PTC299

Cat. No.: HY-124593
CAS No.: 1256565-36-2
Molecular Formula: C₅₂H₂₀Cl₂N₂O₃
Molecular Weight: 467.34
Target: VEGFR
Pathway: Protein Tyrosine Kinase/RTK
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: 50 mg/mL (106.99 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<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>2.1398 mL</td>
<td>10.6988 mL</td>
<td>21.3977 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4280 mL</td>
<td>2.1398 mL</td>
<td>4.2795 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2140 mL</td>
<td>1.0699 mL</td>
<td>2.1398 mL</td>
<td></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: ≥ 0.83 mg/mL (1.78 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 0.83 mg/mL (1.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description:
PTC299 is a potent, orally bioavailable VEGFA inhibitor, targets dihydroorotate dehydrogenase (DHODH), resulting in cell growth inhibition and differentiation in leukemias, including acute myeloid leukemia, linking DHODH regulation and stress-induced VEGFA and angiogenesis.[1][2][3]

IC₅₀ & Target:
IC₅₀ for VEGF[2]

In Vitro:
PTC299 inhibits hypoxia-induced VEGFA protein production in HeLa cells with an EC₅₀ of 1.64 ± 0.83 nM[4]. PTC299 is the most potent inhibitor with an IC₅₀ of about 1 nM, over 10 to 1000-fold more potent than Brequinar, Vidofludimus or Teriflunomide in leukemia cells[1].
REFERENCES


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