1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_8\text{H}_9\text{NO}_4.\frac{1}{4}\text{H}_2\text{O} \)

Batch Molecular Weight: 187.66

Physical Appearance: Off White solid

Solubility:
- Water to 10 mM
- Phosphate buffered saline to 10 mM
- 1eq. NaOH to 100 mM
- 1eq. HCl to 100 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:

\[ \text{HO} \quad \text{NH}_2 \]

2. ANALYTICAL DATA

TLC: \( R_f = 0.17 \) (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

HPLC: Shows 99.9% purity

\(^1\text{H} \text{NMR:} \) Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>51.2</td>
<td>5.1</td>
<td>7.46</td>
</tr>
<tr>
<td>Found</td>
<td>51.34</td>
<td>5.07</td>
<td>7.39</td>
</tr>
</tbody>
</table>
Product Name: (RS)-3,5-DHPG  
CAS Number: 19641-83-9  
IUPAC Name: (RS)-3,5-Dihydroxyphenylglycine

Description:
Selective group I metabotropic glutamate receptor agonist which activates both mGlu1 and mGlu5. Also reported to be an antagonist at metabotropic glutamate receptors linked to phospholipase D. (S)-3,5-DHPG (Cat. No. 0805) also available.

Physical and Chemical Properties:
Batch Molecular Formula: C14H12NO3·¼H2O  
Batch Molecular Weight: 187.66  
Physical Appearance: Off White solid  
Minimum Purity: >99%

Batch Molecular Structure:
![Molecular Structure](image_url)

Storage: Desiccate at -20°C  
CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:
- water to 10 mM  
- phosphate buffered saline to 10 mM  
- 1eq. NaOH to 100 mM  
- 1eq. HCl to 100 mM

Whilst supplied of high purity, this product is very sensitive to air and light promoted oxidation, and may discolour slightly over time. Chemical and pharmacological analysis shows that this discoloration has no noticeable effect on its properties and can be safely ignored. Further analysis has shown that this product rapidly decomposes when dissolved in alkaline solution. Therefore, as a precautionary measure we recommend that the solid material be stored at -20°C, away from light and should be viable for 6 months from the date of purchase. When made up, stock solutions should be aliquoted, stored at -20°C and used within one week.

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: