1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{15}\text{H}_{10}\text{O}_{5} \)

Batch Molecular Weight: 270.24

Physical Appearance: Yellow solid

Solubility: DMSO to 50 mM

Storage: Desiccate at -20°C

2. ANALYTICAL DATA

HPLC: Shows 98.6% purity

\(^1\text{H NMR:}\) 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>C</td>
<td>66.64</td>
<td>66.42</td>
</tr>
<tr>
<td>H</td>
<td>3.73</td>
<td>3.76</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Baicalein  
**Catalog No.:** 1761  
**Batch No.:** 2

**CAS Number:** 491-67-8  
**IUPAC Name:** 5,6,7-Trihydroxy-2-phenyl-(4H)-1-benzopyran-4-one

**Description:**  
Inhibitor of 5- and platelet 12-lipoxygenases (IC₅₀ values are 9.5 and 0.12 μM respectively). Also inhibits Raf-mediated MEK-1 phosphorylation in C6 rat glioma cells and induces G₁ and G₂ cell cycle arrest by decreasing cdk1, cdk2, cyclin D2 and cyclin A expression. Inhibits production of inflammatory cytokines by inhibiting NF-κB activation. Also inhibits erastin-induced ferroptosis.

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** C₁₄H₁₀O₅  
**Batch Molecular Weight:** 270.24  
**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:**  
DMSO to 50 mM  
CAUTION - Solutions of this product should also be kept cold and used only on the day of preparation.

**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:**  