

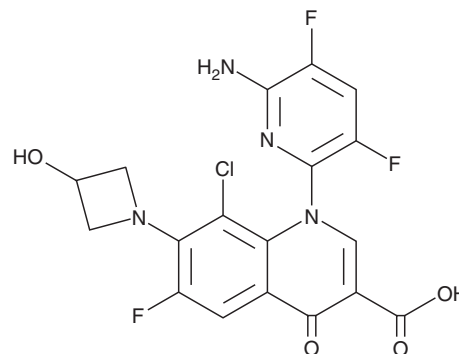
# PRODUCT INFORMATION



## Delafloxacin

Item No. 20314

**CAS Registry No.:** 189279-58-1  
**Formal Name:** 1-(6-amino-3,5-difluoro-2-pyridinyl)-8-chloro-6-fluoro-1,4-dihydro-7-(3-hydroxy-1-azetidynyl)-4-oxo-3-quinolinecarboxylic acid  
**Synonyms:** ABT-492, RX-3341  
**MF:** C<sub>18</sub>H<sub>12</sub>ClF<sub>3</sub>N<sub>4</sub>O<sub>4</sub>  
**FW:** 440.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 228, 288, 334 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

Delafloxacin is supplied as a crystalline solid. A stock solution may be made by dissolving the delafloxacin in the solvent of choice, which should be purged with an inert gas. Delafloxacin is soluble in the organic solvent DMSO at a concentration of approximately 0.5 mg/ml.

### Description

Delafloxacin is a fluoroquinolone antibiotic that demonstrates extremely high potency against a wide range of bacteria *in vitro*, including levofloxacin-resistant strains of *S. pneumoniae* and methicillin-resistant *S. aureus*.<sup>1,2</sup> It targets both DNA gyrase and topoisomerase IV. Delafloxacin has an anionic structure, which enhances its potency in acidic environments (e.g., phagolysosome, inflammatory cells) and in skin and soft tissue infections.<sup>3</sup>

### References

1. Goldstein, E.J.C., Citron, D.M., Merriam, C.V., *et al.* *In vitro* activities of ABT-492, a new fluoroquinolone, against 155 aerobic and 171 anaerobic pathogens isolated from antral sinus puncture specimens from patients with sinusitis. *Antimicrob. Agents Chemother.* **47(9)**, 3008-3011 (2003).
2. A.M. Nilius, A.M., L.L. Shen, L.L., D. Hensy-Rudloff, D., *et al.* *In vitro* antibacterial potency and spectrum of ABT-492, a new fluoroquinolone. *Antimicrob. Agents Chemother.* **47(10)**, 3260-3269 (2003).
3. Kocsis, B., Domokos, J., and Szabo, D. Chemical structure and pharmacokinetics of novel quinolone agents represented by avarofloxacin, delafloxacin, finafloxacin, zabofloxacin and nemonoxacin. *Ann. Clin. Microbiol. Antimicrob.* **15(1)**, 34 (2016).

#### 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

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