

Ropinirole (hydrochloride)

Catalog No: tcsc2864



Available Sizes

Size: 50mg

Size: 100mg

Size: 200mg



Specifications

CAS No:

91374-20-8

Formula:

$C_{16}H_{25}ClN_2O$

Pathway:

GPCR/G Protein;Neuronal Signaling

Target:

Dopamine Receptor;Dopamine Receptor

Purity / Grade:

>98%

Solubility:

DMSO : 17 mg/mL (57.27 mM; Need ultrasonic and warming)

Alternative Names:

SKF 101468 hydrochloride

Observed Molecular Weight:

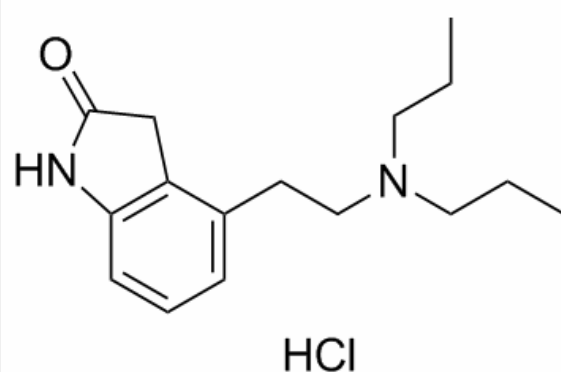
296.84

Product Description

Ropinirole hydrochloride (SKF101468 hydrochloride) is a selective dopamine D2 receptor inhibitor with IC₅₀ of 29 nM.

Target: Dopamine D2 Receptor

Ropinirole (50 mg/kg, i.p.) causes biphasic spontaneous locomotor activity in mice. Ropinirole (0.05-1.0 mg/kg SC) dose-dependently inhibits the dyskinesias induced by 2-di-n-propylamino-5,6-di-hydroxytetralin in mice. Ropinirole, at doses of 1 and 10 µg, injected unilaterally directly into the striatum of the rat causes marked, contralateral (away from the side of injection) asymmetry and circling in mice. Ropinirole (0.05-1.0 mg/kg SC or 0.1 mg/kg PO) reverses all motor and behavioural deficits induced by MPTP in marmosets [1]. Ropinirole (2 mg/kg, i.p.) for 7 days increases GSH, catalase and SOD activities in the striatum and protected striatal dopaminergic neurons against 6-hydroxydopamine (6-OHDA) in mice [2]. Ropinirole (0.2 mg/kg, i.p.) improves the use of previously akinetic forelimb and produced robust circling behavior in lesioned rats with striatal over-expression of both D2R and D3R compared to lesioned animals that received blank vector. The subtherapeutic dose of ropinirole generates only modest motor effects in lesioned rats with sole over-expression of D2R or D3R [3]. Ropinirole (1-8 mg t.i.d.) is rapidly and completely absorbed with oral bioavailability of 55%, clearance of 780 mL/min, elimination half-life of 6 hours in healthy volunteer. Since the major route of elimination for Ropinirole is by the CYP enzyme system, mainly by CYP1A2 and also by CYP3A4, inhibition of the former and possibly the latter may reduce the agent's clearance and lead to drug accumulation [4].



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