d-Sophoridine

Cat. No.: HY-N1373A

CAS No.: 83148-91-8

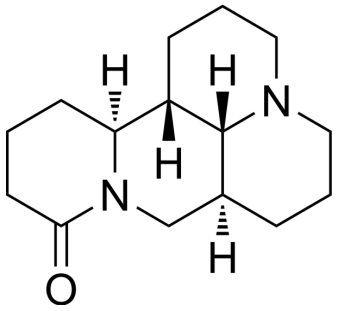
Molecular Formula: $C_{15}H_{24}N_2O$

Molecular Weight: 248.36

Target: Apoptosis

Pathway: Apoptosis

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	d-Sophoridine ((+)-Sophoridine) is the dextro isoform of Sophoridine (HY-N1373), which is a quinolizidine alkaloid isolated from Leguminous plant Sophora flavescens. Sophoridine induces apoptosis. Sophoridine has the potential to be a novel, potent and selective antitumor agent candidate for pancreatic cancer with well-tolerated toxicity[1].
In Vitro	Sophoridine (0-500 μM; 48 hours) exhibits remarkable inhibition effects to the growth of human pancreatic, gastric, liver, colon, gallbladder, and prostate carcinoma cells with IC_{50} values of about 20 μM to 200 μM[1]. Sophoridine (0-20 μM; 48 hours) increases S phase cell population from 26.23% (control) to 38.67% in Miapaca-2 cells and from 29.56% (control) to 39.16% in PANC-1 cells, about a 1.5-fold and a 1.3-fold increase, respectively[1]. Sophoridine (0-20 μM; 48 hours) significantly increases bad and bax levels, and decreases bcl-2 and bcl-xl levels in contrast, with a significant increase in Bax/Bcl-2 ratio[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Sophoridine (intraperitoneal injection; 20 or 40 mg/kg; 21 days) can inhibit the growth of xenograft pancreatic tumors[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xu Z, et al. Sophoridine induces apoptosis and S phase arrest via ROS-dependent JNK and ERK activation in human pancreatic cancer cells. J Exp Clin Cancer Res. 2017 Sep 11;36(1):124.

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