918972
Q9ER88	Dap3	28S ribosomalProtein S29, mitochondrial	0.045789578	1.5573642784	0.155623767	1.34788930543	0.0620855	1.555251151
Q9D0G0	Mrps30	28S ribosomalProtein S30, mitochondrial	0.025440974	0.619522842	0.312203279	0.86628421451	0.122696348	0.744065016
Q9JIK9	Mrps34	28S ribosomalProtein S34, mitochondrial	0.013072615	0.7493305351	0.02293887	0.74423047174	0.22485125	0.856086101
Q9D338	Mrp19	39S ribosomalProtein L19, mitochondrial	0.00219165	0.6292871215	0.004729327	0.66682780939	0.037906451	0.804453807
Q8JZN5	Acad9	Acyl-CoA dehydrogenase family member 9, mitochondrial	0.024475413	1.6973143777	0.098420123	1.44103754909	0.053715109	1.550547572
Q8VCW8	Acsf2	Acyl-CoA synthetase family member 2, mitochondrial	0.006046733	2.5482481753	0.124701641	1.62668323531	0.166460697	1.548820471
Q9CQR4	Acot13	Acyl-coenzyme A thioesterase 13	0.006788904	2.4876739733	0.081921057	1.80799442197	0.032630885	2.004275149
Q9QYR9	Acot2	Acyl-coenzyme A thioesterase 2, mitochondrial	0.024678544	1.6256369517	0.805633825	1.05389690308	0.583661375	1.123399298
P47738	Aldh2	Aldehyde dehydrogenase, mitochondrial	0.005044845	1.6112681598	0.432991643	1.10246719284	0.174032965	1.20249886
Q8WTY4	Ciapi1	Anamorsin	0.233808937	1.2558117148	0.014842673	1.65625376441	0.034633028	1.514180378
Q07813	Bax	Apoptosis regulator BAX	0.007031953	1.5348236154	0.029687158	1.56337712074	0.010212547	1.475022101
Q9EPB4	Pycard	Apoptosis-associated speck-like protein containing a CARD	0.032329891	1.9833756387	0.006755712	2.52268986173	0.006089771	2.296095695
Q9Z0X1	Aifm1	Apoptosis-inducing factor 1, mitochondrial	0.733344376	0.98421133	0.025607631	0.76414153243	0.003217593	0.757824565
P56383	Atp5mc2	ATP synthase F(0) complex subunit C2, mitochondrial	0.024954717	0.034926454	0.026934792	0.05645732842	0.026763381	0.05713911
Q03265	Atp5fla	ATP synthase subunit alpha, mitochondrial	0.023085	0.7980233387	0.002970327	0.67760753227	0.018521615	0.803160514
P56480	Atp5flb	ATP synthase subunit beta, mitochondrial	0.188673347	0.8571859932	0.027651871	0.70452827943	0.247346716	0.872320069
P35434	Atp5fld	ATP synthase subunit delta, mitochondrial	0.568744931	0.9500419255	0.034330219	0.75619665072	0.245377094	0.886804356
P56135	Atp5mf	ATP synthase subunit f, mitochondrial	0.010001154	1.4243129109	0.351382535	0.89295002246	0.519620657	1.104767543
Q9CPQ8	Atp5mg	ATP synthase subunit g, mitochondrial	0.027678495	1.6275894948	0.233402949	0.77359642088	0.788955073	0.937831683
Q91VR2	Atp5flc	ATP synthase subunit gamma, mitochondrial	0.798804732	0.9768326861	0.026345314	0.73268693285	0.056082662	0.787727872
Q9DB20	Atp5po	ATP synthase subunit O, mitochondrial	0.10138699	0.8679802427	0.056146671	0.82046376758	0.250104214	0.892777445
P61222	Abce1	ATP-binding cassette sub-family E member 1	0.034420298	1.6796236749	0.018558762	1.79291046947	0.027658183	1.724647439
Q62167	Ddx3x	ATP-dependent RNA helicase DDX3X	0.040328196	1.2528604416	0.009966678	1.35067253686	0.003286708	1.44947427
Q9DBL7	Coasy	Bifunctional coenzyme A synthase	0.002763225	1.9794125388	0.0046899	1.87399365335	0.011070715	1.717738715
Q9QXX4	Slc25a13	Calcium-binding mitochondrial carrier Protein Aralar2	0.043940796	1.2555522938	0.189094551	0.84804838796	0.888372954	0.980611667
Q8BMD8	Slc25a24	Calcium-binding mitochondrial carrier Protein SCaMC-1	0.000881937	1.5057130191	0.061072363	0.85083973989	0.876290331	1.011664618
