

PRODUCT INFORMATION

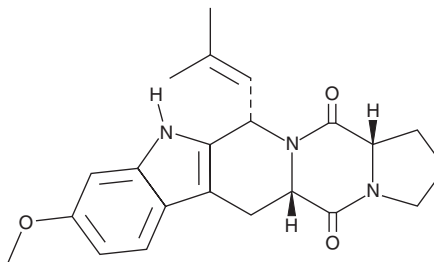


Fumitremorgin C

Item No. 11030

CAS Registry No.: 118974-02-0
Formal Name: 1,2,3,5aS,6,11,12S,14aS-octahydro-9-methoxy-12-(2-methyl-1-propen-1-yl)-5H,14H-pyrrolo[1'',2'':4',5']pyrazino[1',2':1,6]pyrido[3,4-b]indole-5,14-dione

Synonym: Tryptoquivaline
MF: C₂₂H₂₅N₃O₃
FW: 379.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: 4°C
Stability: ≥1 year



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

Laboratory Procedures

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

Description

Fumitremorgin C is a specific inhibitor of breast cancer resistance protein (BCRP/ABCG2) multidrug efflux transporter. At 5 μM, it significantly potentiates the toxicity of the chemotherapeutic drugs mitoxantrone, doxorubicin, and topotecan in S1-M₁-3.2 colon carcinoma cells.¹ Fumitremorgin C reverses multidrug resistance in cells overexpressing BCRP but not P-glycoprotein (ABCB1) or MRP1 (ABCC1).^{2,3}

References

1. Rabindran, S.K., He, H., Singh, M., *et al.* Reversal of a novel multidrug resistance mechanism in human colon carcinoma cells by fumitremorgin C. *Cancer Res.* **58(24)**, 5850-5858 (1998).
2. Rabindran, S.K., Ross, D.D., Doyle, L.A., *et al.* Fumitremorgin C reverses multidrug resistance in cells transfected with the breast cancer resistance protein. *Cancer Res.* **60(1)**, 47-50 (2000).
3. van Loevezijn, A., Allen, J.D., Schinkel, A.H., *et al.* Inhibition of BCRP-mediated drug efflux by fumitremorgin-type indolyl diketopiperazines. *Bioorg. Med. Chem. Lett.* **11(1)**, 29-32 (2001).

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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