PRODUCT INFORMATION



Scoulerine

Item No. 35140

CAS Registry No.: 6451-73-6

Formal Name: 5,8,13,13aS-tetrahydro-3,10-dimethoxy-6H-

dibenzo[a,g]quinolizine-2,9-diol

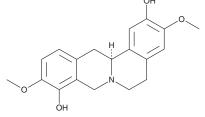
Synonyms: (-)-Scoulerine, I-Scoulerine, (S)-Scoulerine

MF: C₁₉H₂₁NO₄ 327.4 FW: **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years Item Origin: Synthetic

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



Laboratory Procedures

Scoulerine is supplied as a crystalline solid. A stock solution may be made by dissolving the scoulerine in the solvent of choice, which should be purged with an inert gas. Scoulerine is slightly soluble in chloroform and methanol.

Description

Scoulerine is a benzylisoquinoline alkaloid that has been found in C. cava and has diverse biological activities. $^{1-3}$ It selectively binds to the dopamine D_1 and D_2 receptors (K_i s = 22 and 214 nM, respectively) over the serotonin (5-HT) receptor subtypes 5-HT_{1A} and 5-H \bar{T}_{2A} in HEK293 cells when used at a concentration of 10 μ M.¹ Scoulerine inhibits proliferation in a panel of leukemia cell lines (IC₅₀s = 2.7-6.5 μ M).² It inhibits methamphetamine-induced conditioned place preference in mice when administered at a dose of 5 mg/kg.3

References

- 1. Sun, H., Zhu, L., Yang, H., et al. Asymmetric total synthesis and identification of tetrahydroprotoberberine derivatives as new antipsychotic agents possessing a dopamine D_1 , D_2 and serotonin 5-HT_{1 Δ} multi-action profile. Bioorg. Med. Chem. 21(4), 856-868 (2013).
- 2. Habartova, K., Havelek, R., Seifrtova, M., et al. Scoulerine affects microtubule structure, inhibits proliferation, arrests cell cycle and thus culminates in the apoptotic death of cancer cells. Sci. Rep. 8(1), 4829 (2018).
- 3. Mi, G., Gao, Y., Yan, H., et al. I-Scoulerine attenuates behavioural changes induced by methamphetamine in zebrafish and mice. Behav. Brain Res. 298(Pt A), 97-104 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

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

Copyright Cayman Chemical Company, 10/13/2022

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