

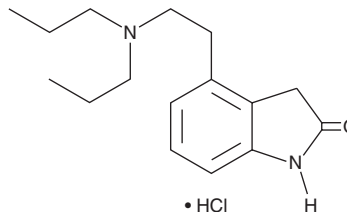
PRODUCT INFORMATION



Ropinirole (hydrochloride)

Item No. 23871

CAS Registry No.: 91374-20-8
Formal Name: 4-[2-(dipropylamino)ethyl]-1,3-dihydro-2H-indol-2-one, monohydrochloride
Synonym: SKF 101468A
MF: C₁₆H₂₄N₂O • HCl
FW: 296.8
Purity: ≥98%
UV/Vis.: λ_{max}: 250 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ropinirole (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the ropinirole (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Ropinirole (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ropinirole (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of ropinirole (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ropinirole is a potent dopamine D₂ receptor agonist (K_i = 29 nM in a radioligand binding assay).¹ It is selective for D₂ over D₁ dopamine receptors (K_i = >100,000 nM) as well as a panel of adrenergic, serotonin, benzodiazepine, and GABA receptors (IC₅₀s = >9,000 nM). Ropinirole reduces spontaneous locomotor activity in mice at doses less than 50 mg/kg but increases it at a dose of 100 mg/kg. It also induces contralateral asymmetry in an open field test in 6-OHDA-lesioned mice. Ropinirole (0.01-1 mg/kg) reverses locomotor deficits and restores interest in novel stimuli in a marmoset model of Parkinson's disease induced by MPTP. Formulations containing ropinirole have been used for the treatment of Parkinson's disease motor dysfunction.

Reference

1. Eden, R.J., Costall, B., Domeney, A.M., *et al.* Preclinical pharmacology of ropinirole (SK&F 101468-A) a novel dopamine D₂ agonist. *Pharmacol. Biochem. Behav.* **38**(1), 147-154 (1991).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/22/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM