SKF-75670 hydrobromide

Cat. No.: HY-125043

CAS No.: 62717-63-9

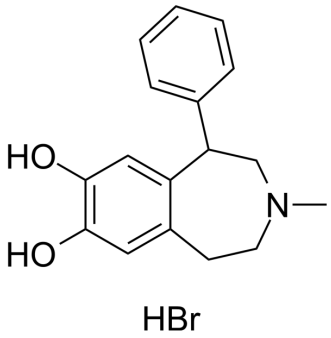
Molecular Formula: $C_{17}H_{20}BrNO_2$

Molecular Weight: 350.25

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: -20°C, stored under nitrogen, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 40 mg/mL (114.20 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8551 mL	14.2755 mL	28.5510 mL
	5 mM	0.5710 mL	2.8551 mL	5.7102 mL
	10 mM	0.2855 mL	1.4276 mL	2.8551 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.14 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.14 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.14 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SKF-75670 hydrochloride is a Dopamine D1 receptor partial agonist. SKF-75670 hydrochloride is also a Cocaine antagonist[1][2][3].

IC_{50} & Target

D_1 Receptor

In Vivo

SKF-75670 hydrochloride (2.5-10 mg/kg, i.p.) reduces locomotor activity in MPTP-treated marmosets[2].
SKF-75670 hydrochloride (0.3 and 1.0 mg/kg, i.m.) antagonizes the rate-altering and discriminative-stimulus effects of Cocaine in monkeys[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	MPTP-treated marmosets[2]
Dosage:	2.5-10 mg/kg
Administration:	i.p.
Result:	Reduced locomotor activity (marmosets were largely immobile and appeared sedated and had a flexed posture).

REFERENCES

[1]. Rosenzweig-Lipson S, et al. Dopamine D1 receptor involvement in the discriminative-stimulus effects of SKF 81297 in squirrel monkeys. J Pharmacol Exp Ther. 1993 Nov;267(2):765-75.

[2]. Gnanalingham KK, et al. Differential anti-parkinsonian effects of benzazepine D1 dopamine agonists with varying efficacies in the MPTP-treated common marmoset. Psychopharmacology (Berl). 1995 Feb;117(3):275-86.

[3]. Spealman RD, et al. Differential modulation of behavioral effects of cocaine by low- and high-efficacy D1 agonists. Psychopharmacology (Berl). 1997 Oct;133(3):283-92.

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