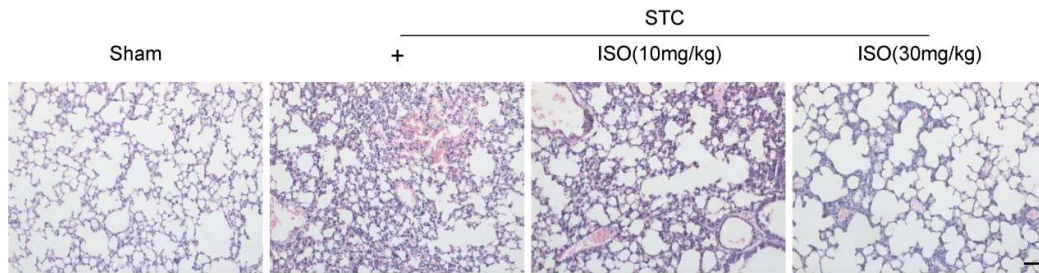


Supplementary Material

A



B

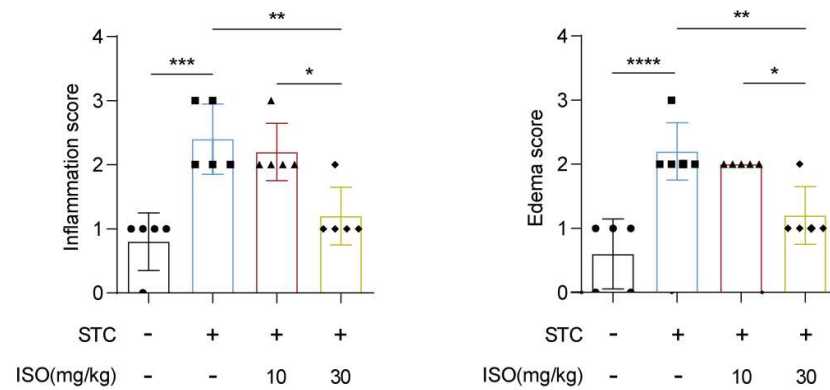


Figure. S1 ISO alleviates STC-associated lung injury. (A) Representative H&E images of lung tissue sections, scale bars = 50 μ m. (B) Histological scoring of inflammation, edema in lung tissues to evaluate the extent of lung injury. $n=5$. All data are presented as mean \pm SD. Statistical significance was assessed using one-way ANOVA followed by Tukey's multiple comparison test. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

