

## Ciprofloxacin, Fluoroquinolone antibacterial agent

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Catalog	Unit
TBI3918-1G	1 g
TBI3918-5G	5 g

### Product Details

**Formal Name:** 1-Cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-3-quinolinecarboxylic acid

**Molecular Formula:** C<sub>17</sub>H<sub>18</sub>FN<sub>3</sub>O<sub>3</sub>

**Formula Weight:** 331.3

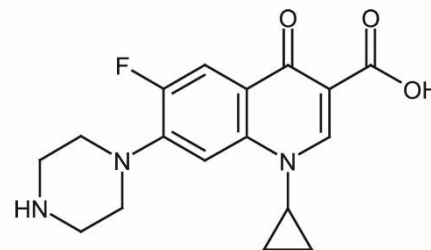
**CAS Number:** 85721-33-1

**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in dilute hydrochloric acid

**Storage:** -20°C



### Applications

Fluoroquinolone antibacterial agent

### Functions

Ciprofloxacin works by inhibiting bacterial DNA gyrase (a type of topoisomerase), which prevents proper DNA replication. As a result, it disrupts cell division and leads to double-strand breaks in the bacterial chromosome. It is a broad-spectrum antibiotic that is effective against Gram-positive, Gram-negative, and anaerobic bacteria, and it is also active against *Mycobacterium tuberculosis*. Additionally, it may have anxiogenic (anxiety-inducing) effects.

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