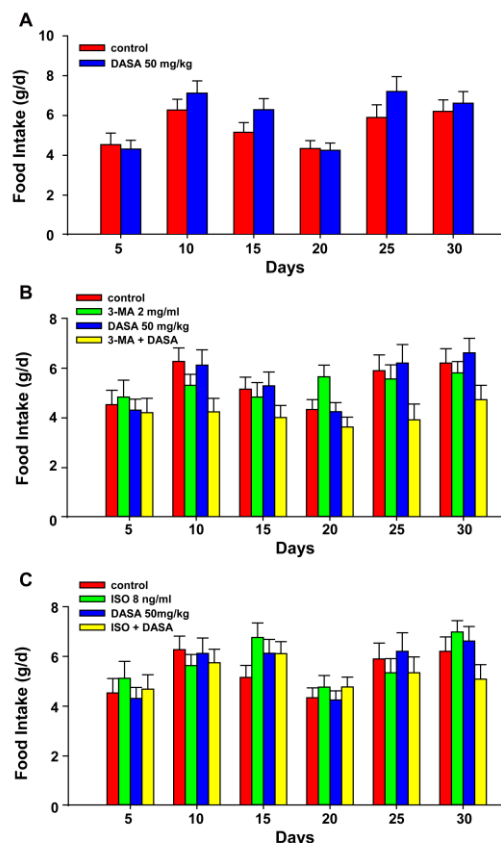


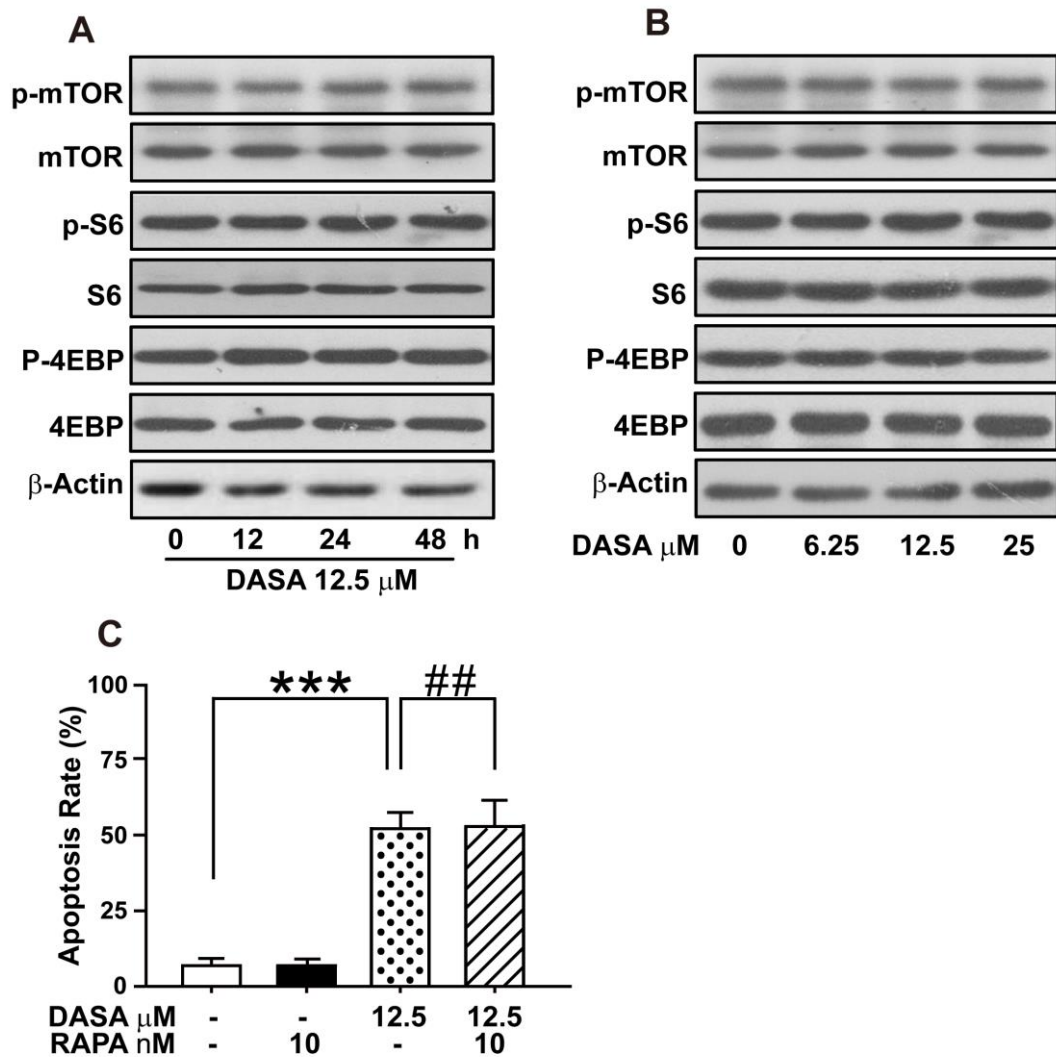
## Autophagy protects against dasatinib-induced hepatotoxicity via p38 signaling

