PRODUCT INFORMATION

Oxyacanthine (hydrochloride)

Item No. 44504

Formal Name: 3,4,4aR,5,16aS,17,18,19-octahydro-21,22,26-trimethoxy-4,17-dimethyl-2H-1,24:12,15-dietheno-6,10-metheno-16H-pyrido[2′,3′:17,18][1,10]dioxacycloeicosino[2,3,4-ij]isoquinolin-9-ol, dihydrochloride

Synonym: NSC 93135

MF: $C_{37}H_{40}N_2O_6$ • 2HCl

FW: 646.2

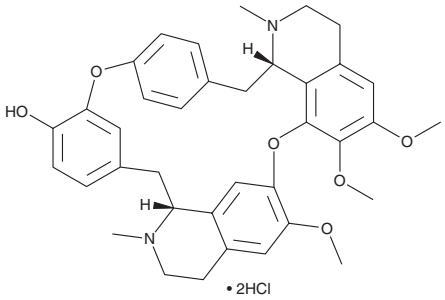
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*Berberidis radix*



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

Laboratory Procedures

Oxyacanthine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the oxyacanthine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Oxyacanthine (hydrochloride) is slightly soluble (0.1-1 mg/ml) in a 1:1 solution of acetonitrile:water. We do not recommend storing the aqueous solution for more than one day.

Description

Oxyacanthine is an alkaloid that has been found in *B. crataegina* and has diverse biological activities.[1-3] It inhibits viral replication in Vero E6 cells infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; IC_{50} = 14.5 µM).[1] Oxyacanthine induces relaxation of potassium-precontracted rat aortic rings (EC_{50} = 17.4 µM) and inhibits norepinephrine-, phenylephrine-, or serotonin-induced contractions in rat aortic rings in a concentration-dependent manner.[2] *In vivo*, oxyacanthine (100 and 200 mg/kg) reduces acetic acid-induced vascular permeability but also induces gastric ulcers in mice.[3]

References

1. Lu, J., Cheng, Y., Zhang, Y., *et al.* Design, synthesis, and evaluation of novel oxyacanthine derivatives for anti-SARS-CoV-2 activity. *Bioorg. Med. Chem. Lett.* **113**, 129951 (2024).
2. Sotníková, R., Kost'álová, D., and Vaverková, S. Effect of bisbenzylisoquinoline alkaloids from *Mahonia aquifolium* on the isolated rat aorta. *Gen. Pharmacol.* **25(7)**, 1405-1410 (1994).
3. Küpeli, E., Koşar, M., Yeşilada, E., *et al.* A comparative study on the anti-inflammatory, antinociceptive and antipyretic effects of isoquinoline alkaloids from the roots of Turkish *Berberis* species. *Life Sci.* **72(6)**, 645-657 (2002).

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/30/2025

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM