

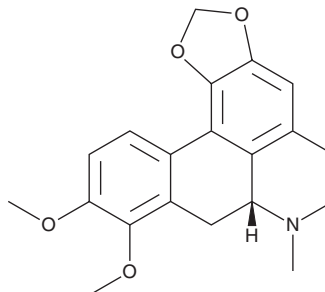
PRODUCT INFORMATION



Crebanine

Item No. 36176

CAS Registry No.: 25127-29-1
Formal Name: (7R)-6,7,7a,8-tetrahydro-9,10-dimethoxy-7-methyl-5H-benzo[g]-1,3-benzodioxolo[6,5,4-de]quinoline
Synonym: (-)-Crebanine
MF: C₂₀H₂₁NO₄
FW: 339.4
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 280 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Stephania yunnanensis*



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

Laboratory Procedures

Crebanine is supplied as a solid. A stock solution may be made by dissolving the crebanine in the solvent of choice, which should be purged with an inert gas. Crebanine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of crebanine in these solvents is approximately 10 and 12 mg/ml, respectively. Crebanine is also slightly soluble in ethanol.

Description

Crebanine is an aporphine alkaloid that has been found in *Stephania venosa* and has diverse biological activities.¹⁻⁵ It is an antagonist of α7 nicotinic acetylcholine receptors (nAChRs; IC₅₀ = 19.1 μM) and inhibits sodium currents (I_{Na}) in isolated guinea pig ventricular myocytes (IC₅₀ = 283 μM).^{1,2} Crebanine is active against the Gram-positive bacteria *M. lysodeikticus*, *B. cereus*, *B. megaterium*, *B. subtilis*, and *S. aureus* (MICs = 0.312, 0.213, 0.312, 0.312, and 0.312 g/L, respectively). It inhibits the LPS-induced production of TNF-α, IL-6, nitric oxide (NO), and prostaglandin E₂ (PGE₂; Item No. 14010) in RAW 264.7 macrophages when used at a concentration of 29.5 μM.³ Crebanine inhibits the proliferation of A549 lung, MDA-MB-231 and MCF-7 breast, and SKOV3 and Caov-3 ovarian cells and reduces TNF-α induced invasion and migration of A549 cells in a concentration-dependent manner.⁴ It prevents scopolamine-induced memory deficits in the Morris water maze in mice when administered at a dose of 25 mg/kg.¹

References

1. Rojsanga, P., Boonyarat, C., Utsintong, M., et al. *Life Sci.* **91**(3-4), 107-114 (2012).
2. Xiao-Shan, H., Qing, L., Yun-Shu, M., et al. *Chin. J. Nat. Med.* **12**(1), 20-23 (2014).
3. Intayoung, P., Limtrakul, P., and Yodkeeree, S. *Biol. Pharm. Bull.* **39**(1), 54-61 (2016).
4. Yodkeeree, S., Pompimon, W., and Limtrakul, P. *Tumour Biol.* **35**(9), 8615-8624 (2014).

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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