BAY-985

**Chemical Properties**

- **CAS No.**: 2409479-29-2
- **Formula**: C27H30F3N9O
- **Molecular Weight**: 553.58
- **Appearance**: N/A
- **Storage**: 0-4°C for short term (days to weeks), or -20°C for long term (months).

**Biological Description**

**Description**

BAY-985 is a potent, selective, and orally active ATP-competitive dual inhibitor of TBK1 and IKKε (IC50s: 2/30 and 2 nM for TBK1 (low/high ATP) and IKKε) with antitumor efficacy.

**Targets (IC50)**

- TBK1: 30 nM (high ATP)
- IKKε: 2 nM

**In vitro**

BAY-985 inhibits FLT3, RSK4, DRAK1, and ULK1 (IC50s: 123, 276, 311, and 7930 nM). BAY-985 inhibits the cellular phosphorylation of interferon regulatory factor 3 (IRF3, IC50: 74 nM). BAY-985 shows anti-proliferative activity in a few cancer cell lines (IC50s: 900 and 7260 nM for SK-MEL2 (NRAS and TP53 mutated) and ACHN (CDKN2A mutated) cells).

**In vivo**

BAY-985 (200 mg/kg; p.o.; b.i.d.; 111 days) results in weak antitumor efficacy. BAY-985 shows high clearance (CLb = 4.0 L/h/kg, ca. 95% hepatic extraction), large volume of distribution at steady state (Vss = 2.9 L/kg) and a short terminal half-life (t1/2 = 0.79 h).

**Solubility Information**

- **DMSO**: 50 mg/mL (90.32 mM)
  (< 1 mg/ml refers to the product slightly soluble or insoluble)

<table>
<thead>
<tr>
<th>Solubility</th>
<th>DMSO: 50 mg/mL (90.32 mM)</th>
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<tbody>
<tr>
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<td>(&lt; 1 mg/ml refers to the product slightly soluble or insoluble)</td>
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</table>

**Preparing Stock Solutions**

<table>
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<tr>
<th></th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
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<tbody>
<tr>
<td>1 mM</td>
<td>1.806 mL</td>
<td>9.032 mL</td>
<td>18.064 mL</td>
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<tr>
<td>5 mM</td>
<td>0.361 mL</td>
<td>1.806 mL</td>
<td>3.613 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.181 mL</td>
<td>0.903 mL</td>
<td>1.806 mL</td>
</tr>
<tr>
<td>50 mM</td>
<td>0.036 mL</td>
<td>0.181 mL</td>
<td>0.361 mL</td>
</tr>
</tbody>
</table>

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

**Reference**

Inhibitors · Natural Compounds · Compound Libraries
This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.
Tel: 781-999-4286  E-mail: info@targetmol.com  Address: 36 Washington Street, Wellesley Hills, MA 02481