GSK2798745

**Cat. No.:** HY-19765  
**CAS No.:** 1419609-94-1  
**Molecular Formula:** C₂₅H₂₈N₆O₃  
**Molecular Weight:** 460.53

**Target:** TRP Channel  
**Pathway:** Membrane Transporter/Ion Channel; Neuronal Signaling

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

### SOLVENT & SOLUBILITY

**In Vitro**

DMSO: 250 mg/mL (542.85 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>2.1714 mL</td>
<td>10.8571 mL</td>
<td>21.7141 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4343 mL</td>
<td>2.1714 mL</td>
<td>4.3428 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2171 mL</td>
<td>1.0857 mL</td>
<td>2.1714 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 (4.52 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.08 mg/mL (4.52 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.08 mg/mL (4.52 mM); Clear solution

### BIOLOGICAL ACTIVITY

**Description**

GSK2798745 is a first-in-class, highly potent, selective, orally active transient receptor potential vanilloid 4 (TRPV4) ion channel blocker with IC₅₀ of 1.8 and 1.6 nM for hTRPV4 and rTRPV4, respectively. GSK2798745 is used in research for the treatment of pulmonary edema associated with congestive heart failure[1][2].

**IC₅₀ & Target**

IC₅₀: 1.8 nM (hTRPV4) and 1.6 nM (rTRPV4)[2]
REFERENCES
