MAZ51

Cat. No.: HY-116624
CAS No.: 163655-37-6
Molecular Formula: C₂₁H₁₈N₂O
Molecular Weight: 314.38
Target: VEGFR; Apoptosis
Pathway: Protein Tyrosine Kinase/RTK; 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: 8.33 mg/mL (26.50 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>3.1809 mL</td>
<td>15.9043 mL</td>
<td>31.8086 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6362 mL</td>
<td>3.1809 mL</td>
<td>6.3617 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3181 mL</td>
<td>1.5904 mL</td>
<td>3.1809 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description MAZ51 is a selective inhibitor of VEGFR-3 (Flt-4) tyrosine kinase. MAZ51 inhibits VEGF-C-induced activation of VEGFR-3 without blocking VEGF-C-mediated stimulation of VEGFR2. MAZ51 had no effect on ligand-induced autophosphorylation of EGFR, IGF-1R and PDGFRβ. MAZ51 blocks proliferation and induces apoptosis in a wide variety of tumor cells. Antitumor activity.[1][2]

IC₅₀ & Target VEGFR3

In Vitro

MAZ51 (2.5-10 μM; 24 hours) blocks proliferation and induces apoptosis in a wide variety of tumor cells[2]. MAZ51 (0.5-50 μM; 25 minutes) has no effect on ligand-induced autophosphorylation of EGFR, IGF-1R and PDGFRβ in A431 cells, HEK-293 cells, and PAE cells, respectively[2].

Cell Proliferation Assay[2]

Cell Line: MT450, 1AS, ASM, G, AT6.1, MTLN3, MTLY, NM-081 cells
Concentration: 2.5, 10 μM
Incubation Time: 24 hours
Result: Induced apoptosis in a wide variety of tumor cells.

Aptosis Analysis

Cell Line: MT450, 1AS, ASM, G, AT6.1, MTLN3, MTLY, NM-081 cells
Concentration: 2.5, 10 μM
Incubation Time: 24 hours
Result: Blocked proliferation in a wide variety of tumor cells.

In Vivo

MAZ51 (8 mg/kg; i.p.; daily for 15 day) significantly suppresses the growth of MT450 tumors.

Animal Model: Wistar Furth rats (bearing MT450 cells)
Dosage: 8 mg/kg
Administration: Intraperitoneal injection; daily for 15 day
Result: Significantly suppressed the growth of MT450 tumors.

REFERENCES
