1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{19}\text{H}_{20}\text{F}_{3}\text{NO}_{3} \)
Batch Molecular Weight: 367.36
Physical Appearance: White solid
Solubility:
- water to 5 mM with gentle warming
- DMSO to 100 mM
- ethanol to 50 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.07 \) (Dichloromethane:Methanol [9:1])
HPLC: Shows 100% purity
\(^1\text{H} \text{NMR:}\) Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: \([\alpha]_D = -3\) (Concentration = 1, Solvent = Methanol)

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>62.12</td>
<td>62.13</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.49</td>
<td>5.37</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>3.81</td>
<td>3.82</td>
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</tbody>
</table>
Description:
Potent and selective inhibitor of the glial glycine transporter GlyT1b (IC_{50} = 6.9 nM). Displays negligible activity at GlyT-2, adrenoreceptors, dopamine, 5HT receptors and noradrenaline, dopamine, 5HT and GABA transporters (pIC_{50} < 4). Active in vivo.

Physical and Chemical Properties:
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at +4°C

Solubility & Usage Info:
water to 5 mM with gentle warming
DMSO to 100 mM
ethanol to 50 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.

References: