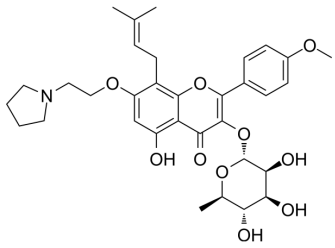
Antitumor agent-92

Cat. No.:	HY-149063
CAS No.:	2922842-01-9
Molecular Formula:	$C_{33}H_{41}NO_{10}$
Molecular Weight:	611.68
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Antitumor agent-92, an Icaritin (HY-N0678) derivative, causes arrest at the G0/G1 phase in the cell cycle and induces cell apoptosis. Antitumor agent-92 has the potential for hepatocellular carcinoma (HCC) research[1].

In Vitro

Antitumor agent-92 (compound 11c; 2-8 μM; 48 h) induces apoptosis in HepG2 and SMMC-7721 cells, especially at high concentrations[1].
Antitumor agent-92 (2-8 μM; 48 h) can induce the G0/G1 cycle arrest in HepG2 and SMMC-7721 cells[1].
Antitumor agent-92 (2-8 μM; 48 h) upregulates P21 and downregulates Cdc2 p34 and CDK4[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Apoptosis Analysis[1]

Cell Line:	HepG2 and SMMC-7721 cells
Concentration:	2, 4, 8 μM
Incubation Time:	48 h
Result:	Apoptotic cells were observed, as evidenced by the increasing number of detached cells and fewer HepG2 and SMMC-7721 cells.

Cell Cycle Analysis[1]

Cell Line:	HepG2 and SMMC-7721 cells
Concentration:	2, 4, 8 μM
Incubation Time:	48 h
Result:	Led to an increased percentage of cells at the G0/G1 phase from 64.22% and 58.43% of the untreated control to 83.28% and 78.95%, respectively.

Western Blot Analysis[1]

Cell Line:	HepG2 and SMMC-7721 cells
Concentration:	2, 4, 8 μM

Incubation Time:	48 h
Result:	The level of P21 was upregulated, and Cdc2 p34 and CDK4 were downregulated.

REFERENCES

[1]. Jichong Li, et al. Synthesis and Structure-Activity Analysis of Icaritin Derivatives as Potential Tumor Growth Inhibitors of Hepatocellular Carcinoma Cells. J Nat Prod. 2023 Feb 24;86(2):290-306.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA