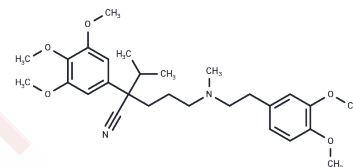


Gallopamil

Chemical Properties

CAS No. :	16662-47-8
Formula:	C ₂₈ H ₄₀ N ₂ O ₅
Molecular Weight:	484.63
Storage:	Pure form: -20°C for 3 years In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Gallopamil (Methoxyverapamil) inhibits acid secretion in a concentration-dependent manner with an IC ₅₀ of 10.9 μM. Gallopamil is a potent antiarrhythmic and vasodilator agent. Gallopamil (Methoxyverapamil), a methoxy derivative of Verapamil, is a phenylalkylamine calcium antagonist.
Targets(IC ₅₀)	Calcium Channel
In vivo	Gallopamil(5 min) significantly reduces systolic and diastolic blood pressure measured without markedly influencing heart rate. Gallopamil (0.2 mg/kg;i.v.) markedly reduces ventricular tachycardia (VT) and totally prevents fibrillation (VF)[2].

Solubility Information

Solubility	DMSO: 95 mg/mL (196.03 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: 3.3 mg/mL (6.81 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0634 mL	10.3171 mL	20.6343 mL
5 mM	0.4127 mL	2.0634 mL	4.1269 mL
10 mM	0.2063 mL	1.0317 mL	2.0634 mL
50 mM	0.0413 mL	0.2063 mL	0.4127 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

- Sewing KF, et al. Calcium channel antagonists verapamil and gallopamil are powerful inhibitors of acid secretion in isolated and enriched guinea pig parietal cells. *Pharmacology*. 1983;27(1):9-14.
- Kirchengast M, et al. Reperfusion arrhythmias in closed-chest rats: the effect of myocardial noradrenaline depletion and Ca²⁺-antagonism. *Clin Exp Pharmacol Physiol*. 1991 Apr;18(4):217-21.
- Brogden RN, et al. Gallopamil. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic potential in ischaemic heart disease. *Drugs*. 1994 Jan;47(1):93-115.

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