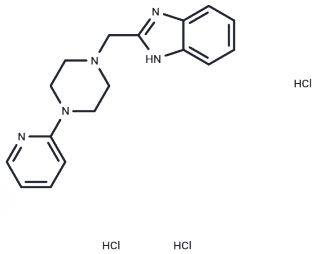
Data Sheet (Cat.No.T22019)

TargetMol

ABT 724 trihydrochloride

Chemical Properties



CAS No. :	587870-77-7
Formula:	C17H22Cl3N5
Molecular Weight:	402.75
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	ABT 724 trihydrochloride is an effective and selective agonist of the D4 receptor (EC50 = 12.4 nM, 14.3 nM, and 23.2 nM for human, rat and ferret, respectively). ABT-724 trihydrochloride can be used in erectile dysfunction studies.
Targets(IC50)	Dopamine Receptor
In vitro	A weak affinity to 5-HT1A receptors (Ki = 2780 nM) is observed. ABT 724 trihydrochloride (10 μM) exhibits a selective biochemical profile, as indicated by a lack of binding affinity for >70 neurotransmitter/uptake/ion channels including D2, D3, or D5 receptors. ABT 724 trihydrochloride(10 μM) does not inhibit the PDE activity of PDE1, PDE5, or PDE6[1].
In vivo	In male adult Wistar rats, ABT 724 trihydrochloride (8.8 μg/kg; s.c.) treatment facilitated penile erection in a dose-dependent manner[1].

Solubility Information

Solubility	H2O: 100 mg/mL (248.29 mM),Sonication is recommended. DMSO: 60 mg/mL (148.98 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.97 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4829 mL	12.4146 mL	24.8293 mL
5 mM	0.4966 mL	2.4829 mL	4.9659 mL
10 mM	0.2483 mL	1.2415 mL	2.4829 mL
50 mM	0.0497 mL	0.2483 mL	0.4966 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

Brioni JD, et al. Activation of dopamine D4 receptors by ABT-724 induces penile erection in rats. Proc Natl Acad Sci U S A. 2004 Apr 27;101(17):6758-63.