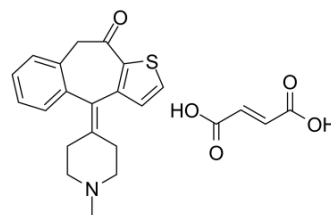


Ketotifen fumarate

Cat. No.:	HY-B0157A		
CAS No.:	34580-14-8		
Molecular Formula:	C ₂₃ H ₂₃ NO ₅ S		
Molecular Weight:	425.5		
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 : ≥ 100 mg/mL (235.02 mM)
 H₂O : 16.67 mg/mL (39.18 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3502 mL	11.7509 mL	23.5018 mL
	5 mM	0.4700 mL	2.3502 mL	4.7004 mL
	10 mM	0.2350 mL	1.1751 mL	2.3502 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (5.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.88 mM); Clear solution
- Add each solvent one by one: PBS
Solubility: 37.5 mg/mL (88.13 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Ketotifen (HC 20511) fumarate is a second-generation noncompetitive H₁-antihistamine and mast cell stabilizer, which is used to prevent asthma attacks^{[1][2]}.

In Vitro

Ketotifen is a second-generation noncompetitive H₁-antihistamine and mast cell stabilizer. It is most commonly sold as a salt of fumaric acid, ketotifen fumarate, and is available in two forms. In its ophthalmic form, it is used to treat allergic

conjunctivitis, or the itchy red eyes caused by allergies. In its oral form, it is used to prevent asthma attacks. Side effects include drowsiness, weight gain, dry mouth, irritability, and increased nosebleeds. Ketotifen fumarate has the ability to block exosome release^{[1][2]}.

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

REFERENCES

[1]. Klooker TK, et al. The mast cell stabiliser ketotifen decreases visceral hypersensitivity and improves intestinal symptoms in patients with irritable bowel syndrome. *Gut*. 2010 Sep;59(9):1213-21.

[2]. Zhang H, et al. Advances in the discovery of exosome inhibitors in cancer. *J Enzyme Inhib Med Chem*. 2020;35(1):1322-1330.

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