

Table S1. Antibodies used in this study.

| Antibody | Manufacture (catalog number) | Source | Applications |
|------------------|------------------------------|--------|--------------|
| GPX4 | Boster (BM5231) | Rabbit | WB |
| GPX4 | Affinity (DF6701) | Rabbit | IHC |
| ACSL4 | Affinity (DF12141) | Rabbit | WB |
| ACSL4 | Proteintech (22401-1-AP) | Rabbit | IHC |
| LPCAT3 | Abclonal (A17604) | Rabbit | WB |
| ALOX12 | Santa Cruz (sc-365194) | Mouse | WB |
| ALOX15 | Abclonal (A6864) | Rabbit | WB |
| β -Actin | Abclonal (AC026) | Rabbit | WB |
| 4-HNE | Abcam (ab48506) | Rabbit | IHC |
| CD31 | Servicebio (GB12063) | Mouse | IF |
| α -SMA | Servicebio (GB111364) | Rabbit | IF |
| α -SMA | Boster (BM0002) | Mouse | WB |
| eNOS | Affinity (AF0096) | Rabbit | WB, IF |
| p-eNOS | Affinity (AF3247) | Rabbit | WB, IF |
| ROCK1 | Proteintech (21850-1-AP) | Rabbit | WB |
| ROCK2 | Boster (PB0428) | Rabbit | WB |
| RhoA | Proteintech (10749-1-AP) | Rabbit | WB |
| nNOS | Servicebio (GB11145) | Rabbit | IF |
| TGF- β 1 | Affinity (AF1027) | Rabbit | WB |
| Smad2/3 | Cell Signaling (D7G7) | Rabbit | WB |
| p-Smad2/3 | Cell Signaling (D27F4) | Rabbit | WB |
| Collagen type I | Santa Cruz (sc-293182) | Mouse | WB |
| Collagen type IV | Proteintech (55131-1-AP) | Rabbit | WB |