

DATASHEET

SCH 23390 hydrochloride

Product overview

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

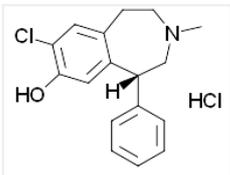
Biological Data

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

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

Chemical Data

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

References

The 'selective' dopamine D₁ receptor antagonist, SCH23390, is a potent and high efficacy agonist at cloned human serotonin_{2C} 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](#)
