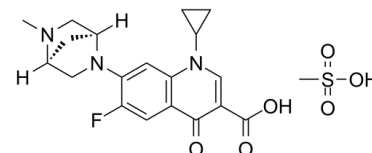


Data Sheet

Product Name:	Danofloxacin (mesylate)
Cat. No.:	CS-2695
CAS No.:	119478-55-6
Molecular Formula:	C ₂₀ H ₂₄ FN ₃ O ₆ S
Molecular Weight:	453.48
Target:	Antibiotic; Bacterial
Pathway:	Anti-infection
Solubility:	DMSO : 20 mg/mL (44.10 mM; Need ultrasonic); H ₂ O : 100 mg/mL (220.52 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Danofloxacin mesylate (CP 76136-27) is a fluoroquinolone antibacterial for veterinary use. Target: Antibacterial Danofloxacin mesylate (CP 76136-27) is a synthetic antibacterial agent of the fluoroquinolone class, acts principally by the inhibition of bacterial DNA-gyrase, which is necessary for supercoiling of DNA to provide a suitable spatial arrangement of DNA within the bacterial cell. The minimum inhibitory concentration of danofloxacin against 90% (MIC90) of contemporary European and North American field isolates of *Pasteurella haemolytica*, *Pasteurella multocida* and *Haemophilus somnus*, the most important bacterial respiratory pathogens of cattle, is 0.125 µg/ml [1]. Danofloxacin mesylate (CP 76136-27) shows protective dose (PD50) of 0.38, 0.8, 2.42 mg/kg for *P. multocida*, *E. coli* and *S. choleraesuis* in in vivo mouse protection assay [2].

References:

- [1]. Giles, C.J., et al., Clinical pharmacokinetics of parenterally administered danofloxacin in cattle. *J Vet Pharmacol Ther*, 1991. 14(4): p. 400-10.
- [2]. McGuirk, P.R., et al., Synthesis and structure-activity relationships of 7-diazabicycloalkylquinolones, including danofloxacin, a new quinolone antibacterial agent for veterinary medicine. *J Med Chem*, 1992. 35(4): p. 611-20.

CAIndexNames:

3-Quinolincarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(1S,4S)-5-methyl-2,5-diazabicyclo[2.2.1]hept-2-yl]-4-oxo-, methanesulfonate (1:1)

SMILES:

O=C(C1=CN(C2CC2)C3=C(C=C(F)C(N4[C@](C5)([H])CN(C)[C@]5([H])C4)=C3)C1=O)O.CS(=O)(O)=O

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA