

Table SI. Specific primers for reverse transcription-quantitative PCR and guide RNA sequences.

Gene name	Primer sequence (5'-3')
Mouse GPX4	F: TGTGCATCCCGCGATGATT
	R: CCCTGTACTTATCCAGGCAGA
Mouse ACSL4	F: CTCACCATTATATTGCTGCCTGT
	R: TCTCTTTGCCATAGCGTTTTTCT
Mouse IL-6	F: ACAAAGCCAGAGTCCTTCAGAGAG
	R: TTGGATGGTCTTGGTCCTTAGCCA
Mouse TNF- $\alpha$	F: TCCCCAAAGGGATGAGAAG
	R: CACTTGGTGGTTTGCTACGA
Mouse IL-1 $\beta$	F: ACTGTGAAATGCCACCTTTTG
	R: TGTTGATGTGCTGCTGTGAG
Mouse MCP-1	F: GCTCTCTCTTCCTCCACCAC
	R: ACAGCTTCTTTGGGACACCT
Mouse HO-1	F: AAGCCGAGAATGCTGAGTTCA
	R: GCCGTGTAGATATGGTACAAGGA
Mouse PTGS2	F: TTCAACACACTCTATCACTGGC
	R: AGAAGCGTTTGCGGTACTCAT
Mouse SLC7A11	F: GGCACCGTCATCGGATCAG
	R: CTCCACAGGCAGACCAGAAAA
Mouse NQO1	F: AGGATGGGAGGTA CT CGAATC
	R: AGGCGTCCTTCCTTATATGCTA
Mouse $\beta$ -actin	F: GAGACCTTCAACACCCAGC
	R: ATGTCACGCACGATTTCCC
Mouse GSK3 $\beta$ sgRNA-1	F: CACCGCTTGCAGCTCTCCGCAAAGG
	R: AAACCCTTTGCGGAGAGCTGCAAGC
Mouse GSK3 $\beta$ sgRNA-2	F: CACCGTCTCGATGGCAGATTCCAA
	R: AAAGTTGGAATCTGCCATCGAGAC

F, forward; R, reverse; GPX4, glutathione peroxidase 4; ACSL4, Acyl-CoA synthetase long-chain family member 4; MCP-1, monocyte chemoattractant protein-1; HO-1, heme oxygenase-1; PTGS2, prostaglandin-endoperoxide synthase 2; SLC7A11, solute carrier family 7 member 11; NQO1, NAD(P)H quinone dehydrogenase 1; GSK3 $\beta$ , glycogen synthase kinase 3 $\beta$ ; sgRNA, single guide RNA.

Table SII. Antibodies for western blotting.

Proteins	Primary antibodies	Secondary antibodies
KIM-1	1:1,000 (cat. no. AF1817; R&D Systems, Inc.)	Anti-Goat IgG (cat. no. A0108; Beyotime Institute of Biotechnology)
NGAL	1:1,000 (cat. no. ab63929; Abcam)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
Phospho-GSK-3 $\beta$ (Ser9)	1:1,000 (cat. no. 9323; Cell Signaling Technology, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
GSK3 $\beta$	1:1,000 (cat. no. 22104-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
NRF2	1:1,000 (cat. no. 16396-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
Cleaved caspase3	1:1,000 (cat. no. 9664; Cell Signaling Technology, Inc.)	HRP-Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
Caspase-3	1:1,000 (cat. no. 9662; Cell Signaling Technology, Inc.)	HRP-Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
RIP3	1:1,000 (cat. no. 68786-2-Ig; Proteintech Group, Inc.)	Anti-Mouse IgG (cat. no. A0206; Beyotime Institute of Biotechnology)
Phospho-RIP3 (Ser232)	1:1,000 (cat. no. 87148-1-RR; Proteintech Group, Inc.)	HRP-Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
MPO	1:1,000 (cat. no. AF3667; R&D Systems, Inc.)	Anti-Goat IgG (cat. no. A0108; Beyotime Institute of Biotechnology)
GPX4	1:1,000 (cat. no. 14432-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
ATPB	1:1,000 (cat. no. 17247-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
SOD2	1:1,000 (cat. no. 24127-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
HO-1	1:1,000 (cat. no. 10701-1-AP; Proteintech Group, Inc.)	Anti-Rabbit IgG (cat. no. A0208; Beyotime Institute of Biotechnology)
$\beta$ -actin	1:1,000 (cat. no. 66009-1-Ig; Proteintech Group, Inc.)	Anti-Mouse IgG (cat. no. A0206; Beyotime Institute of Biotechnology)

GPX4, glutathione peroxidase 4; SOD2, superoxide dismutase 2; HO-1, heme oxygenase 2; MPO, myeloperoxidase; NGAL, neutrophil gelatinase-associated lipocalin.

Table III. Antibodies used in immunofluorescence and immunohistochemistry.

Proteins	Primary antibodies	Secondary antibodies
NRF2	1:100 (cat. no. 16396-1-AP; Proteintech Group, Inc.)	Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 488 (cat. no. A-21206; Thermo Fisher Scientific, Inc.)
Lotus tetragonolobus lectin	1:200 (cat. no. FL-1321; Vector Laboratories, Inc.)	
4-hydroxynonenal	1:100 (cat. no. A26085; ABclonal Biotech Co., Ltd.)	Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 488 (cat. no. A-21206; Thermo Fisher Scientific, Inc.)
F4/80	1:100 (cat. no. 70076; Cell Signaling Technology, Inc.)	SignalStain® Boost IHC Detection Reagent (HRP, Rabbit) (cat. no. 8114S; Cell Signaling Technology, Inc.)