

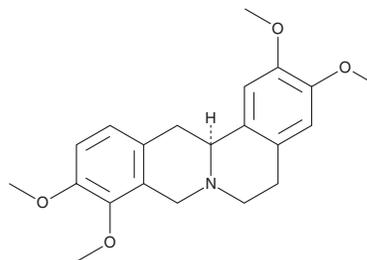
PRODUCT INFORMATION



L-Tetrahydropalmatine

Item No. 20535

CAS Registry No.: 483-14-7
Formal Name: 5,8,13,13aS-tetrahydro-2,3,9,10-tetramethoxy-6H-dibenzo[a,g]quinolizine
Synonyms: (-)-Corydalis B, Rotundine, (-)-Tetrahydropalmatine, (S)-Tetrahydropalmatine, L-THP
MF: C₂₁H₂₅NO₄
FW: 355.4
Purity: ≥98%
UV/Vis.: λ_{max}: 282 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

L-Tetrahydropalmatine is supplied as a crystalline solid. A stock solution may be made by dissolving the L-tetrahydropalmatine in the solvent of choice, which should be purged with an inert gas. L-Tetrahydropalmatine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of L-tetrahydropalmatine in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

L-Tetrahydropalmatine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, L-Tetrahydropalmatine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. L-Tetrahydropalmatine has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

L-Tetrahydropalmatine is an alkaloid that can be found in *C. yanhusuo* root, which is used as an herbal remedy for pain. L-Tetrahydropalmatine has been found to have diverse effects in animals, including antagonizing the supraspinal dopamine 2 receptor and reducing stress-induced anxiety in rats.^{1,2} L-Tetrahydropalmatine also protects against ischemia-reperfusion injury in rats.³

References

1. Hu, J.-Y. and Jin, G.-Z. Supraspinal D₂ receptor involved in antinociception induced by l-tetrahydropalmatine *Zhongguo Yao Li Xue Bao. Acta Pharmacologica Sinica* **20(8)**, 715-719 (1999).
2. Lee, B., Sur, B., Yeom, M., et al. L-tetrahydropalmatine ameliorates development of anxiety and depression-related symptoms induced by single prolonged stress in rats. *Biomol. Ther. (Seoul)* **22(3)** (2014).
3. Han, Y., Zhang, W., Tang, Y., et al. l-Tetrahydropalmatine, an active component of *Corydalis yanhusuo* W.T. Wang, protects against myocardial ischaemia-reperfusion injury in rats. *PLoS One* **7(6)** (2012).

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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