AZD4320

Cat. No.: HY-112416
CAS No.: 1357576-48-7
Molecular Formula: C_{45}H_{48}ClF_{3}N_{4}O_{7}S_{3}
Molecular Weight: 945.53
Target: Bcl-2 Family
Pathway: Apoptosis
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 : 125 mg/mL (132.20 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
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<tbody>
<tr>
<td>Solvent</td>
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<tr>
<td>---------</td>
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<tr>
<td>1 mM</td>
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<tr>
<td>5 mM</td>
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<td>10 mM</td>
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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: ≥ 6.25 mg/mL (6.61 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
AZD4320 is a novel BH3-mimicking dual BCL2/BCLxL inhibitor with IC_{50}s of 26 nM, 17 nM, and 170 nM for KPUM-MS3, KPUM-UH1, and STR-428 cells, respectively.

IC_{50} & Target

<table>
<thead>
<tr>
<th>IC_{50} &amp; Target</th>
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<tbody>
<tr>
<td>BCL2</td>
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<tr>
<td>17 nM (IC_{50}, KPUM-UH1 cells)</td>
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<tr>
<td>BCLxL</td>
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<tr>
<td>17 nM (IC_{50}, KPUM-UH1 cells)</td>
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In Vitro
AZD4320 potently augments the antitumor effect of AZD5153 (Cat. No.: HY-100653A) in double expressing lymphoma (DEL)- and double hit lymphoma (DHL)-derived cell lines in a dose-dependent manner. AZD4320 shows mostly synergistic, and at least additive, growth inhibitory effects on DEL- and DHL derived cell lines, and profoundly increases cells undergoing apoptosis in all three cell lines\(^1\).

MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Two DEL-derived cell lines, KPUM-MS3 and KPUM-UH1, and a DHL-derived cell line, STR-428 are used. To examine the combinatory growth inhibitory effects of AZD4320, cells are treated with five concentrations (0.25, 0.5, 1.0, 2.0, 4.0×IC50) for 72 h, and subjected to a modified MTT assay[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES