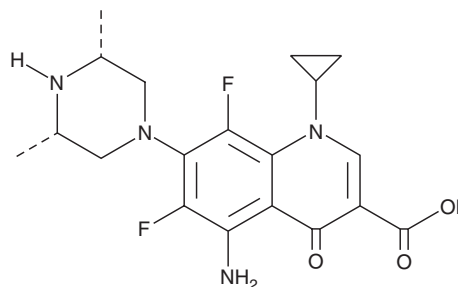


# PRODUCT INFORMATION



## Sparfloxacin Item No. 20379

**CAS Registry No.:** 110871-86-8  
**Formal Name:** *rel*-5-amino-1-cyclopropyl-7-[(3*R*,5*S*)-3,5-dimethyl-1-piperazinyl]-6,8-difluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid  
**Synonyms:** AT-4140, CI-978, CP 103,826, PD1315-1, PD 131501  
**MF:** C<sub>19</sub>H<sub>22</sub>F<sub>2</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 392.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 223, 302, 375 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

Sparfloxacin is supplied as a crystalline solid. A stock solution may be made by dissolving the sparfloxacin in the solvent of choice. Sparfloxacin is soluble in dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sparfloxacin in DMF is approximately 10 mg/ml.

Sparfloxacin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sparfloxacin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Sparfloxacin has a solubility of approximately 0.50 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Sparfloxacin is a fluoroquinolone antibiotic that inhibits bacterial DNA gyrase, thereby inhibiting DNA replication and transcription.<sup>1</sup> It is active against *S. aureus* with an MIC value of 0.031 µg/ml.<sup>1</sup>

### Reference

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).

#### 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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