Moexipril hydrochloride

Cat. No.: HY-B0378A
CAS No.: 82586-52-5
Molecular Formula: C₂₇H₃₅ClN₂O₇
Molecular Weight: 535.03
Target: Angiotensin-converting Enzyme (ACE)
Pathway: Metabolic Enzyme/Protease
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 (186.91 mM)
* “≥” means soluble, but saturation unknown.

Preparing Stock Solutions
<table>
<thead>
<tr>
<th>Preparing</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>1.8691 mL</td>
<td>9.3453 mL</td>
<td>18.6905 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3738 mL</td>
<td>1.8691 mL</td>
<td>3.7381 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1869 mL</td>
<td>0.9345 mL</td>
<td>1.8691 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: ≥ 3.5 mg/mL (6.54 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 3.5 mg/mL (6.54 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 3.5 mg/mL (6.54 mM); Clear solution

BIOLOGICAL ACTIVITY

Moexipril hydrochloride is a potent orally active non-sulfhydryl angiotensin converting enzyme (ACE) inhibitor, which is used for the treatment of hypertension and congestive heart failure. Target: ACE Moexipril hydrochloride is a long-acting ACE inhibitor suitable for once-daily administration, and like some ACE inhibitors, moexipril is a prodrug and needs to be hydrolyzed in the liver into its active carboxylic metabolite, moexiprilat, to become effective [1]. Upon oral administration of moexipril (10 mg/kg/day) to spontaneously hypertensive rats, plasma angiotensin II

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concentration decreased to undetectable levels, plasma ACE activity was inhibited by 98% and plasma angiotensin I concentration increased 8.6-fold 1 h after dosing. At 24 h, plasma angiotensin I and angiotensin II concentrations had returned to pretreatment levels, whereas plasma ACE activity was still inhibited by 56%. Four-week oral administration of moexipril (0.1-30 mg/kg/day) to spontaneously hypertensive rats lowered blood pressure and differentially inhibited ACE activity in plasma, lung, aorta, heart and kidney in a dose-dependent fashion [2, 3].

REFERENCES

