MK-8998

Cat. No.: HY-101096
CAS No.: 953778-58-0
Molecular Formula: C₂₀H₂₃F₃N₂O₂
Molecular Weight: 380.4
Target: Calcium 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 10 mM in DMSO

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>2.6288 mL</td>
<td>13.1441 mL</td>
<td>26.2881 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5258 mL</td>
<td>2.6288 mL</td>
<td>5.2576 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2629 mL</td>
<td>1.3144 mL</td>
<td>2.6288 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
MK-8998 is a potent and selective antagonist of the T-type calcium channel.

In Vitro
MK-8998 is a potent and selective antagonist of the T-type calcium channel that is being investigated as a potential new therapy for the treatment of schizophrenia. Because MK-8998 does not block D₂, SHT₂a, muscarinic, or histaminic receptors, it has the potential for a substantially improved side effect profile compared with currently available atypical antipsychotics[1].

In Vivo
MK-8998 is not effective in treating acutely psychotic inpatients with schizophrenia. There are no significant differences between either MK-8998 or olanzapine versus placebo at any time point. MK-8998 and olanzapine are generally well tolerated but are associated with a higher percentage of adverse events compared with placebo[1].

REFERENCES