Anisodamine

Cat. No.: HY-N0584
CAS No.: 55869-99-3
Molecular Formula: C₁₇H₂₃NO₄
Molecular Weight: 305.37
Target: mAChR
Pathway: GPCR/G Protein; Neuronal Signaling
Storage:
- Powder: -20°C 3 years
- In solvent: -80°C 6 months
- -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO : ≥ 100 mg/mL (327.47 mM)
H₂O : 20 mg/mL (65.49 mM; Need ultrasonic)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass Solvent (mg/mL)</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>3.2747 mL</td>
<td>16.3736 mL</td>
<td>32.7472 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6549 mL</td>
<td>3.2747 mL</td>
<td>6.5494 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3275 mL</td>
<td>1.6374 mL</td>
<td>3.2747 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: ≥ 2.5 mg/mL (8.19 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.19 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.19 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Anisodamine (6-Hydroxyhyoscyamine), a belladonna alkaloid, is a non-subtype-selective muscarinic, and also a nicotinic cholinoreceptor antagonist. Anisodamine employs in traditional Chinese medicine for many ailments, mainly to improve the microcirculation in states of shock, and also in organophosphate poisoning[1].

IC₅₀ & Target
Nicotinic cholinoreceptor[1]
REFERENCES