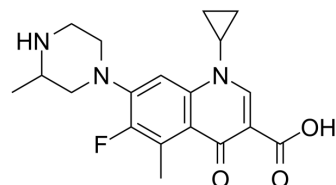


Grepafloxacin

Cat. No.:	HY-A0147
CAS No.:	119914-60-2
Molecular Formula:	C ₁₉ H ₂₂ FN ₃ O ₃
Molecular Weight:	359.39
Target:	Antibiotic; Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Grepafloxacin (OPC-17116) is an oral actively fluoroquinolone antibiotic with potent activity against community-acquired respiratory pathogens including <i>Streptococcus pneumoniae</i> . Grepafloxacin has high tissue penetration and a promising pharmacodynamic profile ^{[1][2][3]} .
In Vitro	Grepafloxacin is a once-daily fluoroquinolone ^[2] . Grepafloxacin exhibits potent in vitro antibacterial activity against Gram-positive bacteria such as <i>Streptococcus pneumoniae</i> and high in vivo efficacy on the experimental systemic infections caused by the Gram-positive and -negative bacteria tested ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Grepafloxacin (OPC-17116) (200 mg/kg; p.o.; Balb/c mice) displays good safety profile in terms of phototoxicity ^[2] . Grepafloxacin (p.o.; 25, 50, 100, and 200 mg/kg; 5 days/week for 4 weeks; Female C57BL6/J-Lyst bg-J/ mice/beige mice) has modest activities in both intranasal (IN) infection and intravenous (IV) <i>Mycobacterium avium</i> infection models ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Efthymiopoulos C. Pharmacokinetics of grepafloxacin. *J Antimicrob Chemother.* 1997;40 Suppl A:35-43.
- [2]. Owen K. Comparative grepafloxacin phototoxicity in mouse skin. *J Antimicrob Chemother.* 1998;42(2):261-264.
- [3]. Cynamon MH, et al. The activity of grepafloxacin in two murine models of *Mycobacterium avium* infection. *J Infect Chemother.* 2004;10(3):185-188.
- [4]. Miyamoto H, et al. Synthesis and biological properties of substituted 1,4-dihydro-5-methyl-4-oxo-3-quinolinecarboxylic acids. *Bioorg Med Chem.* 1995;3(12):1699-1706.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA