

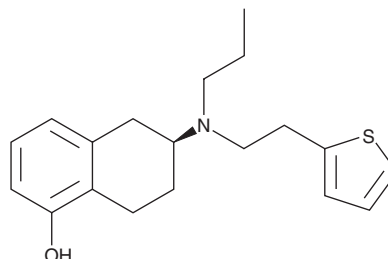
PRODUCT INFORMATION



Rotigotine

Item No. 20246

CAS Registry No.: 99755-59-6
Formal Name: (6S)-5,6,7,8-tetrahydro-6-[propyl[2-(2-thienyl)ethyl]amino]-1-naphthalenol
Synonyms: N-0923, SPM 962
MF: C₁₉H₂₅NOS
FW: 315.5
Purity: ≥98%
UV/Vis.: λ_{max}: 224, 272 nm
Supplied as: A crystalline 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

Rotigotine is supplied as a crystalline solid. A stock solution may be made by dissolving the rotigotine in the solvent of choice, which should be purged with an inert gas. Rotigotine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of rotigotine in these solvents is approximately 1, 20, and 30 mg/ml, respectively.

Rotigotine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Rotigotine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Rotigotine has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Rotigotine is a non-selective dopamine receptor agonist with pEC₅₀ values of 9.6, 10.4, 8.2, 7.7, and 7.7 for D₁, D₂, D₃, D₄, and D₅, respectively.¹ It demonstrates a high-affinity for D₁, D₂, and D₃ with lesser affinity for D₄ and D₅ receptor subtypes.¹ This binding profile is similar to that of apomorphine (Item No. 16094) and pergolide but differentiated from that of pramipexole (Item No. 11981) and ropinirole, which have a more narrow profile of receptor specificity.¹ Each of these agonists demonstrates anti-Parkinsonian effects in animal and clinical models through their ability to directly activate dopamine receptors.¹

Reference

1. Wood, M., *et al.* Rotigotine is a potent agonist at dopamine D₁ receptors as well as at dopamine D₂ and D₃ receptors. *Br. J. Pharmacol.* **172**(4), 1124-1135 (2015).

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.

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