Lacidipine

Cat. No.: HY-B0347
CAS No.: 103890-78-4
Molecular Formula: C₂₆H₃₃NO₆
Molecular Weight: 455.54
Target: Calcium 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

In Vitro
DMSO : ≥ 50 mg/mL (109.76 mM)
H₂O : < 0.1 mg/mL (insoluble)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
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<td>5 mM</td>
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<tr>
<td>10 mM</td>
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</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% corn oil
   Solubility: ≥ 2.5 mg/mL (5.49 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (5.49 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Lacidipine (Lacipil, Motens) is a L-type calcium channel blocker. Target: Calcium Channel. Lacidipine, a novel third-generation dihydropyridine calcium channel blocker, has been demonstrated effective for hypertension. Lacidipine protects HKCs against apoptosis induced by ATP depletion and recovery by regulating the caspase-3 pathway [1]. In biological membranes deriving from rat brain tissue, lacidipine showed an activity comparable to reference antioxidant compounds like vitamin E [2]. Lacidipine has some important protective effects on liver of hypertensive irradiated albino rats [3].
REFERENCES

