

# Pefloxacin (mesylate dihydrate)

Catalog No: tcsc1963



## Available Sizes

**Size:** 100mg

**Size:** 500mg



## Specifications

**CAS No:**

149676-40-4

**Formula:**

$C_{18}H_{28}FN_3O_8S$

**Pathway:**

Anti-infection

**Target:**

Bacterial

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

Pefloxacinium mesylate dihydrate

**Observed Molecular Weight:**

465.49

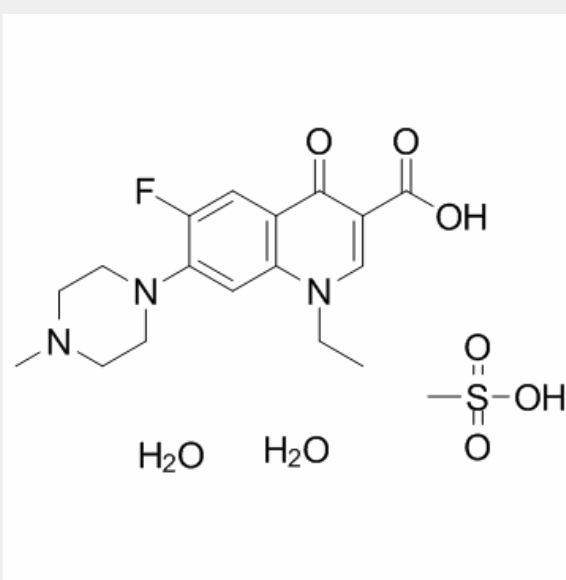
## Product Description

Pefloxacin mesylate dehydrate is a an antibacterial agent and prevents bacterial DNA replication by inhibiting DNA gyrase (topoisomerase)

Target: DNA gyrase

Pefloxacin is a synthetic chemotherapeutic agent used to treat severe and life-threatening bacterial infections. Pefloxacin is commonly referred to as a fluoroquinolone (or quinolone) drug and is a member of the fluoroquinolone class of antibacterials. It is an analog of norfloxacin. It is a synthetic fluoroquinolone, belonging to the 3rd generation of quinolones. Pefloxacin is extensively prescribed in France. Pefloxacin has not been approved for use in the United States.

The bactericidal action of pefloxacin results from interference with the activity of the bacterial enzymes DNA gyrase and topoisomerase IV, which are needed for the transcription and replication of bacterial DNA. DNA gyrase appears to be the primary quinolone target for gram-negative bacteria. Topoisomerase IV appears to be the preferential target in gram-positive organisms. Interference with these two topoisomerases results in strand breakage of the bacterial chromosome, supercoiling, and resealing. As a result DNA replication and transcription is inhibited.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!