**4,5-Dicaffeoylquinic acid**

Cat. No.: HY-N0058  
CAS No.: 57378-72-0  
Molecular Formula: C_{25}H_{24}O_{12}  
Molecular Weight: 516.45  
Target: HBV  
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 (96.81 mM; Need ultrasonic)

<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>Solvent Concentration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>1.9363 mL</td>
<td>9.6815 mL</td>
<td>19.3630 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3873 mL</td>
<td>1.9363 mL</td>
<td>3.8726 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1936 mL</td>
<td>0.9681 mL</td>
<td>1.9363 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 (4.84 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (4.84 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.5 mg/mL (4.84 mM); Clear solution

### BIOLOGICAL ACTIVITY

**Description**  
4,5-Dicaffeoylquinic acid (Isochlorogenic acid C) possesses potent hepatoprotective and anti-HBV effects. IC50 value: Target: Anti-hepatitis natural produce. In vitro: To study anti-hepatitis effect of isochlorogenic acid C, anti-apoptotic and anti-injury properties of test compound were evaluated. The results showed that test compound at concentrations of 10 to 100 μg/ml significantly reduced the caspase-3 and transformed growth factor β1 (TGFβ1) levels of the D-GalN-challenged hepatocytes. Also, test compound improved markedly cell viability of the D-GalN-injured hepatocytes and produced a maximum protection rate of 47.28% at a concentration of 100 μg/ml.
Furthermore, test compound significantly inhibited productions of HBsAg and HBeAg. Its maximum inhibitory rates on the HBsAg and HBeAg expressions were 86.93 and 59.79%, respectively. In addition, test compound significantly induced the HO-1 expression of HepG2.2.15 cells [1]. In vivo:

**REFERENCES**