

Figure S1. Hispidulin promotes cell apoptosis in human non-small-cell lung cancer cells. NCI-H460 and A549 cells were treated with 15 and 30  $\mu\text{M}$  His for 24 h and flow cytometry was used to quantify the percentage of apoptotic cells through Annexin-V/PI staining. His, hispidulin; PI, propidium iodide.

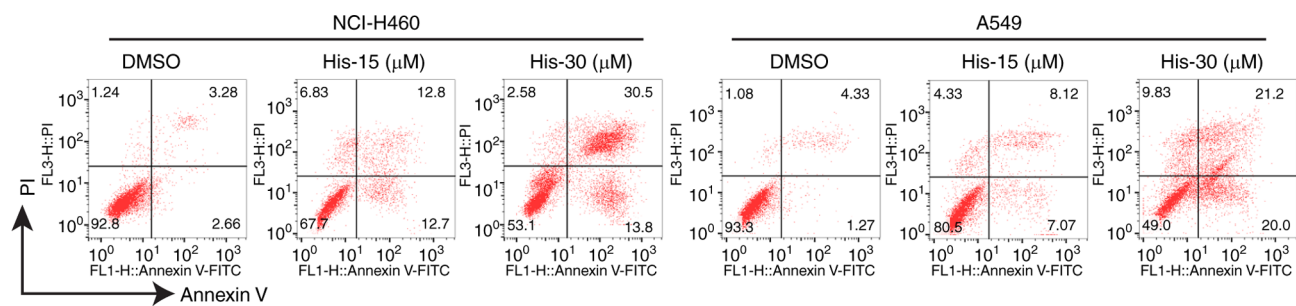


Figure S2. Quantitative analysis of p-eIF2 $\alpha$  expression levels following treatment with (A) His and (B) His and GSH. Data are presented as the mean  $\pm$  SEM, n=3. \*\*P<0.01 and \*\*\*P<0.001 as indicated. His, hispidulin; GSH, glutathione.

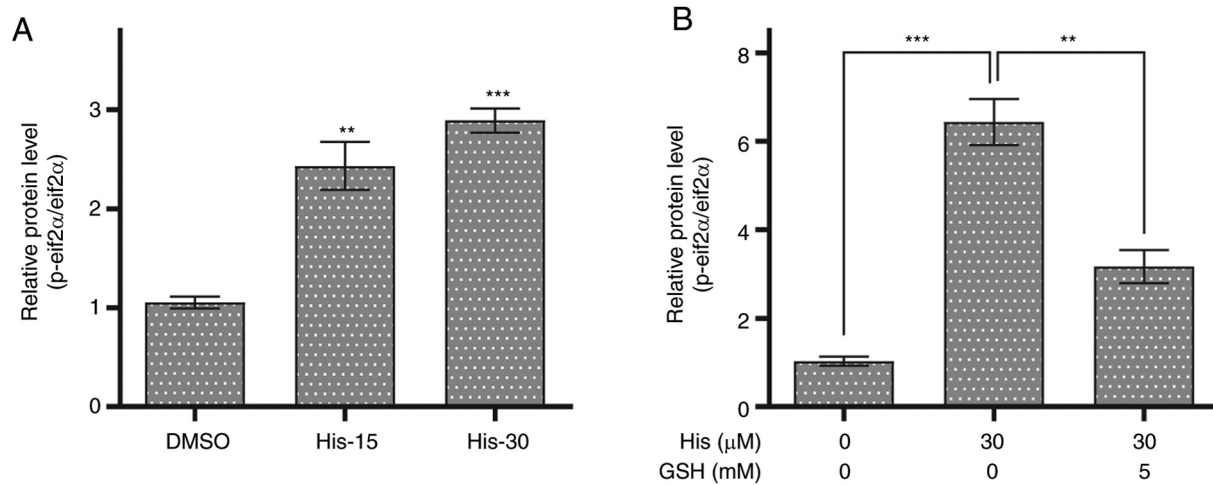


Figure S3. Hispidulin induces apoptosis through ER stress-mediated pathway in human non-small-cell lung cancer cells. (A) Effect of TUDCA pretreatment on His-induced CHOP expression in A549 cells. TUDCA was used at 2.5 mM for 1 h before exposure to 30  $\mu$ M His. (B) Quantitative analysis of CHOP expression levels. (C) Effect of TUDCA on His-induced apoptosis in A549 cells determined by Annexin V/PI staining and (D) the results were quantified. TUDCA was used at 2.5 mM for 1 h before exposure to His. All images shown are representative of three independent experiments with similar results. Data are presented as the mean  $\pm$  SEM, n=3. \*\*P<0.01 and \*\*\*P<0.001 as indicated. His, hispidulin; TUDCA, tauroursodeoxycholic acid; CHOP, C/EBP-homologous protein.

