Pimethixene maleate

Cat. No.: HY-B1101A

CAS No.: 13187-06-9

Molecular Formula: $C_{23}H_{23}NO_4S$

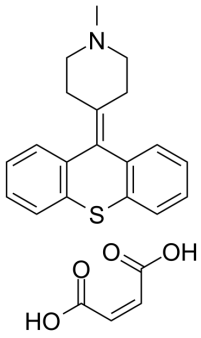
Molecular Weight: 409.5

Target: 5-HT Receptor; Histamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling; Immunology/Inflammation

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (244.20 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4420 mL	12.2100 mL	24.4200 mL
	5 mM	0.4884 mL	2.4420 mL	4.8840 mL
	10 mM	0.2442 mL	1.2210 mL	2.4420 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.11 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.11 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.11 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Pimethixene maleate is antihistamine and antiserotonergic compound, acts as an antimigraine agent.Pimethixene maleate is a highly potent antagonist of 5-HT_{1A}, 5-HT_{2A}, 5-HT_{2B}, 5-HT_{2C}, histamine H_1, dopamine D_2 and $D_{4.4}$ as well as muscarinic M_1 and M_2 receptors, with pK_is of 7.63, 10.22, 10.44, 8.42, 10.14, 8.19, 7.54, 8.61 and 9.38, respectively[1].

IC_{50} & Target

5-HT_{2B} Receptor 10.44 (pKi)	5-HT_{2A} Receptor 10.22 (pKi)	5-HT_{2C} Receptor 8.42 (pKi)	5-HT_{1A} Receptor 7.63 (pKi)
M_2 receptor 9.38 (pKi)	M_1 receptor 8.61 (pKi)	D_2 receptor 8.19 (pKi)	$DD_{4.4}$ receptor 7.54 (pKi)

REFERENCES

[1]. Schmitz B, et al. BF-1--a novel selective 5-HT2B receptor antagonist blocking neurogenic dural plasma protein extravasation in guinea pigs. Eur J Pharmacol. 2015 Mar 15;751:73-80.

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