

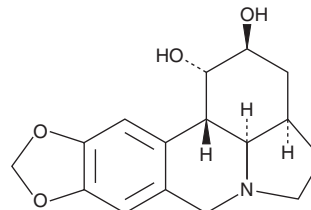
PRODUCT INFORMATION



Dihydrolycorine

Item No. 27809

CAS Registry No.: 6271-21-2
Formal Name: (1S,2S,3aR,12bS,12cR)-2,3,3a,4,5,7,12b,12c-octahydro-1H-[1,3]dioxolo[4,5-j]pyrrolo[3,2,1-de]phenanthridine-1,2-diol
MF: C₁₆H₁₉NO₄
FW: 289.3
Purity: ≥98%
UV/Vis.: λ_{max}: 242, 290 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Dihydrolycorine is supplied as a solid. A stock solution may be made by dissolving the dihydrolycorine in the solvent of choice, which should be purged with an inert gas. Dihydrolycorine is soluble in the organic solvent DMSO at a concentration of approximately 3 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of dihydrolycorine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of dihydrolycorine in PBS, pH 7.2, is approximately 2.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Dihydrolycorine is a derivative of the alkaloid lycorine that has antihypertensive and neuroprotective activities.¹ It inhibits methoxamine-induced contraction of isolated rabbit aortic rings and rat anococcygeus muscle with pA₂ values of 5.93 and 6.35, respectively. Dihydrolycorine reduces mean arterial pressure (MAP) in anesthetized and conscious normotensive rats when administered at a dose of 80 mg/kg. It also reduces electrically or phenylephrine-induced hypertension in pithed rats. Dihydrolycorine reduces infarct size, cerebral edema, and myeloperoxidase activity in a rat model of focal cerebral ischemia-reperfusion injury when administered following reperfusion.²

References

1. Chen, B.Y., Du, Z.H., Zeng, F.D., *et al.* Hypotensive effect of dihydrolycorine. *Zhongguo Yao Li Xue Bao* **14(1)**, 45-49 (1993).
2. Jiang, S., Yu, G., Yu, L., *et al.* Therapeutic effect of dihydrolycorine on focal cerebral ischemia-reperfusion injury in rats. *Yunyang Yixueyuan Xuebao* **28(5)**, 453-456 (2009).

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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