PTC299

**Cat. No.:** HY-124593  
**CAS No.:** 1256565-36-2  
**Molecular Formula:** C₂₅H₂₀Cl₂N₂O₃  
**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

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### 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></td>
<td>1 mM</td>
<td>2.1398 mL</td>
<td>10.6988 mL</td>
<td>21.3977 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4280 mL</td>
<td>2.1398 mL</td>
<td>4.2795 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2140 mL</td>
<td>1.0699 mL</td>
<td>2.1398 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: ≥ 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

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### 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**  
VEGF[^2]

**In Vitro**  
PTC299 inhibits hypoxia-induced VEGFA protein production in HeLa cells with an EC₅₀ of 1.64 ± 0.83 nM[^1].  
PTC299 is the most potent inhibitor with an IC₅₀ of about 1 nM, over 10 to 1000-fold more potent than Brequinar, Vidofludimus or A 77-1726 in leukemia cells[^1].
REFERENCES


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

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