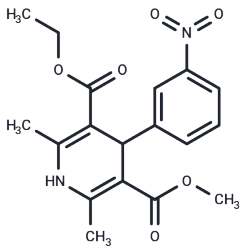
Data Sheet (Cat.No.T0119)

TargetMol

Nitrendipine

Chemical Properties



CAS No. : 39562-70-4

Formula: C18H20N2O6

Molecular Weight: 360.36

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	Nitrendipine (BAY-E-5009) is a calcium channel blocker with marked vasodilator action. It is an effective antihypertensive agent and differs from other calcium channel blockers in that it does not reduce glomerular filtration rate and is mildly natriuretic, rather than sodium retentive.
Targets(IC50)	Apoptosis,Calcium Channel,Autophagy

Solubility Information

Solubility	DMSO: 247.5 mg/mL (686.81 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (27.75 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (27.75 mM),Suspension. *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	2.775 mL	13.875 mL	27.750 mL
5 mM	0.555 mL	2.775 mL	5.550 mL
10 mM	0.2775 mL	1.3875 mL	2.775 mL
50 mM	0.0555 mL	0.2775 mL	0.555 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

Perez-Reyes E, et al. J Pharmacol Exp Ther. 2009 Feb;328(2):621-7.
Wang B, Pei J, Zhang H, et al.Dihydropyridine-derived calcium channel blocker as a promising anti-hantavirus entry inhibitor.Interventions for emerging infectious diseases.2023, 16648714.