### Supplementary Material

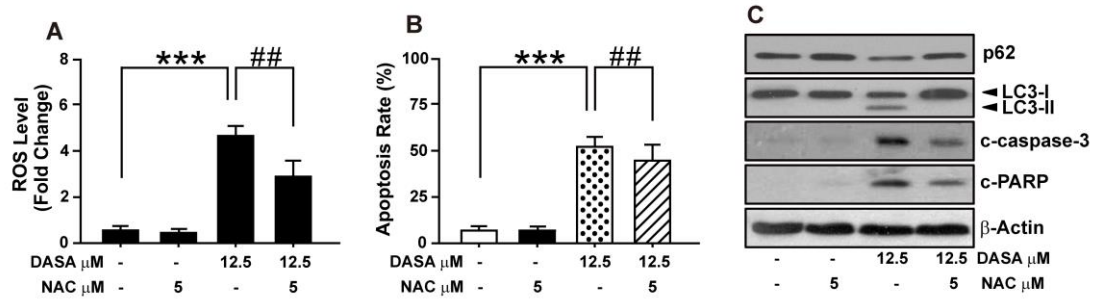


**Figure S1: The food intakes of ICR mice were no change with dasatinib treatment.**

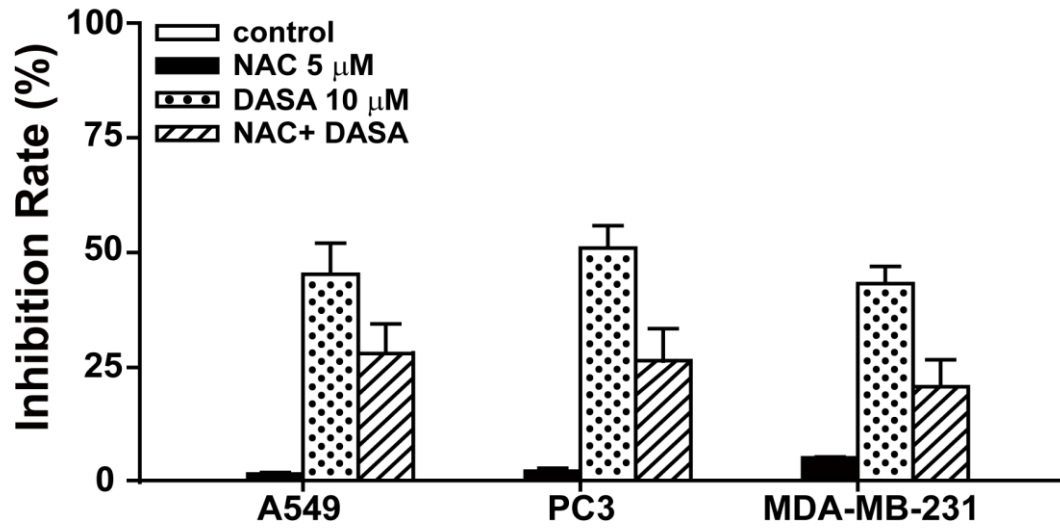
A. ICR mice were randomly divided into two groups (n=6) and were treated either with saline or dasatinib (50 mg/kg) for 30 days. Food intakes were calculated daily. B. ICR mice were randomly divided into 4 groups (n=6 mice) and treated with 3-MA (2 mg/kg), dasatinib (50 mg/kg) or both for 30 days. Food intakes were calculated daily. C. ICR mice were randomly divided into 4 groups (n=6 mice) and treated with ISO (8 ng/kg), dasatinib (50 mg/kg) or both for 30 days. Food intakes were calculated daily. Data are expressed as the mean  $\pm$ SEM. Statistical analysis was performed by t-test where appropriate. DASA = dasatinib. ISO = isoproterenol hydrochloride.



**Figure S2: Dasatinib induces autophagy through a mTOR-independent pathway.** (A-B) Hepatocytes were treated with dasatinib (12.5  $\mu$ M) as indicated for 12, 24 or 48 hours or with different concentrations of DASA (0, 6.25, 12.5 and 25  $\mu$ M) for 24 hours. Protein lysates of cells were subjected to western blot. C. Hepatocytes were treated with dasatinib (12.5  $\mu$ M), RAPA (10 nM) or both for 24 hours. Apoptosis rate was determined by FACS.



**Figure S3: The antioxidant NAC attenuated dasatinib-induced hepatotoxicity and autophagy.** Hepatocytes were treated with dasatinib (12.5  $\mu$ M), NAC (5  $\mu$ M) or both for 24 hours. A. ROS level was detected using H2DCFDA and FACS. B. Apoptosis rate was determined by FACS. C. Protein lysates of cells were subjected to western blot.



**Figure S4: NAC antagonizes the anticancer activity of dasatinib.** A. A549, PC3 and MDA-MB-231 cells were treated with NAC (5 μM), dasatinib (12.5 μM) or both for 24 hours. Apoptosis rate was determined by FACS following Annexin V and PI staining.