P05132	Prkaca	cAMP-dependentProtein kinase catalytic subunit alpha	0.000251254	3.0200346196	0.008125295	1.86260394782	0.00994378	1.862775392
Q8K1J6	Trnt1	CCA tRNA nucleotidyltransferase 1, mitochondrial	0.00518717	3.60233976	0.103375082	2.31869549581	0.013892333	3.060591958
Q9QYB1	Clic4	Chloride intracellular channelProtein 4	0.015878901	1.996274908	0.003926836	2.08250765176	0.028210277	1.684618142
P11440	Cdk1	Cyclin-dependent kinase 1	0.04942752	1.7635429596	0.009503702	2.1779797889	0.010741661	2.15261071
Q9CZ13	Uqcrc1	Cytochrome b-c1 complex subunit 1, mitochondrial	0.447835602	0.9296434926	0.017042143	0.70847709567	0.268306362	0.893296596
Q9DB77	Uqcrc2	Cytochrome b-c1 complex subunit 2, mitochondrial	0.133967019	0.8896124865	0.012510598	0.79083924304	0.149320274	0.897359254
P99028	Uqcrh	Cytochrome b-c1 complex subunit 6, mitochondrial	0.009190644	0.5447673947	0.104847498	0.71129124647	0.053789848	0.668630459
Q9D855	Uqcrb	Cytochrome b-c1 complex subunit 7	0.019647933	3.2046702661	0.061411469	2.5708998101	0.139159656	2.484613553
Q8R1I1	Uqcr10	Cytochrome b-c1 complex subunit 9	0.039950452	1.7820629171	0.641526045	1.13718458862	0.362655415	1.278256484
Q9CR68	Uqcrfs1	Cytochrome b-c1 complex subunit Rieske, mitochondrial	0.015072192	0.3901098829	0.406536672	0.85265099685	0.462833844	0.862186837
Q9CQX2	Cyb5b	Cytochrome b5 type B	0.020754215	0.4710435079	0.005593297	0.69418288452	0.025961319	0.785780299
Q9CPQ1	Cox6c	Cytochrome c Oxidase subunit 6C	0.026995806	1.5195227055	0.176358145	1.16764419762	0.070428618	1.237634131

O35459	Ech1	Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial	0.029297217	1.292783012	0.767908337	0.96269470147	0.954269992	0.991830024
Q8BMF4	Dlat	Dihydrolipoyllysine-residue acetyltransferase component of Pyruvate dehydrogenase complex, mitochondrial	0.007621045	1.2825158382	0.411804989	0.93920571994	0.300193133	1.077193271
P28352	Apex1	DNA-(apurinic or apyrimidinic site) lyase	0.029568964	1.3440345229	0.001001945	1.55098554843	0.003028426	1.442114093
Q8BFR5	Tufm	Elongation factor Tu, mitochondrial	0.001329623	1.3303024865	0.19826598	1.0621711662	0.012602408	1.230423031
P39749	Fen1	Flap endonuclease 1	0.031655762	1.4105833674	0.001864117	1.79222631217	0.002784046	1.64896842
Q9D172	Gatd3a	Glutamine amidotransferase-like class 1 domain-containing Protein 3A, mitochondrial	0.016233377	2.4363094584	0.051499742	2.07492956529	0.012180791	2.570187868
Q80Y14	Glr5	Glutaredoxin-related protein 5, mitochondrial	0.131135124	1.7006540376	0.020847199	2.29301279512	0.030366018	2.171530936
Q9CPV4	Glod4	Glyoxalase domain-containing protein 4	0.007792547	2.228022201	0.009119421	2.00870778303	0.026531828	1.771280628
Q8BMP6	Acbd3	Golgi resident protein GCP60	0.007249255	3.0110473995	0.028977643	2.35181742354	0.03279109	2.269769334
Q9CR59	Gadd45gip1	Growth arrest and DNA damage-inducible proteins-interacting protein 1	0.026259714	1.6405183863	0.201255423	1.21411191776	0.318915443	1.18436663
Q9WTP7	Ak3	GTP:AMP Phosphotransferase AK3, mitochondrial	0.000461337	3.1327651619	0.026915618	2.25021312116	0.003275185	2.48598356
Q9CQN1	Trap1	Heat shock Protein 75 kDa, mitochondrial	0.005620086	1.508272063	0.170380804	1.18014319861	0.0253917	1.350182907
Q99KB8	Hagh	Hydroxyacylglutathione hydrolase, mitochondrial	0.001361628	2.7011185153	0.015629254	1.98663671597	0.139352873	1.605912779
P97287	Mcl1	Induced myeloid leukemia cell differentiation protein Mcl-1 homolog	0.074144009	101715.2957	0.037634236	120461.585222	0.018317496	122658.1127
