Azelnidipine

Cat. No.: HY-B0023
CAS No.: 123524-52-7
Molecular Formula: C₃₃H₃₄N₄O₆
Molecular Weight: 582.65
Target: Calcium Channel
Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling
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 (171.63 mM)
- H₂O: < 0.1 mg/mL (insoluble)
  * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.7163 mL</td>
<td>8.5815 mL</td>
<td>17.1630 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3433 mL</td>
<td>1.7163 mL</td>
<td>3.4326 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1716 mL</td>
<td>0.8581 mL</td>
<td>1.7163 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 (4.29 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Azelnidipine (CS 905; Calblock) is a novel dihydropyridine derivative, a L-type calcium channel blocker, and an antihypertensive. IC₅₀ value:
- Target: L-type calcium channel
- Acute administration of azelnidipine prevents a sudden drop of cardiac function after acute stress. Azelnidipine may have a protective role in inflammation associated with atherosclerosis.

REFERENCES


