1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{14}\text{H}_8\text{N}_2\text{O}_{0.1}\text{H}_2\text{O} \)
Batch Molecular Weight: \( 222.03 \)
Physical Appearance: Yellow solid
Solubility: ethanol to 5 mM with gentle warming
DMSO to 100 mM
Storage: Desiccate at -20°C
Batch Molecular Structure:

![Molecular Structure]

2. ANALYTICAL DATA

TLC: \( R_f = 0.58 \) (Chloroform:Methanol [9:1])
HPLC: Shows 98.9% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon (Theoretical)</th>
<th>Hydrogen (Theoretical)</th>
<th>Nitrogen (Theoretical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>75.73</td>
<td>3.72</td>
<td>12.62</td>
</tr>
<tr>
<td>Found</td>
<td>75.74</td>
<td>3.61</td>
<td>12.8</td>
</tr>
</tbody>
</table>
**Product Information**

**Product Name:** SP 600125  
**Catalog No.:** 1496  
**Batch No.:** 10  
**CAS Number:** 129-56-6  
**EC Number:** 204-955-6

**Description:**
Selective JNK inhibitor. Competitively and reversibly inhibits JNK1, 2 and 3 (IC₅₀ = 40 - 90 nM) with negligible activity at ERK2, p38β and a range of enzymes. Active in vivo. Exhibits reduced selectivity over other protein kinases under certain conditions. Protects renal tubular epithelial cells against ischemia/reperfusion-induced apoptosis. Prevents BMP9-induced osteogenic differentiation of MSCs. Essential component of medium for maintaining stem cells in naive pluripotent state. Available as part of the MAPK Inhibitor Tocriset™.

**Physical and Chemical Properties:**
Batch Molecular Formula: C₁₄H₉N₂O₆.0.1H₂O  
Batch Molecular Weight: 222.03  
Physical Appearance: Yellow solid  
**Minimum Purity:** >98%  
**Batch Molecular Structure:**

![Molecular Structure](image)

**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:**
- ethanol to 5 mM with gentle warming  
- 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:**
- Schnabl et al (2001) TAK1/JNK and p38 have opposite effects on rat hepatic stellate cells. Hepatology 34 953. PMID: 11679966.  