

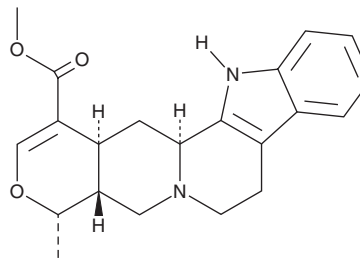
PRODUCT INFORMATION



Ajmalicine

Item No. 31213

CAS Registry No.: 483-04-5
Formal Name: (19 α)-16,17-didehydro-19-methyl-oxayohimban-16-carboxylic acid, methyl ester
Synonyms: (-)-Ajmalicine, Raubasine, NSC 72133, NSC 95087
MF: C₂₁H₂₄N₂O₃
FW: 352.4
Purity: \geq 98%
UV/Vis.: λ_{\max} : 227 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Natural/Source unknown



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

Laboratory Procedures

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

Description

Ajmalicine is a terpenoid indole alkaloid that has been found in *R. serpentina*.^{1,2} It is an α_1 -adrenergic receptor antagonist, reducing the phenylephrine-induced pressor response in pithed rats when administered at doses ranging from 1 to 4 mg/kg.³ It also binds to α_{2A} -, α_{2B} -, α_{2C} -, and α_{2D} -adrenergic receptors (K_{iS} = 8.2, 14.5, 5, and 289 nM, respectively).⁴ Ajmalicine, in combination with almitrine, improves hemodynamic and metabolic parameters following transient cerebral ischemia in dogs.⁵

References

1. Sharma, V., Chaudhary, S., Srivastava, S., *et al.* Characterization of variation and quantitative trait loci related to terpenoid indole alkaloid yield in a recombinant inbred line mapping population of *Catharanthus roseus*. *J. Genet.* **91(1)**, 49-69 (2012).
2. Srivastava, A., Tripathi, A.K., Pandey, R., *et al.* Quantitative determination of reserpine, ajmaline, and ajmalicine in *Rauvolfia serpentina* by reversed-phase high-performance liquid chromatography. *J. Chromatogr. Sci.* **44(9)**, 557-560 (2006).
3. Demichel, P., Gomond, P. and Roquebert, J. α -Adrenoceptor blocking properties of raubasine in pithed rats. *Br. J. Pharmacol.* **77(3)**, 449-454 (1982).
4. Ruffolo, R.R., Jr., Bondinell, W. and Hieble, J.P. α - and β -adrenoceptors: From the gene to the clinic. 2. Structure-activity relationships and therapeutic applications. *J. Med. Chem.* **38(19)**, 3681-3716 (1995).
5. Cahn, R. and Cahn, J. Curative effect of an almitrine-raubasine combination in the postischemic syndrome following transient cerebral ischemia in dogs. *Pharmacology* **36(3)**, 156-165 (1988).

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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