1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{19}H_{22}N_{2}O_{3}S_{2}$
Batch Molecular Weight: 390.52
Physical Appearance: White solid
Solubility: DMSO to 100 mM ethanol to 50 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
$^1$H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<tr>
<td>Theoretical</td>
<td>58.44</td>
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<td>7.17</td>
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<td>5.67</td>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Information**

**Product Name:** PF 4778574  
**Catalog No.:** 4900  
**Batch No.:** 1

**CAS Number:** 1219633-99-4  
**IUPAC Name:** N-[(3R,4S)-3-[4-(5-cyano-2-thienyl)phenyl]tetrahydro-2H-pyran-4-yl]-2-propanesulfonamide

**Description:**  
Positive allosteric modulator of AMPA receptors ($K_i = 85$ nM). Prevents ketamine-induced working memory impairments. Brain penetrant.

**Physical and Chemical Properties:**  
- Batch Molecular Formula: C$_{19}$H$_{22}$N$_2$O$_3$S$_2$  
- Batch Molecular Weight: 390.52  
- Physical Appearance: White solid  
- Minimum Purity: $>$98%

**Storage:** Store at +4°C

**Solubility & Usage Info:**  
- 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:**  