

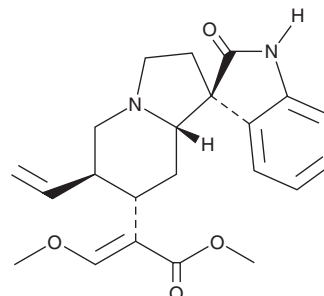
PRODUCT INFORMATION



Isocorynoxine

Item No. 34653

CAS Registry No.: 51014-29-0
Formal Name: (αE,1'S,6'R,7'S,8'aS)-6'-ethenyl-1,2,2',3',6',7',8',8'a-octahydro-α-(methoxymethylene)-2-oxo-spiro[3H-indole-3,1'(5'H)-indolizine]-7'-acetic acid, methyl ester
Synonym: 7-Isocorynoxine
MF: C₂₂H₂₆N₂O₄
FW: 382.5
Purity: ≥95%
UV/Vis.: λ_{max}: 244 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Uncaria* sp.



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

Laboratory Procedures

Isocorynoxine is supplied as a solid. A stock solution may be made by dissolving the isocorynoxine in the solvent of choice, which should be purged with an inert gas. Isocorynoxine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of isocorynoxine in these solvents is approximately 1, 5, and 20 mg/ml, respectively.

Isocorynoxine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, isocorynoxine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Isocorynoxine has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Isocorynoxine is an alkaloid that has been found in *Uncaria* and has diverse biological activities.¹⁻⁴ It inhibits LPS-induced production of nitric oxide (NO) in primary rat microglia (IC₅₀ = 13.7 μM).¹ Isocorynoxine (100 μM) protects against glutamate-induced cytotoxicity in HT22 mouse hippocampal cells.² It induces relaxation of isolated rat arterial rings precontracted with phenylephrine or potassium chloride in a concentration-dependent manner.³ Isocorynoxine (30 mg/kg) reduces head twitch behavior induced by reserpine (Item No. 16474) in mice.⁴

References

1. Yuan, D., Ma, B., Wu, C., *et al.* Alkaloids from the leaves of *Uncaria rhynchophylla* and their inhibitory activity on NO production in lipopolysaccharide-activated microglia. *J. Nat. Prod.* **71**(7), 1271-1274 (2008).
2. Xi, W., Chen, F., Sun, J., *et al.* Isolation and identification of twelve metabolites of isocorynoxine in rat urine and their neuroprotective activities in HT22 cell assay. *Planta Med.* **81**(1), 46-55 (2015).
3. Li, T., Xu, K., Che, D., *et al.* Endothelium-independent vasodilator effect of isocorynoxine in vitro isolated from the hook of *Uncaria rhynchophylla* (Miquel). *Naunyn Schmiedeberg's Arch. Pharmacol.* **391**(11), 1285-1293 (2018).
4. Matsumoto, K., Morishige, R., Murakami, Y., *et al.* Suppressive effects of isorhynchophylline on 5-HT_{2A} receptor function in the brain: behavioural and electrophysiological studies. *Eur. J. Pharmacol.* **517**(3), 191-199 (2005).

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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