**Product Data Sheet**

**Pseudoginsenoside F11**

**Cat. No.:** HY-N0541  
**CAS No.:** 69884-00-0  
**Molecular Formula:** C₄₂H₇₂O₁₄  
**Molecular Weight:** 801.01  
**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**: 100 mg/mL (124.84 mM; Need ultrasonic)  
- **H₂O**: 0.67 mg/mL (0.84 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.2484 mL</td>
<td>6.2421 mL</td>
<td>12.4842 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2497 mL</td>
<td>1.2484 mL</td>
<td>2.4968 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1248 mL</td>
<td>0.6242 mL</td>
<td>1.2484 mL</td>
<td></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: ≥ 2.75 mg/mL (3.43 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**  
   Solubility: ≥ 2.75 mg/mL (3.43 mM); Clear solution
3. Add each solvent one by one: **10% DMSO >> 90% corn oil**  
   Solubility: ≥ 2.75 mg/mL (3.43 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
Pseudoginsenoside F11 (Ginsenoside A1), a component of Panax quinquefolium (American ginseng), has been demonstrated to antagonize the learning and memory deficits induced by scopolamine, morphine and methamphetamine in mice.

**In Vitro**  
Biochemical experiments revealed that Pseudoginsenoside F11 (Ginsenoside A1) could inhibit diprenorphine (DIP)
binding with an IC$_{50}$ of 6.1 μM and reduced the binding potency of morphine in Chinese hamster ovary (CHO)-μ cells [1].

| In Vivo | One in vivo model of cisplatin-induced acute renal failure was performed. The results showed that pretreatment with Pseudoginsenoside F11 (Ginsenoside A1) reduced cisplatin-elevated blood urea nitrogen and creatinine levels, as well as ameliorated the histopathological damage [1]. We tested the effects of Pseudoginsenoside F11 (Ginsenoside A1) on morphine-induced development of behavioral sensitization and alterations in glutamate levels in the medial prefrontal cortex (mPFC) in freely moving mice by using in vivo microdialysis. As the results shown, Pseudoginsenoside F11 (Ginsenoside A1) antagonized the development of behavioral sensitization and decrease of glutamate in the mPFC induced by morphine [3]. |

REFERENCES


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