Parsaclisib

Cat. No.: HY-109068
CAS No.: 1426698-88-5
Molecular Formula: C₂₀H₂₂ClFN₆O₂
Molecular Weight: 432.88
Target: PI3K
Pathway: PI3K/Akt/mTOR
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 (288.76 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mg</td>
<td></td>
</tr>
<tr>
<td>5 mg</td>
<td></td>
</tr>
<tr>
<td>10 mg</td>
<td></td>
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</tbody>
</table>

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.3101 mL</td>
<td>11.5505 mL</td>
<td>23.1011 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4620 mL</td>
<td>2.3101 mL</td>
<td>4.6202 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2310 mL</td>
<td>1.1551 mL</td>
<td>2.3101 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 (4.81 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Parsaclisib (INCB050465) is a potent and selective PI3Kδ inhibitor, with an IC₅₀ of 1 nM at 1 mM ATP, and shows appr 20,000-fold selectivity for PI3Kα, PI3Kβ, PI3Kγ and 57 other kinases[1].

IC₅₀ & Target
IC₅₀: 1 nM (PI3Kδ, 1 mM ATP)[1]

In Vitro
Parsaclisib (INCB050465) is a potent and selective PI3Kδ with an IC₅₀ of 1 nM at 1 mM ATP, and shows appr 20,000-fold selectivity for PI3Kα, PI3Kβ, PI3Kγ and 57 other kinases. Parsaclisib displays significant activity with IC₅₀ values ranging from
0.2 to 2 nM in B and T cell proliferation. Parsaclisib inhibits proliferation of several DLBCL and MCL cell lines in vitro (EC_{50} < 10 nM). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES