

Supplementary Material

LPS response is impaired by urban fine particulate matter

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Table S1: Red blood cell count, fibrinogen (mg/dL) and platelet (1000/mm³) quantification.

	Control	PM	LPS	PM+LPS	LPS nebulization	PM2.5 exposure	Interaction
Erythrocytes (millions/mm³)	9.57 (1.02)	8.8 (0.88) ^b	10.0 (0.46)	8.87 (0.82) ^b	ns	$p \leq 0.0001$	$p = 0.018$
Hemoglobin (g/dL)	15.8 (1.5)	14.5 (1.5) ^b	16.8 (1.0)	15.1 (1.7) ^b	ns	$p = 0.001$	ns
Mean corpuscular volume – MCV (fL)	48.15 (0)	47.3 (1) ^c	48.15 (1)	50 (1)	$p = 0.009$	ns	$p = 0.008$
Mean corpuscular hemoglobin – MCH (pg)	16.5 (0.3)	16.3 (0.4)	16.45 (0.6)	17.3 (0.4)	ns	ns	ns
Mean corpuscular hemoglobin concentration – MCHC(g/dL)	34.3 (0.5)	34.6 (0.8)	34.2 (0.9)	34.6 (0.3)	ns	ns	ns
Red Cell Distribution Width (%)	15.25 (0)	15.4 (1)	15.55 (1)	16.3 (1)	ns	ns	ns
Hematocrit (%)	46.1 (4.9)	42.2 (4.1) ^b	18.7 (1.8)	43.7 (3.1) ^b	ns	$p = 0.001$	ns
Fibrinogen (mg/dL)	285 (70)	155 (70) ^a	390 (0) ^{ab}	190 (0) ^{ab}	$p \leq 0.0001$	$p \leq 0.0001$	$p = 0.023$
Platelets (1000/mm³)	1198 (192)	787 (362) ^{ab}	1334 (333)	1000 (269) ^{ab}	ns	$p \leq 0.0001$	ns

Data are expressed in median (interquartile range). ns: not significant. ^a $p > 0.05$ compared to the control group. ^b $p > 0.05$ compared to the LPS group. ^c $p > 0.05$ compared to the PM+LPS.

Table S2: Primer Sequences

Gene	Forward Sequence	Reverse Sequence
RPL13a	AACCTTTGGTCCCCACTTCCCT	TCCTCAAGACCAACGGACTCCT
TLR- 2	CAGCTGGAGAACTCTGACCC	CAAAGAGCCTGAAGTGGGAG
TLR- 4	TCATGGCACTGTTCTTCTCCT	CATCAGGGACTTTGCTGAGTT
MyD88	CACCTGTGTCTGGTCCATTG	AGGCTGAGTGCAAACCTTGGT
FOXp3	TTCATGCATCAGCTCTCCAC	CTGGACACCCATTCCAGACT

RPL13a: Ribosomal Protein L13a. TLR: Toll-Like Receptor. MyD88: Myeloid differentiation primary response 88. FOXp3: Forkhead box P3.

Table S3: Immunohistochemistry standards

	Antibody	Concentration
Neutrophils	Anti – MPO (Abcam – cod. ab9535)	1:750
Lymphocytes	Anti - CD3 (Serotec – cod. MCA1477)	1:800
Macrophages	Anti - MAC 2 (Cedarlane – cod. CL8942AP)	1:100,000
IL-1 beta	Anti – IL-1beta (Santa Cruz – sc-7887)	1:400
IL-4	Anti – IL-4 (Santa Cruz – sc-1260)	1:1000
IL-5	Anti – IL-5 (Santa Cruz – sc-1265)	1:1000
IL-6	Anti – IL-6 (Santa Cruz – sc-1265)	1:1500
IL-10	Anti – IL-10 (Santa Cruz - sc-73309)	1:100
IL-17	Anti – IL-17 (Santa Cruz – sc-6077)	1:2000
TNF alpha	Anti – TNF-alpha (Santa Cruz –sc-1348)	1:3000

CD3: Cluster of differentiation 3. IL: Interleukin. MPO: Myeloperoxidase. TNF: Tumor necrosis factor.