# Fluoxetine hydrochloride, 5-HT reuptake inhibitor

**Product name**
Fluoxetine hydrochloride, 5-HT reuptake inhibitor

**Description**
5-HT reuptake inhibitor

**Biological description**
Potent, selective 5-HT reuptake inhibitor. Antidepressant *in vivo*. Binds to rat and human 5-HT transporters with $K_i$ values of 2 and 0.9-20 nM, respectively. Shows around 150-900-fold selectivity over 5-HT$_{1A}$, 5-HT$_{2A}$, H$_1$, a$_1$, a$_2$-adrenergic and muscarinic receptors.

**Purity**
> 99%

**Chemical name**
$N$-Methyl-3-[(4-trifluoromethyl)phenoxy]-3-phenylpropylamine hydrochloride

**Molecular weight**
345.79

**Chemical structure**

![Chemical structure image]

**Molecular formula**
$C_{17}H_{18}F_3NO.HCl$

**CAS Number**
56296-78-7

**Storage instructions**
Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.

**Solubility overview**
Soluble in water to 10 mM and in DMSO to 100 mM

**Handling**
Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

**Source**
Synthetic
Functional Studies - Fluoxetine hydrochloride (ab120077) staining serotonin in SKNSH cells treated with fluoxetine hydrochloride (ab120077), by ICC/IF. Increase of serotonin expression correlates with increased concentration of fluoxetine hydrochloride, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120077 (fluoxetine hydrochloride) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab66047 (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 donkey anti-goat polyclonal antibody (ab96931) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Our Abpromise guarantee covers the use of ab120077 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Please note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS”

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