Data Sheet (Cat.No.T19813)

TargetMol

5-Methyltryptamine hydrochloride

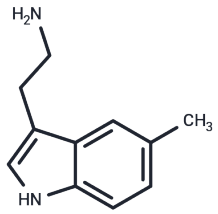
Chemical Properties

CAS No. : 1010-95-3

Formula: C11H15ClN2

Molecular Weight: 210.703

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	5-Methyltryptamine hydrochloride is a high-affinity 5-HT1C receptor ligand and a partial agonist of 5-HT. 5-Methyltryptamine hydrochloride protects mice subjected to burn, tourniquet and endotoxin shock.
Targets(IC50)	5-HT Receptor
In vitro	5-Methyltryptamine stimulates breakdown of endogenous [3H]inositol-labeled phosphoinositides in membranes prepared from blowfly salivary gland homogenates. 5-Methyltryptamine, in the presence of 10 microM GTP gamma S, increased the rate of inositol trisphosphate formation by approximately 500% within 30 s[1].
In vivo	5-Methyltryptamine contracts trachea with lower potency (-log EC50 < 5) than 5-HT (-log EC50 = 6.98). Guinea pig tracheal contraction to 5-HT and 5-Methyltryptamine is inhibited by 1-(1-naphthyl)piperazine (1-NP, 30 nM)[2].

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7461 mL	23.7304 mL	47.4608 mL
5 mM	0.9492 mL	4.7461 mL	9.4922 mL
10 mM	0.4746 mL	2.373 mL	4.7461 mL
50 mM	0.0949 mL	0.4746 mL	0.9492 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

Litosch I, Fain JN. 5-Methyltryptamine stimulates phospholipase C-mediated breakdown of exogenous phosphoinositides by blowfly salivary gland membranes. J Biol Chem. 1985 Dec 25;260(30):16052-5.
Watts SW, Cohen ML. Further evidence that the guinea pig tracheal contractile serotonergic receptor is a 5-hydroxytryptamine2 receptor: use of 5-methyltryptamine and dipropyl-5-carboxamidotryptamine. J Pharmacol Exp Ther. 1993 Jan;264(1):271-5.
Litosch I, et al. 5-Methyltryptamine decreases net accumulation of 32P into the polyphosphoinositides from [gamma-32P]ATP in a cell-free system from blowfly salivary glands. Activation of breakdown of the newly synthesized [32P]polyphosphoinositides. J Biol Chem. 1986 Jan 15;261(2):638-43.
Markley K, Smallman E, Thornton SW. Protection against burn, tourniquet and endotoxin shock by histamine, 5-hydroxytryptamine and 5-hydroxytryptamine derivatives. Br J Pharmacol. 1971 May;42(1):13-24.

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