ADL-5859

Cat. No.: HY-13044  
CAS No.: 850173-95-4  
Molecular Formula: C₂₄H₂₉ClN₂O₃  
Molecular Weight: 428.95  
Target: Opioid Receptor  
Pathway: GPCR/G Protein; 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: ≥ 100 mg/mL (233.13 mM)  
* "≥" means soluble, but saturation unknown.

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>2.3313 mL</td>
<td>11.6564 mL</td>
<td>23.3127 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4663 mL</td>
<td>2.3313 mL</td>
<td>4.6625 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2331 mL</td>
<td>1.1656 mL</td>
<td>2.3313 mL</td>
</tr>
</tbody>
</table>

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.75 mg/mL (6.41 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.75 mg/mL (6.41 mM); Clear solution

BIOLOGICAL ACTIVITY

Description  
ADL5859 is a δ-opioid receptor agonist with Ki of 0.8 nM, selectivity against opioid receptor κ, μ, and weak inhibitory activity at the hERG channel. IC50 value: 0.8 nM(Ki)Target: δ-opioid receptorADL-5859 (ADL5859) is an δ-opioid receptor agonist (Ki=0.84 nM, EC50=20 nM). ADL-5859 (ADL5859) is an agonist agent that selectively stimulates the δ-opioid receptor with potential application in a wide range of inflammatory, neuropathic and acute pain conditions. In addition, Delta agonists are thought to modulate other biological processes that may manifest themselves in disease states or conditions such as overactive bladder and depression. ADL-5859 (ADL5859) is useful for inflammatory, neuropathic and acute pain conditions.
REFERENCES


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