Product Name: TC-S 7006  
Catalog No.: 5240  
Batch No.: 1  
CAS Number: 871307-18-5  
IUPAC Name: 4-[(3-Chloro-4-fluorophenyl)amino]-6-[(3-pyridinylmethyl)amino]-1,7-naphthyridine-3-carbonitrile

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{21}\text{H}_{14}\text{ClFN}_{6}\cdot\text{H}_{2}\text{O} \)

Batch Molecular Weight: 422.85

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.5 \) (Chloroform:Methanol [9:1])

HPLC: Shows 99.6% 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>59.65</td>
<td>3.81</td>
<td>19.87</td>
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<tr>
<td>Found</td>
<td>59.71</td>
<td>3.96</td>
<td>19.64</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
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Description:
Potent and selective Tpl2 (Cot; MAP3K8) inhibitor (IC\textsubscript{50} = 50 nM). Selective for Tpl2 over MEK, p38, Src, MK2, PKC and EGFR. Inhibits LPS-induced TNF-\(\alpha\) secretion from monocytes and attenuates acute myeloid leukemia (AML) cell proliferation in vitro. Also reduces cytolytic activity of human CD8\(^+\) cytotoxic T lymphocytes. Cell permeable.

Physical and Chemical Properties:
Batch Molecular Formula: C\textsubscript{21}H\textsubscript{12}ClF\textsubscript{2}N\textsubscript{3}O\textsubscript{2}
Batch Molecular Weight: 422.85
Physical Appearance: Yellow solid
Minimum Purity: >99%

Storage: Store at -20°C
Solubility & Usage Info:
DMSO to 100 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:
Wang et al (2010) Inhibition of Cot1/Tlp2 oncogene in AML cells reduces ERK5 activation and up-regulates p27\(^{Kip1}\) concomitant with enhancement of differentiation and cell cycle arrest induced by silibinin and 1,25-dihydroxyvitamin D\(_3\). Cell Cycle 9 4542. PMID: 21084834.