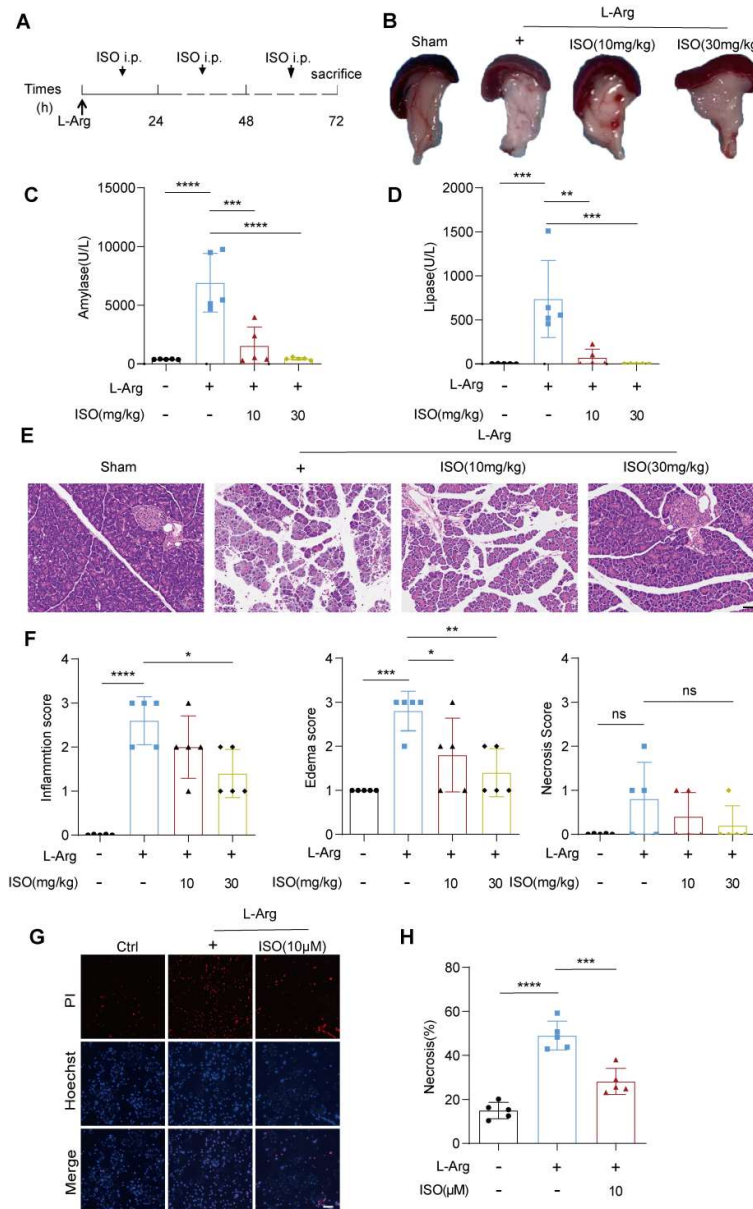


Fig. S2 Protective effects of ISO against L-Arg induced AP. (A) Intraperitoneal administration of saline or ISO (10, 30 mg/kg) four hours after AP induction. (B) Representative images of freshly harvested pancreatic tissues. (C, D) Levels of serum amylase and lipase 72 hours after AP induction. $n=5$. (E) Representative H&E images of pancreatic tissue sections, scale bars = 50 μm . (F) Histological scoring of inflammatory infiltration, edema, and necrosis in pancreatic tissues to evaluate the extent of pancreatic injury. $n=5$. (G) Representative images of primary pancreatic acinar cells stained with PI (red) and Hoechst 33342 (blue), scale bars = 50 μm . (H) Quantification of the percentage of PI-positive primary pancreatic acinar cells using Image J, $n=5$. All data are presented as mean \pm SD. Statistical significance was assessed using one-way ANOVA followed by Tukey's multiple comparison test. ns = $p > 0.05$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

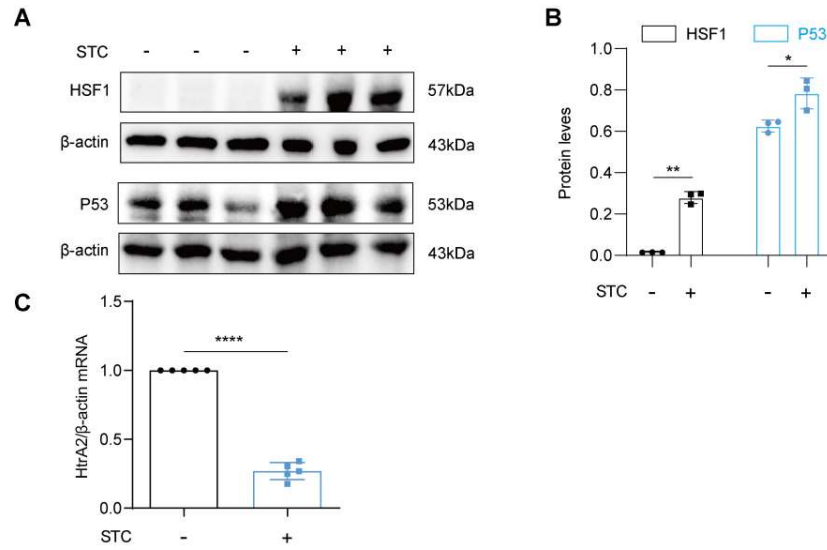


Figure. S3 HSF1 and P53 were upregulated in STC-induced SAP. (A, B) Western blot analysis of HSF1 and P53 protein expression in primary pancreatic acinar cells, $n=3$. (C) The mRNA level of HtrA2 was detected by quantitative RT-PCR, $n=5$. All data are presented as mean \pm SD. Statistical significance was assessed using two-sided Student's unpaired t-tests. * $p < 0.05$, ** $p < 0.01$, **** $p < 0.0001$.

