Web: www.taiclone.com
Tel: +886-2-2735-9682
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Serotonin hydrochloride

Catalog No: tcsc0013171

Available Sizes

Size: 50mg

Size: 100mg

Specifications

CAS No:
153-98-0

Formula:
$C_{10}H_{13}ClN_2O$

Pathway:
Neuronal Signaling;Metabolic Enzyme/Protease;Neuronal Signaling;GPCR/G Protein

Target:
COMT;COMT;5-HT Receptor;5-HT Receptor

Purity / Grade:
>98%

Solubility:
DMSO : 150 mg/mL (705.28 mM; Need ultrasonic)

Alternative Names:
5-Hydroxytryptamine hydrochloride;5-HT hydrochloride

Observed Molecular Weight:
212.68

Product Description

Serotonin hydrochloride is a monoamine neurotransmitter in the CNS and an endogenous **5-HT receptor** agonist. Serotonin hydrochloride is also a **catechol O-methyltransferase** (**COMT**) inhibitor with a $\mathbf{K_i}$ of 44 μM.

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IC50 & Target: 5-HT receptor[1]

Ki: 44 μM (COMT)[1]

In Vitro: Serotonin hydrochloride is a monoamine neurotransmitter in the CNS and an endogenous 5-HT receptor agonist. Serotonin hydrochloride also inhibits catechol O-methyltransferase (COMT), an enzyme that contributes to modultion the perception of pain, via non-competitive binding to the site bound by catechol substrates with a binding affinity comparable to the binding affinity of catechol itself (K_i = 44 μM). Results show that addition of 100 μM of Serotonin hydrochloride decreases the reaction velocity of COMT [1].

In Vivo: Serotonin hydrochloride produces robust hypersensitivity compare to saline-treated controls (p[1]. A significant increase in colonic 5-HT content is observed in IL-13$^{-/-}$ mice receiving Serotonin hydrochloride compare to IL-13$^{-/-}$ receiving vehicle following induction of DSS colitis[2].