Subasumstat

Cat. No.: HY-111789
CAS No.: 1858276-04-6
Molecular Formula: C₂₅H₂₈ClN₅O₅S₂
Molecular Weight: 578.1
Target: E1/E2/E3 Enzyme
Pathway: Metabolic Enzyme/Protease
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: 16.67 mg/mL (28.84 mM; ultrasonic and warming and heat to 80°C)

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Solvent</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></td>
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<tr>
<td>5 mM</td>
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<tr>
<td>10 mM</td>
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</table>

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>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>1.7298 mL</td>
<td>8.6490 mL</td>
<td>17.2980 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3460 mL</td>
<td>1.7298 mL</td>
<td>3.4596 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1730 mL</td>
<td>0.8649 mL</td>
<td>1.7298 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 >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Subasumstat (TAK-981) is a first in class and selective inhibitor of the SUMOylation enzymatic cascade, with potential immune-activating and antineoplastic activities[1][2].

IC₅₀ & Target
SUMOylation[1].

In Vitro
Subasumstat (TAK-981) is able to increase the production of type 1 IFN, thereby increasing type 1 IFN-mediated signaling, activating innate effector cells and enhancing the antitumor innate immune responses[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
A single sub-cutaneous injection of Subasumstat (TAK-981) in naive Balb/c mice at the brachial lymph nodes induces activation of DCs[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
CUSTOMER VALIDATION

- J Clin Invest. 2022 May 2;132(9):e152383.

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REFERENCES

[1]. Sumoylation inhibitor TAK-981.

[2]. TAK-981.