

# PRODUCT INFORMATION

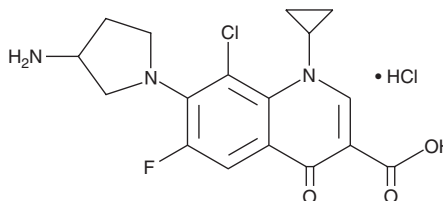


## Clinafloxacin (hydrochloride)

Item No. 16923

**CAS Registry No.:** 105956-99-8  
**Formal Name:** 7-(3-amino-1-pyrrolidinyl)-8-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid, monohydrochloride

**Synonym:** AM1091  
**MF:** C<sub>17</sub>H<sub>17</sub>ClFN<sub>3</sub>O<sub>3</sub> • HCl  
**FW:** 402.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 219, 240, 295, 344 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Clinafloxacin (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the clinafloxacin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Clinafloxacin (hydrochloride) is soluble in the organic solvent methanol (warmed) at a concentration of approximately 1 mg/ml.

### Description

Clinafloxacin is a fluoroquinolone antibiotic that displays broad-spectrum antibacterial activity against Gram-positive, Gram-negative, and anaerobic pathogens by inhibiting the bacterial regulatory enzyme DNA gyrase (IC<sub>50</sub> = 0.92 µg/ml) as well as topoisomerase IV (IC<sub>50</sub> = 1.62 µg/ml).<sup>1,2</sup>

### References

1. Takei, M., Fukuda, H., Kishii, R., *et al.* Target preference of 15 quinolones against *Staphylococcus aureus*, based on antibacterial activities and target inhibition. *Antimicrob. Agents Chemother.* **45(12)**, 3544-3547 (2001).
2. Weigel, L.M., Anderson, G.J., and Tenover, F.C. DNA gyrase and topoisomerase IV mutations associated with fluoroquinolone resistance in *Proteus mirabilis*. *Antimicrob. Agents Chemother.* **46(8)**, 2582-2587 (2002).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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