Madecassoside

Cat. No.: HY-N0568
CAS No.: 34540-22-2
Molecular Formula: C₄₈H₇₈O₂₀
Molecular Weight: 975.12
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 : ≥ 9.8 mg/mL (10.05 mM)
* “≥” means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass (1 mg)</th>
<th>Mass (5 mg)</th>
<th>Mass (10 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.0255 mL</td>
<td>5.1276 mL</td>
<td>10.2551 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2051 mL</td>
<td>1.0255 mL</td>
<td>2.0510 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1026 mL</td>
<td>0.5128 mL</td>
<td>1.0255 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description

Madecassoside is a pentacyclic triterpene isolated from Centella asiatica (L.), as an anti-inflammatory, anti-oxidative activities and anti-aging agent. [1]In vitro: Madecassoside exhibit significant anti-proliferative and anti-invasive effect in HGF-induced HepG2 and SMMC-77 cells. Madecassoside inhibit the HGF-induced activation of cMET-PKC-ERK1/2-COX-2-PGE2 cascade. [1]In vivo: Administration of madecassoside, p.o., exhibit a direct anti-PF effect in mice. Madecassoside increase the expression of hepatocyte growth factor (HGF) in colon tissues, and HGF receptor antagonists attenuated its anti-PF effect. madecassoside in mice are not mediated by its metabolites or itself after absorption into blood. Instead, madecassoside increases the activity of PPAR-γ, which subsequently increases HGF expression in colonic epithelial cells. [2] The reference for administration is 12 mg/kg. [3]

REFERENCES

[1]. Zexin Li et al. Madecassoside suppresses proliferation and invasiveness of HGF-induced human hepatocellular carcinoma cells via PKC-cMET-ERK1/2-
