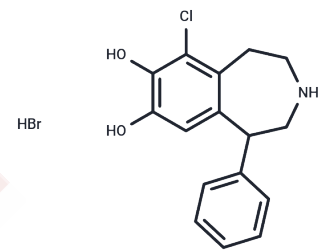


SKF 81297 hydrobromide

Chemical Properties

CAS No. :	67287-39-2
Formula:	C16H17BrClNO2
Molecular Weight:	370.67
Storage:	Store under nitrogen, Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	SKF 81297 hydrobromide is a selective agonist of the dopamine D1-like receptor, with a high affinity for both D1 and D5 subtypes ($K_i = 1.9 \text{ nM}$). SKF 81297 hydrochloride exhibits central activity in vivo and is widely used to study the neuromodulatory effects of the dopamine system, particularly in studies related to cognitive function and motor activity, such as Parkinson's disease.
Targets(IC50)	Dopamine Receptor
In vivo	SKF 81297 hydrobromide (0.05-0.3 mg/kg, intramuscularly) can stimulate MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) to impair motor behavior in monkeys. [1]

Solubility Information

Solubility	Ethanol: 1 mg/mL (2.7 mM), Sonication is recommended. DMF: 20 mg/mL (53.96 mM), Sonication is recommended. DMSO: 20 mg/mL (53.96 mM), Sonication is recommended. ($< 1 \text{ mg/ml}$ refers to the product slightly soluble or insoluble)
In vivo Formulation	Saline: 2 mg/mL (5.4 mM), Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.5 mg/mL (6.74 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6978 mL	13.4891 mL	26.9782 mL
5 mM	0.5396 mL	2.6978 mL	5.3956 mL
10 mM	0.2698 mL	1.3489 mL	2.6978 mL
50 mM	0.054 mL	0.2698 mL	0.5396 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

Vermeulen RJ, et al. The selective dopamine D1 receptor agonist, SKF 81297, stimulates motor behaviour of MPTP-lesioned monkeys. *Eur J Pharmacol.* 1993 Apr 22;235(1):143-7.

Abrahams BS, et al. Place conditioning with the dopamine D1-like receptor agonist SKF 82958 but not SKF 81297 or SKF 77434. *Eur J Pharmacol.* 1998 Feb 19;343(2-3):111-8.

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