Norfloxacin

Cat. No.: HY-B0132
CAS No.: 70458-96-7
Molecular Formula: C₁₆H₁₈FN₃O₃
Molecular Weight: 319.33
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: 6.6 mg/mL (20.67 mM; Need ultrasonic and warming)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>3.1316 mL</td>
<td>15.6578 mL</td>
<td>31.3156 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6263 mL</td>
<td>3.1316 mL</td>
<td>6.2631 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3132 mL</td>
<td>1.5658 mL</td>
<td>3.1316 mL</td>
<td></td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Norfloxacin (MK-0366) is a broad-spectrum antibiotic that is active against both Gram-positive and Gram-negative bacteria, which functions by inhibiting DNA gyrase.

IC₅₀ & Target
DNA gyrase; Antibacterial[1][2].

In Vitro
Norfloxacin (MK-0366) is a synthetic chemotherapeutic antibacterial agent occasionally used to treat common as well as complicated urinary tract infections. Norfloxacin (MK-0366) is a broad-spectrum antibiotic that is active against both Gram-positive and Gram-negative bacteria. It functions by inhibiting DNA gyrase, a type II topoisomerase, and topoisomerase IV, enzymes necessary to separate bacterial DNA, thereby inhibiting cell division. There are currently three approved uses in the adult population (one of which is restricted) and the other ineffective due to bacterial resistance.

REFERENCES
