**Rimeporide**

- **Cat. No.**: HY-19273
- **CAS No.**: 187870-78-6
- **Molecular Formula**: C₁₁H₁₅N₃O₅S₂
- **Molecular Weight**: 333.38
- **Target**: Sodium Channel
- **Pathway**: Membrane Transporter/Ion Channel
- **Storage**:
  - Powder: -20°C for 3 years
  - In solvent: -80°C for 6 months
  - -20°C for 1 month

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20 mg/mL (59.99 mM; Need ultrasonic and warming)

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Mass (mL) 1 mg</th>
<th>Mass (mL) 5 mg</th>
<th>Mass (mL) 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.9996 mL</td>
<td>14.9979 mL</td>
<td>29.9958 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5999 mL</td>
<td>2.9996 mL</td>
<td>5.9992 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3000 mL</td>
<td>1.4998 mL</td>
<td>2.9996 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: ≥ 2.08 mg/mL (6.24 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   - Solubility: ≥ 2.08 mg/mL (6.24 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   - Solubility: ≥ 2.08 mg/mL (6.24 mM); Clear solution

### BIOLOGICAL ACTIVITY

**Description**

Rimeporide (EMD-87580) is a potent and selective inhibitor of the Na⁺/H⁺ exchanger (NHE-1).

**IC₅₀ & Target**

NHE1[¹]

**In Vitro**

Blocking NHE-1 activity has been shown to decrease intracellular Na⁺ and Ca²⁺ overload and pH and Rimeporide (EMD-87580) represents a new therapeutic option for duchenne muscular dystrophy (DMD). Rimeporide (EMD-87580) is expected to act as a muscle-sparing agent and its mode of action means that it is mutation independent[¹].
REFERENCES