Mitiglinide Calcium

Cat. No.: HY-17398
CAS No.: 145525-41-3
Molecular Formula: C₁₉H₂₄NO₃Ca₀.₅
Molecular Weight: 334.44
Target: Potassium Channel
Pathway: Membrane Transporter/Ion Channel
Storage: Powder -20°C 3 years
        4°C 2 years
        In solvent -80°C 6 months
        -20°C 1 month

**SOLVENT & SOLUBILITY**

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td></td>
<td>1 mM</td>
<td>2.9901 mL</td>
<td>14.9504 mL</td>
<td>29.9007 mL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mM</td>
<td>0.5980 mL</td>
<td>2.9901 mL</td>
<td>5.9801 mL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mM</td>
<td>0.2990 mL</td>
<td>1.4950 mL</td>
<td>2.9901 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 >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 0.5 mg/mL (1.50 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 0.5 mg/mL (1.50 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.5 mg/mL (1.50 mM); Clear solution

**BIOLOGICAL ACTIVITY**

Description: Mitiglinide(KAD-1229; S21403) is a drug for the treatment of type 2 diabetes; it is a highly selective KATP channel antagonist. IC50 value: Target: KATP channel Mitiglinide is a hypoglycemic agent that closes adenosine triphosphate (ATP)-sensitive potassium channels (KATP channel s) in the pancreatic β-islet cells. Mitiglinide stimulates insulin secretion by stimulating Ca²⁺ influx.


