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>Concentration</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mg</td>
<td>5 mg</td>
</tr>
<tr>
<td>1 mM</td>
<td>2.3128 mL</td>
<td>11.5639 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4626 mL</td>
<td>2.3128 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2313 mL</td>
<td>1.1564 mL</td>
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</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 provokes 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.
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