Tasosartan

Cat. No.: HY-A0250
CAS No.: 145733-36-4
Molecular Formula: C₂₃H₂₁N₇O
Molecular Weight: 411.46
Target: Angiotensin Receptor
Pathway: GPCR/G Protein
Storage: Powder -20°C 3 years
In solvent -80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO : 125 mg/mL (303.80 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.4304 mL</td>
<td>12.1518 mL</td>
<td>24.3037 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4861 mL</td>
<td>2.4304 mL</td>
<td>4.8607 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2430 mL</td>
<td>1.2152 mL</td>
<td>2.4304 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: ≥ 2.08 mg/mL (5.06 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.06 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Tasosartan is a long-acting angiotensin II (AngII) receptor antagonist.

IC₅₀ & Target
Angiotensin II (AngII) receptor[1]

In Vitro
Tasosartan is an orally active nonpeptide AngII antagonist that has demonstrates specific and selective AT1 receptor antagonistic activity in vitro. IC₅₀ for inhibition of specific binding of ¹²⁵I-AngII to rat adrenal membrane in the absence of proteins in binding buffer is 1.2±0.6 nM[1].
In Vivo
Administration of Tasosartan at doses of 1.0 and 3.0 mg/kg (iv) significantly (p<0.05) attenuates the pressor response to angiotensin-II in rats[2].

PROTOCOL

Animal Administration[2]

Rats[2]
Pressor response to angiotensin-II administration in four groups of rats (n=3-5 each, weighing 343±8 g). Each rat is subjected to four separate bolus injections of angiotensin-II following the introduction of either the vehicle or graded doses of Tasosartan (0.3, 1.0, or 3.0 mg/kg, iv)[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES
