



SUPPLEMENTARY FIG. S4. Resveratrol-induced mitochondrial biogenesis and HO-1 expression are mediated by an eNOS-cGMP-dependent pathway. (A–C) HepG2 cells were treated with 1 μ M resveratrol for the indicated time intervals and with the indicated concentrations of resveratrol for 12 h. (D, E) AML12 cells were treated with 1 μ M resveratrol for 12 h after pretreatment in the absence or presence of L-NAME (1 mM) or ODQ (1 μ M) for 1 h. (F, G) WT and iNOS^{-/-} mice, resveratrol (20 mg/kg/day) was given once daily for 7 days by i.p. injection. Liver tissues were excised and analyzed for mitochondrial biogenesis in mice. (A) eNOS mRNA was analyzed by real-time RT-PCR. (B) eNOS protein levels were measured by western blotting. (C) NO production was observed by using Griess reagents. (D) PGC-1 α , NRF-1, and TFAM mRNA levels. (E) CI (complex I), CIII (complex III), and CIV (complex IV) protein levels. (F) mtDNA content. (G) Mitochondrial mass was assessed by using MitoTracker Red CMXRos staining (red) in liver sections. Experiments were performed thrice independently, and representative data are shown. Data are expressed as mean \pm SEM. * p < 0.05 compared to control group (or un-injected control group). eNOS, endothelial nitric oxide synthase; L-NAME, *N*-nitro-L-arginine methyl ester hydrochloride.