Q91VM9	Ppa2	Inorganic Pyrophosphatase 2, mitochondrial	0.049189844	1.7649814364	0.15636067	1.52614134363	0.170318721	1.499965498
Q9DCB8	Isca2	Iron-sulfur cluster assembly 2 homolog, mitochondrial	0.003543137	4.2519085356	0.170478148	2.30908930598	0.042020035	2.807446657
Q9D7B6	Acad8	Isobutyryl-CoA dehydrogenase, mitochondrial	0.044159119	2.1905153104	0.660504453	1.20918254832	0.444953405	1.351916271
Q6PB66	Lrpprc	Leucine-rich PPR motif-containing Protein, mitochondrial	0.002247329	1.9614375627	0.234233437	1.19730164909	0.091219084	1.347447184
P51174	Acadl	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	0.009047154	1.6812150188	0.728294293	0.9441370567	0.75118335	1.051431364
P41216	Acs11	Long-chain-fatty-acid--CoA ligase 1	0.002246449	1.6510479783	0.041327541	1.2153058438	0.058856703	1.269030792
Q9QUJ7	Acs14	Long-chain-fatty-acid--CoA ligase 4	0.007333325	1.6389586158	0.020117375	1.47813782593	0.031439977	1.422830082
Q8BP40	Acp6	Lysophosphatidic acid phosphatase type 6	0.024653625	1.6433060578	0.146900504	1.22935707667	0.049994088	1.341226956
P45952	Acadm	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial	0.026345629	1.4404064363	0.987024366	1.00231741471	0.683058064	1.059130994
Q7TNS2	Minos1	MICOS complex subunit Mic10	0.415517919	0.7081365176	0.346944006	0.65363196557	0.34045032	0.657629613
Q8R404	Mic13	MICOS complex subunit MIC13	0.019783352	1.9633823045	0.162390912	1.45767219054	0.052753247	1.712323723
Q9CRB9	Chchd3	MICOS complex subunit Mic19	0.024776527	0.7318297077	0.010330717	0.69387606855	0.019903583	0.746771043
Q78IK4	Apool	MICOS complex subunit Mic27	0.065330098	1.2719488542	0.236685001	0.84035501398	0.714756059	1.037287834
Q8CAQ8	Immt	MICOS complex subunit Mic60	0.321234413	0.902563614	0.01519396	0.68102017177	0.097045985	0.820905765
Q922Q1	Marc2	Mitochondrial amidoxime reducing component 2	0.044240544	0.69197073	0.069535635	0.72358184899	0.335863866	0.88079985
P62075	Timm13	Mitochondrial import inner membrane translocase subunit Tim13	0.001166292	6.7754331073	0.002490357	5.31997605964	0.0070811	4.866585746
Q9CYG7	Tomm34	Mitochondrial import receptor subunit TOM34	0.009718201	1.7266001603	0.000573255	1.64963673889	0.004791242	1.615412301
Q8BG51	Rhot1	Mitochondrial Rho GTPase 1	0.047316489	0.7547569435	0.443245356	0.92624312577	0.13871711	0.837911215
Q9DC61	Pmpca	Mitochondrial-processing peptidase subunit alpha	0.000778101	1.8869003106	0.06085217	1.31377080603	0.214012425	1.254175793
Q8K4Z3	Naxe	NAD(P)H-hydrate epimerase	0.016076264	1.7556785978	0.367944716	1.20900447834	0.770940052	1.079474923
Q99LC3	Ndufa10	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial	0.746368318	0.945818134	0.043389603	0.61648904395	0.184965724	0.783832475
Q9ERS2	Ndufa13	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13	0.412443682	0.9293400826	0.008704062	0.77353866809	0.212548606	0.901440475
Q9CQ75	Ndufa2	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	6.42742E-05	0.5498612461	0.002463006	0.77002218748	0.022727327	0.857934213
Q9DC69	Ndufa9	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	0.247603209	0.7956285343	0.047064898	0.64375434346	0.147684477	0.777433463
Q9CQZ6	Ndufb3	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 3	0.043157814	2.2448873917	0.291021515	1.53202750395	0.288954847	1.556114117
