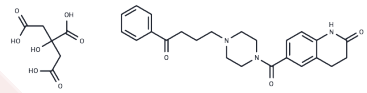
Data Sheet (Cat.No.T33807)

TargetMol

Opc 8490

Chemical Properties



CAS No. : 123941-50-4

Formula: C30H35N3O10

Molecular Weight: 597.61

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	Opc 8490 is a cardiotonic agent and a positive inotropic vasodilator that increases Ca current (ICa) in a dose-dependent and reversible manner and prolongs atrial action potential in a concentration-dependent manner.
Targets(IC50)	Calcium Channel
In vivo	Opc 8490 (0.1, 0.3, and 1 μM/kg) induced a dose-dependent decrease in heart rate and arterial blood pressure in intact assisted dogs when administered intravenously; Opc 8490 (1 μM) induced a triphasic effect, Ph1 followed by Ph2 and a slightly positive (Ph3) chronotropic and inotropic effect.[3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6733 mL	8.3667 mL	16.7333 mL
5 mM	0.3347 mL	1.6733 mL	3.3467 mL
10 mM	0.1673 mL	0.8367 mL	1.6733 mL
50 mM	0.0335 mL	0.1673 mL	0.3347 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

Focaccio A, Peeters G, Movsesian M, Roden R, Eki Y, Krall J, Bristow MR. Mechanism of action of OPC-8490 in human ventricular myocardium. Circulation. 1996 Feb 15;93(4):817-25.

Kurachi Y, Asano Y, Ito H, Sugimoto T. Voltage-dependent inhibition of the delayed outward potassium current by OPC-8490, a novel positive inotropic agent, in isolated atrial myocytes of guinea-pig heart. Naunyn Schmiedebergs Arch Pharmacol. 1990 Apr;341(4):324-30.

Furukawa Y, Akahane K, Haniuda M, Chiba S. Positive inotropic and negative chronotropic effects of OPC-8490, a newly developed cardiotonic, in isolated, blood-perfused canine heart preparations. Jpn Heart J. 1989 May;30(3):387-98.

Endoh M, Satoh H, Norota I, Hirano K, Hosokawa T. Subcellular mechanism of the positive inotropic effect of a new quinolinone derivative OPC-8490 on the dog ventricular myocardium. Heart Vessels. 1991;6(3):158-67.