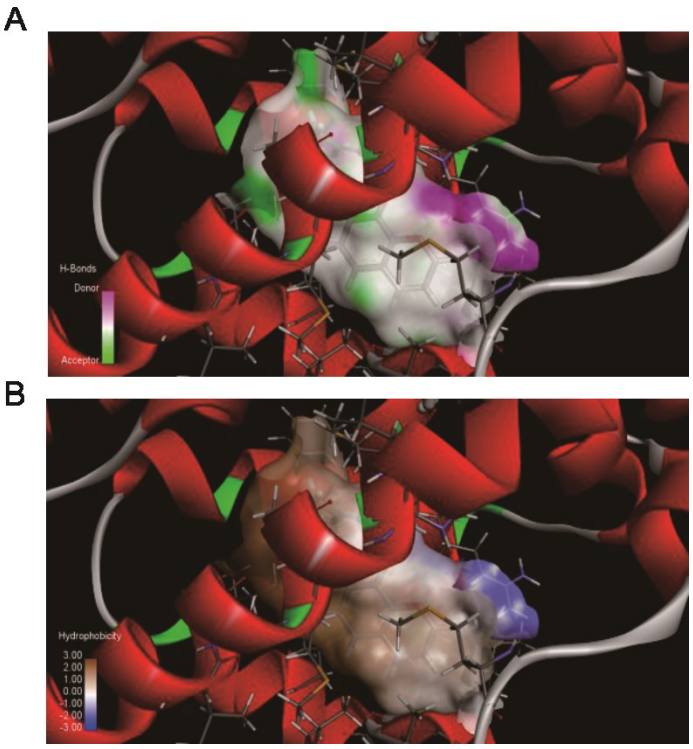
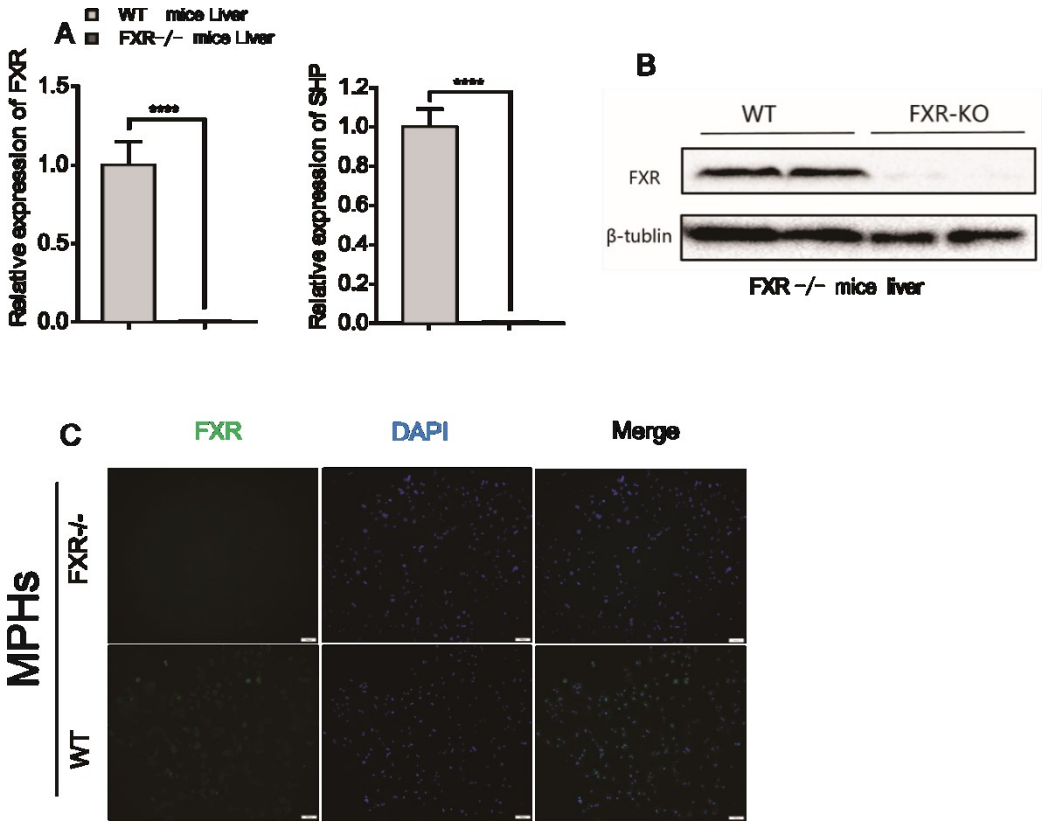
Supplement:



