

# DATASHEET

## SCH 23390 hydrochloride

### Product overview

<b>Name</b>	SCH 23390 hydrochloride
<b>Cat No</b>	HB1643
<b>Alternative names</b>	(R)-(+)-SCH 23390 hydrochloride
<b>Biological action</b>	Antagonist
<b>Purity</b>	>98%
<b>Description</b>	Potent, selective D <sub>1</sub> -like receptor antagonist

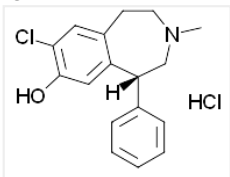
### Biological Data

<b>Biological description</b>	Potent and selective D <sub>1</sub> -like receptor antagonist (K <sub>i</sub> values are 0.2, 0.3, ~800, ~1100, ~3000 nM at D <sub>1</sub> , D <sub>5</sub> , D <sub>3</sub> , D <sub>2</sub> and D <sub>4</sub> respectively). Also acts as an agonist at 5-HT <sub>1C</sub> and 5-HT <sub>2C</sub> (K <sub>i</sub> values are 6.3 and 9.3 respectively). Shows anxiolytic and anticonvulsant effects. Active <i>in vivo</i> .
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### Solubility & Handling

<b>Storage instructions</b>	+4 °C (desiccate)
<b>Solubility overview</b>	Soluble in water (100mM), DMSO (100mM), ethanol (50mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	(R)-(+)-7-Chloro-8-hydroxy-3-methyl-1-phenyl-2,3,4,5-tetrahydro-1H-3-benzazepine hydrochloride
<b>Molecular Weight</b>	324.24
<b>Chemical structure</b>	
<b>Molecular Formula</b>	C <sub>17</sub> H <sub>18</sub> ClNO.HCl
<b>CAS Number</b>	125941-87-9
<b>PubChem identifier</b>	11957535
<b>SMILES</b>	C1C=C(O)C=C([C@](C3=CC=CC=C3)([H])C2)C(CCN2C)=C1.Cl
<b>InChiKey</b>	OYCAEWMSOPMASE-XFULWGLBSA-N

### References

The 'selective' dopamine D<sub>1</sub> receptor antagonist, SCH23390, is a potent and high efficacy agonist at cloned human serotonin<sub>2C</sub> receptors.

Millan MJ *et al* (2001) *Psychopharmacology* (Berl) 156(1)

**PubMedID** [11465634](https://pubmed.ncbi.nlm.nih.gov/11465634/)

**SCH 23390: the first selective dopamine D1-like receptor antagonist.**

Bourne JA (2001) CNS Drug Rev 7(4)

**PubMedID** [11830757](#)

**Selective blockade of dopamine D-1 receptor by SCH 23390 affects dopamine agonist binding to 3H-spiroperone labeled D-2 receptors in rat striatum.**

Zhang X *et al* (1989) Jpn J Pharmacol 50(3)

**PubMedID** [2569545](#)

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