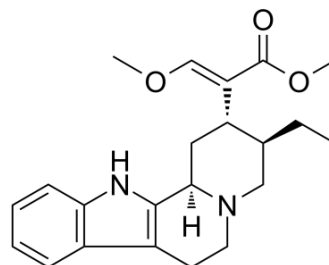


Hirsutine

Cat. No.:	HY-N2193
CAS No.:	7729-23-9
Molecular Formula:	C ₂₂ H ₂₈ N ₂ O ₃
Molecular Weight:	368.47
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Hirsutine, an indole alkaloid of <i>Uncaria rhynchophylla</i> , exhibits anti-cancer activity. Hirsutine induces apoptosis and is a potent Dengue virus inhibitor exhibiting low cytotoxicity ^{[1][2][3]} .
In Vitro	Hirsutine remarkably reduces the viability of MCF-7 and MDA-MB-231 cells in a time- and dose-dependent manner with IC ₅₀ values of 447.79 and 179.06 μM, respectively. In the MDA-MB-231 cells, Hirsutine induces apoptosis and depolarization of MMP, releases Cyt C from mitochondria, and activates caspase 9 and caspase 3 ^[2] .
In Vivo	Hirsutine induces mPTP-dependent apoptosis through ROCK1/PTEN/PI3K/GSK3β pathway in human lung cancer cells ^[3] .

REFERENCES

- [1]. Hishiki T, et al. Hirsutine, an Indole Alkaloid of *Uncaria rhynchophylla*, Inhibits Late Step in Dengue Virus Lifecycle. *Front Microbiol.* 2017 Aug 30;8:1674.
- [2]. Huang QW, et al. [Hirsutine induces apoptosis of human breast cancer MDA-MB-231 cells through mitochondrial pathway]. *Sheng Li Xue Bao.* 2018 Feb 25;70(1):40-46.
- [3]. Zhang R, et al. Hirsutine induces mPTP-dependent apoptosis through ROCK1/PTEN/PI3K/GSK3β pathway in human lung cancer cells. *Cell Death Dis.* 2018 May 22;9(6):598.

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

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