Zaprinast

Cat. No.: HY-B1816
CAS No.: 37762-06-4
Molecular Formula: C₁₃H₁₃N₅O₂
Molecular Weight: 271.27
Target: Phosphodiesterase (PDE)
Pathway: Metabolic Enzyme/Protease
Storage: -20°C, protect from light, stored under nitrogen
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 62.5 mg/mL (230.40 mM; Need ultrasonic)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>3.6864 mL</td>
<td>18.4318 mL</td>
<td>36.8636 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.7373 mL</td>
<td>3.6864 mL</td>
<td>7.3727 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3686 mL</td>
<td>1.8432 mL</td>
<td>3.6864 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 (7.67 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (7.67 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (7.67 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Zaprinast (M&B 22948) is an inhibitor of cGMP-selective Phosphodiesterases (PDEs)[1]. Zaprinast is a G protein-coupled receptor (GPR) 35 agonist which activates rat GPR35 strongly and activates human GPR35 moderately[2]. Zaprinast reduces vessel remodeling through antiproliferative and proapoptotic effects[3].

IC₅₀ & Target

PDE[1], GPR35[2]

REFERENCES
