

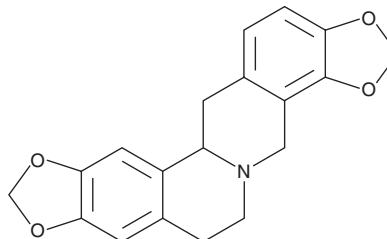
PRODUCT INFORMATION



Tetrahydrocoptisine

Item No. 34603

CAS Registry No.: 4312-32-7
Formal Name: 6,7,12b,13-tetrahydro-4H-bis[1,3]benzodioxolo[5,6-a:4',5'-g]quinolizine
Synonyms: NSC 110382, NSC 404529, (R,S±)-Stylophine
MF: C₁₉H₁₇NO₄
FW: 323.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/Unidentified sp.



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

Laboratory Procedures

Tetrahydrocoptisine is supplied as a solid. A stock solution may be made by dissolving the tetrahydrocoptisine in the solvent of choice, which should be purged with an inert gas. Tetrahydrocoptisine is soluble in organic solvents such as dimethyl formamide and chloroform. The solubility of tetrahydrocoptisine in these solvents is approximately 1 and 5 mg/ml, respectively.

Description

Tetrahydrocoptisine is an alkaloid that has been found in *C. impatiens* and has anti-inflammatory and antioxidant activities.^{1,2} It inhibits LPS-induced NF-κB activation and production of nitric oxide (NO), TNF-α, and IL-6 in isolated mouse peritoneal macrophages when used at concentrations ranging from 0.001 to 1 μg/ml.¹ Tetrahydrocoptisine (10 and 30 mg/kg) inhibits xylene-induced ear edema in mice, and it decreases serum levels of TNF-α in a mouse model of LPS-induced septic shock. It reduces the severity of ethanol-induced gastric ulcers in mice when administered at doses of 10 or 20 mg/kg.²

References

1. Li, W., Huang, H., Zhang, Y., et al. Anti-inflammatory effect of tetrahydrocoptisine from *Corydalis impatiens* is a function of possible inhibition of TNF-α, IL-6 and NO production in lipopolysaccharide-stimulated peritoneal macrophages through inhibiting NF-κB activation and MAPK pathway. *Eur. J. Pharmacol.* **715(1-3)**, 62-71 (2013).
2. Li, W., Huang, H., Niu, X., et al. Protective effect of tetrahydrocoptisine against ethanol-induced gastric ulcer in mice. *Toxicol. Appl. Pharmacol.* **272(1)**, 21-29 (2013).

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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