

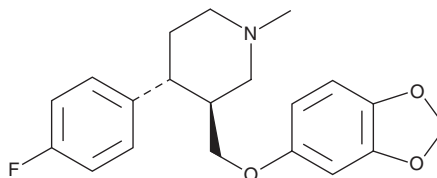
PRODUCT INFORMATION



N-methyl Paroxetine

Item No. 26160

CAS Registry No.: 110429-36-2
Formal Name: (3S,4R)-3-[(1,3-benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)-1-methyl-piperidine
Synonym: Paroxetine-Related Compound F
MF: C₂₀H₂₂FNO₃
FW: 343.4
Purity: ≥98%
UV/Vis.: λ_{max}: 235, 265, 271, 295 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

N-methyl Paroxetine is supplied as a crystalline solid. A stock solution may be made by dissolving the N-methyl paroxetine in the solvent of choice, which should be purged with an inert gas. N-methyl Paroxetine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-methyl paroxetine in ethanol and DMSO is approximately 20 mg/ml and approximately 33 mg/ml in DMF.

N-methyl Paroxetine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-methyl paroxetine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. N-methyl Paroxetine has a solubility of approximately 0.09 mg/ml in a 1:10 solution of DMF:PBS (pH 7.0) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

N-methyl Paroxetine is a derivative of the selective serotonin reuptake inhibitor (SSRI) antidepressant paroxetine (Item No. 14998) that inhibits [³H]paroxetine binding to rat cortical membranes (K_i = 4.3 nM).¹ It inhibits serotonin (5-HT; Item No. 14332) uptake in rat brain synaptosomes with an IC₅₀ value of 22 nM.² N-methyl Paroxetine has been used as a precursor in the synthesis of paroxetine and is a potential impurity in commercial preparations of paroxetine.³

References

1. Mathis, C.A., Gerdes, J.M., Enas, J.D., *et al.* Binding potency of paroxetine analogues for the 5-hydroxytryptamine uptake complex. *J. Pharm. Pharmacol.* **44**(10), 801-805 (1992).
2. Plenge, P., Møllerup, E.T., Honoré, T., *et al.* The activity of 25 paroxetine/femoxetine structure variants in various reactions, assumed to be important for the effect of antidepressants. *J. Pharm. Pharmacol.* **39**(11), 877-882 (1987).
3. Konudula, B.R., Lahiri, S., Rawat, G.S., *et al.* Process for the preparation of paroxetine hydrochloride. *Matrix Laboratories LTD WO 2009/138999 A2* (2009).

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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