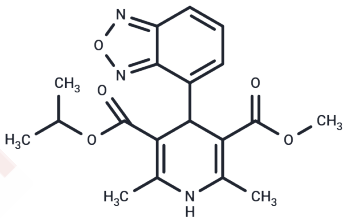
Data Sheet (Cat.No.T0957)

TargetMol

Isradipine

Chemical Properties



CAS No. : 75695-93-1

Formula: C19H21N3O5

Molecular Weight: 371.39

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	Isradipine (PN 200-110) is a dihydropyridine calcium channel blocker with antihypertensive and vasodilator activities. Isradipine blocks calcium entry through calcium ion channels in coronary and peripheral vascular smooth muscle, dilating coronary arteries and peripheral arterioles. This action increases oxygen delivery by enhancing blood flow and decreases oxygen requirements by reducing total peripheral resistance.
Targets(IC50)	Calcium Channel,Autophagy
In vitro	In vivo oxygen uptake (I50 = 31.1 mM) and growth incubation (I50 = 20.8 mM) assays showed that Isradipine was the most effective derivative. At micromolar concentrations, Isradipine inhibited oxygen consumption and growth incubation of the short-membrane form of Trypanosoma cruzi strain Tulahuen.
In vivo	In vivo oxygen uptake (I50 = 31.1 mM) and growth incubation (I50 = 20.8 mM) assays showed that Isradipine was the most effective derivative. At micromolar concentrations, Isradipine inhibited oxygen consumption and growth incubation of the short-membrane form of Trypanosoma cruzi strain Tulahuen.

Solubility Information

Solubility	Ethanol: 7.4 mg/mL (19.93 mM),Sonication is recommended. DMSO: 250 mg/mL (673.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.39 mM),Sonication is recommended. *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	2.6926 mL	13.4629 mL	26.9259 mL
5 mM	0.5385 mL	2.6926 mL	5.3852 mL
10 mM	0.2693 mL	1.3463 mL	2.6926 mL
50 mM	0.0539 mL	0.2693 mL	0.5385 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

Núñez-Vergara LJ, et al. Gen Pharmacol. 1998 Jan;30(1):85-7.
Barhwal K, et al. Neurobiol Dis, 2009, 34(2), 230-244.
Fadda F, et al. Alcohol Clin Exp Res, 1992, 16(3), 449-452.
Levy BI, et al. Circulation, 1994, 90(6), 3024-3033.
Kuzmin A, et al. Pharmacol Biochem Behav, 1992, 41(3), 497-500.