



Certificate of Analysis

www.tocris.com

Product Name: Rotigotine hydrochloride Catalog No.: 3896 Batch No.: 3

CAS Number: 125572-93-2

IUPAC Name: (6S)-5,6,7,8-Tetrahydro-6-[propyl[2-(2-thienyl)ethyl]amino]-1-naphthalenol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₂₅NOS.HCl

Batch Molecular Weight: 351.93 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 25 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.2% purity
Chiral HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -56.4$ (Concentration = 1, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 64.84 7.45 3.98 Found 64.88 7.53 3.76



Product Information

Print Date: Aug 11th 2018

www.tocris.com

Batch No.: 3

Product Name: Rotigotine hydrochloride

CAS Number: 125572-93-2

IUPAC Name: (6S)-5,6,7,8-Tetrahydro-6-[propyl[2-(2-thienyl)ethyl]amino]-1-naphthalenol hydrochloride

Description:

Dopamine D_2 and D_3 receptor agonist. K_i values are 13 and 0.71 nM for D_2 and D_3 respectively. Also has significant affinity for 5-HT_{1A} and adrenergic α_{2B} receptors. Exhibits antiparkinsonian acitivity.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₉H₂₅NOS.HCl

Batch Molecular Weight: 351.93 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

DMSO to 100 mM ethanol to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Catalog No.: 3896

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Scheller *et al* (2009) The in vitro receptor profile of rotigotine: a new agent for the treatment of Parkinson's disease. Naunyn.Schmiedebergs.Arch.Pharmacol. *379* 73. PMID: 18704368.

Belluzzi *et al* (2004) N-0923, a selective dopamine D₂ receptor agonist, is efficacious in rat and monkey models of Parkinson's disease. Mov Disord. **9** 147

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use