



**SUPPLEMENTARY FIG. S7. Resveratrol protects mice against hepatic injury by stimulation of mitochondrial biogenesis through eNOS dependent pathway.** (A–H) WT and eNOS<sup>-/-</sup> mice, were injected with resveratrol in the presence of LPS treatment, with or without SnPP pretreatment as indicated. Liver tissues were excised and analyzed for mitochondrial biogenesis in mice. (A) Expression of PGC-1 $\alpha$ , NRF-1, and/or TFAM mRNA were measured by RT-PCR (B) A long mtDNA fragment (8636bp), the mtDNA content was measured by Expand Long Template PCR. Relative amounts of mtDNA and nDNA (18s) contents were compared. (C) The expression level of CI (complex I), CIII (complex III), and CIV (complex IV) protein was analyzed by western blotting (D) CS activity. (E) Mitochondrial mass was assessed by using MitoTracker Red CMXRos staining (red) in liver sections. Fluorescent-stained were analyzed by confocal microscopy. (F) TNF $\alpha$  and IL-1 $\beta$  gene expression was determined by real-time RT-PCR. Hepatic injury was assessed by determining liver tissue myeloperoxidase (MPO) levels (G) and serum levels of ALT (H). All experiments were performed in triplicate ( $n=5$ /group), and representative data are shown. Quantitative data are expressed as mean  $\pm$  SEM. \* $p < 0.05$  compared with the un-injected control group; † $p < 0.05$  relative to mice injected only with LPS; # $p < 0.05$  relative to mice injected with LPS+resveratrol. CS, citrate synthase; ALT, alanine aminotransferase; LPS, lipopolysaccharides; nDNA, nuclear DNA.