Enoxacin hydrate

Cat. No.: HY-B0268A
CAS No.: 84294-96-2
Molecular Formula: C₁₅H₁₇FN₄O₃ · 3/₂ H₂O
Molecular Weight: 347.34
Target: Bacterial
Pathway: Anti-infection
Storage: 4°C, protect from light

Solvent & Solubility

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>≥ 45 mg/mL (129.56 mM)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* “≥” means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>1 mM</td>
<td>2.8790 mL</td>
<td>14.3951 mL</td>
<td>28.7902 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.5758 mL</td>
<td>2.8790 mL</td>
<td>5.7580 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2879 mL</td>
<td>1.4395 mL</td>
<td>2.8790 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description

Enoxacin is a broad-spectrum 6-fluoronaphthyridinone antibacterial agent. Target: antibacterial
Enoxacin is a new quinolone carboxylic acid compound. Its activity against 740 bacterial isolates was determined. It inhibited 90% Escherichia coli, Klebsiella sp., Aeromonas sp., Enterobacter spp., Serratia spp., Proteus mirabilis, and Morganella morganii at less than or equal to 0.8 micrograms/ml [1]. Daily plasma theophylline concentrations were measured in 14 patients. The mean +/- s.d. theophylline concentrations increased from 8.5 +/- 2.8 micrograms ml⁻¹ prior to enoxacin to a maximum of 21.7 +/- 7.8 micrograms ml⁻¹ during coadministration [2].

REFERENCES

