

## Ofloxacin

## Chemical Properties

CAS No. : 82419-36-1

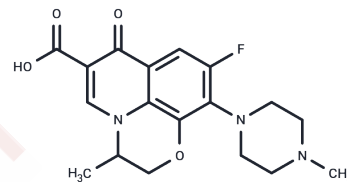
Formula: C<sub>18</sub>H<sub>20</sub>FN<sub>3</sub>O<sub>4</sub>

Molecular Weight: 361.37

Storage: Keep away from direct sunlight, Keep away from moisture, Store at low temperature

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

|               |                                                                                                                                                                                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description   | Ofloxacin (Oxaldin) is a fluoroquinolone antibacterial antibiotic. Ofloxacin binds to and inhibits bacterial topoisomerase II (DNA gyrase) and topoisomerase IV, enzymes involved in DNA replication and repair, resulting in cell death in sensitive bacterial species. |
| Targets(IC50) | Endogenous Metabolite, Antibacterial, Antibiotic, Topoisomerase, Virus Protease                                                                                                                                                                                          |

## Solubility Information

|            |                                                                                                                            |
|------------|----------------------------------------------------------------------------------------------------------------------------|
| Solubility | DMSO: 3.62 mg/mL (10.02 mM), Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|----------------------------------------------------------------------------------------------------------------------------|

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 2.7672 mL | 13.8362 mL | 27.6725 mL |
| 5 mM  | 0.5534 mL | 2.7672 mL  | 5.5345 mL  |
| 10 mM | 0.2767 mL | 1.3836 mL  | 2.7672 mL  |
| 50 mM | 0.0553 mL | 0.2767 mL  | 0.5534 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Divo AA, et al. Antimicrob Agents ChemOthers. 1988 Aug;32(8):1182-6.

Kong Y, Geng Z, Jiang G, et al. Comparison of the in vitro antibacterial activity of ofloxacin, levofloxacin, moxifloxacin, sitafloxacin, flaxloxacil, and delafloxacin against Mycobacterium tuberculosis strains isolated in China. Heliyon. 2023

Ma X, Li H, Ji J, et al. Overexpression of outer membrane protein A (OmpA) increases aminoglycoside sensitivity in mycobacteria. BMC microbiology. 2024, 24(1): 472.

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