PRODUCT INFORMATION



Levofloxacin N-oxide

Item No. 27177

CAS Registry No.: Formal Name:	117678-38-3 (3S)-9-fluoro-2,3-dihydro-3-methyl-10-(4-methyl- 4-oxido-1-piperazinyl)-7-oxo-7H-pyrido[1,2,3- de]-1,4-benzoxazine-6-carboxylic acid
MF:	C ₁₈ H ₂₀ FN ₃ O ₅
FW:	377.4
Purity:	≥95%
Supplied as:	A solid F
Storage:	-20°C
Stability:	≥4 years O
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

Levofloxacin N-oxide is supplied as a solid. A stock solution may be made by dissolving the levofloxacin N-oxide in the solvent of choice, which should be purged with an inert gas. Levofloxacin N-oxide is slightly soluble in DMSO and methanol (sonicated).

Description

Levofloxacin N-oxide is an inactive metabolite of the antibiotic levofloxacin (Item No. 20382).^{1,2} Levofloxacin N-oxide is also a degradation product of levofloxacin that is formed through exposure to daylight or hydrogen peroxide.^{3,4}

References

- 1. Hemeryck, A., Mamidi, R.N., Bottacini, M., et al. Pharmacokinetics, metabolism, excretion and plasma protein binding of ¹⁴C-levofloxacin after a single oral administration in the Rhesus monkey. Xenobiotica 36(7), 597-613 (2006).
- 2. Norrby, S.R. Levofloxacin. Expert Opin. Pharmacother. 1(1), 109-119 (1999).
- 3. Czyrski, A., Anusiak, K., and Teżyk, A. The degradation of levofloxacin in infusions exposed to daylight with an identification of a degradation product with HPLC-MS. Sci. Rep. 9(1), 3621 (2019).
- 4. Lalitha Devi, M. and Chandrasekhar, K.B. A validated stability-indicating RP-HPLC method for levofloxacin in the presence of degradation products, its process related impurities and identification of oxidative degradant. J. Pharm. Biomed. Anal. 50(5), 10-17 (2009).

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.

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