

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

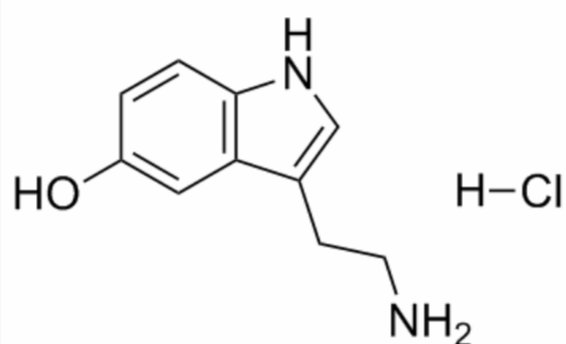
Serotonin hydrochloride is a monoamine neurotransmitter in the CNS and an endogenous **5-HT receptor** agonist. Serotonin hydrochloride is also a **catechol O-methyltransferase (COMT)** inhibitor with a K_i of 44 μ M.

IC50 & Target: 5-HT receptor^[1]

Ki: 44 μ M (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 modulation 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 ($K_i = 44 \mu\text{M}$). 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].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!