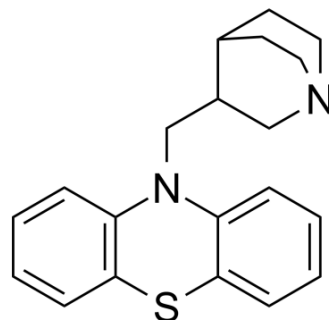


Mequitazine

Cat. No.:	HY-B2168		
CAS No.:	29216-28-2		
Molecular Formula:	C ₂₀ H ₂₂ N ₂ S		
Molecular Weight:	322.47		
Target:	Histamine Receptor		
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 16 mg/mL (49.62 mM; Need ultrasonic and warming)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	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

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Mequitazine is a potent, non-sedative and long-acting histamine H₁ antagonist.

In Vitro

Mequitazine is a potent H₁-receptors selective antihistaminic drug 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]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Mequitazine and clemizole antagonize 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]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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.

[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.

[3]. Martinez-Mir I, et al. Antihistaminic and anticholinergic activities of mequitazine in comparison with clemizole. J Pharm Pharmacol. 1988 Sep;40(9):655-6.

[4]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA