TP0463518

Cat. No.: HY-112144
CAS No.: 1558021-37-6
Molecular Formula: C₂₀H₁₈ClN₃O₆
Molecular Weight: 431.83
Target: HIF/HIF Prolyl-Hydroxylase
Pathway: Metabolic Enzyme/Protease
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: ≥ 125 mg/mL (289.47 mM)
* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<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></td>
<td>2.3157 mL</td>
<td>11.5786 mL</td>
<td>23.1573 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.4631 mL</td>
<td>2.3157 mL</td>
<td>4.6315 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.2316 mL</td>
<td>1.1579 mL</td>
<td>2.3157 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 (4.82 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.82 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.82 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
TP0463518 is a potent hypoxia-inducible factor prolyl hydroxylases (PHDs) inhibitor with a \( K_i \) value of 5.3 nM for human PHD2. TP0463518 also inhibits human PHD1/PHD3 with \( IC_{50} \)s of 18 and 63 nM as well as monkey PHD2 with an \( IC_{50} \) value of 22 nM[1].
REFERENCES