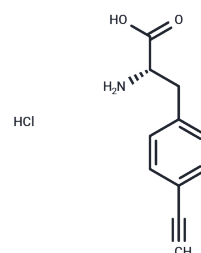


p-Ethynylphenylalanine hydrochloride

Chemical Properties

CAS No. :	188640-63-3
Formula:	C ₁₁ H ₁₂ ClNO ₂
Molecular Weight:	225.67
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	p-Ethynylphenylalanine hydrochloride (4-Ethynyl-L-phenylalanine HCL) is a novel, potent, and specific inhibitor of TPH[1]. Its potential to selectively and reversibly inhibit serotonin biosynthesis may contribute to characterizing the role of serotonin in behavioral and physiological activities[1].
Targets(IC50)	Hydroxylase
In vitro	p-Ethynylphenylalanine hydrochloride was demonstrated to inhibit competitively and reversibly TPH in vitro (K _i = 32.6 +/- 6.2 microM vs. tryptophan)[1].
In vivo	Administration of p-Ethynylphenylalanine hydrochloride (30 mg/kg) to rats produced a 95 +/- 5% decrease in TPH activity in brain homogenates and a concomitant decrease in serotonin and 5-hydroxyindole-3-acetic acid levels (85%) at 24 h after injection[1].

Solubility Information

Solubility	H ₂ O: 12 mg/mL (53.17 mM),Sonication is recommended. DMSO: 99 mg/mL (438.69 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (14.62 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.4312 mL	22.1562 mL	44.3125 mL
5 mM	0.8862 mL	4.4312 mL	8.8625 mL
10 mM	0.4431 mL	2.2156 mL	4.4312 mL
50 mM	0.0886 mL	0.4431 mL	0.8862 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Stokes AH, et al. p-ethynylphenylalanine: a potent inhibitor of tryptophan hydroxylase. J Neurochem. 2000 May;74 (5):2067-73.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481