# Supplementary Material

## Coarse particulate matter ($PM_{2.5-10}$) in Los Angeles Basin air induces expression of inflammation and cancer biomarkers in rat brains.

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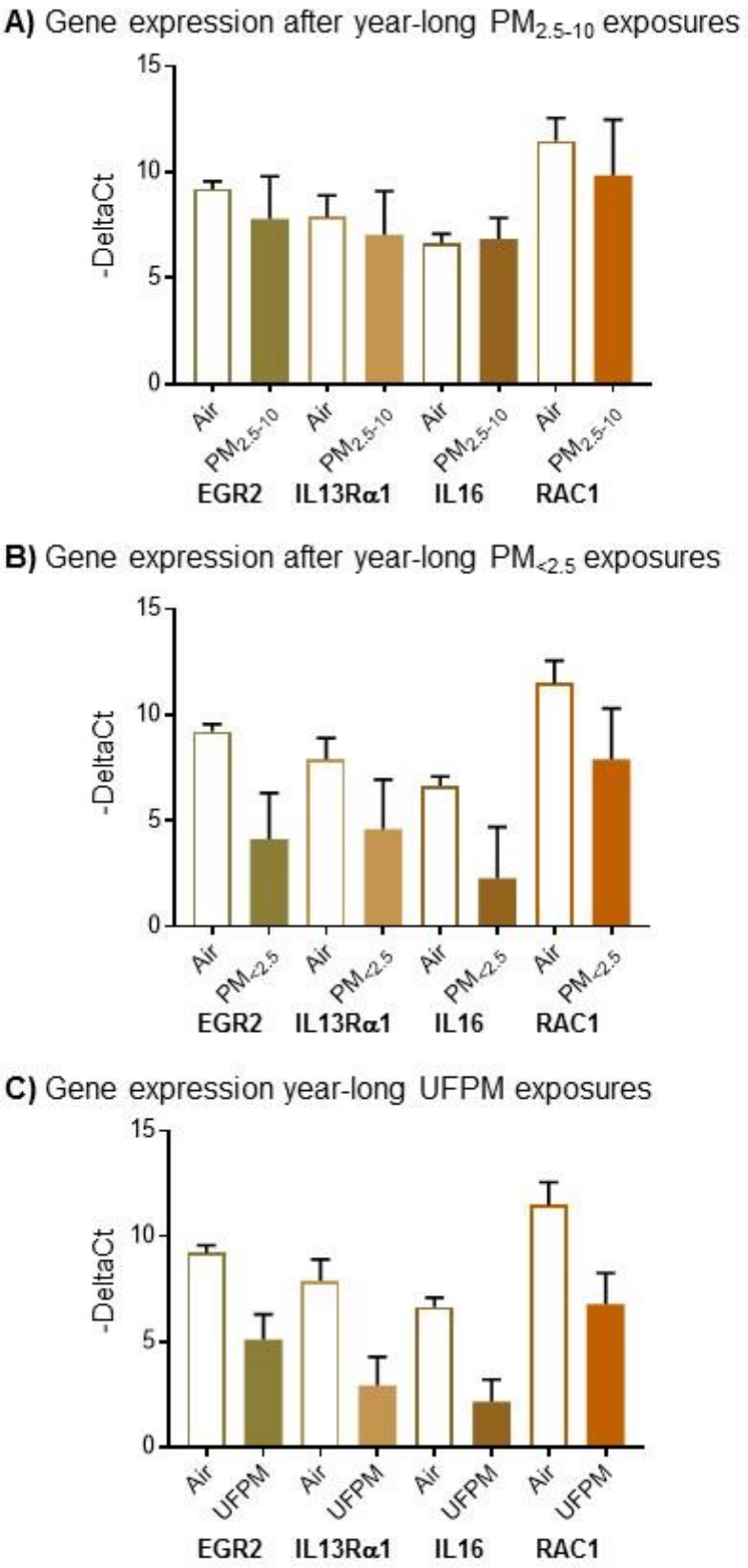


**Supplementary Figure S1.** Expression of genes related to inflammation (EGR2, IL13Rα1, IL16) and cancer (RAC1) in the rat brain after prolonged exposures to air pollution (1 year). No genes are upregulated in the PM vs. filtered air groups. Data are shown as mean + S.E.M.

**Supplementary Table S2.** Mass and composition of PM used in this experiment

| PM Type | UFPM | $PM_{<2.5}$ | $PM_{2.5-10}$ |
|---|---|---|---|
| Median Diameter (nm) | 70 | 700 | 3000 |
| Particle concentration ($\mu g/m^3$) | 63 ± 8 | 149 ± 24 | 58 ± 7 |
| Particle number (particles/$cm^3$ $10^{-3}$) | 65 ± 5 | 67 ± 6 | - |
| EC mass ($\mu g/m^3$) (%) | 5.0 ± 1.1<br>8.0 | 5.8 ± 1.1<br>3.9 | 1.7 ± 0.6<br>2.9 |
| OC mass ($\mu g/m^3$) (%) | 17.3 ± 2.8<br>27.5 | 19.2 ± 2.7<br>12.8 | 11.8 ± 3.5<br>20.3 |

PM mass and concentration used for exposure experiments. Experiments were conducted at the same time as those in [26] and the table was adapted from the aforementioned study. The abbreviations EC indicate elemental carbon and OC organic carbon.