

Table S1. RPKM values obtained from sequencing

Name	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
GPX1	54806,43	53479,69	54143,06	83989,36	70097,41	77043,39	73359,47	69733,66	71546,56	72228,92	64452,72	68340,82
NQO1	38468,81	37363,06	37915,94	39602,18	36045,72	37823,95	39432,21	43694,07	41563,14	44052,89	54418,03	49235,46
SOD1	38151,99	43025,63	40588,81	38172,44	45522,06	41847,25	40118,95	40012,89	40065,92	41485,91	38743,87	40114,89
PARK7	23868,72	27057,29	25463,01	21982,57	21761,71	21872,14	21701,4	22726,2	22213,8	25868,49	23327,1	24597,8
TXN	22864,96	22633,35	22749,16	25099,01	20375,54	22737,28	22376,48	25096,66	23736,57	21206,59	34342,55	27774,57
PRDX3	17277,44	17220,87	17249,15	16616,35	16304,13	16460,24	17394,77	18851,25	18123,01	15745,23	18152,92	16949,08
HMOX1	10690,71	11993,38	11342,05	15018,07	14398,36	14708,21	14065,69	13082,74	13574,21	14137,22	12472,08	13304,65
TXN2	9130,892	8987,884	9059,388	14334,42	11215,07	12774,75	10759	10203,18	10481,09	8778,076	9434,859	9106,467
SOD2	6946,713	6909,628	6928,17	6394,07	7775,051	7084,561	5831,835	5230,129	5530,982	5237,199	3753,088	4495,144
GCLC	5548,713	5586,15	5567,432	3259,549	5548,557	4404,053	5712,122	5587,535	5649,829	6253,247	4215,977	5234,612
SRXN1	4232,966	3136,911	3684,938	4917,154	5363,789	5140,472	5032,918	5449,179	5241,048	5115,102	4386,095	4750,599
CAT	3979,379	3545,419	3762,399	5930,653	5007,703	5469,178	5159,663	5920,622	5540,142	4489,161	5757,382	5123,271
GCLM	2596,908	2085,264	2341,086	1755,865	1628,91	1692,387	2104,548	2206,933	2155,74	2043,877	2195,373	2119,625
IDE	1588,177	1581,648	1584,912	1215,876	1068,35	1142,113	1249,253	1193,335	1221,294	1152,107	1485,134	1318,62
PRDX1	1520,371	1530,965	1525,668	1068,076	963,3559	1015,716	1122,688	1010,335	1066,511	900,1999	1033,547	966,8732
HMBS	1478,996	1508,422	1493,709	1490,005	1354,002	1422,003	1413,956	1551,318	1482,637	1355,302	1271,12	1313,211
MRPL13	183,9251	185,497	184,7111	87,2863	78,97632	83,13131	117,2711	125,1155	121,1933	134,5396	203,808	169,1738
TNF	114,164	94,70653	104,4353	144,9328	185,3745	165,1537	104,46	98,84666	101,6533	45,66953	63,994	54,83176
GSTP1	26,40229	59,36845	42,88537	113,2436	104,7659	109,0047	65,48257	48,54711	57,01484	1250	1337,192	1293,596

Oxidative Stress

Name	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
BAX	14222,6	13078,66	13650,63	12276,22	9639,263	10957,74	12533,39	12377,45	12455,42	11183,97	10530,54	10857,25
LRP1	1971,642	1952,663	1962,152	1338,392	1346,514	1342,453	1676,23	1803,19	1739,71	1567,646	1895,734	1731,69
KEAP1	1957,078	1652,697	1804,887	2227,384	1792,733	2010,058	1848,97	1818,419	1833,694	1506,014	1473,399	1489,706
BCL2	5,850628	0,828327	3,339477	4,06288	4,977772	4,520326	4,568165	4,987716	4,777941	3,994371	0	1,997185

Apopstpsis

Name	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
TGFB1	10787,01	10153,11	10470,06	11641,21	11473,66	11557,44	11908,12	12330,37	12119,25	10646,87	11714,68	11180,78
IL8	6485,508	7572,044	7028,776	7584,181	11018,77	9301,476	7521,909	6702,447	7112,178	9101,58	7766,556	8434,068
TGFBR2	5988,239	5494,747	5741,493	4352,197	4427,503	4389,85	4861,456	4504,333	4682,895	5202,066	4385,312	4793,689
IL1RN	3865,637	4030,603	3948,12	2894,214	2891,06	2892,637	2826,148	2851,919	2839,034	2980,818	2382,689	2681,753
VEGFB	3725,918	4740,185	4233,052	4172,499	3159,187	3665,843	3999,763	4082,263	4041,013	5172,438	6829,686	6001,062

NFE2L2	3427,974	3829,683	3628,828	3523,836	2994,311	3259,073	4084,785	3110,216	3597,501	2688,758	2318,055	2503,407
NFKB1	1910,771	1736,192	1823,481	1689,242	1585,457	1637,349	1601,612	1555,358	1578,485	1458,178	1697,002	1577,59
CSF3	309,7407	263,1169	286,4288	131,8624	203,786	167,8242	102,5214	122,4612	112,4913	89,64394	96,62517	93,13456
CSF2	84,00096	48,6523	66,32663	119,3179	139,225	129,2715	76,02232	48,82611	62,42422	107,5305	136,9782	122,2543
IL10	18,13754	9,629614	13,88358	6,29767	11,02257	8,66012	5,310665	8,590236	6,950451	19,34837	18,07448	18,71142
CCL2	7,986654	5,653718	6,820186	11,09242	14,56098	12,8267	6,235973	3,782611	5,009292	13,63172	31,83554	22,73363
CCL5	1,977295	0	0,988648	4,119309	7,209869	5,664589	46,31612	30,90383	38,60997	0	47,2901	23,64505
IL1B	0,965656	2,050751	1,508204	16,09404	15,84494	15,96949	11,30975	5,488206	8,398978	80	115,4758	97,73791

Immunoregulation and Infl

	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
Name												
MMP2	281,8157	205,9315	243,8736	598,4714	434,2408	516,3561	518,872	553,6958	536,2839	526,0041	753,7273	639,8657
MMP9	1,279825	0	0,639912	18,66386	9,333323	13,99859	11,99143	25,45814	18,72478	22,93643	61,218	42,07721

Metalloproteinase

	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
Name												
CHRN2	2,54787	2,164352	2,356111	0	0,929037	0,464519	2,38725	0,724028	1,555639	0	0	0
CHRNA2	0,621812	0	0,310906	2,590847	0	1,295423	0,728265	0,883501	0,805883	0	7,435797	3,717899

naChr

Name	CTRL	CTRL	CTRL	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 1 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA + α -Lipoic 5 μ m	PA:OA	PA:OA	PA:OA
ABCC2	8862,512	7821,283	8341,898	7696,546	7534,891	7615,718	7978,945	7657,348	7818,146	8236,385	8920,618	8578,502
ABCC1	2882,319	3297,355	3089,837	2275,934	2012,607	2144,27	2348,2	2387,22	2367,71	3185,972	2638,282	2912,127
KCNK13	107,8747	108,2523	108,0635	167,9345	218,2858	193,1102	227,6946	220,6468	224,1707	188,1686	382,746	285,4573
JUN	20,70534	7,647246	14,17629	13,1282	16,41271	14,77046	8,434806	17,90732	13,17106	25,35271	10,76523	18,05897

Others