Perospirone hydrochloride

Cat. No.: HY-B0731

CAS No.: 129273-38-7

Molecular Formula: $C_{23}H_{31}ClN_4O_2S$

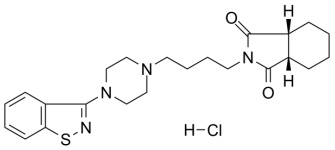
Molecular Weight: 463.04

Target: 5-HT Receptor; Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: -20°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 : 125 mg/mL (269.96 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1596 mL	10.7982 mL	21.5964 mL
	5 mM	0.4319 mL	2.1596 mL	4.3193 mL
	10 mM	0.2160 mL	1.0798 mL	2.1596 mL

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

BIOLOGICAL ACTIVITY

Description

Perospirone hydrochloride (SM-9018) is an orally active antagonist of 5-HT_{2A} receptor (K_i of 0.6 nM) and dopamine D_2 receptor (K_i of 1.4 nM). Perospirone hydrochloride is also a partial agonist of 5-HT_{1A} receptor (K_i of 2.9 nM). Perospirone hydrochloride is an atypical antipsychotic agent and has the potential for schizophrenic disease research[1][2].

IC_{50} & Target

5-HT_{2A} Receptor 0.6 nM (Ki)	D_2 Receptor 1.4 nM (Ki)	5-HT_{1A} Receptor 2.9 nM (Ki)	5-HT_1 Receptor 18 nM (Ki)
D_1 Receptor 41 nM (Ki)			

REFERENCES

[1]. Kato T, et al. Binding profile of SM-9018, a novel antipsychotic candidate. pn J Pharmacol. 1990 Dec;54(4):478-81.

[2]. Hagiwara H, et al. Phencyclidine-induced cognitive deficits in mice are improved by subsequent subchronic administration of the antipsychotic drug perospirone: role

of serotonin 5-HT1A receptors. Eur Neuropsychopharmacol. 2008 Jun;18(6):448-54.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA