PRODUCT INFORMATION



Conessine

Item No. 11700

CAS Registry No.: 546-06-5

Formal Name: N,N-dimethyl-con-5-enin-3β-amine Synonyms: Neriine, NSC 119994, Roquessine,

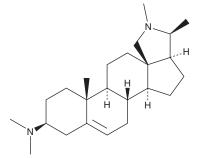
Wrightine

MF: $C_{24}H_{40}N_2$ FW: 356.6 **Purity:** ≥98%

Supplied as: A crystalline 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

Conessine is supplied as a crystalline solid. A stock solution may be made by dissolving the Conessine in the solvent of choice, which should be purged with an inert gas. Conessine is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of conessine in these solvents is approximately 16 and 1 mg/ml, respectively.

Conessine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, conessine should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Conessine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Conessine is a steroidal alkaloid that has been found in H. antidysenterica and has diverse biological activities. 1-5 It is active against a variety of Gram-positive and Gram-negative bacteria, including B. subtilis, S. aureus, M. luteus, and E. coli (MICs = $15.6-1,000 \, \mu \text{g/disc}$ in agar diffusion assays), the amoeba E. histolytica, as well as P. falciparum schizonts (IC₅₀ = $1.9 \mu g/ml$). Conessine inhibits replication of the coronaviruses HCoV-OC43, HCoV-NL63, MERS-CoV, and MHV-A59 in infected cells with EC₅₀ values of 2.34, 10.75, 4.98, and 11.46 μM, respectively.⁴ It is also a histamine H₃ receptor antagonist (K,s = 5.37 and 12.3 nM for the human and rat receptors, respectively).⁵ Conessine (10 mg/kg) reduces parasitemia in a mouse model of P. berghei infection.3

References

- 1. Siddiqui, B.S., Ali, S.T., Rizwani, G.H., et al. Antimicrobial activity of the methanolic bark extract of Holarrhena pubescens (Buch. Ham), its fractions and the pure compound conessine. Nat. Prod. Res. 26(11), 987-992 (2012).
- 2. Jayaswal, S.B. Amoebicidal activity of steroidal alkaloids of Wrightia tomentosa in vitro. Indian J. Pharm. 38(4), 112-113 (1976).
- Dua, V.K., Verma, G., Singh, B., et al. Anti-malarial property of steroidal alkaloid conessine isolated from the bark of Holarrhena antidysenterica. Malar. J. 12, 194 (2013).
- Shen, L., Niu, J., Wang, C., et al. High-throughput screening and identification of potent broad-spectrum inhibitors of coronaviruses. J. Virol. 93(12), e00023-19 (2019).
- Zhao, C., Sun, M., Bennani, Y.L., et al. The alkaloid conessine and analogues as potent histamine H₃ receptor antagonists. J. Med. Chem. 51(17), 5423-5430 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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