

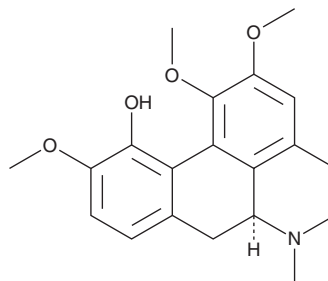
PRODUCT INFORMATION



Isocorydine

Item No. 30101

CAS Registry No.: 475-67-2
Formal Name: (6aS)-5,6,6a,7-tetrahydro-1,2,10-trimethoxy-6-methyl-4H-dibenzo[de,g]quinolin-11-ol
Synonym: NSC 32979
MF: C₂₀H₂₃NO₄
FW: 341.4
Purity: ≥98%
UV/Vis.: λ_{max}: 216, 272 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years
Item Origin: Plant/*Dactylicapnos scandens*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Isocorydine is supplied as a crystalline solid. A stock solution may be made by dissolving the isocorydine in the solvent of choice, which should be purged with an inert gas. Isocorydine is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

Description

Isocorydine is an aporphine alkaloid that has been found in *A. squamosa* that has vasodilatory and anticancer activities.¹⁻⁵ It reduces the action potential duration and increases the effective refractory period in isolated canine Purkinje fibers when used at a concentration of 30 μM.² Isocorydine induces relaxation of norepinephrine-precontracted isolated rabbit aortic strips with an EC₅₀ value of 12.6 μM.³ It is cytotoxic to A549 lung cancer cells (IC₅₀ = 197.7 μM), as well as Huh7, HepG2, SNU-449, and SNU-387 hepatic cancer cells (IC₅₀s = 161.3, 148, 262.2, and 254.1 μg/ml, respectively).⁴⁻⁵ Isocorydine, in combination with doxorubicin, reduces tumor growth in a Huh7 mouse xenograft model.⁵

References

1. Bhakuni, D.S., Tewari, S., and Dhar, M.M. Aporphine alkaloids of *Annona squamosa*. *Phytochemistry* **11**(5), 1819-1822 (1972).
2. Zhao, Y.-Q., Li, G.-R., Zhang, D.-Z., et al. Effects of isocorydine on action potentials in isolated canine purkinje fibers and ventricular muscles. *J. Mol. Cell. Cardiol.* **12**(4), 324-327 (1991).
3. Jiang, Q.-S., Huang, X.-N., Sun, A.-S., et al. Relation of vasodilative action of isocorydine to cyclic nucleotides. *Chi. J. Pharm. Toxicol.* **15**(4), 251-255 (2011).
4. Zhong, M., Liu, Y., Liu, J., et al. Isocorydine derivatives and their anticancer activities. *Molecules* **19**(8), 12099-12115 (2014).
5. Pan, J.-X., Chen, G., Li, J.-J., et al. Isocorydine suppresses doxorubicin-induced epithelial-mesenchymal transition via inhibition of ERK signaling pathways in hepatocellular carcinoma. *Am. J. Cancer Res.* **8**(1), 154-164 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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