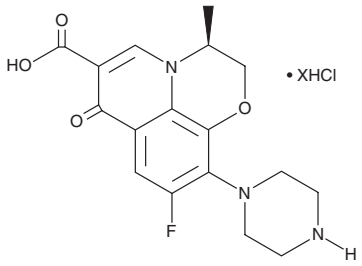
PRODUCT INFORMATION

N-desmethyl Levofloxacin (hydrochloride)

Item No. 27178

Formal Name:	(3S)-9-fluoro-2,3-dihydro-3-methyl-7-oxo-10-(1-piperazinyl)-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic acid, hydrochloride
Synonym:	Desmethyl Levofloxacin
MF:	$C_{17}H_{18}FN_3O_4$ • HCl
FW:	347.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 223, 294, 326 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

N-desmethyl Levofloxacin (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the N-desmethyl levofloxacin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. N-desmethyl Levofloxacin (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of N-desmethyl levofloxacin (hydrochloride) in these solvents is approximately 1, 25, and 30 mg/ml, resepectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-desmethyl levofloxacin (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of N-desmethyl levofloxacin (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-desmethyl Levofloxacin is an active metabolite of the fluoroquinolone antibiotic levofloxacin (Item No. 20382).[1] It is active against *S. aureus*, *S. epidermidis*, *B. subtilis*, *E. coli*, *P. aeruginosa*, and *K. pneumoniae* (MICs = 4, 1, 1, 0.012, >4, and 0.25 µg/ml, respectively).

Reference

1. Mohammadhosseini, N., Alipanahi, Z., Alipour, E., *et al.* Synthesis and antibacterial activity of novel levofloxacin derivatives containing a substituted thienylethyl moiety. *Daru.* **20(1),** (2012).

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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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM