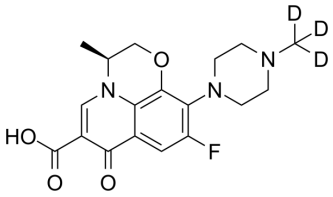
(S)-Ofloxacin-d3

Cat. No.:	HY-B0330S1		
CAS No.:	2208780-63-4		
Molecular Formula:	$C_{18}H_{17}D_3FN_3O_4$		
Molecular Weight:	364.39		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	(S)-Ofloxacin-d_3 is the deuterium labeled Levofloxacin. Levofloxacin, a synthetic fluoroquinolone, is an antibacterial agent that inhibits the supercoiling activity of bacterial DNA gyrase, halting DNA replication.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Siva, R., et al., Effect of levofloxacin on neutrophilic airway inflammation in stable COPD: a randomized, double-blind, placebo-controlled trial. Int J Chron Obstruct Pulmon Dis, 2014. 9: p. 179-86.

[3]. Pradeep, A.R., et al., Clinical and microbiological effects of levofloxacin in the treatment of chronic periodontitis: a randomized, placebo-controlled clinical trial. J Investig Clin Dent, 2014.

[4]. Lee, B.T., et al., Efficacy of Levofloxacin in the Treatment of BK Viremia: A Multicenter, Double-Blinded, Randomized, Placebo-Controlled Trial. Clin J Am Soc Nephrol, 2014.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA