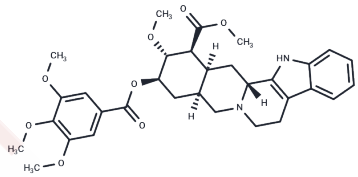
Data Sheet (Cat.No.T8270)

TargetMol

Deserpidine

Chemical Properties



CAS No. : 131-01-1

Formula: C32H38N2O8

Molecular Weight: 578.65

Storage: 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	Deserpidine (Harmonyl) is only found in individuals that have used or taken this drug. It is an ester alkaloid drug isolated from Rauwolfia canescens (family Apocynaceae) with antipsychotic and antihypertensive properties that has been used for the control of high blood pressure and for the relief of psychotic behavior.Deserpidine's mechanism of action is through inhibition of the ATP/Mg2+ pump responsible for the sequestering of neurotransmitters into storage vesicles located in the presynaptic neuron. Deserpidine is a competitive angiotensin converting enzyme (ACE) inhibitor. Deserpidine also decreases angiotensin II-induced aldosterone secretion by the adrenal cortex.
Targets(IC50)	RAAS,Angiotensin-converting Enzyme (ACE)

Solubility Information

Solubility	DMSO: 235 mg/mL (406.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (17.28 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (17.28 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7282 mL	8.6408 mL	17.2816 mL
5 mM	0.3456 mL	1.7282 mL	3.4563 mL
10 mM	0.1728 mL	0.8641 mL	1.7282 mL
50 mM	0.0346 mL	0.1728 mL	0.3456 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

Varchi G, et al. Synthesis of deserpidine from reserpine. J Nat Prod. 2005 Nov;68(11):1629-31.
Zhang H, et al. Liquid chromatography/tandem mass spectrometry method for the quantification of deserpidine in human plasma: Application to a pharmacokinetic study. J Chromatogr B Analyt Technol Biomed Life Sci. 2009 Oct 1;877(27):3221-5.
Fulton SC, et al. Comparison of the effectiveness of deserpidine, reserpine, and alpha-methyltyrosine on brain biogenic amines. Fed Proc. 1976 Dec;35(14):2558-62.