Echinocystic acid

Cat. No.: HY-N0271
CAS No.: 510-30-5
Molecular Formula: C₃₀H₄₈O₄
Molecular Weight: 472.7
Target: Reactive Oxygen Species
Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
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: ≥ 100 mg/mL (211.55 mM)
H₂O: < 0.1 mg/mL (insoluble)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.1155 mL</td>
<td>10.5775 mL</td>
<td>21.1551 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4231 mL</td>
<td>2.1155 mL</td>
<td>4.2310 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2116 mL</td>
<td>1.0578 mL</td>
<td>2.1155 mL</td>
</tr>
</tbody>
</table>

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.75 mg/mL (5.82 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Echinocystic acid a pentacyclic triterpene isolated from the fruits of Gleditsia sinensis Lam, has potent antioxidant, anti-inflammatory and anti-tumor properties. In vitro: Echinocystic acid (EA) inhibit the formation of osteoclast. EA inhibit RANKL-induced NF-κB activation and ERK phosphorylation in BMMs. [1] EA inhibit IL-1β-induced inflammation in chondrocytes. [2]In vivo: Echinocystic acid reduces reserpine-induced pain/depression dyad in mice. [3]

REFERENCES
