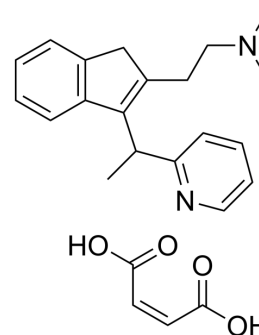


Dimethindene maleate

Cat. No.:	HY-13710A
CAS No.:	3614-69-5
Molecular Formula:	C ₂₄ H ₂₈ N ₂ O ₄
Molecular Weight:	408.49
Target:	Endogenous Metabolite; Histamine Receptor
Pathway:	Metabolic Enzyme/Protease; GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (306.01 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.4480 mL	12.2402 mL	24.4804 mL
5 mM	0.4896 mL	2.4480 mL	4.8961 mL
10 mM	0.2448 mL	1.2240 mL	2.4480 mL

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

BIOLOGICAL ACTIVITY

Description

Dimethindene maleate is a selective histamine H1 antagonist with antihistamine effects. Dimethindene maleate can be used for the research of hypersensitivity reactions^{[1][2][3]}.

IC₅₀ & Target

IC₅₀: 29.5 μM (cromakalim-induced K⁺ currents), 49 μM (Y-26763-induced K⁺ currents)^[2]

In Vitro

Dimethindene maleate (1-1000 μM) suppresses the cromakalim-induced/glibenclamide-sensitive K⁺ currents in a concentration-dependent and reversible manner with an IC₅₀ value of 29.5 μM^[2].

Dimethindene maleate (1-1000 μM) inhibits Y-26763-induced glibenclamide-sensitive K⁺ currents with an IC₅₀ value of 49 μM^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Dimethindene maleate (0.25 mg; i.p. once) affects wound healing in mice^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57BL/6 mice with wound healing ^[1]
Dosage:	0.25 mg
Administration:	Intraperitoneal injection; 0.25 mg once
Result:	Significantly delayed skin wound and only showed wound closure impairment in the initial phase wound healing.

REFERENCES

[1]. Weller K, et, al. Mast cells are required for normal healing of skin wounds in mice. FASEB J. 2006 Nov;20(13):2366-8.

[2]. Sakuta H. Inhibition by histamine H1 receptor antagonists of endogenous glibenclamide-sensitive K⁺ channels in follicle-enclosed *Xenopus* oocytes. Eur J Pharmacol. 1994 Jan 1;266(1):99-102.

[3]. Towart R, et al. Investigation of the antihistaminic action of dimethindene maleate (Fenistil) and its optical isomers. Agents Actions Suppl. 1991;33:403-8.

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

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