**BI6727 (Volasertib)**

Cat. No.: A8558  
CAS No.: 755038-65-4  
Formula: C34H50N8O3  
M.Wt: 618.83  
Synonyms: BI 6727; BI-6727  
Target: Cell Cycle/Checkpoint  
Pathway: PLK  
Storage: Store at -20°C  

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### Solvent & Solubility

insoluble in H2O; ≥10.31 mg/mL in DMSO; ≥56.1 mg/mL in EtOH

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass</th>
<th>Solvent Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mg</td>
<td>5 mg</td>
</tr>
<tr>
<td>1 mM</td>
<td>1.6160 mL</td>
<td>8.0798 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3232 mL</td>
<td>1.6160 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1616 mL</td>
<td>0.8080 mL</td>
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</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

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### Biological Activity

**Shortsummary**  
Plk inhibitor, highly potent

**IC50 & Target**  
0.87 nM (Polo-like kinase)

**Cell Viability Assay**

**Cell Line:** Human melanoma A375 and Hs 294T cells  
**Preparation method:** The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.  
**Reacting conditions:** 24 h, 10-100 nM
Applications: BI6727 (Volasertib) is a second generation small molecule Plk1 inhibitor and has been reported to be a promising agent for treatment of several cancers. BI6727 (Volasertib) inhibits growth, viability and induces apoptosis of melanoma cells.

In Vivo

Animal experiment

Animal models: Patients aged ≥ 18 years with locally advanced or metastatic urothelial cancer

Dosage form: BI6727 (Volasertib) was administered by 2-hour intravenous infusion at a dose of 300 mg once daily on day 1 of 3-week treatment cycles.

Applications: BI6727 (Volasertib) has an acceptable safety profile as a second-line treatment for advanced or metastatic urothelial cancer, but only modest antitumor activity for further evaluation as a monotherapy.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations


References


Caution

FOR RESEARCH PURPOSES ONLY.
NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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