

Dopropidil

Chemical Properties

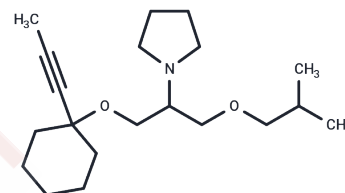
CAS No. : 79700-61-1

Formula: C₂₀H₃₅NO₂

Molecular Weight: 321.5

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	Dopropidil is a new anti-angina pectoris calcium regulator, which has intracellular calcium antagonist activity and anti-ischemic effects in various predicted animal models.
Targets(IC50)	Calcium Channel
In vitro	In the calcium-free medium (IC ₅₀ = 30.0 μM), dopredil can inhibit caffeine-induced contraction of rabbit renal arteries. Dopredil inhibits norepinephrine (NE)-induced responses with IC ₅₀ of 2.7 and 29.8 μM, respectively. At 3 μM and 10 μM, dopredil significantly reduced the maximum increase in diastolic pressure caused by veratrine (IC ₅₀ = 2.8 μM).
In vivo	Dopamine (1 and 2.5 mg/kg) dose-dependently reduced electrical (ST segment elevation), biochemical (lactate production and potassium release) and mechanical (myocardial segment contractility loss) disturbances caused by ischemia in anesthetized dogs. Intraduodenal administration of dopredil (50 mg/kg) can significantly reduce tachycardia caused by isoproterenol. This effect is evident between 15 and 120 minutes after application of the compound, indicating rapid absorption and long duration of action. In awake dogs, dopredil (12-14 mg/kg p.o.) can reduce the resting heart rate by about 10 beats/minute.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1104 mL	15.5521 mL	31.1042 mL
5 mM	0.6221 mL	3.1104 mL	6.2208 mL
10 mM	0.311 mL	1.5552 mL	3.1104 mL
50 mM	0.0622 mL	0.311 mL	0.6221 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

J. Planellas, et al. Dopropidil, A Novel Antianginal Calcium Modulating Agent. Cardiovascular Drug Reviews. Vol.12, No.3, pp. 208-224.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481