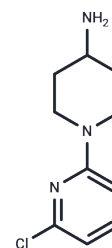


## SR 57227 hydrochloride

## Chemical Properties

CAS No. :	77145-61-0
Formula:	C <sub>10</sub> H <sub>14</sub> ClN <sub>3</sub> ·HCl
Molecular Weight:	248.15
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

HCl



## Biological Description

Description	SR 57227 hydrochloride(SR 57227A ) is a potent, orally active and selective 5-HT <sub>3</sub> receptor agonist. It with ability to cross the blood brain barrier. It has affinities (IC <sub>50</sub> ) varying between 2.8 and 250 nM for 5-HT <sub>3</sub> receptor binding sites in rat cortical membranes and on whole NG 108-15 cells or their membranes. Anti-depressant effects.
Targets(IC <sub>50</sub> )	5-HT Receptor
In vivo	Seizure latency was significantly prolonged by a 5-HT <sub>3</sub> receptor agonist SR 57227 in a dose-dependent manner.?Seizure score and mortality were also decreased by SR 57227 in PTZ-treated mice.?Furthermore, these anticonvulsant effects of SR 57227 were inhibited by a 5-HT <sub>3</sub> receptor antagonist ondansetron.?However, ondansetron alone had no effect on seizure latency, seizure score or mortality at different doses.? Immunohistochemical studies have also shown that c-Fos expression was significantly increased in hippocampus (dentate gyrus, CA1, CA3 and CA4) of PTZ-treated mice.? Furthermore, c-Fos expression was significantly inhibited by ondansetron in mice treated with PTZ and SR 57227.?An ELISA study showed that SR 57227 attenuated the PTZ-induced inhibitory effects of GABA levels in hippocampus and cortex, and the attenuated effects of SR 57227 were antagonized by ondansetron in hippocampus but not cortex.?Activation of 5-HT <sub>3</sub> receptor by SR 57227, which plays an important role on the control of seizure induced by PTZ, may be related to GABA activity in hippocampus.? Therefore, 5-HT <sub>3</sub> receptor subtype is a potential target for the treatment of epilepsy[1].

## Solubility Information

Solubility	DMSO: 8.33 mg/mL (33.57 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	4.0298 mL	20.1491 mL	40.2982 mL
5 mM	0.806 mL	4.0298 mL	8.0596 mL
10 mM	0.403 mL	2.0149 mL	4.0298 mL
50 mM	0.0806 mL	0.403 mL	0.806 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

Li B , Liang W , Sun Z , et al. The Anticonvulsant Effects of SR 57227 on Pentylentetrazole-Induced Seizure in Mice [J]. Plos One, 2014, 9(4):e93158.

Li B , Shao D , Luo Y , et al. Role of 5-HT3 receptor on food intake in fed and fasted mice.[J]. Plos One, 2014, 10(3): e0121473.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481