Supplementary materials

DpdtC chelates iron and forms a complex at 1:1 molar ratio

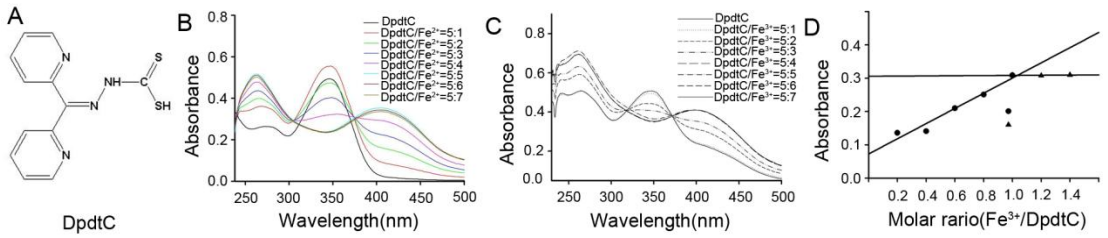

Fig. S1 UV-visible spectra of DpdtC iron complex and relation between absorbance and molar ratio. (A) structure of DpdtC; (B) Spectra of DpdtC and in the presence of varied concentration of Fe^{2+}; (C) Spectra of DpdtC and in the presence of varied concentration of Fe^{3+}; the molar ratio as indicated in the figure. (D) Plot of the absorbance of copper complex at 404 nm vs. molar ratio of Fe^{3+}/DpdtC.

DpdtC induced growth inhibition against normal human hepatic cell

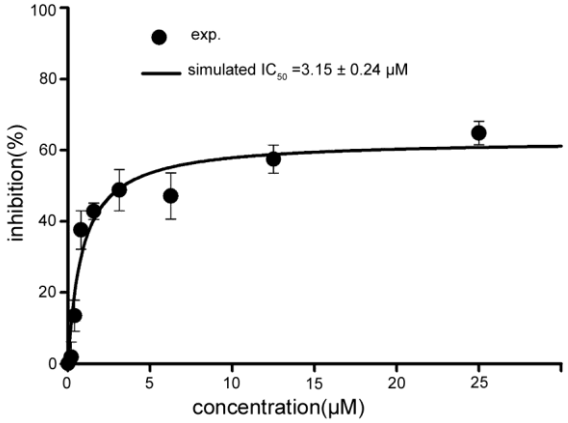

Fig. S2 DpdtC induced growth inhibition against normal human hepatic cell LO2.

ROS generation during the time period of exposure of DpdtC to HepG2 cell

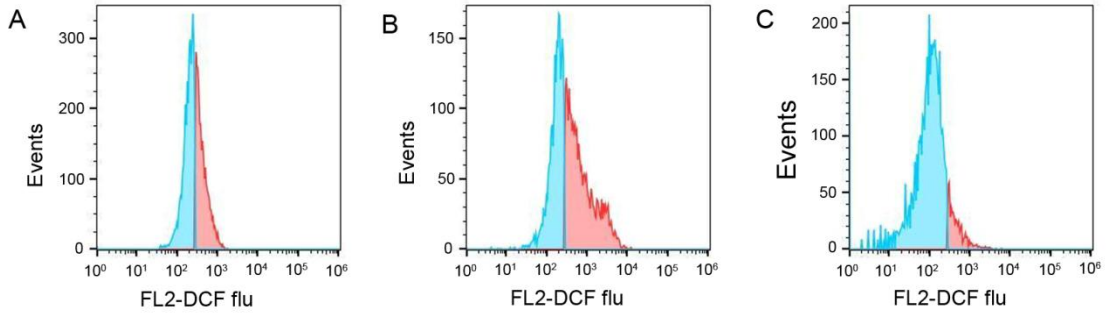

Fig. S3 DpdtC induced ROS after 48 h incubation. (A) H_2O; (B) 0.75 μM DpdtC; (C) 1.5 μM DpdtC.

DpdtC induced change in autophagic vacuoles

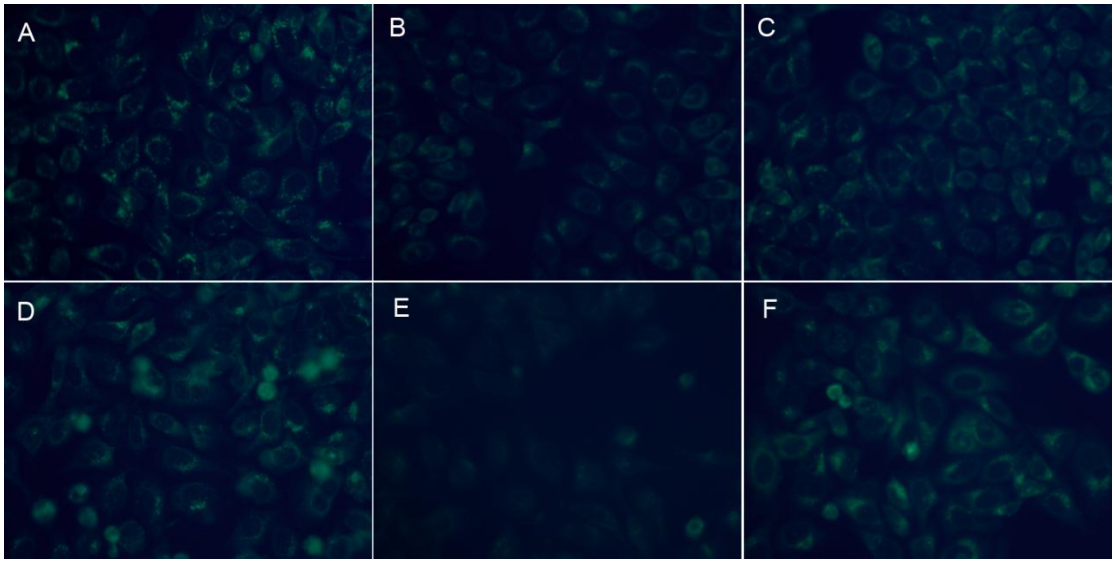

Fig. S4 The microcopic analysis of formation of autophagic vacuoles. (A) H_2O control; (B) 1.5 mM 3-MA; (C) 1.5 mM NAC; (D) 2 μM DpdtC; (E) 2 μM DpdtC + 1.5 mM 3-MA; (F) 2 μM DpdtC + 1.5 mM NAC.

DpdtC induced alteration in LMP

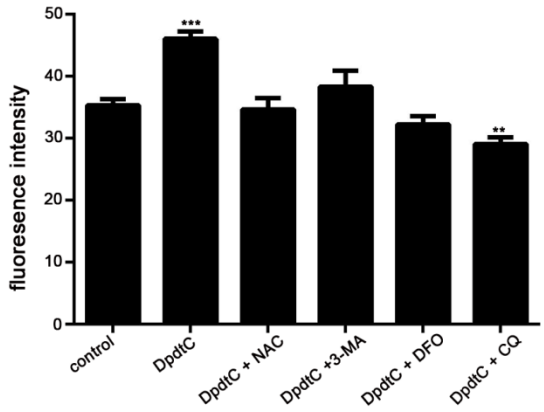

Fig. S5 The effect of DpdtC on lysosomal membrane permeability. The quantification analysis was performed by ImageJ. The results were obtained from three experiments. ***p< 0.01; **p < 0.05.