23-Hydroxybetulinic acid

Cat. No.: HY-N0566
CAS No.: 85999-40-2
Molecular Formula: C₃₀H₄₈O₄
Molecular Weight: 472.7
Target: Others
Pathway: Others
Storage: Please store the product under the recommended conditions in the COA.

Solvent & Solubility

In Vitro

10 mM in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mM</td>
<td>5 mM</td>
<td>10 mM</td>
</tr>
<tr>
<td>Solvent</td>
<td>2.1155 mL</td>
<td>10.5775 mL</td>
<td>21.1551 mL</td>
</tr>
<tr>
<td>Mass</td>
<td>2.1155 mL</td>
<td>10.5775 mL</td>
<td>21.1551 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description

23-hydroxybetulinic acid is one of the bioactive components responsible for its anticancer activity. In vitro: 23-hydroxybetulinic acid also shows different proliferation inhibitory activity against B16, HeLa, and HUVEC, with the IC₅₀ value of 78.5, 80, and 94.8 μM, respectively. 23-hydroxybetulinic acid can promote cell cycle arrest at S phase and induce apoptosis via intrinsic pathway. 23-hydroxybetulinic acid disrupts mitochondrial membrane potential significantly (p<0.01) and selectively downregulates the levels of Bcl-2, survivin and upregulates Bax, cytochrome C, cleaved caspase-9. 23-hydroxybetulinic acid can induce apoptosis in K562 cells. [1] 23-hydroxybetulinic acid enhances sensitivity of doxorubicin (DOX, ADR) on MCF-7/ADR cell lines, indicating its potential to be developed as a novel MDR modulator. [2] 23-HBA significantly improve the sensitivity of the tumor to doxorubicin. [3]

REFERENCES
