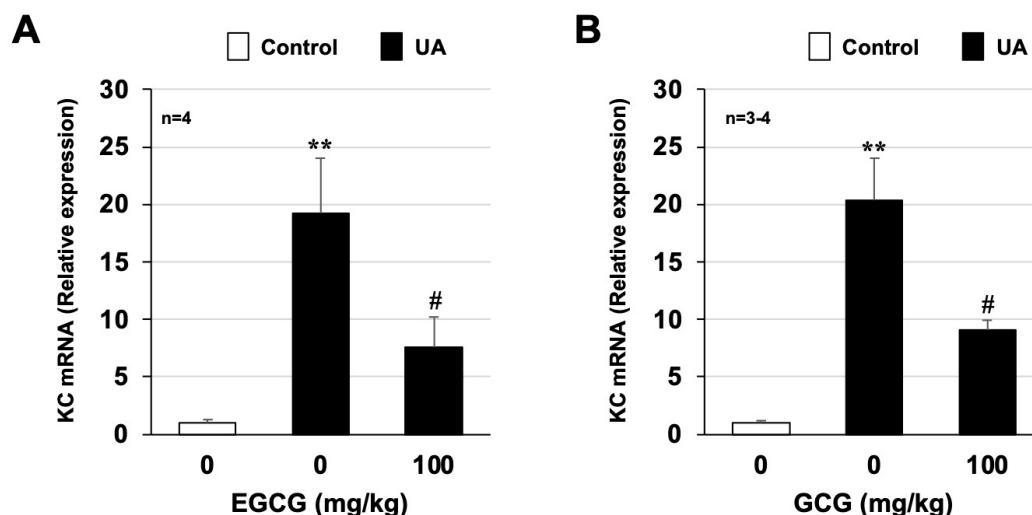
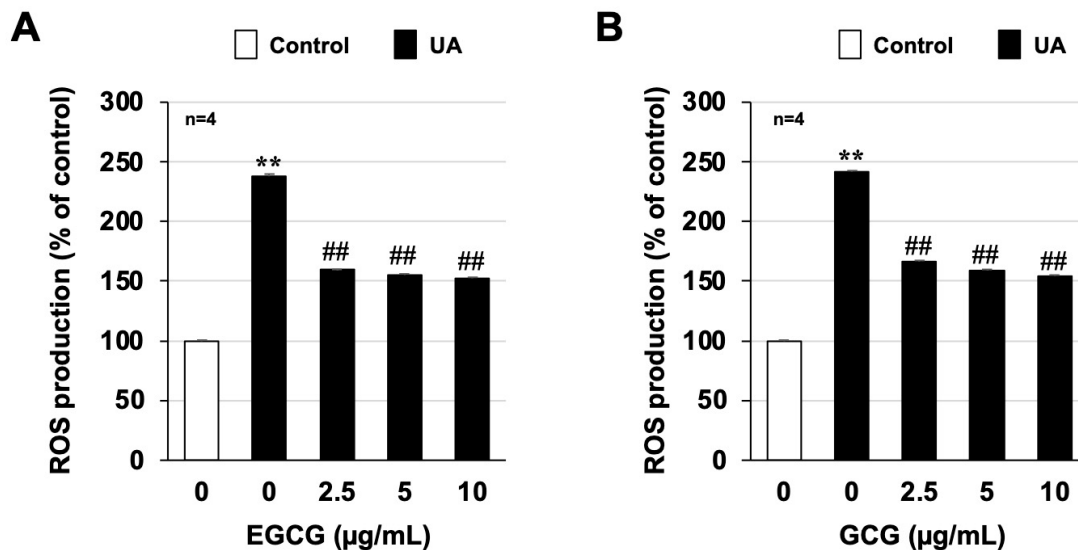


Gene	Primer	Sequence (5' to 3')	Tm
TNF- $\alpha$	Forward	CGTCAGCCGATTTGCTATCT	58.14
	Reverse	CGGACTCCGCAAAGTCTAAG	58.37
IL-1 $\beta$	Forward	GATCCCAAGCAATACCCAAA	55.67
	Reverse	GGGGAAGTCTGCAGACTCAA	59.31
IL-6	Forward	CTGGAGTCACAGAAGGAGTGG	59.73
	Reverse	GGTTTGCCGAGTAGATCTCAA	57.75
Mip-2	Forward	ACCCTGCCAAGGGTTGACTTC	62.56
	Reverse	GGCACATCAGGTACGATCCAG	60.54
Kc	Forward	TGCACCCAAACCGAAGTCAT	60.18
	Reverse	TTGTCAGAAGCCAGCGTTCAC	61.41
Gapdh	Forward	AACCTTGGCATTGTGGAAGG	56.79
	Reverse	ACACATTGGGGGTAGGAACA	58.55

Supplementary Figure S1. Primer sequences used in this study.

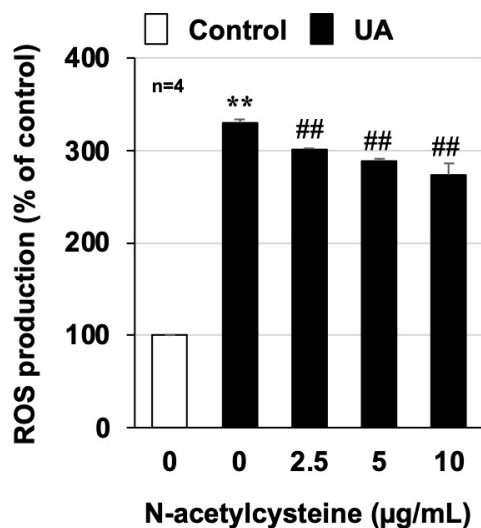


**Supplementary Figure S2. Effect of EGCG on urban aerosol-dependent inflammatory responses.** Male ICR mice were intraperitoneally administered EGCG (100 mg/kg in sterile saline), GCG (100 mg/kg in sterile saline), or sterile saline 1 h before intratracheal administration of urban aerosol particle suspension (1.0 mg/mouse) or sterile saline (Control). Total RNA was extracted from the lungs 24 h after urban aerosol particle suspension administration and subjected to real-time RT-PCR using a specific primer set for the keratinocytes-derived chemokine (*Kc*) gene. Values were normalized to *Gapdh* and are expressed relative to the Control. Values represent the mean  $\pm$  SEM; # $p$  < 0.05; \*\* $p$  < 0.01. (\* vs Control; # vs UA).



