



# LKT Laboratories, Inc.

## Besifloxacin Hydrochloride

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### Product Information

**Product ID** B1973

**CAS No.** 405165-61-9

**Chemical Name** 7-[(3R)-3-aminoazepan-1-yl]-8-chloro-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid hydrochloride

**Synonym**

**Formula** C<sub>19</sub>H<sub>22</sub>ClFN<sub>3</sub>O<sub>3</sub> · HCl

**Formula Wt.** 430.31

**Melting Point**

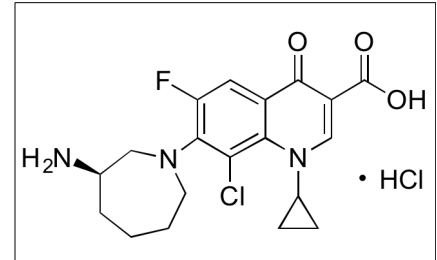
**Purity** ≥98%

**Solubility** Sparingly soluble in water (1 mg/mL), DMSO (<1 mg/mL)

**Store Temp** -20°C

**Ship Temp** Ambient

**Description** Besifloxacin is a fourth generation fluoroquinolone antibiotic that displays broad-spectrum antibacterial activity against aerobic and anaerobic bacteria and is effective against a wide range of ocular pathogens that exhibit resistance to other fluoroquinolone antibiotics. Besifloxacin inhibits DNA topoisomerase IV and DNA gyrase, preventing DNA replication, transcription, and repair. This compound also inhibits production of IL-1Ra, IL-6, IL-1-β, MCP-1, and other pro-inflammatory cytokines; it may also inhibit NF-κB signaling.



**Bulk quantities available upon request**

Product ID	Size
B1973	25 mg
B1973	100 mg
B1973	250 mg

**References** Miller D, Chang JS, Flynn HW, et al. Comparative in vitro susceptibility of besifloxacin and seven comparators against ciprofloxacin- and methicillin-susceptible/nonsusceptible staphylococci. *J Ocul Pharmacol Ther.* 2013 Apr;29(3):339-44. PMID: 23289847.

Lan W, Petznick A, Heryati S, et al. Nuclear Factor-κB: central regulator in ocular surface inflammation and diseases. *Ocul Surf.* 2012 Jul;10(3):137-48. PMID: 22814642.

Cambau E, Matrat S, Pan XS, et al. Target specificity of the new fluoroquinolone besifloxacin in *Streptococcus pneumoniae*, *Staphylococcus aureus* and *Escherichia coli*. *J Antimicrob Chemother.* 2009 Mar;63(3):443-50. PMID: 19147516.

Zhang JZ, Ward KW. Besifloxacin, a novel fluoroquinolone antimicrobial agent, exhibits potent inhibition of pro-inflammatory cytokines in human THP-1 monocytes. *J Antimicrob Chemother.* 2008 Jan;61(1):111-6. PMID: 17965029.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.