1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{17}\text{H}_{18}\text{F}_{3}\text{NO} \cdot \text{HCl} \)

Batch Molecular Weight: 345.78

Physical Appearance: White solid

Solubility:
- DMSO to 100 mM
- Water to 10 mM

Storage: Store at RT

Batch Molecular Structure:

![Molecular Structure](image)

2. ANALYTICAL DATA

Melting Point: Between 158 - 159°C

HPLC: Shows 99.7% purity

\(^1\)H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>59.05</td>
<td>59.26</td>
</tr>
<tr>
<td>H</td>
<td>5.54</td>
<td>5.57</td>
</tr>
<tr>
<td>N</td>
<td>4.05</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Fluoxetine hydrochloride

Description:
Fluoxetine hydrochloride is a selective serotonin reuptake inhibitor. Binds to the human 5-HT transporter with a Kᵢ of 0.9 nmol/l and is between 150- and 900-fold selective over 5-HT₁A, 5-HT₂A, H₁, α₁, α₂-adrenergic, and muscarinic receptors. Antidepressant. Induces differentiation of neuronal precursors, enhancing neuronal characteristics. Fluoxetine also inhibits assembly and activation of the NLRP3-ASC inflammasome and prevents degeneration of retinal pigmented epithelium (RPE) cells in an animal model of dry age-related macular degeneration (AMD).

Physical and Chemical Properties:
Batch Molecular Formula: C₁₁H₁₅F₃NO.HCl
Batch Molecular Weight: 345.78
Physical Appearance: White solid

Minimum Purity: ≥99%

Storage: Store at RT

Solubility & Usage Info:
DMSO to 100 mM
water to 10 mM

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:
Sold with the permission of Eli Lilly and Company

References: