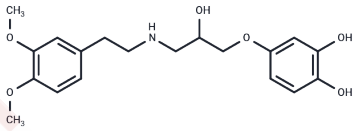
Data Sheet (Cat.No.T16769)

TargetMol

Ro 363

Chemical Properties



CAS No. : 74513-77-2

Formula: C19H25NO6

Molecular Weight: 363.4

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	RO 363 is an effective inotropic stimulant and is a cardiovascular modulator that decreases diastolic blood pressure and pronounces increases in myocardial contractility. Ro 363 is an effective and highly selective β1-adrenoceptor agonist.
Targets(IC50)	Adrenergic Receptor
In vitro	RO 363 is approximately half as effective as (-)-Isoprenaline in tissues where actions are due to β1-receptor activation (guinea-pig atrial and ileal preparations and ventricular strips from the rabbit, rat, and guinea-pig. In spontaneously contracted tracheal preparations from the guinea-pig, RO 363 is a full agonist and is approximately half as potent as (-)-Isoprenaline. These effects of RO 363 are due to the activation of a population of β1-receptors in the tissue since RO 363 and (-)-Isoprenaline have the same relative potencies in trachea, cardiac and ileal preparations. Isolated perfused heart preparations from guinea-pigs developed arrhythmic contractions following the administration of Ro 363 in doses producing 70-100% of its maximal chronotropic responses [1][2].
In vivo	Ro 363 elicits ventricular arrhythmias following the administration of subarrhythmic doses of ouabain and increases the number of subauricular escape beats which occurred during vagal nerve stimulation in non-ouabain treated animals. In chloralose-anesthetized cats, Ro 363, when compared to epinephrine, is essentially devoid of arrhythmogenic activity in animals in which cardiac sensitization is induced by U-0882 or halothane [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7518 mL	13.7589 mL	27.5179 mL
5 mM	0.5504 mL	2.7518 mL	5.5036 mL
10 mM	0.2752 mL	1.3759 mL	2.7518 mL
50 mM	0.055 mL	0.2752 mL	0.5504 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

Maccarrone C, et al. Comparison of the Arrhythmogenic Actions of (-)-Isoprenaline, Dobutamine and the selective beta 1-adrenoceptor agonist, (+/-)-(1-[3',4'-dihydroxyphenoxy] -2-hydroxy-[3",4"-dimethoxy phenethylamino]-propane)-oxalate (Ro 363). Arzneimittelforschung. 1985;35(3):592-8.

Iakovidis D, et al. In vitro activity of RO363, a beta1-adrenoceptor selective agonist. Br J Pharmacol. 1980 Apr;68 (4):677-85.

Einstein R, et al. Comparison of the cardiac effects of beta-adrenoreceptor agonists in anaesthetised and conscious dogs. J Auton Pharmacol. 1986 Mar;6(1):9-14.