Besifloxacin Hydrochloride

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway:	HY-17028 405165-61-9 C ₁₉ H ₂₂ Cl ₂ FN ₃ O ₃ 430.3 Bacterial; Antibiotic Anti-infection	
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	

SOLVENT & SOLUBILITY

In Vitro	Ethanol : < 1 mg/mL (ultrasonic) (insoluble)	
	DMSO : < 1 mg/mL (insoluble or slightly soluble)	
	H ₂ O : < 0.1 mg/mL (insoluble)	

BIOLOGICAL ACTI	
Description	Besifloxacin hydrochloride is a fourth-generation fluoroquinolone antibiotic. IC50 Value:Target: AntibacterialBesifloxacin has been found to inhibit production of pro-inflammatory cytokines in vitro. Besifloxacin is a novel 8-chloro-fluoroquinolone agent with potent, bactericidal activity against prevalent and drug-resistant pathogens.besifloxacin is the most potent agent tested against gram-positive pathogens and anaerobes and is generally equivalent to comparator fluoroquinolones in activity against most gram-negative pathogens. Besifloxacin demonstrates potent, broad-spectrum activity, which is particularly notable against gram-positive and gram-negative isolates that are resistant to other fluoroquinolones and classes of antibacterial agents.
IC ₅₀ & Target	Quinolone

REFERENCES

[1]. Wang Z, Wang S, Zhu F, Chen Z, Yu L, Zeng S.Determination of enantiomeric impurity in besifloxacin hydrochloride by chiral high-performance liquid chromatography with precolumn derivatization. Chirality. 2012 Jul;24(7):526-31. doi: 10.1002/chir.22042.

[2]. Hussar DA.New drugs: golimumab, besifloxacin hydrochloride, and artemether/lumefantrine.J Am Pharm Assoc (2003). 2009 Jul-Aug;49(4):570-4.

[3]. Nafziger AN, Bertino JS Jr.Besifloxacin ophthalmic suspension for bacterial conjunctivitis. Drugs Today (Barc). 2009 Aug;45(8):577-88.

[4]. Proksch JW, Ward KW.Ocular pharmacokinetics/pharmacodynamics of besifloxacin, moxifloxacin, and gatifloxacin following topical administration to pigmented rabbits. J Ocul Pharmacol Ther. 2010 Oct;26(5):449-58.

[5]. Comstock TL, Paterno MR, Usner DW, Pichichero ME.Efficacy and safety of besifloxacin ophthalmic suspension 0.6% in children and adolescents with bacterial conjunctivitis: a post hoc, subgroup analysis of three randomized, double-masked, parallel-group, multicenter clinical trials. Paediatr Drugs. 2010 Apr 1;12(2):105-12. doi: 10.2165/11534380-00000000-00000.

Product Data Sheet

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