Lck Inhibitor

Cat. No.: HY-12072
CAS No.: 847950-09-8
Molecular Formula: C₃₁H₃₀N₈O
Molecular Weight: 530.62
Target: Src
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
10 mM in DMSO

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.8846 mL</td>
<td>9.4229 mL</td>
<td>18.8459 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3769 mL</td>
<td>1.8846 mL</td>
<td>3.7692 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1885 mL</td>
<td>0.9423 mL</td>
<td>1.8846 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Lck Inhibitor is a new class of compounds that are potent inhibitors of Lck with an IC50 value of 7 nM. IC50 Value: 7 nM [1]. Target: Lck

in vitro: Lck Inhibitor (compound 25) exhibited good potency in the T-cell receptor-induced IL-2 secretion assay (IL-2) and also inhibited subsequent T-cell proliferation (T-cell prolif.) in the same human T -cells.

in vivo: A once daily dose of 25 was administered orally at 10, 30, and 60 mg/kg from day 9 today 17. Paw volume was measured daily from day 9 through day 18. The compound showed a dose-dependent inhibition of arthritis, with an ED50 estimated at 24 mg/kg (Figure 6). Based on the measured plasma levels from the three dose groups, the exposure of 25 at the ED50 was estimated to be 2.7 μM·h (Cmax≈ 0.7 μM) [1]. Clinical trial: N/A

REFERENCES