Q9CQH3	Ndufb5	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 5, mitochondrial	0.027470938	1.9903537435	0.13637992	1.52435516232	0.025961109	1.928429808
Q91YT0	Ndufv1	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial	0.307127712	0.8925893312	0.001106381	0.60066373361	0.013558624	0.755408764
Q91WD5	Ndufs2	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial	0.597760856	0.886381871	0.033394809	0.53582118743	0.148537059	0.72931724

Q91VD9	Ndufs1	NADH-ubiquinoneOxidoreductase 75 kDa subunit, mitochondrial	0.018209279	0.8092941031	0.003845007	0.73289325872	0.04526031	0.846885175
Q14C51	Ptcd3	Pentatricopeptide repeat domain-containingProtein 3, mitochondrial	0.003958426	1.4945969749	0.206621619	1.17243369761	0.073255042	1.30335539
P99029	Prdx5	Peroxiredoxin-5, mitochondrial	0.005761858	1.7761382679	0.000232065	2.03440323465	0.004212574	1.838908664
O70325	Gpx4	Phospholipid hydroperoxide glutathione peroxidase	0.000200748	2.7238283955	0.00622928	1.89466517273	0.018067532	1.845724761
Q8CG72	Adprhl2	Poly(ADP-ribose) glycohydrolase ARH3	0.000689374	5.5573858008	0.001373341	5.31537830518	0.230813919	2.705743941
Q8K411	Pitrm1	Presequence Protease, mitochondrial	0.034422278	2.0919122745	0.668904847	1.16519724835	0.307009178	1.413040636
Q2YDW2	Msto1	Protein misato homolog 1	0.111001513	1.586498987	0.032088117	1.83811967286	0.039674029	1.786682636
Q3T114	Prrc1	Protein PRRC1	0.014715886	2.6117495748	0.048839314	2.15295751818	0.008426241	2.839726999
Q8BK59	Pum3	Pumilio homolog 3	0.575105673	1.182309158	0.847368681	0.9396071963	0.956419735	0.982296275
Q9D051	Pdhb	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial	0.020845397	1.2201172589	0.882946496	1.01270791365	0.240857918	1.133876633
Q8BKZ9	Pdhx	Pyruvate dehydrogenase protein X component, mitochondrial	0.00514636	4.4590933456	9.26161E-05	3.68147038453	0.005607644	4.166178031
Q9JIY5	Htra2	SerineProtease HTRA2, mitochondrial	0.033741701	1.7334981175	0.342027438	1.27086120695	0.184028133	1.385995062
Q9JMY0	Stap1	Signal-transducing adaptor protein 1	0.00524383	1.3864461907	0.00650804	1.41043950125	0.094253226	1.178340564
Q8BGH2	Samm50	Sorting and assembly machinery component 50 homolog	0.030999644	1.5025468595	0.119780178	0.68628552867	0.8580014	0.969157235
Q9Z219	Sucla2	Succinate--CoA ligase [ADP-forming] subunit beta, mitochondrial	0.044423146	1.3780542599	0.76574301	1.04262752432	0.324410486	1.145459464
Q62465	Vat1	Synaptic vesicle membrane protein VAT-1 homolog	2.46935E-05	3.7232435991	0.001603215	1.9442840087	0.012161949	1.65079689
Q9JLT4	Txnrd2	Thioredoxin reductase 2, mitochondrial	0.001076552	2.6779265304	0.018589928	1.47283462043	0.024945142	1.431575687
P20108	Prdx3	Thioredoxin-dependent peroxide reductase, mitochondrial	0.07939858	1.8411946581	0.024965301	1.76134613675	0.018176262	1.827315015
Q3UQ84	Tars2	Threonine--tRNA ligase, mitochondrial	0.042327559	1.9007317659	0.602850066	1.21373342228	0.187597975	1.503957235
Q02053	Uba1	Ubiquitin-like modifier-activating enzyme 1	0.002098679	2.0668209712	0.004907032	1.88356471608	0.02665266	1.600871245
Q9JK81	Myg1	UPF0160 Protein MYG1, mitochondrial	0.03072474	1.6790532718	0.016894531	1.79718193104	0.046460681	1.591147986
Q3U5F4	Yrdc	YrdC domain-containing protein, mitochondrial	0.196391959	54084.801448	0.000561428	168445.368166	0.020094628	126987.4061
Q80Y81	Elac2	ZincPhosphodiesterase ELAC protein 2	0.043720879	1.4310605061	0.085688726	1.34223248108	0.481444005	1.127717064