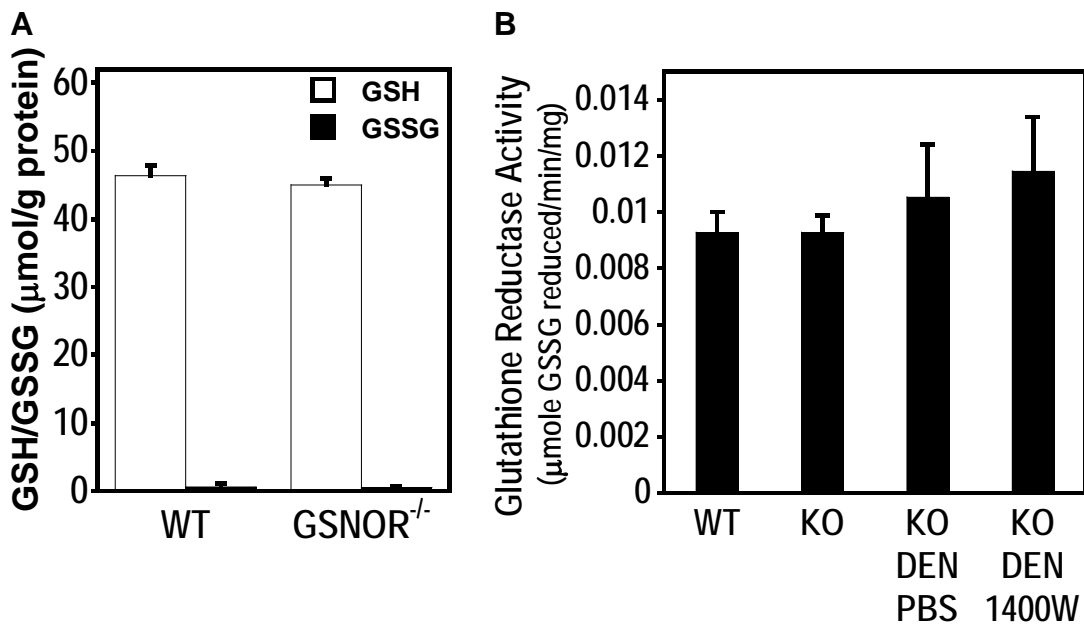
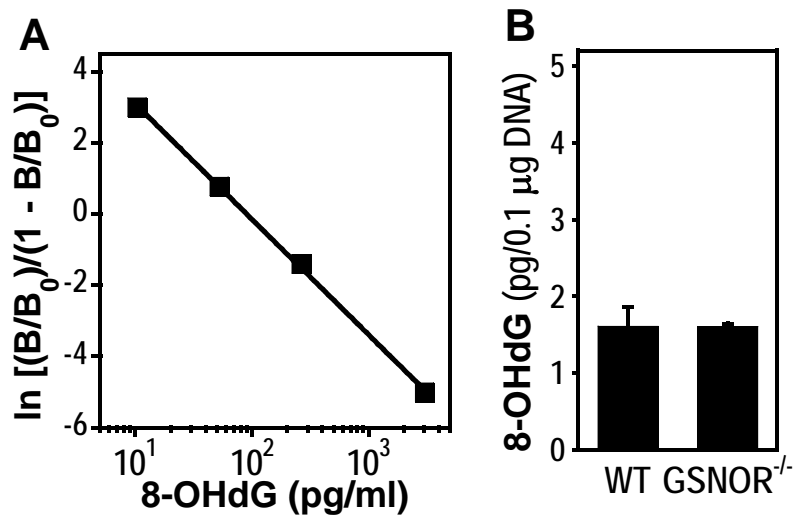


**Supplemental Figure 1. Lack of effect of 1400W on HCC cell growth.** Huh-7 HCC cells obtained from American Type Culture Collection were cultured in triplicates in 96-well plates in the presence of 0 (Vehicle), 4, and 20 μM of 1400W for 24 and 48 hours. Cell numbers were measured using CellTiter-Blue Reagent (Promega). The data (mean ± SE) are representative of two independent experiments.

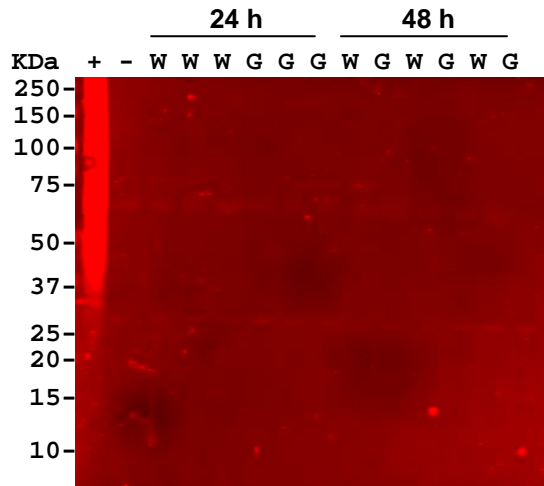


**Supplemental Figure 2. Liver glutathione and glutathione reductase.**

A, Comparable levels of glutathione (GSH) and glutathione disulfide (GSSG) in the livers of wild-type and GSNOR<sup>-/-</sup> mice. Glutathione levels are normalized with protein contents in the liver homogenates. Data (mean ± SD) are from 3 pairs of WT and GSNOR<sup>-/-</sup> mice matched for age (3-6 months), gender and weight. B, Glutathione reductase activity in livers of unchallenged wild-type or GSNOR<sup>-/-</sup> (KO) mice, or DEN-challenged KO mice with additional injection of PBS or 1400W. The data (mean ± SD) are from 4 mice in each group.



**Supplemental Figure 3. Measurement of 8-OHdG.** A, Experimental standard curve using 8-OHdG (in 50  $\mu$ l) supplied with the 8-OHdG assay kit. B, 8-OHdG levels in livers 48 h after DEN treatment. Genomic DNA was purified and hydrolyzed to nucleotides for 8-OHdG analysis. Two  $\mu$ g of DNA (in 50  $\mu$ l) were analyzed for each sample. The data (mean  $\pm$  SE) are from three pairs of wild-type and GSNOR<sup>-/-</sup> mice.



**Supplemental Figure 4. Immunoblot analysis of protein tyrosine nitration in livers of DEN-treated wild-type (W) or GSNOR<sup>-/-</sup> (G) mice.** Peroxynitrite-treated and untreated liver lysates from an unchallenged wild-type mouse are used as positive (+) and negative (-) controls, respectively. Each lane represents an individual mouse. The data are representative of two independent experiments.