GDP366

Cat. No.: HY-U00177
CAS No.: 501698-03-9
Molecular Formula: C₂₀H₁₇N₅OS
Molecular Weight: 375.45
Target: Survivin
Pathway: Apoptosis
Storage: Powder -20°C 3 years
        In solvent -80°C 6 months
        -20°C 1 month
In solvent -80°C 6 months

SOLVENT & SOLUBILITY

In Vitro
DMSO : 62.5 mg/mL (166.47 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.6635 mL</td>
<td>13.3174 mL</td>
<td>26.6347 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5327 mL</td>
<td>2.6635 mL</td>
<td>5.3269 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2663 mL</td>
<td>1.3317 mL</td>
<td>2.6635 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 (5.54 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
GDP366, a dual inhibitor of survivin and Op18, induces cell growth inhibition, cellular senescence and mitotic catastrophe in human cancer cells.

IC₅₀ & Target
Survivin[¹]
Op18[¹]

In Vitro
GDP366 potently and selectively inhibits the expression of both survivin and Op18. GDP366 decreases both the mRNA and protein levels of survivin and Op18. This inhibitory effect is not dependent on the status of p53 and p21 although GDP366 potently increases p53 and p21 levels. GDP366 significantly inhibits the growth of tumor cells in vitro and in vivo (nude mouse model) without rapid induction of apoptosis. GDP366 induces polyploidy in multiple types of cancer cell lines. GDP366 increases chromosomal instability, and induces cellular senescence by inhibiting telomerase
activity[1].

REFERENCES