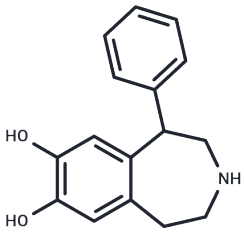
Data Sheet (Cat.No.T23359)

TargetMol

SKF38393 hydrobromide

Chemical Properties



CAS No. : 20012-10-6

Formula: C16H18BrNO2

Molecular Weight: 336.22

Storage: Keep away from moisture
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	SKF38393 hydrobromide is the salt form of SKF38393.SKF38393 is a dopamine D1 receptor agonist that increases the expression of Shati/Nat8L mRNA in the NAc of mice; increases the frequency of 5-hydroxytryptamine and n -methyl- D -aspartate-induced locomotion-associated ruptures in astrocytes; can mimic the dopamine-induced inhibition of colonic motility in mice; can promote locust swarming
Targets(IC50)	Dopamine Receptor
In vitro	**Methods**: To assess the role of dopamine receptor subtypes in the initiation of behavioral sensitization to cocaine, the partial D1 agonist SKF-38393 (0.01-1.0 μg/side), the D2/3 agonist quinpirole (0.1-1.0 μg/side), or saline was infused once daily into the ventral tegmental area (VTA) or nucleus accumbens shell over 3 days. **Results**: 1.0 μg/side SKF-38393 infusion into the nucleus accumbens shell produced significant behavioral hyperactivity after both the first and last daily infusions, with no significant differences in behavioral responses between days; repeated administration of SKF-38393 into the VTA resulted in sensitization to the locomotor activating effects of cocaine.[6]
In vivo	**Methods**: To assess the role of dopamine receptor subtypes in the initiation of behavioral sensitization to cocaine, the partial D1 agonist SKF38393 hydrobromide (0.01-1.0 μg/side), the D2/3 agonist quinpirole (0.1-1.0 μg/side), or saline was infused once daily into the ventral tegmental area (VTA) or nucleus accumbens shell over 3 days. **Results**: 1.0 μg/side SKF38393 hydrobromide infusion into the nucleus accumbens shell produced significant behavioral hyperactivity after both the first and last daily infusions, with no significant differences in behavioral responses between days; repeated administration of SKF38393 hydrobromide into the VTA resulted in sensitization to the locomotor activating effects of cocaine.[1]

Solubility Information

Solubility	H2O: 10 mg/mL (29.74 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9742 mL	14.8712 mL	29.7424 mL
5 mM	0.5948 mL	2.9742 mL	5.9485 mL
10 mM	0.2974 mL	1.4871 mL	2.9742 mL
50 mM	0.0595 mL	0.2974 mL	0.5948 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

1. Pierce RC, et al. Repeated intra-ventral tegmental area administration of SKF-38393 induces behavioral and neurochemical sensitization to a subsequent cocaine challenge. J Pharmacol Exp Ther. 1996 Jul;278(1):384-92.
Bouron A, et al. The D1 dopamine receptor agonist SKF-38393 stimulates the release of glutamate in the hippocampus. Neuroscience. 1999;94(4):1063-70.
Mayerhofer A, et al. Functional Dopamine-1 Receptors and DARPP-32 Are Expressed in Human Ovary and Granulosa Luteal Cells in Vitro. J Clin Endocrinol Metab. 1999 Jan;84(1):257-64.
Muralikrishnan D, et al. SKF-38393, a dopamine receptor agonist, attenuates 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced neurotoxicity. Brain Res. 2001 Feb 23;892(2):241-7.
5. Johnson DE,et al. The growth inhibitory properties of a dopamine agonist (SKF 38393) on MCF-7 cells. Anticancer Drugs. 1995 Jun;6(3):471-4.