FGFR4-IN-1

Cat. No.: HY-100631
CAS No.: 1708971-72-5
Molecular Formula: C₂₄H₂₇N₇O₅
Molecular Weight: 493.52
Target: FGFR
Pathway: Protein Tyrosine Kinase/RTK
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass (mg/mL)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>6.4 mg/mL (12.97 mM; Need warming)</td>
<td></td>
</tr>
</tbody>
</table>

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Solvent</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>DMSO</td>
<td>2.0263 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>DMSO</td>
<td>0.4053 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>DMSO</td>
<td>0.2026 mL</td>
</tr>
</tbody>
</table>

In solvent

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</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description

FGFR4-IN-1 is a potent inhibitor of FGFR4 with IC₅₀ of 0.7 nM.

IC₅₀ & Target

FGFR
IC₅₀ 0.7 nM (IC₅₀)

In Vitro

FGFR4-IN-1 significantly inhibits the proliferation of HuH-7 hepatocellular carcinoma cells with IC₅₀ of 7.8 nM[1].

PROTOCOL

Cell Assay [1]

Methylene blue staining proliferation assay (MBS): The effect of compounds on cell proliferation is assessed using HuH-7 hepatocellular carcinoma cells are cultured in the vendor-recommended medium. Specifically, 5000 cells/well are seeded in 96-well tissue culture plates in a total media volume of 100 μL/well and increasing compound dilutions.
or DMSO are added 24 hours thereafter in triplicates. 72 hours after compound addition, cells are fixed by adding 25 and incubated for 10 minutes at room temperature. Cells are washed three times with H₂O. Cells are washed 3 times with H₂O, 200 mL/well and then lysed by adding 200 mL/well of 3% HCl for 30 minutes at room temperature with shaking. Optical density is measured at A650 nm. The concentration of compound providing 50% of proliferation inhibition with respect to DMSO-treated cells is determined (IC₅₀) using XLFit software.

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

REFERENCES

[1]. Ring-fused bicyclic pyridyl derivatives as fgfr4 inhibitors. WO 2015059668 A1?