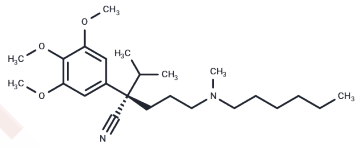
Data Sheet (Cat.No.T28164)

TargetMol

Nexopamil

Chemical Properties



CAS No. : 136033-49-3

Formula: C24H40N2O3

Molecular Weight: 404.59

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	Nexopamil (LU-49938) is a calcium channel antagonist and a 5-hydroxytryptamine 2A receptor antagonist. Nexopamil inhibits 5-HT-induced contraction and proliferation of mesenchymal cells.
Targets(IC50)	Calcium Channel,5-HT Receptor,Dopamine Receptor
In vitro	Nexopamil abolished in a concentration-dependent way the serotonin-induced [3H] thymidine incorporation into DNA, and the serotonin-induced increase in a number of cells. Nexopamil partially blocked the serotonin-induced mesangial cell contraction, in a dose-dependent manner blocking 5-HT2 receptors and the voltage-operated Ca2+ channels.[3]

Solubility Information

Solubility	DMSO: 55 mg/mL (135.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4716 mL	12.3582 mL	24.7164 mL
5 mM	0.4943 mL	2.4716 mL	4.9433 mL
10 mM	0.2472 mL	1.2358 mL	2.4716 mL
50 mM	0.0494 mL	0.2472 mL	0.4943 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

Hohlfeld T, et al. Protection of reperfused ischemic pig myocardium by nexopamil, a new combined Ca2+ and serotonin antagonist. J Cardiovasc Pharmacol. 1994 ; 23(6):922-931.
Nearing BD, et al. Potent antifibrillatory effect of combined blockade of calcium channels and 5-HT2 receptors with nexopamil during myocardial ischemia and reperfusion in dogs: comparison to diltiazem. J Cardiovasc Pharmacol. 1996 ; 27(6):777-787.
Park SJ, et al. The combined 5-HT2 receptor and calcium channel inhibitor LU49938 restores endothelium dependent responses in the regenerated endothelium of the porcine coronary artery. Cardiovasc Res. 1995 ; 29(1): 95-101.
Montero A, et al. The effect of LU-49938 (nexopamil) on the activation by serotonin of mesangial cells. Fundam Clin Pharmacol. 1995 ; 9(2):175-180.
Park SJ, et al. Effects of the combined 5-hydroxytryptamine2 receptor and Ca2+ channel antagonist LU49938 on the responsiveness of isolated porcine coronary arteries with and without endothelium. J Cardiovasc Pharmacol. 1994 ; 24(3):517-522.
Kirchengast M, et al. Inhibition by the combined Ca2+ and 5-HT2 receptor antagonist nexopamil (LU 49938) of intracoronary thrombus formation in a canine model of arterial stenosis and intimal damage. J Cardiovasc Pharmacol. 1993 ; 22(5):687-694.

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