

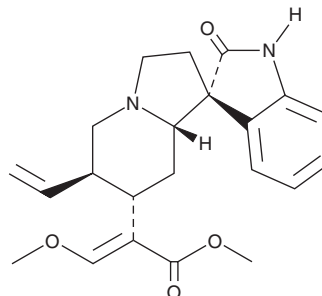
PRODUCT INFORMATION



Corynoxine

Item No. 31403

CAS Registry No.: 630-94-4
Formal Name: (α E,1'R,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: δ^{18} -Rynchophylline
MF: C₂₂H₂₆N₂O₄
FW: 382.5
Purity: \geq 98%
UV/Vis.: λ_{max} : 210, 242 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 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

Corynoxine is supplied as a solid. A stock solution may be made by dissolving the corynoxine in the solvent of choice, which should be purged with an inert gas. Corynoxine is soluble in the organic solvent DMSO at a concentration of approximately 3.8 mg/ml.

Description

Corynoxine 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 = 15.7 μ M).¹ Corynoxine (5-50 μ M) inhibits PDGF-BB-induced ERK1/2 activation in, and proliferation of, rat aortic vascular smooth muscle cells (VSMCs).² It inhibits histamine release from LAD 2 mast cells induced by compound 48/80 (Item No. 22173) when used at concentrations ranging from 25 to 200 μ M.³ *In vivo*, corynoxine (0.5, 2.5, and 5 mg/kg) reduces compound 48/80-induced local anaphylaxis and mast cell degranulation in mouse hind paws. Corynoxine (30 and 100 mg/kg) also reduces methamphetamine-induced hyperlocomotion 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. Kim, T.-J., Lee, J.-H., Lee, J.-J., *et al.* Corynoxine isolated from the hook of *Uncaria rhynchophylla* inhibits rat aortic vascular smooth muscle cell proliferation through the blocking of extracellular signal regulated kinase 1/2 phosphorylation. *Biol. Pharm. Bull.* **31**(11), 2073-2078 (2008).
3. Xie, Y., Wei, D., Hu, T., *et al.* Anti-pseudo-allergic capacity of alkaloids screened from *Uncaria rhynchophylla*. *New J. Chem.* **4**, 38-45 (2020).
4. Sakakibara, I., Terabayashi, S., Kubo, M., *et al.* Effect on locomotion of indole alkaloids from the hooks of *Uncaria* plants. *Phytomedicine* **6**(3), 163-168 (1999).

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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