1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** \(C_{26}H_{29}ClN_{2}O_{4}S \cdot \frac{1}{4}H_{2}O\)
- **Batch Molecular Weight:** 505.54
- **Physical Appearance:** White solid
- **Solubility:** DMSO to 100 mM with gentle warming
- **Storage:** Store at +4°C
- **Batch Molecular Structure:**

   ![Molecular Structure](image)

2. ANALYTICAL DATA

- **HPLC:** Shows 99.9% 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>Carbon</td>
<td>61.77</td>
<td>61.77</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.88</td>
<td>5.93</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>5.54</td>
<td>5.47</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: KN 93
CAS Number: 139298-40-1
IUPAC Name: \(N\)-(2-[[3-(4-Chlorophenyl)-2-propenyl]methylamino]methyl)phenyl)-\(N\)-(2-hydroxyethyl)-4-methoxybenzenesulphonamide

Description:
Potent, cell permeable inhibitor of CaM kinase II (IC\(_{50}\) = 0.37 \(\mu\)M). Also a direct extracellular open channel blocker of voltage-gated potassium channels (IC\(_{50}\) = 307 nM for \(K_a 1.5\)) and abolishes IKr in ventricular myocytes (IC\(_{50}\) = 102.6 nM) independently of CaM kinase II inhibition. Water soluble form and Negative Control also available.

Physical and Chemical Properties:
- Batch Molecular Formula: \(C_{26}H_{25}ClN_6O_7S\cdot\frac{1}{4}H_2O\)
- Batch Molecular Weight: 505.54
- Physical Appearance: White solid
- Minimum Purity: >98%
- Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:
DMSO to 100 mM with gentle warming

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: