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 for 3 years, 4°C for 2 years
- In solvent: -80°C for 6 months, -20°C for 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: ≥ 100 mg/mL (171.63 mM)
H₂O: < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

<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>Conconeption</td>
<td>Mass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>1.716 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


