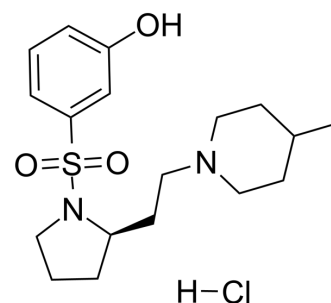


SB-269970 hydrochloride

Cat. No.:	HY-15370A
CAS No.:	261901-57-9
Molecular Formula:	C ₁₈ H ₂₉ ClN ₂ O ₃ S
Molecular Weight:	388.95
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 30 mg/mL (77.13 mM)
 H₂O : 10 mg/mL (25.71 mM); ultrasonic and warming and heat to 60°C
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.5710 mL	12.8551 mL	25.7102 mL
	5 mM	0.5142 mL	2.5710 mL	5.1420 mL
	10 mM	0.2571 mL	1.2855 mL	2.5710 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: PBS
Solubility: 10 mg/mL (25.71 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.43 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SB-269970 hydrochloride is a potent, selective and brain-penetrant 5-HT₇ receptor antagonist with a pK_i of 8.3. SB-269970 hydrochloride exhibits >50-fold selectivity against other 5-HT receptors^{[1][2]}.

IC₅₀ & Target

5-HT₇ Receptor
8.3 (pKi)

In Vivo

SB269970 hydrochloride (SB-269970A) (3-30 mg/kg; i.p.; once) significantly blocks amphetamine and ketamine-induced

hyperactivity^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male C57BL6/J mice ^[1]
Dosage:	3, 10, 30 mg/kg
Administration:	Intraperitoneal injection; once
Result:	Significantly blocked amphetamine and ketamine-induced hyperactivity.

CUSTOMER VALIDATION

- Protein Cell. 2019 Mar;10(3):178-195.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. <http://www.ncbi.nlm.nih.gov/pubmed/10821781>

[2]. Roberts C, et al. The effect of SB-269970, a 5-HT(7) receptor antagonist, on 5-HT release from serotonergic terminals and cell bodies. Br J Pharmacol. 2001 Apr;132(7):1574-80.

[3]. Monti JM, et al. The serotonin 5-HT7 receptor agonist LP-44 microinjected into the dorsal raphe nucleus suppresses REM sleep in the rat. Behav Brain Res. 2008 Aug 22;191(2):184-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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