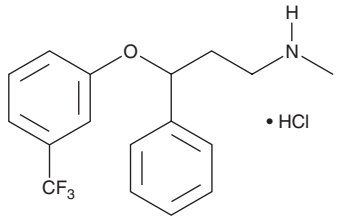
PRODUCT INFORMATION

meta-Fluoxetine (hydrochloride)

Item No. 22158

CAS Registry No.:	79088-29-2
Formal Name:	N-methyl-γ-[3-(trifluoromethyl)phenoxy]-benzenepropanamine, monohydrochloride
Synonyms:	*m*-Fluoxetine, Fluoxetine Impurity C, Fluoxetine Related Compound A
MF:	$C_{17}H_{18}F_3NO \bullet HCl$
FW:	345.8
Purity:	≥98%
UV/Vis.:	λ_{max}: 277 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

meta-Fluoxetine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the *meta*-fluoxetine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. *meta*-Fluoxetine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of *meta*-fluoxetine (hydrochloride) in ethanol and DMSO is approximately 12.5 mg/ml and approximately 16 mg/ml in DMF.

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 *meta*-fluoxetine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of *meta*-fluoxetine (hydrochloride) in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

meta-Fluoxetine is an isomer of fluoxetine (Item No. 14418) that is found as an impurity in fluoxetine preparations. *meta*-Fluoxetine is a weaker serotonin selective reuptake inhibitor (SSRI) than fluoxetine, in which the trifluoromethyl group is at the *para* position (K_is = 166 and 17 nM, respectively, in rat brain synaptosomes).[1,2]

References

1. Wong, D.T., Bymaster, F.P., Horng, J.S., *et al.* A new selective inhibitor for uptake of serotonin into synaptosomes of rat brain: 3-(p-trifluoromethylphenoxy). N-methyl-3-phenylpropylamine. *J. Pharmacol. Exp. Ther.* **193(3)**, 804-811 (1975).
2. Wong, D.T., Bymaster, F.P., and Engleman, E.A. Prozac (fluoxetine, Lilly 110140), the first selective serotonin uptake inhibitor and an antidepressant drug: Twenty years since its first publication. *Life Sci.* **57(5)**, 411-441 (1995).

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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