Daprodustat

**Cat. No.:** HY-17608  
**CAS No.:** 960539-70-2  
**Molecular Formula:** C₁₉H₂₇N₃O₆  
**Molecular Weight:** 393.43  
**Target:** HIF/HIF Prolyl-Hydroxylase  
**Pathway:** Metabolic Enzyme/Protease  
**Storage:**  
- Powder: -20°C, 3 years; 4°C, 2 years; In solvent: -80°C, 2 years; -20°C, 1 year

**SOLVENT & SOLUBILITY**

**In Vitro**
DMSO: 19.5 mg/mL (49.56 mM; Need ultrasonic and warming)

<table>
<thead>
<tr>
<th>Solvent Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing Stock Solutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration</td>
<td>2.5417 mL</td>
<td>12.7087 mL</td>
<td>25.4175 mL</td>
</tr>
<tr>
<td>1 mM</td>
<td>0.5083 mL</td>
<td>2.5417 mL</td>
<td>5.0835 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2542 mL</td>
<td>1.2709 mL</td>
<td>2.5417 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: 5% DMSO >> 40% PEG300 >> 5% Tween-80 >> 50% saline  
   Solubility: ≥ 2.5 mg/mL (6.35 mM); Clear solution
2. Add each solvent one by one: 5% DMSO >> 95% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (6.35 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**
Daprodustat (GSK1278863) is an orally active hypoxia-inducible factor prolyl hydroxylase (HIF-PH) inhibitor being developed for the treatment of anemia associated with chronic kidney disease.

**In Vitro**
GSK1278863 is an orally administered small-molecule PHI, and stimulates endogenous EPO synthesis and induce effective erythropoiesis\(^1\).  
GSK1278863 has been shown to increase erythropoietin levels, leading to increases in hemoglobin, hematocrit and red blood cell numbers\(^2\).  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
CUSTOMER VALIDATION

- J Biol Chem. 2021 Feb 8;100397.
- Drug Test Anal. 2020 Aug 27.
- J Anal Toxicol. 2020 May 20;bkaa055.

See more customer validations on www.MedChemExpress.com

REFERENCES
