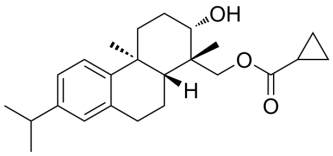
Antitumor agent-97

Cat. No.:	HY-149829
CAS No.:	2654024-16-3
Molecular Formula:	$C_{24}H_{34}O_3$
Molecular Weight:	370.52
Target:	Apoptosis; Autophagy
Pathway:	Apoptosis; Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Antitumor agent-97 (compound 42) is an anticancer agent. Antitumor agent-97 can effectively inhibit the proliferation and autophagy of MGC 803 cells, and induce apoptosis. Antitumor agent-97 also enhances ROS accumulation in MGC 803 cells. Antitumor agent-97 can be used in cancer research[1].

In Vitro

Antitumor agent-97 (Compound 42; 0-200 μM; 24 h) inhibits cell viability of MGC 803 cells in a dose-dependent manner, with an IC_{50} value of 20.921 μM[1].
Antitumor agent-97 (20 μM; 24 h) decreases cell proliferation of MGC 803 cells[1].
Antitumor agent-97 (20 μM; 24 h) induces apoptosis and inhibits autophagy in MGC 803 cells[1].
Antitumor agent-97 (20 μM; 0-24 h) enhances ROS accumulation in MGC 803 cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	MGC 803 cells
Concentration:	0-200 μM
Incubation Time:	24 h
Result:	Suppressed cell viability (IC_{50} = 20.921 μM).

Cell Proliferation Assay[1]

Cell Line:	MGC 803 cells
Concentration:	20 μM
Incubation Time:	24 h
Result:	Inhibited cell proliferation.

Western Blot Analysis[1]

Cell Line:	MGC 803 cells
Concentration:	20 μM

Incubation Time:	24 h
Result:	Significantly upregulated the protein expression of LC3B-II and p62 and decreased the protein expression of LC3B-I. Enhanced the protein expression of cleaved caspase-9 and cleaved caspase-3, and decreased the protein expression of B-cell lymphoma-2 (Bcl-2).

REFERENCES

[1]. Mao XD, et al. Synthesis and Bioactivity Evaluation of Nepetaefolin F and Its Analogues. ACS Omega. 2023 Apr 12;8(16):14830-14840.

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