Data Sheet (Cat.No.T2209)

TargetMol

Serotonin hydrochloride

Chemical Properties

CAS No. : 153-98-0

Formula: C10H13ClN2O

Molecular Weight: 212.676

Storage: Store at low temperature
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	Serotonin hydrochloride (Serotonin HCl) is an endogenous 5-HT receptor agonist, a monoamine neurotransmitter in the CNS, and a catechol O-methyltransferase (COMT) inhibitor(Ki=44 μM).
Targets(IC50)	5-HT Receptor,Endogenous Metabolite,Transferase
In vivo	The role of serotonin in the regulation of larval Aedes aegypti hemolymph composition is investigated in vivo using two reuptake inhibitors (SSRIs), alaproclate HCl and 6-nitroquipazine maleate, and the receptor antagonist methiothepin mesylate. [1]

Solubility Information

Solubility	H2O: 21.3 mg/mL (100.15 mM),Sonication is recommended. DMSO: 128 mg/mL (601.85 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: 4 mg/mL (18.81 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.7019 mL	23.5095 mL	47.019 mL
5 mM	0.9404 mL	4.7019 mL	9.4038 mL
10 mM	0.4702 mL	2.3509 mL	4.7019 mL
50 mM	0.094 mL	0.4702 mL	0.9404 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

Onken, H, et al. J Insect Sci, 2008, 8, 1-20.
Liu P, Yin Y, Wang T, et al. Ligand-induced activation of ERK1/2 signaling by constitutively active Gs-coupled 5-HT receptors. Acta Pharmacologica Sinica. 2019, 40(9): 1157-1167
Han M, Kang F, Yang C, et al. A comparative study of serotonin and norepinephrine as adjuncts to improve cutaneous antinociception of mexiletine in response to skin pinpricks in rats. International Journal of Immunopathology and Pharmacology. 2021, 35: 20587384211016129.
Han M, Kang F, Yang C, et al. A comparative study of serotonin and norepinephrine as adjuncts to improve cutaneous antinociception of mexiletine in response to skin pinpricks in rats[J]. International Journal of Immunopathology and Pharmacology. 2021, 35: 20587384211016129.
Ping Liu, Yu-ling Yin, Ting Wang, Li Hou, Xiao-xi Wang, Man Wang, Guan-guan Zhao, Yi Shi, H. Eric Xu, and Yi Jiang. Ligand-induced activation of ERK1/2 signaling by constitutively active Gs-coupled 5-HT receptors [J]. Acta Pharmacologica Sinica. 2019 Mar 4.

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