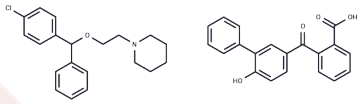
Data Sheet (Cat.No.T13619)

TargetMol

Cloperastine fendizoate

Chemical Properties



CAS No. : 85187-37-7

Formula: C40H38ClNO5

Molecular Weight: 648.19

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	Cloperastine fendizoate (Hustazol) inhibits the hERG K+ currents in a concentration-dependent manner (IC50: 27 nM).
Targets(IC50)	EGFR,Potassium Channel
In vitro	Among the antitussive agents, Cloperastine, which possesses antitussive and antiedemic activity, also relaxes the bronchial musculature. Cloperastine is also endowed with an antihistaminic and papaverine-like activity similar to codeine but without its narcotic effects [2].
In vivo	In anesthetized guinea pigs, a therapeutic dose (1 mg/kg) of Cloperastine extended the QT interval and monophasic action potential duration, without altering the PR interval or QRS width [1]. When administered intraperitoneally, Cloperastine hydrochloride exhibits relatively low acute toxicity in rats and mice. As Cloperastine fendizoate, its oral administration demonstrates minimal toxicity, with LD50 values exceeding 1000 and 2000 mg/kg in rats and mice, respectively [2].

Solubility Information

Solubility	DMSO: 8 mg/mL (12.34 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: 1 mg/mL (1.54 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	1.5428 mL	7.7138 mL	15.4276 mL
5 mM	0.3086 mL	1.5428 mL	3.0855 mL
10 mM	0.1543 mL	0.7714 mL	1.5428 mL
50 mM	0.0309 mL	0.1543 mL	0.3086 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

Takahara A, et al. Effects of the antitussive drug cloperastine on ventricular repolarization in halothane-anesthetized guinea pigs. J Pharmacol Sci. 2012;120(3):165-75.
Catania MA, et al. Pharmacological and clinical overview of cloperastine in treatment of cough. Ther Clin Risk Manag. 2011;7:83-92.