

Supplementary material

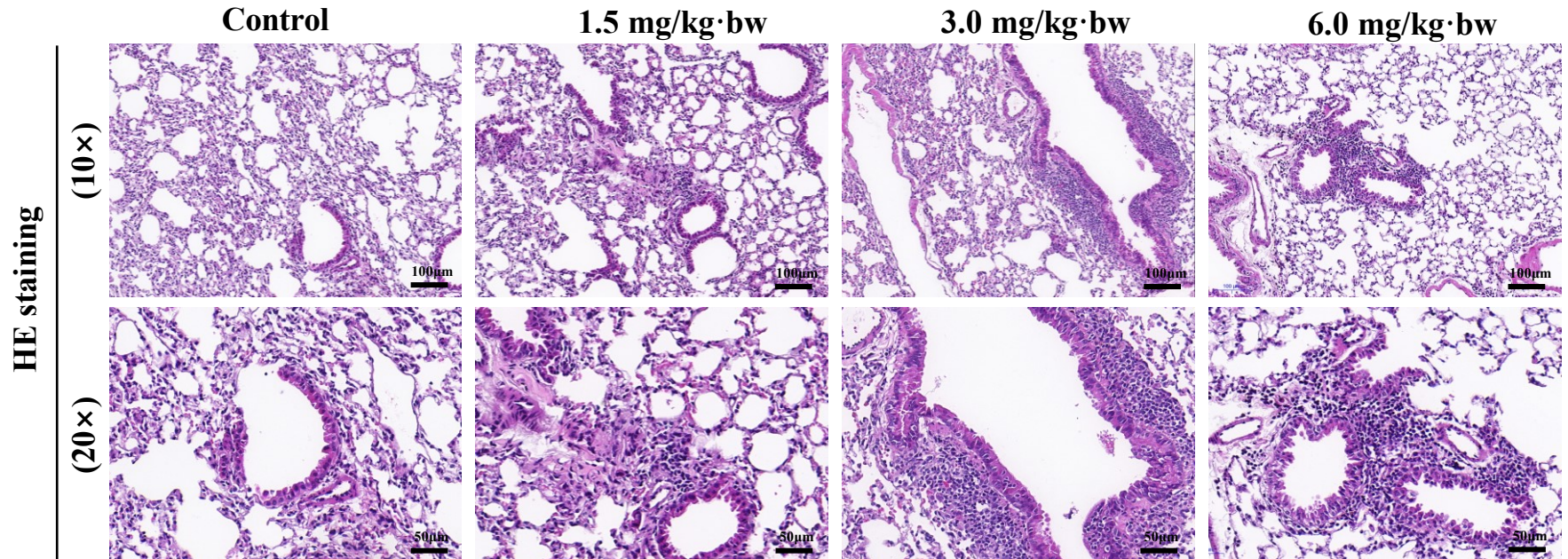


Fig. S1. Histopathology alterations of lung tissues after intratracheal instillation exposure to SiNPs in ApoE^{-/-} mice. n = 4 per group.

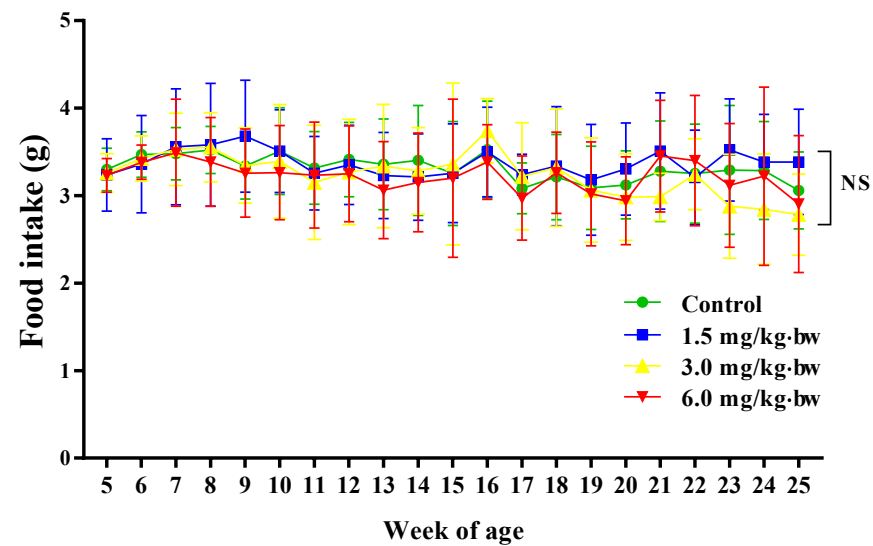
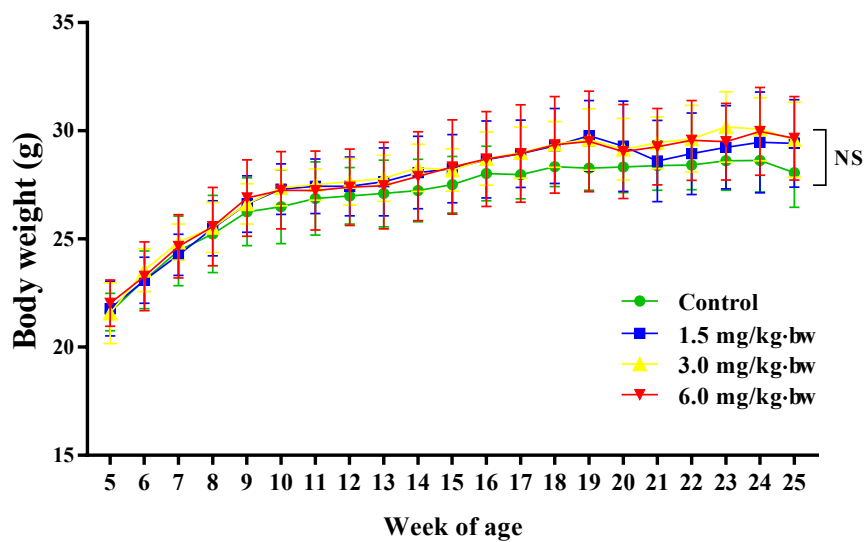


