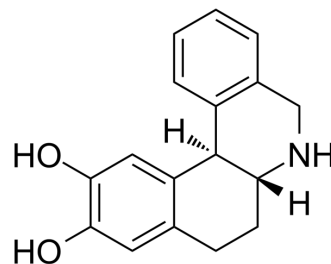


Dihydrxidine

Cat. No.:	HY-101299A
CAS No.:	123039-93-0
Molecular Formula:	C ₁₇ H ₁₇ NO ₂
Molecular Weight:	267.32
Target:	Dopamine Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dihydrxidine (DAR-0100) is a high potent, selective and full efficacy D1-like dopamine receptor (D1/D5) agonist with an IC ₅₀ of 10 nM for D1 receptor. Dihydrxidine exhibits potent antiparkinsonian activity ^{[1][2][3][4]} . Dihydrxidine can stimulate YAP phosphorylation ^[5] .
IC₅₀ & Target	IC ₅₀ : 10 nM (D1 dopamine receptor), D5 dopamine receptor, 660 nM (D1 dopamine receptor) ^[1]
In Vitro	Dihydrxidine (DAR-0100) strongly increased YAP phosphorylation in U2OS cells ^[5] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Dihydrxidine has poor oral bioavailability and a relatively short half-life of 1 to 2 h ^[3] . Dihydrxidine (3 mg/kg; i.p.) produces prominent dopamine D1 receptor agonist effects in vivo ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Adult male Sprague–Dawley rats (275-300 g) ^[4]
Dosage:	Adult male Sprague–Dawley rats (275-300 g) ^[4]
Administration:	Intraperitoneal injection
Result:	Produces prominent dopamine D1 receptor agonist effects in vivo

REFERENCES

- [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.
- [5]. Yu FX, et al. Regulation of the Hippo-YAP pathway by G-protein-coupled receptor signaling. *Cell.* 2012;150(4):780-791.

Caution: Product has not been fully validated for medical applications. For research use only.

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