Dehydrocostus Lactone

Cat. No.: HY-N0591
CAS No.: 477-43-0
Molecular Formula: C₁₅H₁₈O₂
Molecular Weight: 230.3
Target: Others
Pathway: Others
Storage: Powder -20°C 3 years
        4°C 2 years
        In solvent -80°C 6 months
        -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO : ≥ 62.5 mg/mL (271.39 mM)
Ethanol : 15 mg/mL (65.13 mM; Need ultrasonic)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<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>1 mM</td>
<td>4.3422 mL</td>
<td>21.7108 mL</td>
<td>43.4216 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.8684 mL</td>
<td>4.3422 mL</td>
<td>8.6843 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.4342 mL</td>
<td>2.1711 mL</td>
<td>4.3422 mL</td>
<td></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: ≥ 2.08 mg/mL (9.03 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (9.03 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (9.03 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Dehydrocostus Lactone is a major sesquiterpene lactone isolated from the roots of Saussurea lappa. IC50 value:
In vitro: Dehydrocostus Lactone promoted apoptosis with increased activation of caspases 8, 9, 7, 3,
enhanced PARP cleavage, decreased Bcl-XL expression and increased levels of Bax, Bak, Bok, Bik, Bmf, and t-Bid. We
have demonstrated that Dehydrocostus Lactone inhibits cell growth and induce apoptosis in DU145 cells [1].

REFERENCES


