

# 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

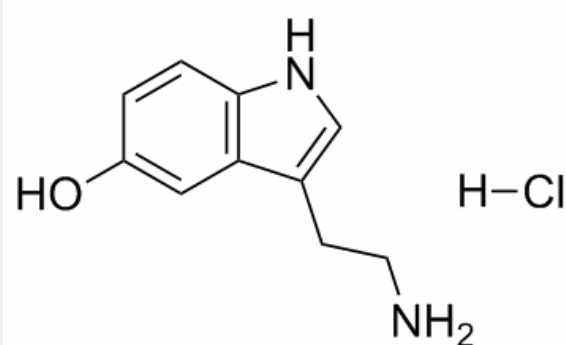
Serotonin hydrochloride is a monoamine neurotransmitter in the CNS and an endogenous **5-HT receptor** agonist. Serotonin hydrochloride is also a **catechol O-methyltransferase (COMT)** inhibitor with a **K<sub>i</sub>** of 44 μM.

IC50 & Target: 5-HT receptor<sup>[1]</sup>

Ki: 44  $\mu$ M (COMT)<sup>[1]</sup>

**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  $\mu\text{M}$  of Serotonin hydrochloride decreases the reaction velocity of COMT<sup>[1]</sup>.

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



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