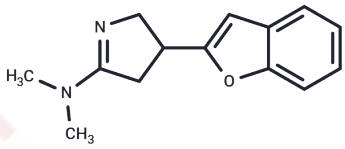
Data Sheet (Cat.No.T12538)

TargetMol

Prifuroline

Chemical Properties



CAS No. : 70833-07-7

Formula: C14H16N2O

Molecular Weight: 228.29

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	Prifuroline is an agent of antiarrhythmic.
Targets(IC50)	Others,AChR
In vivo	Prifuroline dose-dependently antagonizes the arrhythmogenic action of aconitine in rats, when administered either intravenously (5, 10 or 20 mg/kg) or intraduodenally (10, 20 or 50 mg/kg);?it exhibits effectiveness by the digestive route at doses only twice as greater as the active i.v. doses: its intravenous anti-aconitine activity is comparable to that of disopyramide, and superior to that of quinidine;?lidocaine is inactive in this test. Prifuroline also diminishes ventricular susceptibility to electrical stimulation in open-chest rats;?its effect is comparable to that of disopyramide and amiodarone at the same dose levels;?quinidine and lidocaine are less effective.?Only prifuroline and propranolol were able to antagonize ouabain toxicity in guinea-pigs, quinidine showing only borderline activity, and disopyramide, lidocaine and verapamil being ineffective.?In a model of arrhythmias induced by anoxic stress in rats, all the tested compounds were found active, with prifuroline and disopyramide providing complete protection at high dose levels.?The arrhythmias induced in dogs by coronary artery ligation were markedly antagonized by prifuroline after doses of 5 and 10 mg/kg i.v. or 30 mg/kg intraduodenally;?the duration of its antiarrhythmic activity in this model of arrhythmias in conscious dogs was much longer after intraduodenal than after i.v. administration.? Prifuroline was also able to restore sinus rhythm in guinea-pigs after intracardiac conduction blockade with acetylcholine, although being devoid of anticholinergic activity.?It also diminishes the maximal frequency of guinea-pig atria electrically stimulated in viro (EC25 = 5 X 10(-6) g/ml).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.3804 mL	21.902 mL	43.8039 mL
5 mM	0.8761 mL	4.3804 mL	8.7608 mL
10 mM	0.438 mL	2.1902 mL	4.3804 mL
50 mM	0.0876 mL	0.438 mL	0.8761 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

Benharkate M, et al. Antiarrhythmic and hemodynamic effects of prifuroline. Arzneimittelforschung. 1986 Dec;36 (12):1761-7.