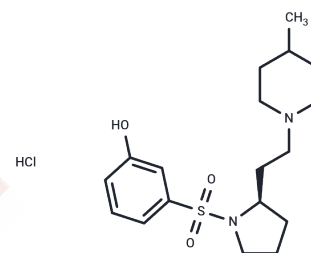


## SB-269970 hydrochloride

## Chemical Properties

CAS No. :	261901-57-9
Formula:	C <sub>18</sub> H <sub>28</sub> N <sub>2</sub> O <sub>3</sub> S·HCl
Molecular Weight:	388.95
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	SB-269970 hydrochloride (SB-269970A), a hydrochloride salt form of SB-269970, is a 5-HT <sub>7</sub> receptor antagonist (pK <sub>i</sub> of 8.3) and exhibits >50-fold selectivity against other receptors.
Targets(IC <sub>50</sub> )	5-HT Receptor
In vitro	SB-269970 inhibits 5-CT-stimulated adenylyl cyclase activity in guinea-pig hippocampal membranes. SB-269970 (0.03 μM, 0.1 μM, 0.3 μM and 1 μM) produces a concentration-related rightward-shift of the 5-CT concentration-response curve with no significant alteration in the maximal response to 5-CT. [1] SB-269970 (1 μM) has any effect on 5-HT efflux when superfused alone. [2]
In vivo	SB-269970 (10 mg/kg and 30 mg/kg) significantly reduces the effects of amphetamine by 25 and 27%, respectively, and blocks the effects of ketamine by 38% (10 mg/kg) and 30% (30 mg/kg). SB-269970 significantly reduces amphetamine-induced hyperactivity in wild-type mice and is without effects in 5-HT <sub>7</sub> knockout mice. Systemic administration of SB-269970 (30 mg/kg) significantly reverses amphetamine disruption of PPI and did not enhance PPI by itself compared to control. [3] SB-269970 significantly reverses the deficits induced by MK-801, but not by scopolamine. SB-269970 normalizes MK-801-induced glutamate but not dopamine release in the cortex. [4] SB-269970 (in one medium dose of 0.5 or 1 mg/kg) exerts a specific antianxiety-like effect in the Vogel drinking test in rats, in the elevated plus-maze test in rats and in the four-plate test in mice. Moreover, SB-269970 (in one medium dose of 5 or 10 mg/kg) reveals antidepressant-like activity in the forced swimming and the tail suspension tests in mice. [5] SB-269970 at doses of 0.3, 1 and 3 μg exhibits an anticonflict effect which is weaker than that of diazepam (40 μg), whereas SB-269970 at doses of 3 and 10 μg had marked anti-immobility action comparable to that of imipramine (0.1 μg). [6]

## Solubility Information

Solubility	H <sub>2</sub> O: 7.8 mg/mL (20.05 mM), Sonication is recommended. DMSO: 30 mg/mL (77.13 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.571 mL	12.8551 mL	25.7102 mL
5 mM	0.5142 mL	2.571 mL	5.142 mL
10 mM	0.2571 mL	1.2855 mL	2.571 mL
50 mM	0.0514 mL	0.2571 mL	0.5142 mL

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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

Hagan JJ, et al. Br J Pharmacol, 2000, 130(3), 539-548.

Roberts C, et al. Br J Pharmacol, 2001, 132(7), 1574-1580.

Galici R, et al. Behav Pharmacol, 2008, 19(2), 153-159.

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Wesołowska A, et al. Neuropharmacology. 2006 Sep;51(3):578-86.

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