**Ranirestat**

**Cat. No.:** HY-15314  
**CAS No.:** 147254-64-6  
**Molecular Formula:** C₁₇H₁₁BrFN₃O₄  
**Molecular Weight:** 420.19  
**Target:** Aldose Reductase  
**Pathway:** Metabolic Enzyme/Protease

**Storage:**  
- Powder: -20°C, 3 years; 4°C, 2 years  
- In solvent: -80°C, 6 months; -20°C, 1 month

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### Solvent & Solubility

#### In Vitro

DMSO: \(\geq 50\) mg/mL (118.99 mM)  
\* “\(\geq\)” means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>Mass (1 mg)</th>
<th>Mass (5 mg)</th>
<th>Mass (10 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>2.3799 mL</td>
<td>11.8994 mL</td>
<td>23.7988 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4760 mL</td>
<td>2.3799 mL</td>
<td>4.7598 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2380 mL</td>
<td>1.1899 mL</td>
<td>2.3799 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 >> 90% corn oil  
Solubility: \(\geq 2.5\) mg/mL (5.95 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: \(\geq 2.5\) mg/mL (5.95 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: \(\geq 2.5\) mg/mL (5.95 mM); Clear solution

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**BIOLOGICAL ACTIVITY**

**Description**  
Ranirestat (AS-3201) is an aldose reductase inhibitor being developed for the treatment of diabetic neuropathy.

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**REFERENCES**
