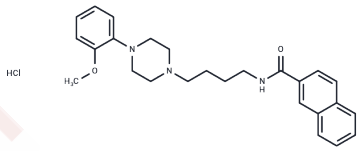
Data Sheet (Cat.No.T14767)

TargetMol

BP 897 hydrochloride

Chemical Properties



CAS No. : 314776-92-6

Formula: C26H32ClN3O2

Molecular Weight: 454

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	BP 897 is a potent and selective agonist of dopamine D3 receptor and it is a weak dopamine D2 receptor antagonist, with Kis of 0.92 nM and 61 nM for D3 and D2 receptors. Which shows low affinities at D1 and D4 receptors (Kis, 3 and 0.3 μM, respectively).
Targets(IC50)	Dopamine Receptor
In vitro	BP 897 inhibits forskolin-induced cyclic AMP accumulation with an EC50 of 1.0 ± 0.3?nM, and increases mitogenesis, another D3-receptor-mediated response (EC50 = 3 ± 1?nM) in NG 108-15 cells expressing the human D3 receptor. However, BP 897 (1?μM) does not inhibit cyclic AMP accumulation or trigger mitogenesis in cells expressing the D2 receptor[1]. With a 70 times lower affinity at the D2 receptor (Ki, 61 nM). BP 897 also weakly binds to α1 and α2 adrenergic receptors (Ki = 60 and 83?nM, respectively), 5HT1A and 5HT7 receptors (Ki = 84 and 345?nM, respectively), and has negligible affinities (Ki > 1?μM) at muscarinic, histamine and opiate receptors.
In vivo	BP 897 (0, 0.05, 0.5, 1?mg/kg) inhibits cocaine-seeking behaviour that depends upon the presentation of drug-associated cues, without having any intrinsic, primary rewarding effects[1]. BP 897 binds to D2-receptor in mouse striatum with an ED50 of 15?mg/kg, and the D3-receptor occupancy is blow 0.5?mg/kg.

Solubility Information

Solubility	DMSO: 9 mg/mL (19.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0441 mL	0.2203 mL	0.4405 mL

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

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.