BP 897 hydrochloride

Cat. No.: HY-106660

CAS No.: 314776-92-6

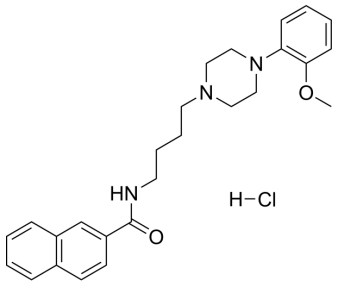
Molecular Formula: $C_{26}H_{32}ClN_3O_2$

Molecular Weight: 454

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (275.33 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2026 mL	11.0132 mL	22.0264 mL
	5 mM	0.4405 mL	2.2026 mL	4.4053 mL
	10 mM	0.2203 mL	1.1013 mL	2.2026 mL

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

BIOLOGICAL ACTIVITY

Description

BP 897 hydrochloride is a potent and partial dopamine D3 receptor agonist and a weak D2 receptor antagonist. BP 897 hydrochloride displays a high affinity at the dopamine D3 receptor (K_i=0.92 nM) and a 70 times lower affinity at the D2 receptor (K_i=61 nM)[1].

IC_{50} & Target	D_2 Receptor	D_3 Receptor

In Vitro

BP 897 hydrochloride also displays low affinities at D1 and D4 receptors (K_i=3 and 0.3 μM, respectively), as well as at α1 and α2 adrenergic receptors (K_i=60 and 83 nM, respectively), 5HT1A and 5HT7 receptors (K_i=84 and 345 nM, respectively), and negligible affinities (K_i>1 μM) atmuscarinic, histamine and opiate receptors[1].

In NG 108-15 cells expressing the human D3 receptor, BP 897 hydrochloride inhibits forskolin-induced cyclic AMP accumulation with an EC_{50} of 1 nM. BP 897 hydrochloride activates mitogenesis and this response is antagonized by the preferential D3 receptor antagonist Nafadotride (1 μM). BP 897 hydrochloride also partially antagonized the response induced by quinpirole (10 nM)[1].

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

In Vivo

BP 897 hydrochloride binds to D2-receptor in mouse striatum with an ED_{50} of 15 mg/kg, and the D3-receptor occupancy is

blow 0.5 mg/kg[1].

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

Animal Model:	Male Listar hooded rats[1]
Dosage:	0.05, 0.5, 1 mg/kg
Administration:	i.p.; 30 min before the session
Result:	Reduced cocaine-seeking behaviour before the first infusion of cocaine, in a dose-dependent manner, at doses similar to those at which BP 897 produced its responses on rotations and c-fos expression.

REFERENCES

[1]. Pilla M, et al. Selective inhibition of cocaine-seeking behaviour by a partial dopamine D3 receptor agonist. Nature. 1999 Jul 22;400(6742):371-5.

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