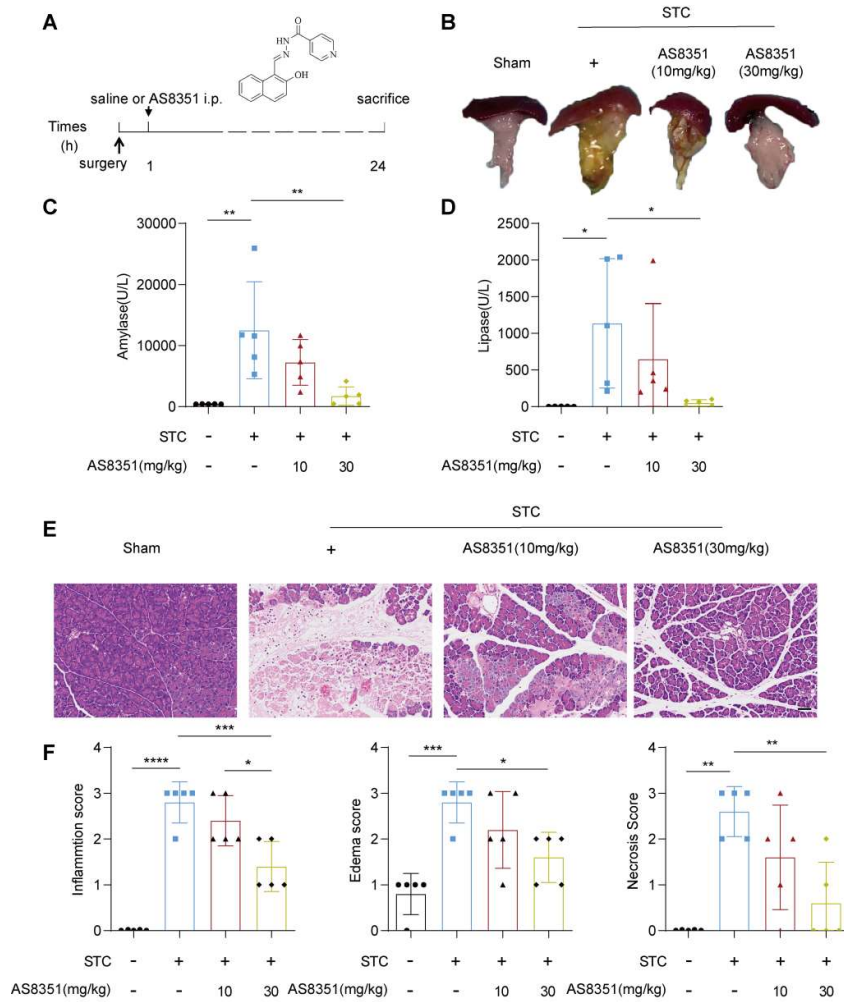


Fig. S4 Protective effects of AS8351 on STC-induced SAP. (A) Intraperitoneal administration of saline or AS8351 (10, 30 mg/kg) four hours after AP induction. (B) Representative images of freshly harvested pancreatic tissues. (C, D) Levels of serum amylase and lipase 24 hours after SAP induction. $n=5$. (E) Representative H&E images of pancreatic tissue sections, scale bars = 50 μ m. (F) Histological scoring of inflammatory infiltration, edema, and necrosis in pancreatic tissues to evaluate the extent of pancreatic injury. $n=5$. All data are presented as mean \pm SD. Statistical significance was assessed using one-way ANOVA followed by Tukey's multiple comparison test.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.