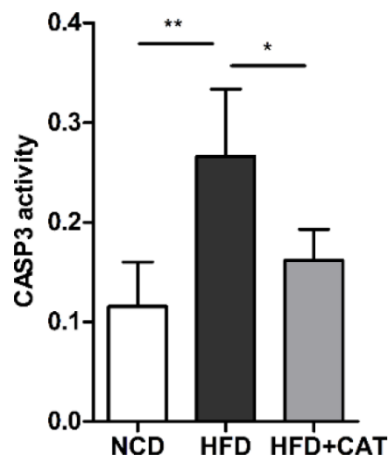
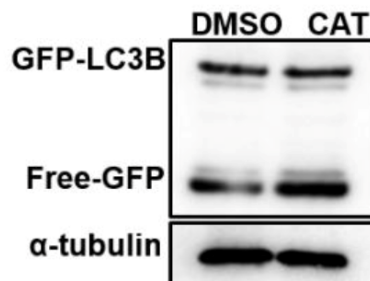


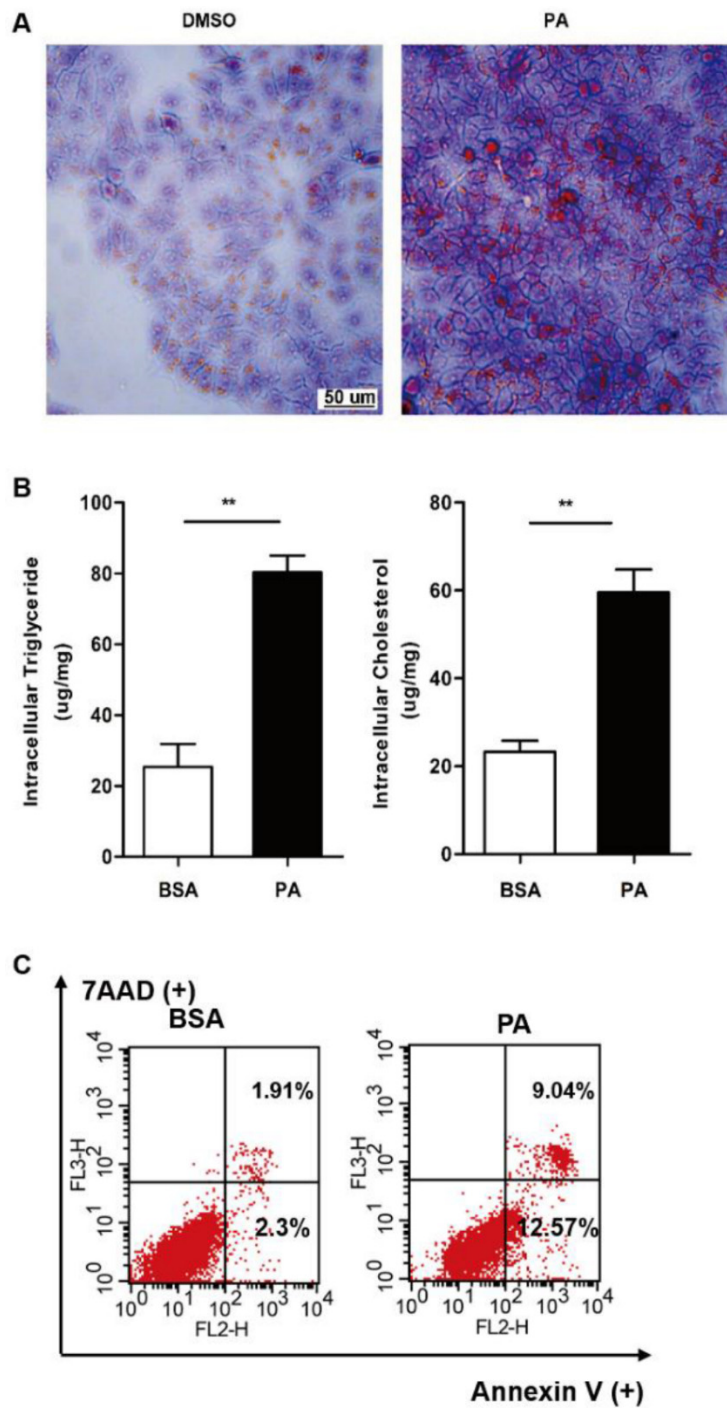
## SUPPLEMENTARY FIGURES



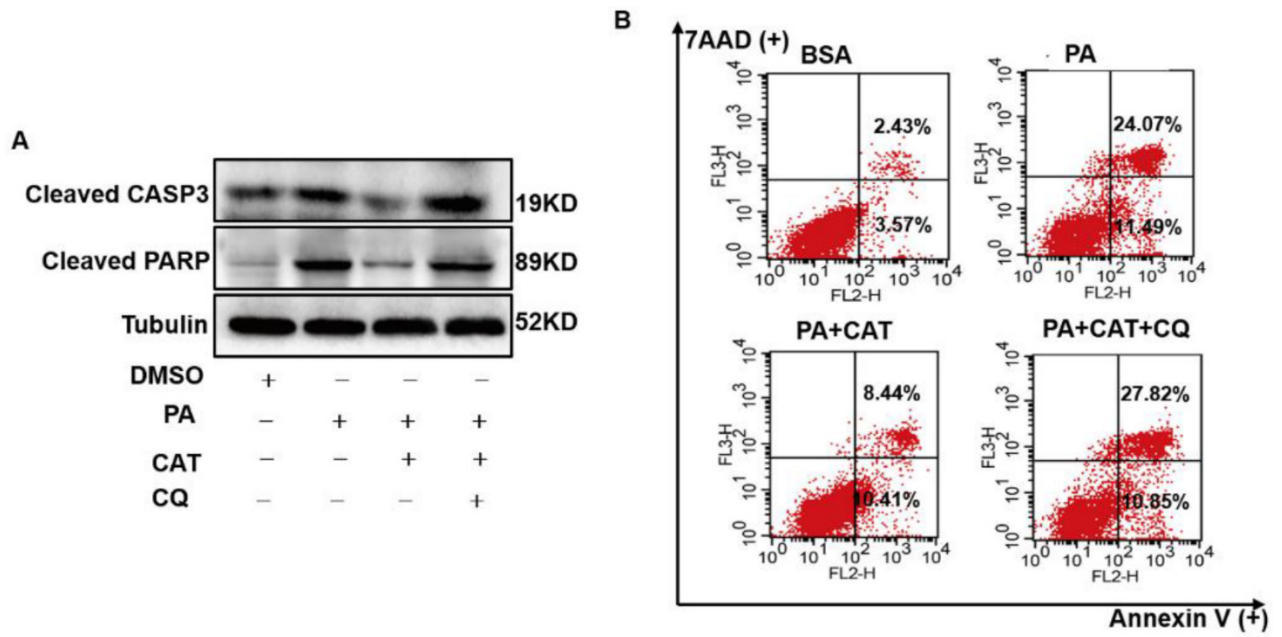
**Supplementary Figure 1. CAT ameliorated lipoapoptosis in HFD mice.** Mice were treated with CAT (50 mg/kg/d) or vehicle by oral gavage for 4 weeks. Caspase-3 (CASP3) activity was measured. \* $P < 0.05$ , \*\* $P < 0.05$ .



**Supplementary Figure 2. CAT induced autophagic flux in hepatocytes.** Immunoblot detection of the expression of GFP-LC3, and free-GFP in HepG2 cells treated with CAT (10  $\mu\text{g}/\text{ml}$ ) for 24h. GFP-LC3B expression levels decreased, and free-GFP expression levels increased in hepatocytes responded to CAT.



**Supplementary Figure 3. PA induced liver steatosis and apoptosis in hepatocytes.** Cells were treated with 0.3 mM PA for 24 h. HepG2 cells were stained with Oil Red O staining (A), and intracellular TG and TC was quantitatively analyzed (B). Scale bars: 25  $\mu$ m. The apoptosis was determined by and flow cytometry (C).



**Supplementary Figure 4. CAT ameliorated lipoapoptosis in hepatocytes depending on autophagy.** Cells were treated with 0.3 mM PA and 10 $\mu$ g/ml CAT for 24 h in the presence or absence of 50 mM chloroquine (CQ) for 2 h. The apoptosis was determined by immunoblot analysis (A) and flow cytometry (B)..