Davercin

Cat. No.: HY-100584  
CAS No.: 55224-05-0  
Molecular Formula: C_{38}H_{65}NO_{14}  
Molecular Weight: 759.92  
Target: Bacterial  
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: ≥ 50 mg/mL (65.80 mM)  
* "≥" means soluble, but saturation unknown.

<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>1.3159 mL</td>
<td>6.5796 mL</td>
<td>13.1593 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2632 mL</td>
<td>1.3159 mL</td>
<td>2.6319 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1316 mL</td>
<td>0.6580 mL</td>
<td>1.3159 mL</td>
</tr>
</tbody>
</table>

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: ≥ 3 mg/mL (3.95 mM); Clear solution  
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 3 mg/mL (3.95 mM); Clear solution  
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 3 mg/mL (3.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description  
Davercin (Erythromycin Cyclocarbonate), derivative of Erythromycin, which is active against Gram-positive and some Gram-negative microorganisms.

IC₅₀ & Target  
Antibacteria[1]
Erythromycin is used in treatment of respiratory, gastrointestinal, and genital tract infections, as well as skin and soft tissue infections. Erythromycin, with its ten chiral centers and two sugar substituents (L-cladinose and D-desosamine), is a good starting point for numerous medicinal chemistry efforts for improvement of its biological profile (better activity, higher stability, and improved bioavailability) since the first generation of macrolides, which had low toxicity and good tolerability, are unstable in acidic media, had low toxicity and good tolerability.[1]

REFERENCES