GSK4112

Cat. No.: HY-14414
CAS No.: 1216744-19-2
Molecular Formula: C₁₈H₂₁ClN₂O₄S
Molecular Weight: 396.89
Target: Autophagy
Pathway: Autophagy
Storage: Powder -20°C 3 years
4°C 2 years
In solvent -80°C 6 months
-20°C 1 month

Solvent & Solubility

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td>2.5196 mL</td>
<td>12.5979 mL</td>
<td>25.1959 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.5039 mL</td>
<td>2.5196 mL</td>
<td>5.0392 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.2520 mL</td>
<td>1.2598 mL</td>
<td>2.5196 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: ≥ 2.5 mg/mL (6.30 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.30 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (6.30 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description
GSK4112 is a Rev-erbα agonist with EC50 of 0.4 μM, also is a small molecule chemical probe for the cell biology of the nuclear heme receptor Rev-erbα. IC50 value: 0.4 μM (EC50)Target: Rev-erbα in vitro: GSK4112 profiled as a Rev-erb agonist in cells to inhibit expression of the circadian target gene bmal1. In addition, GSK4112 repressed the expression of gluconeogenic genes in liver cells and reduced glucose output in primary hepatocytes. Therefore, GSK4112 is useful as a chemical tool to probe the function of Rev-erb in transcriptional repression, regulation of...
circadian biology, and metabolic pathways. Additionally, GSK4112 may serve as a starting point for design of Rev-erb chemical probes with in vivo pharmacological activity.

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**REFERENCES**


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**Caution: Product has not been fully validated for medical applications. For research use only.**

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