Materials and Methods Dot-blot

Collagen I solution was prepared and mixed with 4-hydroxy-2-nonenal (HNE) in concentrations 1  $\mu$ M, 5  $\mu$ M, 10  $\mu$ M, 25  $\mu$ M, 50  $\mu$ M, 75  $\mu$ M, and 100  $\mu$ M according to coating protocol and was left to bind for an hour at room temperature. Following incubation, 100  $\mu$ L of each mixture was loaded on the nitrocellulose membrane (Bio-Rad Laboratories, Hercules, CA, USA) and washed twice with PBS before the addition of the blocking solution, 2% (w/v) nonfat dry milk (Bio-Rad Laboratories, Hercules, CA, USA) in PBS for an hour. The membrane was then incubated with monoclonal mouse anti-HNE-histidine antibody (1:100; clone HNE 1g4, a generous gift of prof. G. Waeg) overnight at room temperature. After incubation with secondary antibody (1:25; EnVision, Dako), immunoreactive bands were visualized using the 3, 3'-diaminobenzidine (DAB; Dako).



Figure S1. Dot blot of 4-hydroxy-2-nonenal (HNE)-collagen I conjugates.