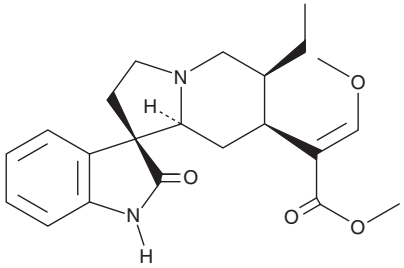
PRODUCT INFORMATION

Corynoxine B

Item No. 27827

CAS Registry No.:	17391-18-3
Formal Name:	(αE,1′R,6′S,7′S,8′aS)-6′-ethyl-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
Synonyms:	7-Isocorynoxine, Cory B
MF:	$C_{22}H_{28}N_2O_4$
FW:	384.5
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Uncariarhynchophylla* sp.



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

Laboratory Procedures

Corynoxine B is supplied as a solid. A stock solution may be made by dissolving the corynoxine B in the solvent of choice, which should be purged with an inert gas. Corynoxine B is slightly soluble (0.1-1 mg/ml) in acetonitrile and methanol.

Description

Corynoxine B is an oxindole alkaloid that has been found in *M. speciosa* and has diverse biological activities.[1-5] It induces autophagy in *Drosophila* second instar larvae when used at a concentration of 100 µM.[2] Corynoxine B (100 mg/kg) inhibits apomorphine- and methamphetamine-induced hyperlocomotion in mice.[3] It increases the duration of thiopental-induced sleep in mice when administered at a dose of 100 mg/kg.[4] Exosomes containing corynoxine B increase the length of freezing time induced by footshock in a contextual fear conditioning test, decrease the latency to escape in the Morris water maze, and increase the number of hippocampal synaptic connections in the 5XFAD transgenic mouse model of Alzheimer's disease.[5]

References

1. Chakraborty, S., Uprety, R., Daibani, A.E., *et al.* Kratom alkaloids as probes for opioid receptor function: Pharmacological characterization of minor indole and oxindole alkaloids from kratom. *ACS Chem. Neurosci.* **12(14)**, 2661-2678 (2021).
2. Chen, L.-L., Song, J.-X., Lu, J.-H., *et al.* Corynoxine, a natural autophagy enhancer, promotes the clearance of alpha-synuclein via Akt/mTOR pathway. *J. Neuroimmune Pharmacol.* **9(3)**, 380-387 (2014).
3. 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).
4. Sakakibara, I., Takahashi, H., Terabayashi, S., *et al.* Effect of oxindole alkaloids from the hooks of *Uncaria macrophylla* on thiopental-induced hypnosis. *Phytomedicine* **5(2)**, 83-86 (1998).
5. Iyaswamy, A., Thakur, A., Guan, X.J., *et al.* Fe65-engineered neuronal exosomes encapsulating corynoxine-B ameliorate cognition and pathology of Alzheimer's disease. *Signal Transduct. Target. Ther.* **8(1)**, 404 (2023).

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