BAY-1895344 hydrochloride

Cat. No.: HY-101566A
Molecular Formula: C₂₀H₂₂ClN₇O
Molecular Weight: 411.89
Target: ATM/ATR
Pathway: Cell Cycle/DNA Damage; PI3K/Akt/mTOR
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 : 54 mg/mL (131.10 mM; Need ultrasonic and warming)
H₂O : 50 mg/mL (121.39 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<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>2.4278 mL</td>
<td>12.1392 mL</td>
<td>24.2783 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4856 mL</td>
<td>2.4278 mL</td>
<td>4.8557 mL</td>
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</tr>
<tr>
<td>10 mM</td>
<td>0.2428 mL</td>
<td>1.2139 mL</td>
<td>2.4278 mL</td>
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</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 (5.05 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.05 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.05 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
BAY-1895344 hydrochloride is a potent, orally available and selective ATR inhibitor, with IC₅₀ of 7 nM. Anti-tumor activity[1].

IC₅₀ & Target
IC₅₀: 7 nM (IC₅₀)

In Vitro
BAY-1895344 potently inhibits the proliferation of a broad spectrum of human tumor cell lines with a median IC₅₀ of
78 nM[1]. BAY-1895344 potently suppresses NSC-32065-induced H2AX phosphorylation (IC50, 36 nM)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

<table>
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<th>In Vivo</th>
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<tbody>
<tr>
<td>BAY-1895344 shows potent anti-tumor efficacy in monotherapy in a variety of xenograft models of ovarian and colorectal cancer, and causes complete tumor remission in mantle cell lymphoma models[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</td>
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REFERENCES
