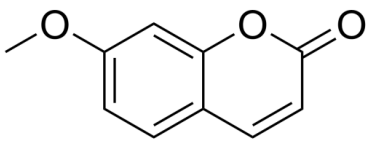
Data Sheet

Product Name:	Herniarin
Cat. No.:	CS-0016775
CAS No.:	531-59-9
Molecular Formula:	$C_{10}H_8O_3$
Molecular Weight:	176.17
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 150 mg/mL (851.45 mM)



BIOLOGICAL ACTIVITY:

Herniarin is a natural coumarin occurs in some flowering plants, with antitumor effect. ***In Vitro:*** Herniarin is cytotoxic to breast carcinoma cell line MCF-7 with an IC_{50} of 207.6 μM. Herniarin (100 μM) also induces apoptosis in MCF-7 cells[1]. Herniarin alone has no obvious cytotoxicity on transitional cell carcinoma (TCC) cells, but when in combination with 5 μg/mL cisplatin, Herniarin (80 μg/mL) potently enhances the antitumor effect of cisplatin, and increases chromatin condensation[2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: Herniarin is dissolved in DMSO[1].[1]Briefly, the cells are seeded (**10^4 cells per well**) onto flat-bottomed 96-well culture plates and allowed to grow 72 h after treatment with **various concentration** of auraptene, **Herniarin**, umbelliferone, and umbelliprenin. After removing the medium, MTT solution (5 mg/mL in PBS) is added and incubated for 4 h and the resulting formazan is solubilized with **DMSO** (100 mL). The absorption is measured at 570 nm (620 nm as a reference) in an ELISA reader[1].

References:

[1]. Mousavi SH, et al. Comparative analysis of the cytotoxic effect of 7-prenyloxycoumarin compounds and herniarin on MCF-7 cell line. Avicenna J Phytomed. 2015 Nov-Dec;5(6):520-30.

[2]. Haghighitalab A, et al. Enhancement of cisplatin cytotoxicity in combination with herniarin in vitro. Drug Chem Toxicol. 2014 Apr;37(2):156-62.

CAIndexNames:

2H-1-Benzopyran-2-one, 7-methoxy-

SMILES:

O=C1C=CC2=CC=C(OC)C=C2O1

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

Tel: 610-426-3128 Fax: 888-484-5008 E-mail: sales@ChemScene.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA