

**Additional File 1: Genes significantly differentially expressed after ozone challenge.** Genes are sorted according to expression level fold change (FC) (post-ozone challenge / pre-ozone challenge) in each groups.

<b>Symbol</b>	<b>Non-Responders' FC</b>	<b>Responders' FC</b>	<b>Significantly Altered in Non-Responders, Responders, or Both</b>
<i>SERPINE2</i>	3.06	2.10	Both
<i>CDKN3</i>	2.82	1.85	Both
<i>CCND1</i>	2.73	1.87	Both
<i>MMP2</i>	2.64	1.99	Both
<i>SFRP1</i>	2.53	1.91	Both
<i>NCF2</i>	2.42	1.99	Both
<i>STK12</i>	2.22	2.23	Both
<i>PSMB10</i>	736.50	0	Non-Responders
<i>TXN2</i>	249.33	0	Non-Responders
<i>SEMA3B</i>	89.74	0	Non-Responders
<i>FCGR1A</i>	79.33	0	Non-Responders
<i>FBN1</i>	33.65	0	Non-Responders
<i>CCNG1</i>	31.65	0	Non-Responders
<i>API5</i>	23.00	0	Non-Responders
<i>SCUBE1</i>	19.94	0	Non-Responders
<i>CD97</i>	19.59	0	Non-Responders
<i>BRCA1</i>	18.35	0	Non-Responders
<i>HAS1</i>	18.24	0	Non-Responders
<i>LCN2</i>	17.57	0	Non-Responders
<i>BCL3</i>	13.08	0	Non-Responders
<i>GNLY</i>	12.69	0	Non-Responders
<i>PLK2</i>	9.63	0	Non-Responders
<i>NLRP11</i>	9.25	0	Non-Responders
<i>STEAP</i>	8.82	0	Non-Responders
<i>NGB</i>	6.23	0	Non-Responders
<i>TUBA1</i>	5.36	0	Non-Responders
<i>GATA3</i>	5.27	0	Non-Responders
<i>BCL2A1</i>	4.94	0	Non-Responders
<i>CHIT1</i>	4.86	0	Non-Responders
<i>SEPP1</i>	4.78	0	Non-Responders
<i>ALDH1B1</i>	4.46	0	Non-Responders
<i>RELB</i>	4.42	0	Non-Responders
<i>IL1R2</i>	4.29	0	Non-Responders
<i>HLA-C</i>	4.28	0	Non-Responders
<i>NMES1</i>	4.21	0	Non-Responders

<b>Symbol</b>	<b>Non-Responders' FC</b>	<b>Responders' FC</b>	<b>Significantly Altered in Non-Responders, Responders, or Both</b>
<i>LOX</i>	4.01	0	Non-Responders
<i>TBP</i>	4.00	0	Non-Responders
<i>TNFRSF10C</i>	3.99	0	Non-Responders
<i>IL1B</i>	3.98	0	Non-Responders
<i>B2M</i>	3.98	0	Non-Responders
<i>IGFBP2</i>	3.92	0	Non-Responders
<i>S100A12</i>	3.82	0	Non-Responders
<i>SERPINF1</i>	3.77	0	Non-Responders
<i>BATF</i>	3.69	0	Non-Responders
<i>PSMC4</i>	3.63	0	Non-Responders
<i>P2RY5</i>	3.62	0	Non-Responders
<i>CCR9</i>	3.61	0	Non-Responders
<i>SOD2</i>	3.60	0	Non-Responders
<i>PSMC3</i>	3.52	0	Non-Responders
<i>IL8RA</i>	3.50	0	Non-Responders
<i>NCF4</i>	3.46	0	Non-Responders
<i>GTPBP4</i>	3.45	0	Non-Responders
<i>SEMA4C</i>	3.44	0	Non-Responders
<i>SELL</i>	3.43	0	Non-Responders
<i>PTMA</i>	3.42	0	Non-Responders
<i>IFITM2</i>	3.37	0	Non-Responders
<i>S100A8</i>	3.36	0	Non-Responders
<i>HAS3</i>	3.35	0	Non-Responders
<i>LILRB2</i>	3.29	0	Non-Responders
<i>CCL28</i>	3.25	0	Non-Responders
<i>ITGB7</i>	3.21	0	Non-Responders
<i>NGFRAP1</i>	3.20	0	Non-Responders
<i>PRDX4</i>	3.16	0	Non-Responders
<i>PROK2</i>	3.15	0	Non-Responders
<i>ADAM8</i>	3.12	0	Non-Responders
<i>BCL6</i>	3.12	0	Non-Responders
<i>NFKBIA</i>	3.07	0	Non-Responders
<i>TGFBR3</i>	3.05	0	Non-Responders
<i>COL5A1</i>	3.01	0	Non-Responders
<i>ILF2</i>	3.01	0	Non-Responders
<i>ODC1</i>	2.96	0	Non-Responders
<i>GSTM3</i>	2.92	0	Non-Responders
<i>SEMA5A</i>	2.83	0	Non-Responders

Symbol	Non-Responders' FC	Responders' FC	Significantly Altered in Non-Responders, Responders, or Both
<i>ITIH2</i>	2.80	0	Non-Responders
<i>LEAP2</i>	2.77	0	Non-Responders
<i>EXO1</i>	2.76	0	Non-Responders
<i>IGFBP3</i>	2.75	0	Non-Responders
<i>PXMP2</i>	2.69	0	Non-Responders
<i>DHCR24</i>	2.64	0	Non-Responders
<i>CTNNAL1</i>	2.61	0	Non-Responders
<i>AHSG</i>	2.61	0	Non-Responders
<i>BFAR</i>	2.58	0	Non-Responders
<i>TREM1</i>	2.50	0	Non-Responders
<i>GFPT2</i>	2.50	0	Non-Responders
<i>CYC1</i>	2.49	0	Non-Responders
<i>C4A</i>	2.48	0	Non-Responders
<i>HAS2</i>	2.48	0	Non-Responders
<i>IMPDH2</i>	2.44	0	Non-Responders
<i>LILRA3</i>	2.42	0	Non-Responders
<i>COL1A2</i>	2.40	0	Non-Responders
<i>CSF1R</i>	2.38	0	Non-Responders
<i>TFF1</i>	2.38	0	Non-Responders
<i>FCGR3B</i>	2.33	0	Non-Responders
<i>NQO1</i>	2.30	0	Non-Responders
<i>TROAP</i>	2.28	0	Non-Responders
<i>LILRB1</i>	2.20	0	Non-Responders
<i>FST</i>	2.08	0	Non-Responders
<i>PSMB5</i>	2.00	0	Non-Responders
<i>GBP2</i>	1.84	0	Non-Responders
<i>PDCD8</i>	1.81	0	Non-Responders
<i>NCR2</i>	-0.34	0	Non-Responders
<i>ZNF144</i>	-0.47	0	Non-Responders
<i>FAIM2</i>	-0.66	0	Non-Responders
<i>HSPA5</i>	-0.70	0	Non-Responders
<i>IL1F8</i>	-0.99	0	Non-Responders
<i>SLC4A7</i>	-1.28	0	Non-Responders
<i>P2RXL1</i>	-1.33	0	Non-Responders
<i>ENG</i>	-1.79	0	Non-Responders
<i>EGF</i>	-2.12	0	Non-Responders
<i>ISG20</i>	-2.29	0	Non-Responders
<i>GLA</i>	-3.01	0	Non-Responders

<b>Symbol</b>	<b>Non-Responders' FC</b>	<b>Responders' FC</b>	<b>Significantly Altered in Non-Responders, Responders, or Both</b>
<i>NRAS</i>	-3.18	0	Non-Responders
<i>MAPK11</i>	-3.48	0	Non-Responders
<i>SLC44A1</i>	-4.75	0	Non-Responders
<i>RAB2</i>	-5.78	0	Non-Responders
<i>MYC</i>	-6.47	0	Non-Responders
<i>RB1</i>	-6.56	0	Non-Responders
<i>ATRN</i>	-9.17	0	Non-Responders
<i>VAV3</i>	-9.87	0	Non-Responders
<i>AP1S1_HUMAN</i>	-12.18	0	Non-Responders
<i>HYOU1</i>	-13.49	0	Non-Responders
<i>FADD</i>	-14.33	0	Non-Responders
<i>PPP5C</i>	-16.63	0	Non-Responders
<i>UBE2N_HUMAN</i>	-19.34	0	Non-Responders
<i>GTF2F1</i>	-21.66	0	Non-Responders
<i>SLC20A2</i>	-59.69	0	Non-Responders
<i>VCL</i>	-104.18	0	Non-Responders
<i>CD163</i>	0	4.21	Responders
<i>MAL2</i>	0	3.79	Responders
<i>CLDN3</i>	0	3.17	Responders
<i>RBBP7</i>	0	2.79	Responders
<i>CLU</i>	0	2.49	Responders
<i>ASS</i>	0	2.42	Responders
<i>HLA-DRB1</i>	0	2.41	Responders
<i>GAPD</i>	0	2.25	Responders
<i>NMU</i>	0	2.13	Responders
<i>ID1</i>	0	1.97	Responders
<i>MYBL2</i>	0	1.89	Responders
<i>TNC</i>	0	1.85	Responders
<i>TGFB111</i>	0	1.79	Responders