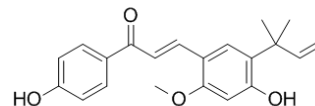


Data Sheet

Product Name:	Licochalcone A
Cat. No.:	HY-N0372
CAS No.:	58749-22-7
Molecular Formula:	C ₂₁ H ₂₂ O ₄
Molecular Weight:	338.40
Target:	Autophagy
Pathway:	Autophagy
Solubility:	DMSO: ≥ 31 mg/mL



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:

- [1]. Tang ZH, et al. Induction of C/EBP homologous protein-mediated apoptosis and autophagy by licochalcone A in non-small cell lung cancer cells. *Sci Rep.* 2016 May 17;6:26241.
- [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
- [3]. Egler J, et al. Licochalcone A Induced Suicidal Death of Human Erythrocytes. *Cell Physiol Biochem.* 2015;37(5):2060–70.

Caution: Product has not been fully validated for medical applications. For research use only.

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