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)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass (mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.4304 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4861 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2430 mL</td>
</tr>
</tbody>
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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 >> 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 \(^2\)**

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**
