

PRODUCT INFORMATION



Isomitraphylline

Item No. 39452

CAS Registry No.: 4963-01-3
Formal Name: (1'S,3S,4'aS,5'aS,10'aR)-1,2,5',5'a,7',8',10',10'a-octahydro-1'-methyl-2-oxo-spiro[3H-indole-3,6'(4'aH)-[1H]pyrano[3,4-f]indolizine]-4'-carboxylic acid, methyl ester

Synonym: Ajmalicine Oxindole A

MF: C₂₁H₂₄N₂O₄

FW: 368.4

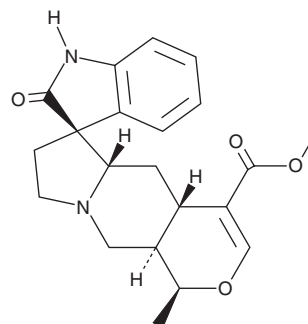
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Plant/*Mitragyna ciliata*



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

Laboratory Procedures

Isomitraphylline is supplied as a solid. A stock solution may be made by dissolving the isomitraphylline in the solvent of choice, which should be purged with an inert gas. Isomitraphylline is sparingly soluble (1-10 mg/ml) in chloroform and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Isomitraphylline is an alkaloid that has been found in *U. tomentosa* and has anticancer activity.^{1,2} It is an antagonist of ecdysteroid receptors in a reporter assay using *Drosophila* B_{II} cells (EC₅₀ = 160 μM).¹ Isomitraphylline (50 or 100 μM) reduces the proliferation of, and induces apoptosis in, CCRF CEM C7H2 lymphoblastic leukemia cells.²

References

1. Dinan, L., Bourne, P.C., Meng, Y., *et al.* Assessment of natural products in the *Drosophila melanogaster* B_{II} cell bioassay for ecdysteroid agonist and antagonist activities. *Cell. Mol. Life Sci.* **58**(2), 321-342 (2001).
2. Bacher, N., Tienfenthaler, M., Sturm, S., *et al.* Oxindole alkaloids from *Uncaria tomentosa* induce apoptosis in proliferating, G0/G1-arrested and bcl-2-expressing acute lymphoblastic leukaemia cells. *Br. J. Haematol.* **132**(5), 615-622 (2006).

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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