1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** C$_{21}$H$_{21}$NO$_2$S
- **Batch Molecular Weight:** 351.46
- **Physical Appearance:** Pale yellow solid
- **Solubility:** DMSO to 100 mM, ethanol to 50 mM
- **Storage:** Store at +4°C

2. ANALYTICAL DATA

- **Melting Point:** Between 103 - 105°C
- **HPLC:** Shows 99.8% 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>71.77</td>
<td>71.36</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.02</td>
<td>6.05</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>3.98</td>
<td>3.98</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Tazarotene
CAS Number: 118292-40-3
IUPAC Name: 6-[(2]-3,4-Dihydro-4,4-dimethyl-2H-1-benzothiopyran-6-yl)ethynyl]-3-pyridinecarboxylic acid ethyl ester

Description:
Receptor-selective acetylenic retinoid; binds at retinoid acid receptors (RAR) -β and -γ. Topically used for the treatment of skin disorders, particularly psoriasis and acne. Implicated in the treatment of basal cell carcinomas; induces upregulation of Bax in vivo. Exhibits antiproliferative and proapoptotic activity. Upregulates TIGs (Tazarotene-induced genes), including the cell adhesion molecule TIG1 and the tumor-suppressor TIG3.

Physical and Chemical Properties:
Batch Molecular Formula: C21H23NO2S
Batch Molecular Weight: 351.46
Physical Appearance: Pale yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

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: