Cephalomannine

Cat. No.: HY-77554
CAS No.: 71610-00-9
Molecular Formula: C₄₅H₅₃NO₁₄
Molecular Weight: 831.9
Target: Microtubule/Tubulin
Pathway: Cell Cycle/DNA Damage; Cytoskeleton
Storage: 4°C, protect from light
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>≥ 100 mg/mL (120.21 mM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₂O</td>
<td>&lt; 0.1 mg/mL (insoluble)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mM</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.2021 mL</td>
<td>6.0103 mL</td>
<td>12.0207 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2404 mL</td>
<td>1.2021 mL</td>
<td>2.4041 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1202 mL</td>
<td>0.6010 mL</td>
<td>1.2021 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: **10% DMSO** >> **40% PEG300** >> **5% Tween-80** >> **45% saline**
   Solubility: ≥ 2.5 mg/mL (3.01 mM); Clear solution

2. Add each solvent one by one: **10% DMSO** >> **90% corn oil**
   Solubility: ≥ 2.5 mg/mL (3.01 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cephalomannine is a taxol derivative with antitumor, antiproliferative properties. IC50 value:
Target: Cephalomannine is an active anti-cancer agent obtained from Taxus yunnanensis and has an antineoplastic effect on tumors found in mice. Cephalomannine is a chemotherapy drug that is given as a treatment for some types of cancer.
Cephalomannine is most commonly used to treat non-small cell lung cancer.

REFERENCES