Fig. S2 The body weight and food intake trends of mice .The body weight and food intake of the mice was measured weekly during the experiment. Data are expressed as means \pm SD, n = 9.

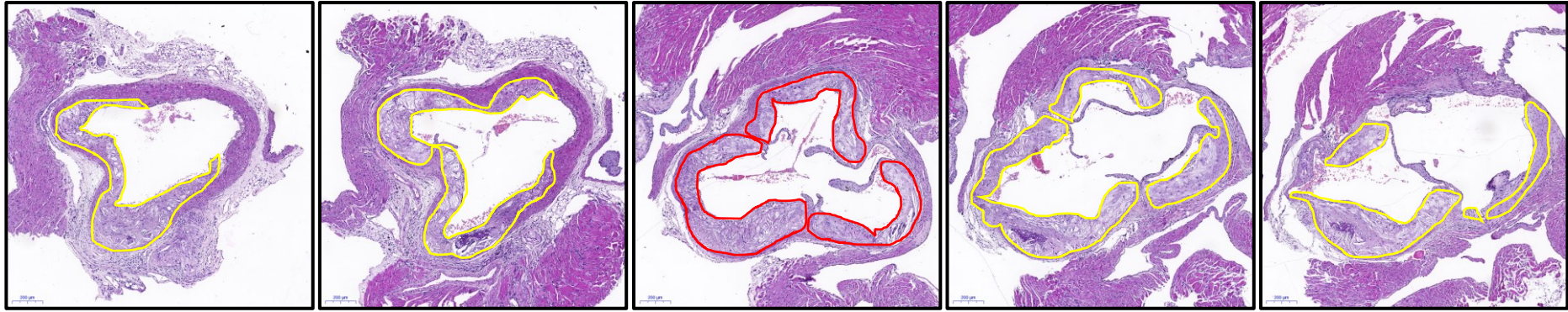


Fig. S3 Method for analyzing plaque area in aortic root. Regional errors in lesion size were avoided by acquiring sequential sections throughout of the entire aortic root. The lesion with the largest area was used for statistical analysis.

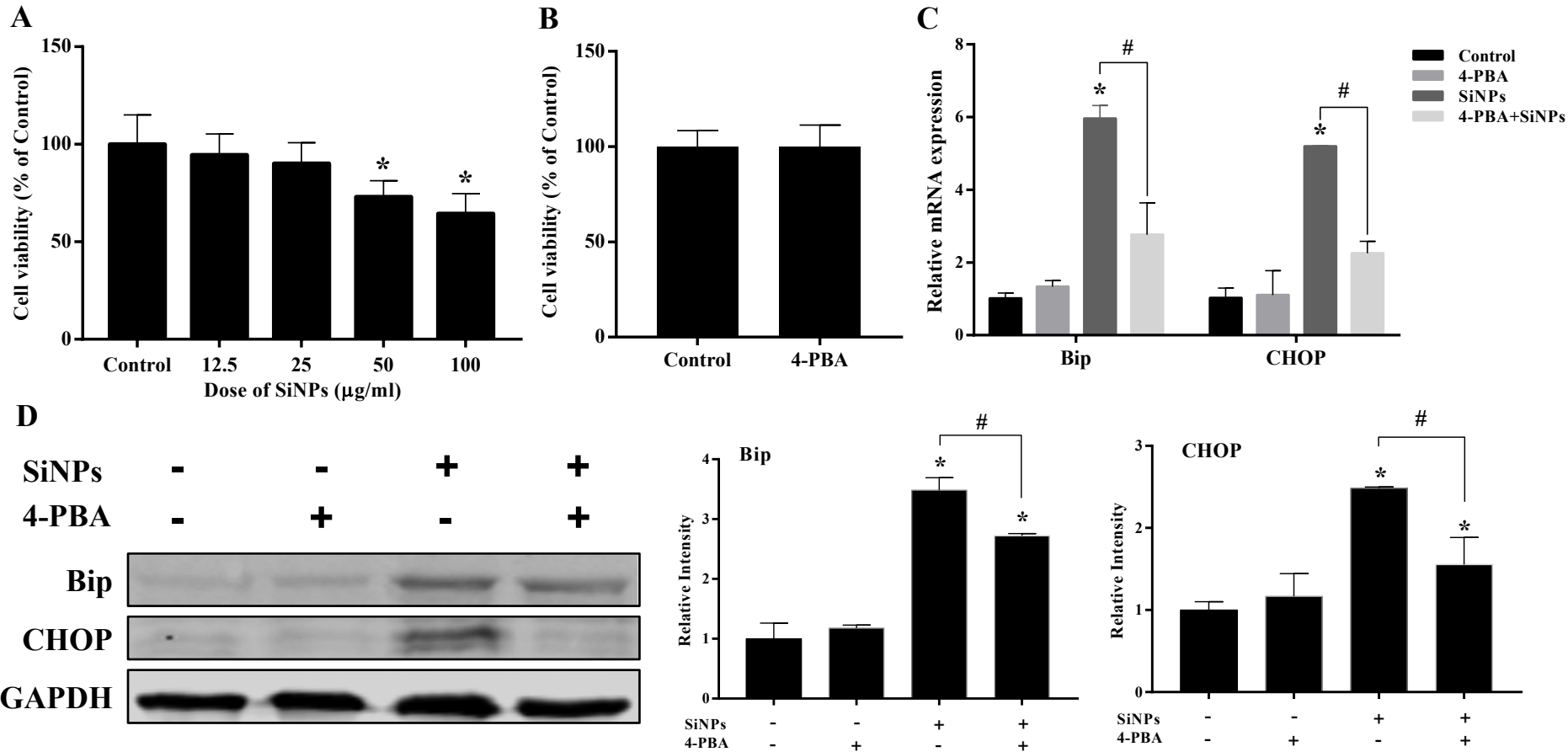


Fig. S4 4-PBA inhibited the ER stress induced by SiNPs in RAW267.4 cells. (A) Cell viability was determined by MTT assay after 24 hours-treatment with SiNPs. (B) Cell viability was determined after 4-PBA pretreatment (3 mM, 6 hours). (C, D) 4-PBA inhibited up-regulation of Bip and CHOP in RAW264.7 cells induced by SiNPs. * $p < 0.05$ vs Control, # $p < 0.05$ vs SiNPs treatment group. Data are expressed as means \pm SD of three independent experiments.

Table S1. Real-time PCR Primer Pairs

Gene.	Description	Primer sequence
GRP78/Bip	F	GTGTGTGAGACCAGAACCGT
	R	ACAGTGAACTTCATCATGCCG
CHOP	F	CCAGGAAACGAAGAGGAAGA
	R	CTTTGGGATGTGCGTGTG
CD36	F	GTGCTCTCCCTTGATTCTGC
	R	CTCCAAACACAGCCAGGAC
SRA	F	AGTCAGTGGATGGTGGGAGT
	R	GGAAGCCTGGTATTGTCTGG
SRB1	F	GCCTGTTTGTGGGATGAA
	R	AGTCCGTTCCATTTGTCCAC
ABCA1	F	GGAAGGCACTCAAGCCACT
	R	CAGCCAACCTCCTGAAAGGTC
ABCG1	F	TACCTGGATTTTCATCGTCCTG
	R	AATGTCTGCTTTGCCTCGTT
ACAT1	F	AATGGACTCGGGCTGATTG
	R	AACCTCCGTCACTGTCTGCT
β-actin	F	GAGACCTTCAACACCCCAGC
	R	ATGTCACGCACGATTTCCC

Abbreviation: PCR, polymerase chain reaction.