BIOLOGICAL ACTIVITY:
Licochalcone A, a flavonoid isolated from the famous Chinese medicinal herb Glycyrrhiza uralensis Fisch, presents obvious anti-cancer effects. The IC50 value is 0.97 μM for UGT1A1.

PROTOCOL (Extracted from published papers and Only for reference)
Kinase Assay [1] Caspase 3/7 activity assay kits (Cell Signaling Technology, Inc., Beverly, MA, USA) were utilized to study caspase activities in accordance with the manufacturer’s instructions. Cells were plated into 96-well plates and cultured for 24 h. Cells were incubated with indicated concentrations of LCA with or without pretreatment of CQ (5 μM, 1 h) or specific knock-down of ATG7. Cells were then lysed on ice for 5 min and caspase 3/7 assay reagent (200 μL) was added into each well and incubated for 1 h. Luminescence was detected using a microplate reader (Perkin Elmer, 1420 Multilabel Counter Victor3, Wellesley, MA, USA). Cell Assay [1] The effects of LCA on cell viability were examined by MTT assay as described in the previous report35. Briefly, exponentially growing cells were seeded into 96-well plates. Upon reaching approximately 70% to 80% confluence, cells were treated as indicated. Then, the cell viability was detected by incubating the cells in a medium containing 1 mg/mL MTT for 4 h. 100 μL of DMSO was then added into solubilize the formazan and shaking for 10 min in the dark. The absorbance at 570 nm was recorded with a microplate reader (Perkin Elmer, 1420 Multilabel Counter Victor3, Wellesley, MA, USA).

References:
[2]. Hong Xin, et al. Assessment of the inhibition potential of Licochalcone A against human UDP-glucuronosyltransferases. Food and Chemical Toxicology Volume 90, April 2016, Pages 112–122