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## DATASHEET

Fluoxetine hydrochloride

### Product overview

|                          |                                                                   |
|--------------------------|-------------------------------------------------------------------|
| <b>Name</b>              | Fluoxetine hydrochloride                                          |
| <b>Cat No</b>            | HB1600                                                            |
| <b>Biological action</b> | Inhibitor                                                         |
| <b>Purity</b>            | >98%                                                              |
| <b>Description</b>       | Selective 5-HT uptake inhibitor. Affects differentiation of NSCs. |

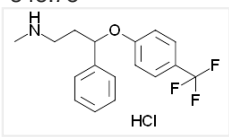
### Biological Data

|                               |                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Biological description</b> | Potent, selective 5-HT reuptake inhibitor ( $K_i = 2$ nM at rSERT). Also acts at other receptors and channels. Shows ~150-900 fold selectivity over 5-HT <sub>1A</sub> , <sub>2A</sub> , muscarinic, $\alpha_1$ , $\alpha_2$ -adrenoceptors and H <sub>1</sub> receptors. Also affects differentiation of neural stem cells (NSCs). Shows antidepressant effects. Active <i>in vivo</i> . |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Solubility & Handling

|                             |                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage instructions</b> | Room temperature                                                                                                              |
| <b>Solubility overview</b>  | Soluble in water (10mM) and in DMSO (100mM)                                                                                   |
| <b>Important</b>            | This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use. |

### Chemical Data

|                           |                                                                                                                      |
|---------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Chemical name</b>      | N-Methyl-3-[(4-trifluoromethyl)phenoxy]-3-phenylpropylamine hydrochloride                                            |
| <b>Molecular Weight</b>   | 345.78                                                                                                               |
| <b>Chemical structure</b> |                                   |
| <b>Molecular Formula</b>  | C <sub>17</sub> H <sub>18</sub> F <sub>3</sub> NO.HCl                                                                |
| <b>CAS Number</b>         | 56296-78-7                                                                                                           |
| <b>PubChem identifier</b> | 62857                                                                                                                |
| <b>SMILES</b>             | CNCCC(C1=CC=CC=C1)OC2=CC=C(C=C2)C(F)(F)F.Cl                                                                          |
| <b>InChi</b>              | InChI=1S/C17H18F3NO.ClH/c1-21-12-11-16(13-5-3-2-4-6-13)22-15-9-7-14(8-10-15)17(18,19)20;/h2-10,16,21H,11-12H2,1H3;1H |
| <b>InChiKey</b>           | GIYXAJPCNFJEHY-UHFFFAOYSA-N                                                                                          |
| <b>MDL number</b>         | MFCD00214288                                                                                                         |

### References

#### Fluoxetine, a selective inhibitor of serotonin uptake.

Fuller RW *et al* (1991) Med Res Rev 11(1)

**PubMedID** [1994152](#)

**Fluoxetine and its two enantiomers as selective serotonin uptake inhibitors.**

Wong DT *et al* (1990) Acta Pharm Nord 2(3)

**PubMedID** [2200429](#)

**Fluoxetine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in depressive illness.**

Benfield P *et al* (1986) Drugs 32(6)

**PubMedID** [2878798](#)

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