Corosolic acid

Cat. No.: HY-N0280
CAS No.: 4547-24-4
Molecular Formula: C₃₀H₄₈O₄
Molecular Weight: 472.7
Target: Autophagy
Pathway: Autophagy
Storage: Powder -20°C 3 years
         4°C  2 years
         In solvent -80°C 6 months
         -20°C 1 month

Solvent & Solubility

In vitro: 10 mM in DMSO

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

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

BIOLOGICAL ACTIVITY

Description

Corosolic acid isolated from the fruit of Cratoegus pinnatifida var. psilosa, was reported to have anticancer activity. IC50 value: 26.8 μg/ml in vitro. Target: In vitro: Corosolic acid displayed about the same potent cytotoxic activity as ursolic acid against several human cancer cell lines. In addition, the compound displayed antagonistic activity against the phorbol ester-induced morphological modification of K-562 leukemic cells, indicating the suppression of protein kinase C (PKC) activity by the cytotoxic compound. The compound showed PKC inhibition with dose-dependent pattern in an in vitro PKC assay [1]. MTT method was used to detect the influence of corosolic acid on A549 lung cancer cell growth in vitro under different concentrations. The value of IC50 was 26.8 μg/ml in vitro experiment. Corosolic acid of different doses had certain therapeutic effects on A549 solid tumor, the content of VEGF and CD34 proteins also had different degrees of influence [2]. Corosolic acid induced apoptosis in CT-26 cells, mediated by the activation of caspase-3. It inhibited the proliferation and tube formation of human umbilical vein endothelial cells and human dermal lymphatic microvascular endothelial cells, decreased the proliferation and migration of human umbilical vein endothelial cells stimulated by angiopoietin-1 [3]. In vivo: A mouse colon carcinoma CT-26 animal model was employed to determine the in vivo anti-angiogenic and anti-lymphangiogenic effects of corosolic acid.
REFERENCES


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

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