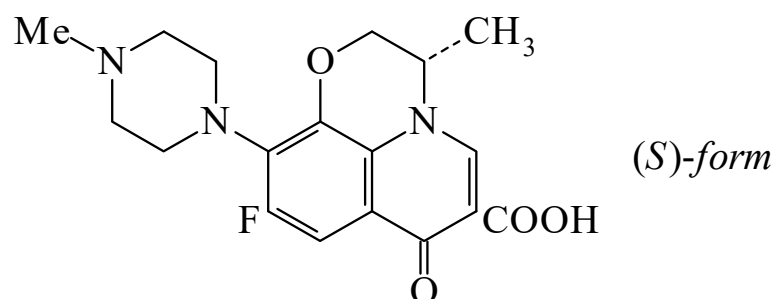




>>Entry Name: Ofloxacin, BAN, INN, JAN, USAN

Synonym(s): 9-Fluoro-2,3-dihydro-3-methyl-10-(4-methyl-1-piperazinyl)-7-oxo-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid, 9Cl. Exocin. Flobacin. Mefoxacin. Ocuflox. Ofloctet. Oflocin. Oxaldin. Tarivid. DL-8280. Ru 43280. Hoe 280. Many other names



CAS Registry Number: 83380-47-6

Related CAS Registry Numbers(s): 86784-41-0

Molecular Formula: $C_{18}H_{20}FN_3O_4$

Molecular Weight: 361.372

Accurate Mass: 361.143785

Percentage Composition: C 59.83%; H 5.58%; F 5.26%; N 11.63%; O 17.71%

Biological Use/Importance: Antibacterial agent. Shows broad spectrum of activity against gram-positive and -negative bacteria

Development Status: Launched 1985

Calculated Log P Data: Log P -1.04 (uncertain value) (calc)

Hazard & Toxicity: LD₅₀ (rat, orl) 3590 mg/kg. LD₅₀ (rat, scu) 7070 mg/kg. LD₅₀ (rat, ivn) 273 mg/kg. Exp. reprod. and fetotoxic effects. Mutagenic props.

>>Variant: (S)-form

Synonym(s): Levofloxacin, BAN, INN, USAN. DR 3355. RWJ 25213. Cravit. Floxin. Levaquin. Tavanic

CAS Registry Number: 100986-85-4

Extra CAS Registry Numbers(s): 138199-71-0

Molecular Formula: $C_{18}H_{20}FN_3O_4$

Molecular Weight: 361.372

Accurate Mass: 361.143785

Percentage Composition: C 59.83%; H 5.58%; F 5.26%; N 11.63%; O 17.71%

Development Status: Launched 1993 (Japan). Worldwide 37th best selling prescription drug (\$1.09 bn) (Johnson and Johnson) (2000, Pharma Business)

Melting Point: Mp 188°. Mp 225-227 dec.°

Optical Rotation: $[\alpha]_D^{23}$ -76.9 (c, 0.385 in 1M NaOH). $[\alpha]_D^{25}$ -85 (c, 0.2 in CHCl₃)

Other Data: Pharmacol. active isomer

Hazard & Toxicity: LD₅₀ (rat, orl) 1478 mg/kg. Exp. reprod. and teratogenic effects

>>Variant: (±)-form

CAS Registry Number: 82419-36-1

Molecular Formula: $C_{18}H_{20}FN_3O_4$

Molecular Weight: 361.372

Accurate Mass: 361.143785

Percentage Composition: C 59.83%; H 5.58%; F 5.26%; N 11.63%; O 17.71%

Physical Description: Cryst. (EtOH/CHCl₃)

Melting Point: Mp 262-264°

Sigma: O8757

References:

Sato, K. *et al.*, *Antimicrob. Agents Chemother.*, 1982, **22**, 548, (pharmacol)

Eur. Pat., 1982, *Daiichi Seiyaku*, 47 005; *CA*, **97**, 55821b, (synth, pharmacol)

Hayakawa, I. *et al.*, *Antimicrob. Agents Chemother.*, 1986, **29**, 163, (resoln, props)

Egawa, H. *et al.*, *Chem. Pharm. Bull.*, 1986, **34**, 4098, (synth)

Monk, J.P. *et al.*, *Drugs*, 1987, **33**, 346, (rev)

Mitscher, L.A. *et al.*, *J. Med. Chem.*, 1987, **30**, 2283, (synth, activity)