Product Data Sheet

Product Name: Coclaurine
Cat. No.: GC61477

Chemical Properties

Cas. No.	486-39-5		
SMILES	OC1=CC2=C(C=C1OC)CCN[C@H]2CC3=CC=C(O)C=C3		
Formula	$C_{17}H_{19}NO_3$	M.Wt	285.34
Solubility	DMSO : 25 mg/mL (87.61 mM; ultrasonic and warming and heat to 60°C)	Storage	Store at -20°C,protect from light
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Coclaurine		

Background

Coclaurine is a benzylisoquinoline alkaloid that has been found in *T. quinquenervia* and has nicotinic acetylcholine receptor (nAChR) inhibitory and insecticidal activities.[1,2] It inhibits ACh-induced currents in *Xenopus* oocytes expressing human α4β2 or α4β4 subunit-containing nAChRs (IC_{50}s = 49 and 18 ?M, respectively).[1] Coclaurine induces mortality in *D. melanogaster* and *C. pomonella* larvae (LD50s = 78.2 and 35.4 ?g/ml, respectively).[2]

1.Exley, R., Iturriaga-Vásquez, P., Lukas, R.J., et al.Evaluation of benzyltetrahydroisoquinolines as ligands for neuronal nicotinic acetylcholine receptorsBr. J. Pharmacol.146(1)15-24(2005) 2.Quiroz-Carre?o, S., Pastene-Navarrete, E., Espinoza-Pinochet, C., et al.Assessment of insecticidal activity of benzylisoquinoline alkaloids from Chilean Rhamnaceae plants against fruit-fly Drosophila melanogaster and the lepidopteran crop pest Cydia pomonellaMolecules25(21)5094(2020)

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA