Acetophenazine dimaleate

Cat. No.: HY-B1262

CAS No.: 5714-00-1

Molecular Formula: $C_{31}H_{37}N_3O_{10}S$

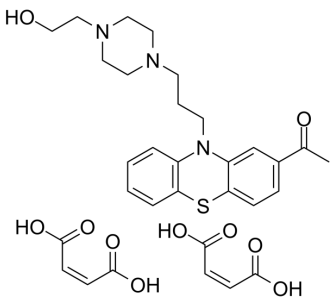
Molecular Weight: 643.7

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (194.19 mM; Need ultrasonic)

H_2O : 8.33 mg/mL (12.94 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	1.5535 mL	7.7676 mL	15.5352 mL
5 mM	0.3107 mL	1.5535 mL	3.1070 mL
10 mM	0.1554 mL	0.7768 mL	1.5535 mL

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

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 5 mg/mL (7.77 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (3.23 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.23 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Acetophenazine dimaleate, a phenothiazine derivative, is an antipsychotic agent. Acetophenazine dimaleate primarily blocks dopamine D2 receptors in the brain. Acetophenazine dimaleate can be used for researching psychotic disorders such as schizophrenia and anxious depression[1][2].

IC_{50} & Target

D_2 Receptor

In Vivo

Acetophenazine (2.4 mg/kg; i.h.; single dosage) significantly prolongs the time lapse from the first fight to submission and the actual fighting time to submission in mice[3].

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

Animal Model:	C57BL mice (10-12 weeks)[3]
Dosage:	2.4 mg/kg
Administration:	i.h.; single dosage
Result:	Significantly prolonged the time lapse from the first fight to submission and the actual fighting time to submission.

REFERENCES

[1]. Azam Bazrafshan, et al. Acetophenazine versus chlorpromazine for schizophrenia. Cochrane Database of Systematic Reviews. 2015, Issue 4.

[2]. KNIGHT WR, HOLTZ JR, SPROGIS GR. ACETOPHENAZINE AND FIGHTING BEHAVIOR IN MICE. Science. 1963 Aug 30;141(3583):830-1.

[3]. Hollister LE, et al. Acetophenazine and diazepam in anxious depressions. Arch Gen Psychiatry. 1971 Mar;24(3):273-8.

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