PF 1022A

Cat. No.: HY-12361
CAS No.: 133413-70-4
Molecular Formula: C₅₂H₇₆N₄O₁₂
Molecular Weight: 949.18
Target: Parasite
Pathway: Anti-infection
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 : ≥ 43 mg/mL (45.30 mM)
* ≥ means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.0535 mL</td>
<td>5.2677 mL</td>
<td>10.5354 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2107 mL</td>
<td>1.0535 mL</td>
<td>2.1071 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1054 mL</td>
<td>0.5268 mL</td>
<td>1.0535 mL</td>
</tr>
</tbody>
</table>

Preparing Stock Solutions

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

BIOLOGICAL ACTIVITY

Description: PF 1022A is an N-methylated cyclooctadepsipeptides (CODPs) with strong anthelmintic properties; acts as an ionophore. IC50 value: Target: PF 1022A showed strong anthelmintic activities against Ascaridia galli in chickens [1]. PF1022A is a novel anthelmintic that binds to the latrophilin-like transmembrane receptor important for pharyngeal pumping in nematodes. Furthermore, PF1022A binds to GABA receptors, which might contribute to the anthelmintic effect. Like other cyclodepsipeptides, PF1022A acts as an ionophore [2]. In vitro, PF1022A showed low activity on embryonation but significantly inhibited egg hatch (10 and 100 μg/ml), whereas albendazole (10 and 100 μg/ml) revealed statistically significant inhibitions of both embryonation and egg hatch. PF1022A (1-100 μg/ml) completely inhibited larval movement at most examination points [3].

REFERENCES
