### 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>Solvent Concentration</th>
<th>Mass (1 mg)</th>
<th>Mass (5 mg)</th>
<th>Mass (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 >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.08 mg/mL (6.24 mM); Clear solution  
2. 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  
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   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