Apigenin 7-glucoside

Cat. No.: HY-N0578
CAS No.: 578-74-5
Molecular Formula: C₂₁H₂₀O₁₀
Molecular Weight: 432.38
Target: Reactive Oxygen Species
Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage: 4°C, protect from light
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: ≥ 100 mg/mL (231.28 mM)

* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent 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>2.3128 mL</td>
<td>11.5639 mL</td>
<td>23.1278 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4626 mL</td>
<td>2.3128 mL</td>
<td>4.6256 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2313 mL</td>
<td>1.1564 mL</td>
<td>2.3128 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 >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (5.78 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Apigenin-7-glucoside exhibits significant anti-proliferative and antioxidant activity, scavengers of ROS. In vitro: exhibits significant anti-proliferative activity against B16F10 melanoma cells after 24 and 48 h of incubation. Apigenin-7-glucoside provoks an increase of subG0/G1, S and G2/M phase cell proportion with a significant decrease of cell proportion in G0/G1 phases. Apigenin-7-glucoside enhances melanogenesis synthesis and tyrosinase activity of B16F10 melanoma cells. [1] Api7G specifically induced the differentiation of CD34+ cells towards the erythroid lineage and inhibited the myeloid differentiation. [2] APIG had strong antioxidant activity against reactive oxygen species (ROS) in vitro in a concentration-dependent manner.
REFERENCES


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

Tel: 609-228-6898          Fax: 609-228-5909          E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA