Licofelone

Cat. No.: HY-B1452
CAS No.: 156897-06-2
Molecular Formula: C₂₃H₂₂ClNO₂
Molecular Weight: 379.88
Target: COX; Lipooxygenase; Apoptosis
Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; Apoptosis
Storage: Powder -20°C 3 years
In solvent -80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO: 25 mg/mL (65.81 mM; Need ultrasonic)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td></td>
<td>2.6324 mL</td>
<td>13.1621 mL</td>
<td>26.3241 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td></td>
<td>0.5265 mL</td>
<td>2.6324 mL</td>
<td>5.2648 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td></td>
<td>0.2632 mL</td>
<td>1.3162 mL</td>
<td>2.6324 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 >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.58 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Licofelone (ML-3000) is a dual COX/5-lipooxygenase (5-LOX) inhibitor (IC₅₀=0.21/0.18 μM, respectively) for the treatment of osteoarthritis. Licofelone exerts anti-inflammatory and anti-proliferative effects. Licofelone induces apoptosis, and decreases the production of proinflammatory leukotrienes and prostaglandins.[1][2][3].

IC₅₀ & Target

<table>
<thead>
<tr>
<th>COX</th>
<th>5-LOX</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.21 μM</td>
<td>IC₅₀</td>
</tr>
<tr>
<td>0.18 μM</td>
<td>IC₅₀</td>
</tr>
</tbody>
</table>

In Vitro
The IC₅₀s of human thrombocyte COX and human 5-LO are 0.16 μM and 0.23 μM, respectively.[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1][2][3]


Caution: Product has not been fully validated for medical applications. For research use only.

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