

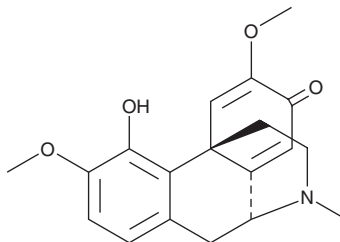
PRODUCT INFORMATION



(-)-Sinoacutine

Item No. 29889

CAS Registry No.: 4090-18-0
Formal Name: (9 α ,13 α)-5,6,8,14-tetradehydro-4-hydroxy-3,6-dimethoxy-17-methyl-morphinan-7-one
Synonym: (-)-Salutaridine
MF: C₁₉H₂₁NO₄
FW: 327.4
Purity: $\geq 95\%$
UV/Vis.: λ_{\max} : 241 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Plant/*Sinomenii caulis*



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

Laboratory Procedures

(-)-Sinoacutine is supplied as a solid. A stock solution may be made by dissolving the (-)-sinoacutine in the solvent of choice, which should be purged with an inert gas. (-)-Sinoacutine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (-)-sinoacutine in these solvents is approximately 1, 5, and 10 mg/ml, respectively.

(-)-Sinoacutine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (-)-sinoacutine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (-)-Sinoacutine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(-)-Sinoacutine is an alkaloid that has been found in *S. acutum* and has cytoprotective and vasorelaxant activities.^{1,2} It inhibits hydrogen peroxide-induced decreases in viability in PC12 cells when used at concentrations of 1 and 10 μM .¹ (-)-Sinoacutine induces relaxation of precontracted isolated rat aortic rings ($\text{IC}_{50} = 32.8 \mu\text{M}$).²

References

1. Bao, G.-H., Qin, G.-W., Wang, R., *et al.* Morphinane alkaloids with cell protective effects from *Sinomenium acutum*. *J. Nat. Prod.* **68**(7), 1128-1130 (2005).
2. Tsai, T.-H., Wang, G.-J., and Lin, L.-C. Vasorelaxing alkaloids and flavonoids from *Cassytha filiformis*. *J. Nat. Prod.* **71**(2), 289-291 (2008).

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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