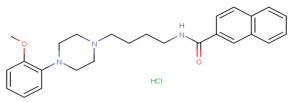
Data Sheet (Cat.No.T14767)

TargetMol
A DRUG SCREENING EXPERT

BP 897

Chemical Properties



CAS No.:	314776-92-6
Formula:	C26H32ClN3O2
Molecular Weight:	454
Appearance:	off-white solid
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

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(IC_{50})	D3 receptor: (ki) 0.92 nM D2 receptor: 61 nM(ki) D4 receptor: 0.3 μM(ki) D1 receptor: 3 μM
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	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.203 mL	11.013 mL	22.026 mL
5 mM	0.441 mL	2.203 mL	4.405 mL
10 mM	0.220 mL	1.101 mL	2.203 mL
50 mM	0.044 mL	0.220 mL	0.441 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

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:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481