BAY-2402234

Cat. No.: HY-112645
CAS No.: 2225819-06-5
Molecular Formula: C₂₁H₁₈ClF₅N₄O₄
Molecular Weight: 520.84
Target: Others
Pathway: Others
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 (240.00 mM; Need ultrasonic)

<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>1.9200 mL</td>
<td>9.5999 mL</td>
<td>19.1998 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3840 mL</td>
<td>1.9200 mL</td>
<td>3.8400 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1920 mL</td>
<td>0.9600 mL</td>
<td>1.9200 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 (3.99 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (3.99 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (3.99 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**
BAY-2402234 is a selective dihydroorotate dehydrogenase (DHODH) inhibitor for the treatment of myeloid malignancies.

**IC₅₀ & Target**
DHODH[1].

**In Vitro**
BAY-2402234 is a selective low-nanomolar inhibitor of human DHODH enzymatic activity. In vitro, it potently inhibits
Proliferation of AML cell lines in the sub-nanomolar to low-nanomolar range. BAY-2402234 induces differentiation of AML cell lines also in a sub-nanomolar to low-nanomolar range, demonstrating the anticipated mode of action in cellular mechanistic assays[1].

In Vivo

BAY-2402234 exhibits strong in vivo anti-tumor efficacy in monotherapy in several subcutaneous and disseminated AML xenografts as well as AML patient-derived xenograft (PDX) models. Target engagement of the novel DHODH inhibitor BAY-2402234 can be observed by increase of tumoral and plasma dihydroorotate levels after treatment with the inhibitor. Consistent with the in vitro data BAY-2402234 induces AML differentiation in vivo as detected by upregulation of differentiation cell surface markers in xenograft and PDX models after treatment with the inhibitor. Furthermore, differentiation-associated transcriptomic changes are evident following a single administration of BAY-2402234 in vivo[1].

REFERENCES