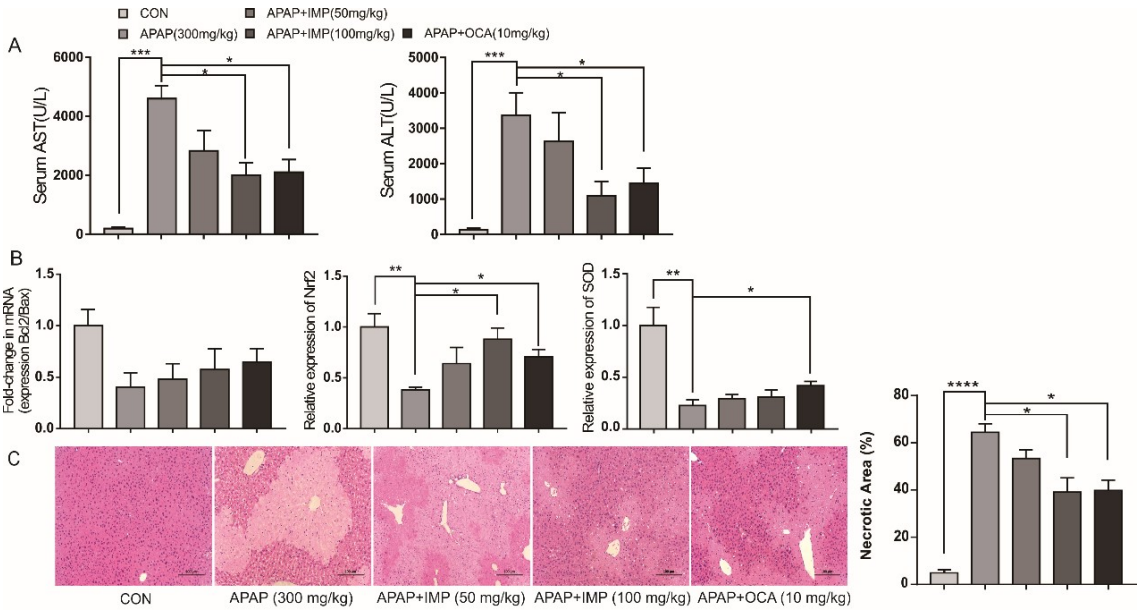
Supplement Figure S1. FXR molecular docking.

(A)Interactions of hFXR with surrounding hydrogen residues of IMP (Pink represents the hydrogen donor region, and green the hydrogen acceptor region). (B) The binding with IMP and hFXR in terms of hydrophobicity. (Brown represents the hydrophobic area and blue the hydrophilic area).



Supplement Figure S2. Identification of FXR knockout C57BL/6 mice ($FXR^{-/-}$).

(A) The relative expression of FXR in $FXR^{-/-}$ mice liver tissue was determined by qRT-PCR. (B) The protein expression of FXR in $FXR^{-/-}$ mice liver tissue was analyzed by Western blot. (C) The expression of FXR in PMHs was detected by Immunocytochemistry. Data are expressed versus vehicle-treated control group. *p <0.05; **p < 0.01; ***p<0.001.



Supplement Figure S3. Therapeutic efficacy of IMP in protecting against APAP-induced acute liver injury.

Mice were given IMP (50 or 100 mg/kg) or OCA (10 mg/kg) by gavage at 4 h after APAP (300 mg/kg) treatment. Until 10 h post APAP challenge, all mice were sacrificed. Serum and liver samples were collected for further analysis. (A) The measurement of serum ALT and AST levels. (B) The mRNA levels of Nrf2, SOD2 and Bcl2/Bax from tissue were determined by qRT-PCR. (C)Representative images of H&E staining of liver sections (with/without IMP treatment) with APAP injection (magnification: 200×). Results are expressed as fold changes compared to the vehicle-treated control group. *p <0.05; **p < 0.01; ***p<0.001. Bcl2, B-cell lymphoma 2; Bax, Bcl2-Associated X protein; Nrf2, nuclear factor erythroid2-related factor 2; SOD2, superoxide dismutase-2; qRT-PCR, quantitative real-time PCR.