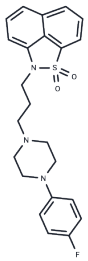
Data Sheet (Cat.No.T15270)

TargetMol

Fananserin

Chemical Properties



CAS No. : 127625-29-0

Formula: C23H24FN3O2S

Molecular Weight: 425.52

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	Fananserin is an effective, selective and oral active antagonist of 5-HT2 (Ki = 0.37 nM for the rat 5-HT2A). Fananserin is an antagonist of human D4 receptor (Ki = 2.93 nM).
Targets(IC50)	5-HT Receptor,Dopamine Receptor
In vitro	Fananserin displays low to moderate affinity for α1-adrenoceptors, dopamine D2 receptors and histamine H 1 receptors[1]. Fananserin displaces [3H]spiperone binding to recombinant human dopamine D 4 receptors with a Ki of 2.93 nM[3]. Fananserin is relatively selective for 5-HT2 receptor with lower affinity for the 5-HT1A receptor and very low affinity for the 5-HT3 receptor[3].
In vivo	Fananserin shows a moderate affinity for alpha 1-adrenoceptors in the rat thalamus with an IC50 of 14 nM and for H1 receptors in the guinea-pig cerebellum with an IC50 of 13 nM[1]. Fananserin displaces [125I]AMIK from 5-HT2 receptors with an IC50 of 0.21 nM in the rat frontal cortex[1]. Fananserin (0.5, 1, 2 and 4 mg/kg; p.o.) dose-dependently increases the duration of deep nonrapid eye movement (NREM) sleep at the expense of wakefulness[2].

Solubility Information

Solubility	DMSO: 95 mg/mL (223.26 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (7.76 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	2.3501 mL	11.7503 mL	23.5007 mL
5 mM	0.470 mL	2.3501 mL	4.7001 mL
10 mM	0.235 mL	1.175 mL	2.3501 mL
50 mM	0.047 mL	0.235 mL	0.470 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

Malgouris C, et al. Autoradiographic studies of RP 62203, a potent 5-HT2 receptor antagonist. In vitro and ex vivo selectivity profile. Eur J Pharmacol. 1993 Mar 16;233(1):29-35.
Stutzmann JM, et al. RP 62203, a 5-hydroxytryptamine2 antagonist, enhances deep NREM sleep in rats. Sleep. 1992 Apr;15(2):119-24.
Heuillet E, et al. The naphtosultam derivative RP 62203 (fananserin) has high affinity for the dopamine D4 receptor. Eur J Pharmacol. 1996 Oct 24;314(1-2):229-33.