

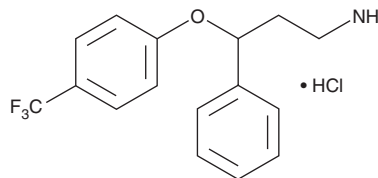
# PRODUCT INFORMATION



## Norfluoxetine (hydrochloride)

Item No. 15900

**CAS Registry No.:** 57226-68-3  
**Formal Name:**  $\gamma$ -[4-(trifluoromethyl)phenoxy]-  
benzenepropanamine,  
monohydrochloride  
**Synonym:** Desmethyfluooxetine  
**MF:**  $C_{16}H_{16}F_3NO \cdot HCl$   
**FW:** 331.8  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{max}$ : 227, 264, 276 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Norfluoxetine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the norfluoxetine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Norfluoxetine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of norfluoxetine (hydrochloride) in these solvents is approximately 30 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 norfluoxetine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of norfluoxetine (hydrochloride) in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Norfluoxetine is an active metabolite of the antidepressant fluoxetine.<sup>1</sup> It is formed from fluoxetine by the cytochrome P450 (CYP) isoforms CYP2C9, CYP2C19, and CYP3A.<sup>2</sup> Norfluoxetine inhibits serotonin (5-HT) uptake in rat brain synaptosomal membrane preparations ( $K_i = 44.7$  nM) and isolated human platelets ( $IC_{50} = \sim 15$  nM).<sup>1</sup> It has been found in the tissues of fish exposed to wastewater effluent.<sup>3</sup>

### References

1. Wong, D.T., Bymaster, F.P., Reid, L.R., *et al.* Norfluoxetine enantiomers as inhibitors of serotonin uptake in rat brain. *Neuropsychopharmacology* **8(4)**, 337-344 (1993).
2. Hiemke, C. and Härtter, S. Pharmacokinetics of selective serotonin reuptake inhibitors. *Pharmacol. Ther.* **85(1)**, 11-28 (2000).
3. Brooks, B.W., Chambliss, C.K., Stanley, J.K., *et al.* Determination of select antidepressants in fish from an effluent-dominated stream. *Environ. Toxicol. Chem.* **24(2)**, 464-469 (2005).

#### 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

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