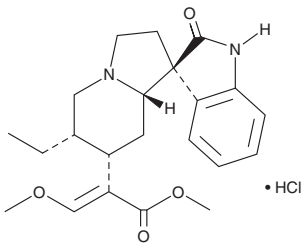
PRODUCT INFORMATION

Corynoxine (hydrochloride)

Item No. 28496

Formal Name:	(αE,1′S,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, monohydrochloride
MF:	$C_{22}H_{28}N_2O_4$ • HCl
FW:	420.9
Purity:	≥98%
UV/Vis.:	λ_{max}: 242 nm
Supplied as:	A crystalline 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

Corynoxine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the corynoxine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Corynoxine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of corynoxine in ethanol is approximately 3 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Corynoxine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, corynoxine (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Corynoxine (hydrochloride) has a solubility of approximately 0.25 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Corynoxine is an indole alkaloid that has been found in *U. macrophylla* and has neuroprotective activity.[1,2] It increases levels of the autophagy marker LC3-II in Neuro2a and SH-SY5Y neuronal cells when used at concentrations ranging from 6.25 to 25 µM.[1] Corynoxine (25 µM) increases degradation of wild-type and A53T mutant α-synuclein, a major component of Lewy bodies in the brain of Parkinson's disease patients, in PC12 cells, an effect that can be reversed by the autophagy inhibitors 3-methyladenine (Item No. 13242) and chloroquine (Item No. 14194). It reduces increases in methamphetamine-induced locomotor activity in rats when administered at doses of 30 and 100 mg/kg.[2]

References

1. 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).
2. 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM