

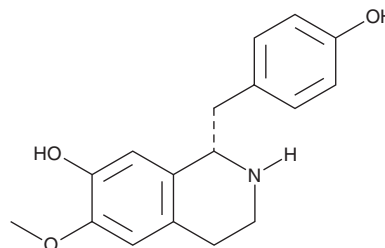
PRODUCT INFORMATION



Coclaurine

Item No. 35716

CAS Registry No.: 486-39-5
Formal Name: (1S)-1,2,3,4-tetrahydro-1-[(4-hydroxyphenyl)methyl]-6-methoxy-7-isoquinolinol
Synonyms: (S)-Coclaurine, (-)-Coclaurine
MF: C₁₇H₁₉NO₃
FW: 285.3
Purity: ≥98%
UV/Vis.: λ_{max}: 227 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Lindera aggregata* (Sims) Kosterm.



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

Laboratory Procedures

Coclaurine is supplied as a solid. A stock solution may be made by dissolving the coclaurine in the solvent of choice, which should be purged with an inert gas. Coclaurine is soluble in acetone, chloroform, dichloromethane, and DMSO.

Description

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 (IC₅₀s = 49 and 18 μM, respectively).¹ Coclaurine induces mortality in *D. melanogaster* and *C. pomonella* larvae (LD₅₀s = 78.2 and 35.4 μg/ml, respectively).²

References

1. Exley, R., Iturriaga-Vásquez, P., Lukas, R.J., *et al.* Evaluation of benzyltetrahydroisoquinolines as ligands for neuronal nicotinic acetylcholine receptors. *Br. J. Pharmacol.* **146**(1), 15-24 (2005).
2. Quiroz-Carreño, 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 pomonella*. *Molecules* **25**(21), 5094 (2020).

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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