

# PRODUCT INFORMATION

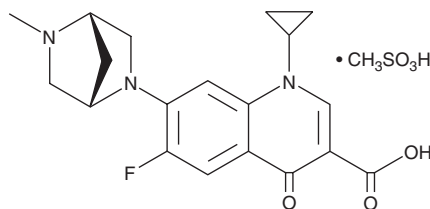


## Danofloxacin (mesylate)

Item No. 22408

**CAS Registry No.:** 119478-55-6  
**Formal Name:** 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(1S,4S)-5-methyl-2,5-diazabicyclo[2.2.1]hept-2-yl]-4-oxo-3-quinolinecarboxylic acid, methanesulfonate

**Synonym:** CP 76,136-27  
**MF:** C<sub>19</sub>H<sub>20</sub>FN<sub>3</sub>O<sub>3</sub> • CH<sub>3</sub>SO<sub>3</sub>H  
**FW:** 453.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 236, 282, 351 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

Danofloxacin (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the danofloxacin (mesylate) in the solvent of choice, which should be purged with an inert gas. Danofloxacin (mesylate) is soluble in the organic solvent DMSO. It is also soluble in water. The solubility of Danofloxacin (mesylate) in DMSO and water is approximately 25 and 20 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

### Description

Danofloxacin is a fluoroquinolone antibiotic. *In vitro*, danofloxacin has activity against 68 field isolates of *Mycoplasma* species isolated from cattle, swine, and poultry with MICs ranging from 8 to 500 nM.<sup>1</sup> It is protective *in vivo* against *P. multocida*, *E. coli*, and *S. choleraesuis* in mice with protective doses of 0.31, 0.40, and 2.42 mg/kg, respectively.<sup>2</sup> Formulations containing danofloxacin are widely used to prevent infectious disease in livestock.<sup>3</sup>

### References

1. Cooper, A.C., Fuller, J.R., Fuller, M.K., *et al.* *In vitro* activity of danofloxacin, tylosin and oxytetracycline against *mycoplasmas* of veterinary importance. *Res. Vet. Sci.* **54**(3), 329-334 (1993).
2. McGuirk, P.R., Jefson, M.R., Mann, D.D., *et al.* Synthesis and structure-activity relationships of 7-diazabicycloalkylquinolones, including danofloxacin, a new quinolone antibacterial agent for veterinary medicine. *J. Med. Chem.* **35**(4), 611-620 (1992).
3. Yao, M., Gao, W., Tao, H., *et al.* The regulation effects of danofloxacin on pig immune stress induced by LPS. *Res. Vet. Sci.* **110**, 65-71 (2017).

#### 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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