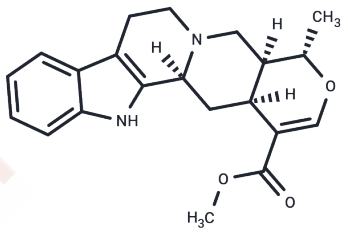
Data Sheet (Cat.No.TN2267)

TargetMol

Tetrahydroalstonine

Chemical Properties



CAS No. : 6474-90-4

Formula: C21H24N2O3

Molecular Weight: 352.43

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Tetrahydroalstonine is an indole alkaloid extracted from the fruit of Rhazya stricta and is a selective α2-adrenoceptor antagonist. tetrahydroalstonine has shown antipsychotic activity in Rauwolfia tetraphylla.
Targets(IC50)	Akt,Adrenergic Receptor,mTOR,ATG
In vivo	The tetrahydroalstonine (0.5 to 2 mg/kg) on alpha 1- and alpha 2-adrenoceptors were assessed by effects on the rise in blood pressure induced by stimulation of the sympathetic outflow from the spinal cord or by injection of noradrenaline in pithed rats. Tetrahydroalstonine antagonized the effects of injected noradrenaline. Tetrahydroalstonine is more selective for alpha 2-adrenoceptors.[2]

Solubility Information

Solubility	DMSO: 90 mg/mL (255.37 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8374 mL	14.1872 mL	28.3744 mL
5 mM	0.5675 mL	2.8374 mL	5.6749 mL
10 mM	0.2837 mL	1.4187 mL	2.8374 mL
50 mM	0.0567 mL	0.2837 mL	0.5675 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Malik S. Tetrahydroalstonine from Fruits of Rhazya stricta. Planta Med. 1984 ; 50(3):283.
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 ; 106(1):203-205.
Liao Y, et al. The Protective Effect of (-)-Tetrahydroalstonine against OGD/R-Induced Neuronal Injury via Autophagy Regulation. Molecules. 2023 ; 28(5):2370.
Roquebert J, et al. Differential inhibition of raubasine and tetrahydroalstonine on the vasopressor response to sympathetic nervous stimulation and intravenous noradrenaline in the pithed rat. J Pharmacol. 1985 ; 16(4):412-420.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481