

## Dihydrxidine hydrochloride

## Chemical Properties

CAS No.:	137417-08-4
Formula:	C <sub>17</sub> H <sub>18</sub> ClNO <sub>2</sub>
Molecular Weight:	303.78
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

## Biological Description

Description	Dihydrxidine hydrochloride is a full efficacy D1-like dopamine receptor (D1/D5) agonist (IC <sub>50</sub> : 10 nM for D1 receptor). It also shows potent antiparkinsonian activity.
Targets(IC <sub>50</sub> )	D1 dopamine receptor: 10 nM D2 dopamine receptor: 660 nM
In vivo	Dihydrxidine hydrochloride shows poor oral bioavailability. It also has a relatively short half-life of 1 to 2 h [3]. Dihydrxidine hydrochloride (3 mg/kg; i.p.) yields dopamine D1 receptor agonist effects in vivo [4].

## Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.292 mL	16.459 mL	32.919 mL
5 mM	0.658 mL	3.292 mL	6.584 mL
10 mM	0.329 mL	1.646 mL	3.292 mL
50 mM	0.066 mL	0.329 mL	0.658 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Lovenberg TW, et al. Dihydrxidine, a novel selective high potency full dopamine D-1 receptor agonist. Eur J Pharmacol. 1989 Jul 4;166(1):111-3.
2. Mottola DM, et al. Dihydrxidine, a novel full efficacy D1 dopamine receptor agonist. J Pharmacol Exp Ther. 1992 Jul;262(1):383-93.
3. Salmi P, et al. Dihydrxidine--the first full dopamine D1 receptor agonist. CNS Drug Rev. 2004 Fall;10(3):230-42.
4. Gleason, S. D., et al. Effects of dopamine D1 receptor agonists in rats trained to discriminate dihydrxidine. Psychopharmacology, 2006;186(1), 25-31.

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