

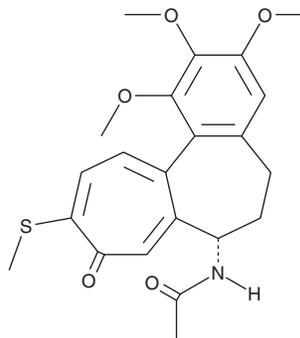
PRODUCT INFORMATION



Thiocolchicine

Item No. 17427

CAS Registry No.: 2730-71-4
Formal Name: N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-acetamide
Synonym: NSC 186301
MF: C₂₂H₂₅NO₅S
FW: 415.5
Purity: ≥98%
UV/Vis.: λ_{max}: 230, 254, 288, 379 nm
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

Thiocolchicine is supplied as a crystalline solid. A stock solution may be made by dissolving the thiocolchicine in the solvent of choice. Thiocolchicine is soluble in organic solvents such as ethanol, methanol, and DMSO, which should be purged with an inert gas.

Description

Thiocolchicine is an inhibitor of microtubule assembly (IC₅₀ = 2.5 μM) and a derivative of colchicine (Item No. 9000760).¹ It inhibits binding of colchicine to tubulin (K_i = 0.7 μM in a radioligand binding assay). Thiocolchicine inhibits proliferation of MDA-MB-231 and multidrug resistant (MDR) MCF-7 ADR breast cancer cells (IC₅₀s = 0.6 and 400 nM, respectively) as well MDR CEM-VBL leukemia cells (IC₅₀ = 50 nM).²

References

1. Hahn, K.M., Humphreys, W.G., Helms, A.M., *et al.* Structural requirements for the binding of colchicine analogs to tubulin: The role of the C-10 substituent. *Bioor. Med. Chem. Lett.* **1(9)**, 471-476 (1991).
2. De Vincenzo, R., Scambia, G., Ferlini, C., *et al.* Antiproliferative activity of colchicine analogues on MDR-positive and MDR-negative human cancer cell lines. *Anticancer Drug Des.* **12(1)**, 19-33 (1998).

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, 09/30/2022

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