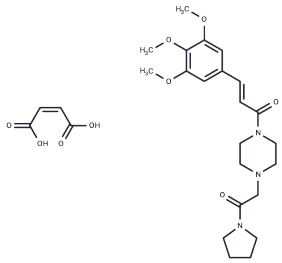
Data Sheet (Cat.No.T0368)

TargetMol

Cinepazide maleate

Chemical Properties



CAS No. : 26328-04-1

Formula: C22H31N3O5·C4H4O4

Molecular Weight: 533.57

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	Cinepazide maleate (MD-67350), a maleate salt form of cinepazide, is a vasodilator.
Targets(IC50)	Calcium Channel
In vitro	Cinepazide exhibits strong chronotropic and inotropic effects. Intravenous administration of Cinepazide (1 mg/kg - 3 mg/kg) leads to an 8% increase in heart rate while reducing blood pressure by 4%. Cinepazide selectively enhances the functional activity of 5-HT neurons in the brain, although hypoxia inhibits its activity. Doses of Cinepazide (3 mg/kg - 30 mg/kg) administered intravenously transiently increase renal and femoral arterial blood flow, spinal and carotid blood flow, and cardiac output in anesthetized dogs while decreasing total peripheral resistance, exhibiting a concentration-dependent relationship with these effects. At 30 mg/kg, Cinepazide enhances the dilatory neural response of dog spinal blood vessels to intrathecal adenosine and adenylic acid. Cinepazide (1 mg - 10 mg) amplifies blood flow within spinal vessels in a dose-dependent manner, partially inhibited by pretreatment with intravenous aminophylline and unaffected by autonomic antagonists. Cinepazide is well absorbed, with over 60% excreted within 24 hours. Over five days, the excretion of Cinepazide through feces and urine is 58.3% and 36.7% in rats, 68.6% and 33.4% in dogs, and 38.1% and 61.3% in humans, respectively.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: 98 mg/mL (183.67 mM),Sonication is recommended. DMSO: 99 mg/mL (185.54 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 (6.18 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8742 mL	9.3708 mL	18.7417 mL
5 mM	0.3748 mL	1.8742 mL	3.7483 mL
10 mM	0.1874 mL	0.9371 mL	1.8742 mL
50 mM	0.0375 mL	0.1874 mL	0.3748 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

Akashi A, et al. Nihon Yakurigaku Zasshi. 1979, 75(5), 507-516.
Cameron BD, et al. Xenobiotica. 1976, 6(7), 441-455.
Bruckner UB, et al. Arzneimittelforschung. 1976, 26(8), 1565-1568.
Miwa S, et al. Jpn J Pharmacol. 1986, 41(1), 109-115.