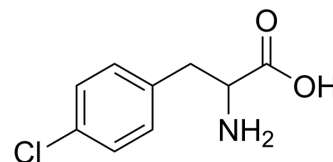


Fenclonine

Cat. No.:	HY-B1368
CAS No.:	7424-00-2
Molecular Formula:	C ₉ H ₁₀ ClNO ₂
Molecular Weight:	199.63
Target:	Tryptophan Hydroxylase
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (500.93 mM; ultrasonic and adjust pH to 2 with HCl)
 H₂O : 4.55 mg/mL (22.79 mM; ultrasonic and warming and adjust pH to 2 with HCl and heat to 60°C)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		5.0093 mL	25.0463 mL	50.0927 mL
	5 mM		1.0019 mL	5.0093 mL	10.0185 mL
	10 mM		0.5009 mL	2.5046 mL	5.0093 mL

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

In Vivo

- Add each solvent one by one: 0.5% CMC-Na/saline water
Solubility: 20 mg/mL (100.19 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (12.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (12.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (12.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fenclonine is a selective and irreversible tryptophan hydroxylase inhibitor, which is a rate-limiting enzyme in the biosynthesis of serotonin. Fenclonine can be used in carcinoid syndrome research^{[1][2][3]}.

In Vivo

Fenclonine (intraperitoneal injection; 100 mg/kg; once daily; 3 d) treatment can inhibit Morphine-induced anti-nociceptive

activity^[2].

?Fenclonine (intraperitoneal injection; 300 mg/kg; once daily; 3 d) pretreatment completely abolishes the effects of a 50?mg/kg dose of Paracetamol^[3].

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

Animal Model:	Wistar albino rats of either sex and weighing between 80 and 100 g ^[2]
---------------	---

Dosage:	100 mg/kg
---------	-----------

Administration:	Intraperitoneal injection; 100 mg/kg; once daily; 3 days
-----------------	--

Result:	Inhibited the antinociceptive activity of Morphine by 41.5%.
---------	--

Animal Model:	Male Swiss mice (22–25 g) ^[3]
---------------	--

Dosage:	300 mg/kg
---------	-----------

Administration:	Intraperitoneal injection; 300 mg/kg; once daily; 3 days
-----------------	--

Result:	Inhibited the effects of Paracetamol in depression-like and compulsion-like behavior.
---------	---

CUSTOMER VALIDATION

- Food Chem. 2022 Dec 9;407:135172.
- Food Chem. 2021 Mar 1;339:127864.
- Food Res Int. 2024 Apr, 181, 114094.
- Food Res Int. 1 November 2022, 112088.
- EMBO Rep. 2024 Jan 22.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. M Jouvett. Sleep and serotonin: an unfinished story. Neuropsychopharmacology. 1999 Aug;21(2 Suppl):24S-27S.

[2]. A K Sanyal, et al. Prostaglandins: antinociceptive effect of prostaglandin E1 in the rat. Clin Exp Pharmacol Physiol. 1977 May-Jun;4(3):247-55.

[3]. Shyamshree S S Manna, et al. Paracetamol potentiates the antidepressant-like and anticomulsive-like effects of fluoxetine. Behav Pharmacol. 2015 Apr;26(3):268-81.

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