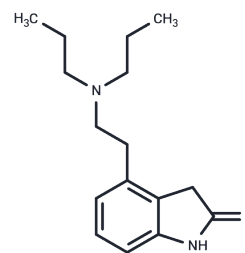


Ropinirole

Chemical Properties

CAS No. :	91374-21-9
Formula:	C ₁₆ H ₂₄ N ₂ O
Molecular Weight:	260.38
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Ropinirole (SKF 101468) is an orally active and potent D3/D2 receptor agonist with anti-amyotrophic lateral sclerosis effects. Ropinirole is used in the study of Parkinson's disease.
Targets(IC50)	Dopamine Receptor
In vitro	Ropinirole has a 10- to 20-fold higher binding affinity for D3 receptors than for D2 and D4 receptors. As an orally potent D3/D2 receptor agonist, Ropinirole has a K _i value of 29 nM for the D2 receptor and has pEC ₅₀ s of 7.4, 8.4, and 6.8 for the hD2, hD3, and hD4 receptors, respectively, with no affinity for the D1 receptor. [1] Ropinirole showed low activity at α ₂ -adrenergic receptors and 5-HT ₂ receptors, but no activity at 5-HT ₁ receptors, benzodiazepine receptors, γ-aminobutyric acid receptors, and α ₁ and β-adrenergic receptors. [2]
In vivo	Intraperitoneal injections of Ropinirole at doses of 0.1-10 mg/kg were able to lower the threshold for intracranial self-stimulation (ICSS), showing anxiolytic and antidepressant effects without affecting motor function or spatial memory. [2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8405 mL	19.2027 mL	38.4054 mL
5 mM	0.7681 mL	3.8405 mL	7.6811 mL
10 mM	0.3841 mL	1.9203 mL	3.8405 mL
50 mM	0.0768 mL	0.3841 mL	0.7681 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

Eden RJ, et al. Preclinical pharmacology of ropinirole (SK&F 101468-A) a novel dopamine D2 agonist. *Pharmacol Biochem Behav.* 1991 Jan;38(1):147-54.

Mavrikaki M, et al. Ropinirole regulates emotionality and neuronal activity markers in the limbic forebrain. *Int J Neuropsychopharmacol.* 2014 Dec;17(12):1981-93.

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