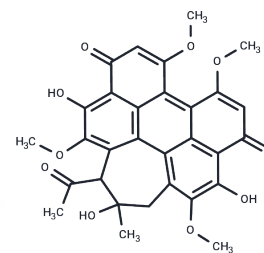


Hypocrellin A

Chemical Properties

CAS No. :	77029-83-5
Formula:	C ₃₀ H ₂₆ O ₁₀
Molecular Weight:	546.52
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Hypocrellin A is a natural PKC inhibitor with light-induced antitumor, antifungal and antiviral activities and also exerts immunomodulatory effects on MHC-restricted antigen presentation.
Targets(IC50)	Apoptosis,Bcl-2 Family,HIV Protease,Antibacterial,Parasite,Influenza Virus,PKC,VEGFR
In vitro	<p>Method: Three NSCLC cell lines H460, PC-9 and H19755 were treated with 0.01μM, 0.1 μM, 0.5μM, 1μM, 5μM, 10μM, 50μM and 100μM HA for 48 hours, and IC50 was determined.</p> <p>RESULTS The IC50 of Hypocrellin A against H1975, H460 and PC-9 were 0.2223μM, 0.2706μM and 0.6223μM respectively. [1]</p> <p>METHODS: A549 cells were collected 12 or 24 h after 24 h treatment with 0.08 μmol/L Hypocrellin A-PDT and apoptosis was measured, aliquots of cell lysates were separated by SDS-PAGE, and lysates were analyzed by Western blotting PARP-1 levels.</p> <p>RESULTS Hypocrellin A-mediated PDT significantly increased the apoptotic population of A549 cells, collectively showing an increase in the proportion of cells in the S phase and G2-M phase, and a decrease in the proportion of cells in the G0-G1 phase, and PARP cleavage in Hypocrellin A begins to occur 3 hours after PDT. [2]</p> <p>METHODS: The isolated tissues of the liver and soleus skeletal muscle parts of the insulin target tissues of obese Zucker rats were treated with Hypocrellin A at concentrations of 0.01, 0.1, 1.0 and 10μg/ml respectively, and the activity of PKC enzyme was measured.</p> <p>RESULTS The IC50 value of Hypocrellin A on liver PKC activity was 0.07μg/ml, and the IC50 value on soleus muscle PKC activity was 0.26μg/ml. [3]</p>
In vivo	<p>METHODS: H460 cells were transplanted into athymic female BALB/c nude mice. The mice in the experimental group were intraperitoneally injected with 2.5 mg/kg and 5 mg/kg Hypocrellin A every other day, and the tumor volume of the mice was observed.</p> <p>RESULTS Hypocrellin A reduced NSCLC tumor weight and volume in a concentration-dependent manner. [1]</p>
Cell Research	Cells were seeded in 96-well plates at a density of 1*10 ⁴ cells in a final volume of 100 μl and maintained in DMEM medium at 37°C. After cells were treated with different concentrations of HA (5, 10, 20, 40, 80 μM), 20 μl 5 mg/ml MTT solution were added to each well and incubated for 4 h in the incubator. Then 150 μl DMSO were added to each well to dissolve the pellet, keep it in the dark for 15 min, and dissolve the crystal completely. Automatic microplate reader measured at 490 nm optical density (OD value). The experiment was repeated three times. For combination test, cells were

A DRUG SCREENING EXPERT

Cell Research	treated with 20 μ M Hypocrellin A and different concentrations of OA (25, 50, 100, 200 μ M)
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Solubility Information

Solubility	DMSO: 19.23 mg/mL (35.19 mM), Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8298 mL	9.1488 mL	18.2976 mL
5 mM	0.366 mL	1.8298 mL	3.6595 mL
10 mM	0.183 mL	0.9149 mL	1.8298 mL
50 mM	0.0366 mL	0.183 mL	0.366 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Yang L, et al. Hypocrellin A exerts antitumor effects by inhibiting the FGFR1 signaling pathway in non-small cell lung cancer. *Phytomedicine*. 2022 Mar;97:153924.

Qi S, et al. Hypocrellin A-based photodynamic action induces apoptosis in A549 cells through ROS-mediated mitochondrial signaling pathway. *Acta Pharm Sin B*. 2019 Mar;9(2):279-293.

Qu X, et al. Inhibitory effect of hypocrellin A on protein kinase C in liver and skeletal muscle of obese Zucker rats. *Am J Chin Med*. 2003;31(6):871-8.

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