

# Risperidone (hydrochloride)

Catalog No: tcsc1927



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

666179-74-4

**Formula:**

$C_{23}H_{28}ClFN_4O_2$

**Pathway:**

GPCR/G Protein;Neuronal Signaling;Neuronal Signaling;GPCR/G Protein

**Target:**

Dopamine Receptor;Dopamine Receptor;5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

R 64 766 hydrochloride

**Observed Molecular Weight:**

446.95

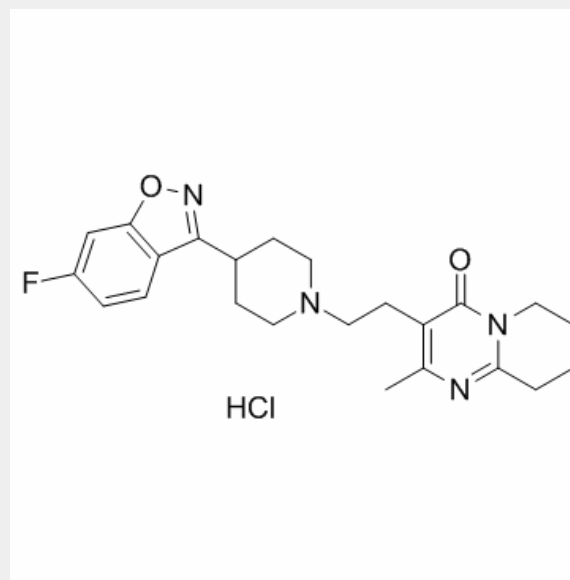
## Product Description

Risperidone hydrochloride is a serotonin **5-HT<sub>2</sub>** receptor blocker and a potent **dopamine D<sub>2</sub>** receptor antagonist, with **K<sub>i</sub>s** of 0.16, 1.4 nM for 5-HT<sub>2</sub> and D<sub>2</sub> receptor, respectively.

IC<sub>50</sub> & Target: K<sub>i</sub>: 0.16 nM (5-HT<sub>2</sub> receptor); 1.4 nM (dopamine D<sub>2</sub> receptor)<sup>[1]</sup>.

**In Vitro:** Risperidone is serotonin 5-HT<sub>2</sub> receptor blocker as shown by displacement of radioligand binding (K<sub>i</sub>=0.16 nM), activity on isolated tissues (EC<sub>50</sub>=0.5 nM). Risperidone is also a potent dopamine D<sub>2</sub> receptor antagonist as indicated by displacement of radioligand binding (K<sub>i</sub>=1.4 nM), activity in isolated striatal slices (IC<sub>50</sub>=0.89 nM)<sup>[1]</sup>. Risperidone increases the production of IL-10 and MDC as well as the proinflammatory cytokines, such as IL-6, IL-8, and TNF-α, but decreases the production of IP-10 and IL-12<sup>[2]</sup>.

**In Vivo:** Long-Evans rats receive daily subcutaneous injections of vehicle or 1 of 2 doses of risperidone (1.0 and 3.0 mg/kg per day) from postnatal Days 14 to 42. Weight gain during development is slightly yet significantly reduced in risperidone-treated rats. In the first 2 experiments, early-life Risperidone administration is associated with increased locomotor activity at 1 week post administration through approximately 9 months of age, independent of changes in weight gain<sup>[2]</sup>.



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