ABT-888 (Veliparib)

Cat. No.: A3002
CAS No.: 912444-00-9
Formula: C13H16N4O
M.Wt: 244.3
Synonyms: ABT-888, ABT 888, ABT888, Veliparib
Target: Chromatin/Epigenetics
Pathway: PARP
Storage: Store at -20° C

Solvent & Solubility

insoluble in H2O; ≥10.6 mg/mL in EtOH with ultrasonic; ≥6.11 mg/mL in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Solvent</td>
<td>1 mM</td>
<td>5 mM</td>
<td>10 mM</td>
</tr>
<tr>
<td></td>
<td>1 mM</td>
<td>4.0933 mL</td>
<td>20.4666 mL</td>
<td>40.9333 mL</td>
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<tr>
<td></td>
<td>5 mM</td>
<td>0.8187 mL</td>
<td>4.0933 mL</td>
<td>8.1867 mL</td>
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<tr>
<td></td>
<td>10 mM</td>
<td>0.4093 mL</td>
<td>2.0467 mL</td>
<td>4.0933 mL</td>
</tr>
</tbody>
</table>

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

Biological Activity

Shortsummary: Potent PARP inhibitor
IC₅₀ & Target: 5.2 nM (Ki) (PARP1), 2.9 nM (Ki) (PARP2)

Cell Viability Assay

Cell Line: HCT-116 and HT-29 cell lines
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: 4 μM; 24 h

Applications: In HCT-116 and HT-29 cell lines, the ability of ABT-888 to synergize the effect of the anti-cancer agents, SN38 or oxaliplatin, was determined using the SRB assay. PARP activity was significantly reduced in samples treated with SN38 in combination with ABT-888 (>4 fold at 24 h).

Animal experiment

Animal models: Female nude athymic mice

Dosage form: 12.5 mg/kg; oral gavage twice daily in 6-hour intervals.

Applications: HCT116 xenografts were established in 5- to 6-week-old female nude athymic mice by subcutaneous flank injections of 200 mL cell suspension (5*10^6 cells) per flank. This triple-therapy group (RT, CPT-11, and ABT) showed a significantly longer tumor growth delay (TGD) when compared with the tumors treated with RT and CPT-11 but no ABT-888, which had a mean TGD of 14.21 days.

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

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