Table S1. Meteorological and gaseous data measured by the EPA Guting air quality monitoring stations during the study period

Meteorological and gaseous data (unit)	$Mean \pm SD (Min\sim Max)$
Temperature (°C)	$20.2 \pm 5.0 (5.4 \sim 31.1)$
Relative humidity (%)	$80.8 \pm 9.6 (54.9 \sim 96.1)$
NO_2 (ppb)	$21.6 \pm 6.3 \ (10.0 \sim 50.0)$
$SO_2(ppb)$	$2.6 \pm 1.1 \ (0.9 \sim 8.3)$
O ₃ (ppb)	$26.3 \pm 10.7 (2.0 \sim 84.3)$

NO₂: nitrogen dioxides; SO₂: sulfur dioxide; O₃: ozone.

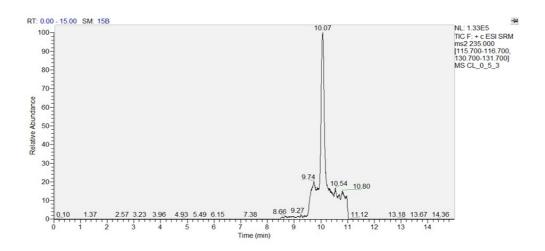


Figure S1. Spectrums of MDA analysed by LC-MS/MS.

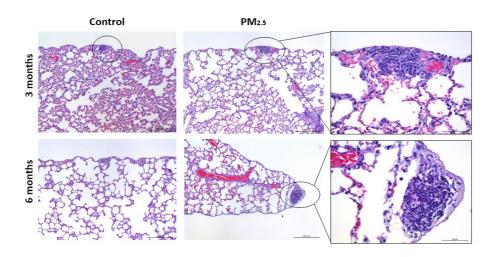


Figure S2. Effects (3- and 6-months exposure) of $PM_{2.5}$ on the inflammatory infiltration of lungs in SH rats. Subpleural alveolar infiltration of mononuclear cells was observed in the lungs after 3- and 6-months exposure of HEPA and/or $PM_{2.5}$.

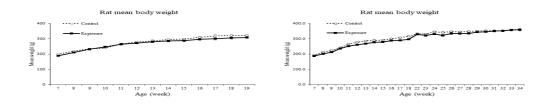


Figure S3. Alteration in body weight of SH rats between HEPA (control) and $PM_{2.5}$ (exposure) groups after 6-months exposure.

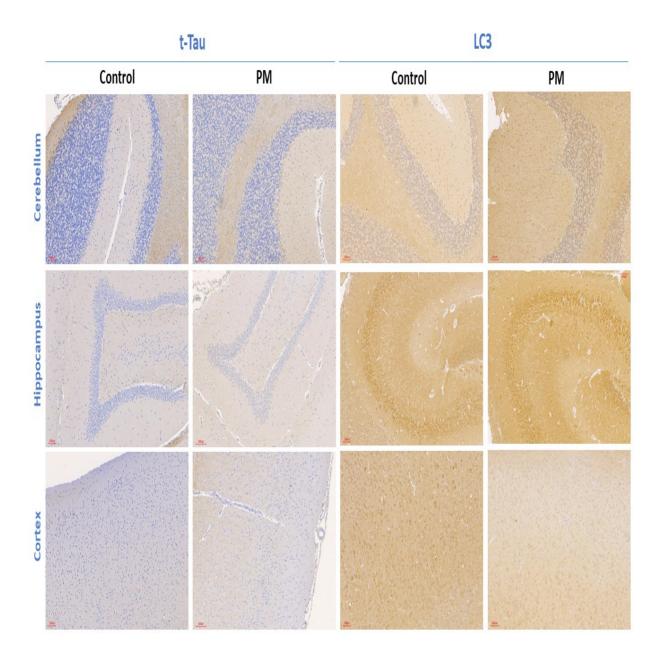


Figure S4. IHC images of total Tau (t-Tau) in the cerebellum, hippocampus, and cortex of SH rats after 6 months of exposure to HEPA (control) and $PM_{2.5}$ (exposure). Scar bar is 50 μ m.

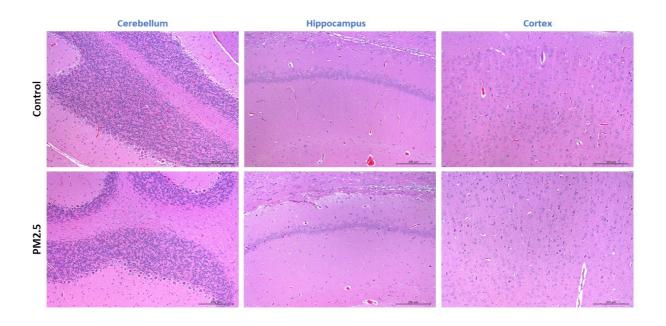


Figure S5. Chronic effects (6-months exposure) of $PM_{2.5}$ on the histological changes of cerebellum, hippocampus, and cortex in SH rats. scale bar: 200 μ m