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: Rotundine, L-THP
MF: C_{21}H_{25}NO_4
FW: 355.4
Purity: ≥98%
UV/Vis.: λ_{max}: 282 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

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. L-Tetrahydropalmatine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. 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