Raxatrigine

Cat. No.: HY-12796
CAS No.: 934240-30-9
Molecular Formula: C₁₈H₁₉FN₂O₂
Molecular Weight: 314.35
Target: Sodium Channel
Pathway: Membrane Transporter/Ion Channel
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: 83 mg/mL (264.04 mM; Need ultrasonic and warming)

Preparing Stock Solutions

<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>3.1812 mL</td>
<td>15.9058 mL</td>
<td>31.8117 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6362 mL</td>
<td>3.1812 mL</td>
<td>6.3623 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3181 mL</td>
<td>1.5906 mL</td>
<td>3.1812 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description
Raxatrigine (GSK-1014802) is a novel small molecule state-dependent sodium channel blocker; Nav1.7 sodium channel inhibitor.

IC₅₀ & Target
Sodium channel blocker[1].

In Vitro
Like lamotrigine, both GSK2 and GSK3 were able to prevent the deficit in reversal learning produced by PCP, thus confirming their potential in the treatment of cognitive symptoms of schizophrenia. However, higher doses than those required for anticonvulsant efficacy of the drugs were needed for activity in the reversal-learning model, suggesting a lower therapeutic window relative to mechanism-dependent central side effects for this indication. Raxatrigine (GSK-1014802) received orphan-drug designation from the US Food and Drug Administration in July 2013.

REFERENCES