1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** $C_{13}H_{15}NO_2S$
- **Batch Molecular Weight:** 249.33
- **Physical Appearance:** Pale yellow solid
- **Solubility:** DMSO to 100 mM, ethanol to 75 mM
- **Storage:** Store at +4°C
- **Batch Molecular Structure:**

![Chemical Structure](image)

2. ANALYTICAL DATA

- **TLC:** $R_f = 0.5$ (Dichloromethane:Ethyl acetate [4:1])
- **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>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>62.62</td>
<td>6.06</td>
<td>5.62</td>
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<tr>
<td>Found</td>
<td>62.65</td>
<td>6.02</td>
<td>5.59</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Information

Product Name: TG 003
CAS Number: 719277-26-6
IUPAC Name: (1Z)-1-(3-Ethyl-5-methoxy-2(3H)-benzothiazolylidene)-2-propanone

Description:
Potent, ATP-competitive inhibitor of Clk-family kinases (IC\textsubscript{50} values are 15, 20 and 200 nM for mClk4, 1 and 2 respectively and >10 \mu M for mClk3). Also inhibits DYRK1A/B (IC\textsubscript{50} values are 24 and 34 nM respectively). Suppresses serine/arginine-rich protein phosphorylation; affects the regulation of alternative splicing by phosphorylation of SR protein both in vitro and in vivo.

Physical and Chemical Properties:
Batch Molecular Formula: C\textsubscript{15}H\textsubscript{13}NO\textsubscript{3}S
Batch Molecular Weight: 249.33
Physical Appearance: Pale yellow solid

Minimum Purity: >98%

Storage: Store at +4°C

Solubility & Usage Info:
DMSO to 100 mM
ethanol to 75 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: