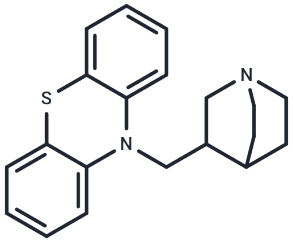
Data Sheet (Cat.No.T4499)

TargetMol

Mequitazine

Chemical Properties



CAS No. : 29216-28-2

Formula: C20H22N2S

Molecular Weight: 322.47

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	Mequitazine (Virginan) is an effective, nonsedative and long-acting histamine H1 antagonist.
Targets(IC50)	Histamine Receptor
In vitro	Mequitazine is widely studied and used for allergic disorders such as hay fever and urticaria[1]. Mequitazine demonstrates significant bactericidal effects against all the tested clinical isolates including Ps. aeruginosa. Its effect against the Gram-positive isolates is more pronounced [2].
In vivo	Mequitazine antagonizes the effect of histamine in guinea-pig ileum competitively. Mequitazine at 107 produces a parallel shift of the dose-response curve to acetylcholine in the rat duodenum. Mequitazine at highest concentration shows anticholinergic activity [3]. Mequitazine inhibits contractile responses to KCl, phenylephrine (PE), 5-hydroxytryptamine (5-HT), and Ca2+ in rat aorta [4].

Solubility Information

Solubility	DMSO: 50 mg/mL (155.05 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: 2.5 mg/mL (7.75 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	3.1011 mL	15.5053 mL	31.0106 mL
5 mM	0.6202 mL	3.1011 mL	6.2021 mL
10 mM	0.3101 mL	1.5505 mL	3.1011 mL
50 mM	0.062 mL	0.3101 mL	0.6202 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

Gonnot V, et al. Expedient synthesis of mequitazine an antihistaminic drug by palladium catalyzed allylic alkylation of sodium phenothiazinate. Chem Pharm Bull (Tokyo). 2009 Nov;57(11):1300-2.
El-Nakeeb MA, et a. In vitro antibacterial activity of some antihistaminics belonging to different groups against multi-drug resistant clinical isolates. Braz J Microbiol. 2011 Jul;42(3):980-91.
Martinez-Mir I, et al. Antihistaminic and anticholinergic activities of mequitazine in comparison with clemizole. J Pharm Pharmacol. 1988 Sep;40(9):655-6.
Satake N, et al. Possible mechanisms of vasoinhibitory effects of mequitazine, an antiallergic agent, on the contractions of isolated rat aorta induced by K+, phenylephrine, 5-hydroxytryptamine, and Ca2+. J Cardiovasc Pharmacol. 1994 Apr;23(4):669-73.