产品名称：2-phenyl-4-azabicyclo[5.4.0]undeca-7,9,11-triene-9,10-diol
产品别名：SKF 38393 hydrochloride

生物活性：

Description	SKF 38393 hydrochloride is a selective agonist of the dopamine D1 receptor (D1DR) with an IC50 of 110 nM[1].
IC_{50} & Target	IC50: 110 nM (D1DR)
In Vitro	The selective D1-R agonist SKF-38393 (hydrochloride) induces a similar change in cytomorphology and increased the levels of media cAMP[2]. SKF-38393 (hydrochloride) (10 μmol/L; 1 hour) induces increased threonine-phosphorylation of DA- and cAMP-regulated phosphoprotein of Mr 32 kD (DARPP-32) in cultured GC cells[2].
	Western Blot Analysis[2].
	Cell Line: GC cells
	Concentration: 10 μmol/L
	Incubation Time: 1 hour
	Result: Induced increased threonine-phosphorylation of DA- and cAMP-regulated phosphoprotein of Mr 32 kD (DARPP-32) in cultured GC cells.
In Vivo	SKF-38393 (hydrochloride) (10 mg/kg; i.p.; every 16 hours) blocks the 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) -induced depletion of glutathione[3]. SKF-38393 (hydrochloride) attenuates MPTP-induced depletion of dopamine[3]. SKF-38393 (hydrochloride) enhances the activity of superoxide dismutase and hence mimics the action of Selegiline[3]. SKF-38393 (hydrochloride) enhances the frequency but not the amplitude of tetrodotoxin-resistant excitatory postsynaptic currents which argues for a presynaptic locus of D1 action[4].
	Animal Model: Balb/c mice (20–25 g)[3].
	Dosage: 5 mg/kg, 10 mg/kg
	Administration: Intraperitoneal injection; every 16 hours
	Result: Blocked the MPTP-induced depletion of glutathione and attenuated MPTP-induced depletion of dopamine.
Solvent&Solubility	***In Vitro:*** **DMSO : ≥ 34 mg/mL (116.53 mM)** * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.4274 mL	17.1368 mL	34.2736 mL
	5 mM	0.6855 mL	3.4274 mL	6.8547 mL
	10 mM	0.3427 mL	1.7137 mL	3.4274 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

[1]. Altar CA, et al. Picomolar affinity of 125I-SCH 23982 for D1 receptors in brain demonstrated with digital

References	subtraction auto radiography. J Neurosci. 1987 Jan;7(1):213-222. [2]. 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. [3]. 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. [4]. 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.

源叶生物