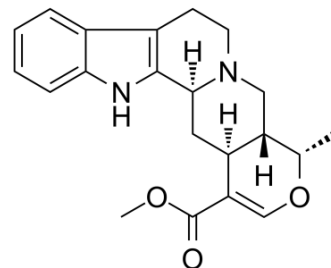


Ajmalicine

Cat. No.:	HY-N1919
CAS No.:	483-04-5
Molecular Formula:	C ₂₁ H ₂₄ N ₂ O ₃
Molecular Weight:	352.43
Target:	Adrenergic Receptor; AChE
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description

Ajmalicine (Raubasine) is found in herbs of *Catharanthus roseus*, is an antihypertensive drug used in the treatment of high blood pressure, decreases peripheral resistance and blood pressure^[1]. Ajmalicine (Raubasine) is an adrenergic drug which preferentially blocks **alpha 1-adrenoceptor** than alpha 2-adrenoceptor^[2]. Ajmalicine (Raubasine) is a reversible non-competitive **nicotine receptor** antagonist with an IC₅₀ of 72.3 μM^[3]. Ajmalicine (Raubasine) acts preferentially at postsynaptic sites, competitively antagonizes the effect of noradrenaline on postsynaptic alpha-adrenoceptor with a pA₂ value of 6.57, blocks the inhibitory effect of clonidine with a pA₂ value of 6.2^[4].

REFERENCES

- [1]. Wink, Michael; Roberts, M. W. (1998). *Alkaloids: biochemistry, ecology, and medicinal applications*. New York: Plenum Press. ISBN 0-306-45465-3.
- [2]. Roquebert J, et al. Inhibition of the alpha 1 and alpha 2-adrenoceptor-mediated pressor response in pithed rats by raubasine, tetrahydroalstonine and akuammigine. *Eur J Pharmacol.* 1984 Oct 30;106(1):203-5.
- [3]. Pereira DM, et al. Pharmacological effects of *Catharanthus roseus* root alkaloids in acetylcholinesterase inhibition and cholinergic neurotransmission. *Phytomedicine.* 2010 Jul;17(8-9):646-52.
- [4]. • Demichel P, et al. Effects of raubasine stereoisomers on pre- and postsynaptic alpha-adrenoceptors in the rat vas deferens. *Br J Pharmacol.* 1984 Oct;83(2):505-10

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA