Pentagalloylglucose

Cat. No.: HY-N0527
CAS No.: 14937-32-7
Molecular Formula: C₄₁H₃₂O₂₆
Molecular Weight: 940.68
Target: Influenza Virus
Pathway: Anti-infection
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 : 50 mg/mL (53.15 mM; Need ultrasonic)
H₂O : 6 mg/mL (6.38 mM; Need ultrasonic and warming)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>1 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg</td>
</tr>
<tr>
<td>1 mM</td>
<td>1.0631 mL</td>
<td>5.3153 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2126 mL</td>
<td>1.0631 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1063 mL</td>
<td>0.5315 mL</td>
</tr>
</tbody>
</table>

In Vivo
1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (2.66 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (2.66 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (2.66 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Pentagalloylglucose (Penta-O-galloyl-β-D-glucose) is a gallotannin isolated from various plants. It suppressed interleukin (IL)-4 induced signal pathway in B cell, and inhibited IgE production partially caused by increasing a population of Treg cells in conjunction with Treg-inducing factors. Pentagalloylglucose possesses significant anti-rabies virus (RABV) activity.
REFERENCES


