

**Figure S1.** Apoptotic cell death was also dependent on PA treatment time in HCT116 p53<sup>+/+</sup> and p53<sup>-/-</sup> cell lines. HCT116 p53<sup>+/+</sup> and p53<sup>-/-</sup> cells were treated with 250  $\mu$ M palmitic acid or BSA as a control for the indicated times. Cells were harvested, and apoptotic small fragmental DNA was extracted using lock gel.

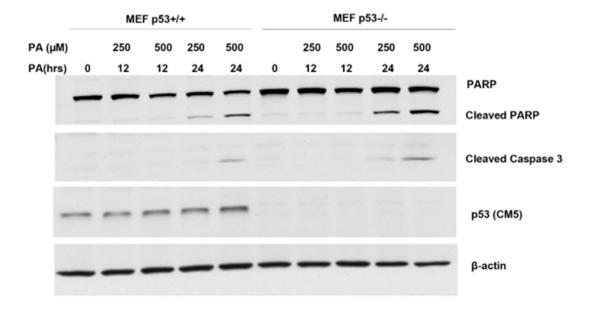


Figure S2. Palmitic acid induces MEF cell apoptosis and activates p53 in time and dosage dependent manner. Primary MEF cells were treated with palmitic acid for the indicated time and dosage. 40  $\mu$ g of total protein extract was resolved on SDS-PAGE. p53, cleaved caspase-3, PARP, and cleaved PARP were detected by western blotting.  $\beta$ -actin was used as a loading control.