



LKT Laboratories, Inc.

## R-(+)-Ofloxacin

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### Product Information

**Product ID** O2146

**CAS No.** 100986-86-5

**Chemical Name** (R)-9-Fluoro-2,3-dihydro-3-methyl-10-(4-methyl-1-piperazinyl)-7-oxo-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid

**Synonym**

**Formula** C<sub>18</sub>H<sub>20</sub>FN<sub>3</sub>O<sub>4</sub>

**Formula Wt.** 361.37

**Melting Point** 225-227 °C

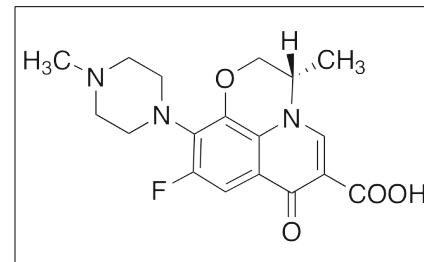
**Purity** ≥98%

**Solubility**

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** R-(+)-Ofloxacin is the optically active isomer of ofloxacin, a second generation fluoroquinolone antibiotic. This compound is often given as a topical treatment for ocular and otic infections. Like other fluoroquinolones, ofloxacin inhibits DNA gyrase and topoisomerase IV; it exhibits antibacterial efficacy against both gram positive and gram negative bacteria. Under UV light, ofloxacin exhibits phototoxicity, disrupting the mitochondrial membrane potential and inducing ROS-mediated DNA damage.



**Bulk quantities available upon request**

Product ID	Size
O2146	1 mg
O2146	5 mg
O2146	10 mg

**References** Dwivedi A, Mujtaba SF, Yadav N, et al. Cellular and molecular mechanism of ofloxacin induced apoptotic cell death under ambient UV-A and sunlight exposure. *Free Radic Res.* 2014 Mar;48(3):333-46. PMID: 24286391.

Pantel A, Petrella S, Matrat S, et al. DNA gyrase inhibition assays are necessary to demonstrate fluoroquinolone resistance secondary to gyrB mutations in Mycobacterium tuberculosis. *Antimicrob Agents Chemother.* 2011 Oct;55(10):4524-9. PMID: 21768507.

Drlica K, Zhao X. DNA gyrase, topoisomerase IV, and the 4-quinolones. *Microbiol Mol Biol Rev.* 1997 Sep;61(3):377-92. PMID: 9293187.

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