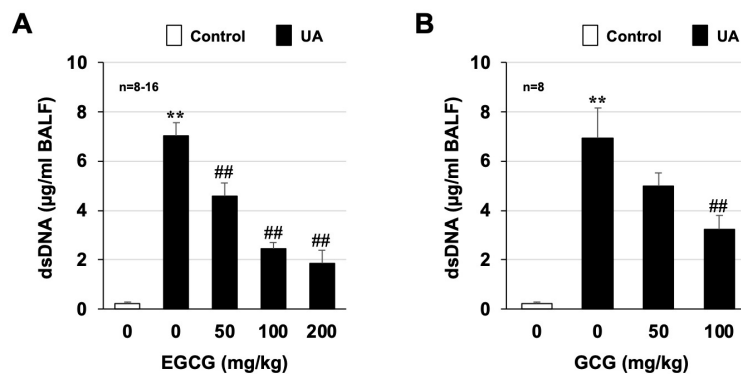
**Supplementary Figure S3. Effects of EGCG or GCG on urban aerosol-induced ROS production in inflammatory cells recovered in BALF.**

Male ICR mice were intratracheally administered urban aerosol particle suspension (1.0 mg/mouse) or sterile saline (Control). BALFs were prepared 24 h after the intratracheal administration. Inflammatory cells recovered from BALF ( $3.0 \times 10^4$  cells/well) were then seeded onto 96 well black plates and pre-cultured with H<sub>2</sub>DCFDA (10 µM) for 60 minutes. The cells were treated with EGCG (2.5–10 µg/mL) or GCG (2.5–10 µg/mL) to the medium. After 24 h, the ROS levels were measured using a microplate reader. Values represent the mean  $\pm$  SEM; \*\* or ##  $p < 0.01$ . (\* vs Control; # vs UA).



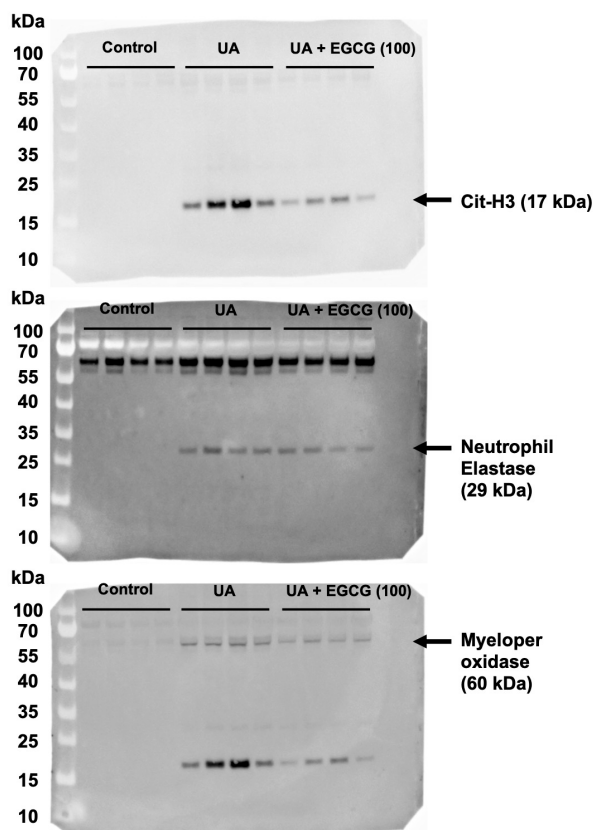
**Supplementary Figure S4. Effect of N-acetylcysteine on urban aerosol-induced ROS production.**

RAW264 cells were pre-cultured with H<sub>2</sub>DCFDA (10 µM) for 60 min. Then, the cells were treated with N-acetylcysteine (2.5–10 µg/mL) prior to the addition of urban aerosols (30 µg/cm<sup>2</sup>) to the medium. After 24 h, the ROS levels were measured using a microplate reader. Values represent the mean  $\pm$  SEM; \*\* or ##  $p < 0.01$ . (\* vs Control; # vs UA).



**Supplementary Figure S5. Effect of EGCG or GCG on urban aerosol-induced neutrophil extracellular trap formation.**

Male ICR mice were intraperitoneally administered EGCG (50–200 mg/kg in sterile saline), GCG (50–100 mg/kg in sterile saline), or sterile saline 1 h before intratracheal administration of urban aerosol particle suspension (1.0 mg/mouse) or sterile saline (Control). BALFs were prepared 24 h after the intratracheal administration. The amount of double-stranded DNA (dsDNA) present in the BALF was determined using the Quant-iT™ PicoGreen® dsDNA Assay Kits according to the manufacturer's protocol. Values are the mean ± SEM; \*\* or ## $p < 0.01$  (\* vs Control; # vs UA).



The MPO bands were identified with reference to this paper.

Recombinant ACE2 protein protects against acute lung injury induced by SARS-CoV-2 spike RBD protein. *Crit Care*. 2022; 26: 171.

**Supplementary Figure S6. Original images for Western blotting analysis.**