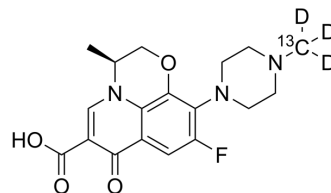


Levofloxacin-¹³C,₃D₃

Cat. No.:	HY-B0330S2												
CAS No.:	1261398-33-7												
Molecular Formula:	C ₁₇ ¹³ CH ₁₇ D ₃ FN ₃ O ₄												
Molecular Weight:	365.38												
Target:	Bacterial; Antibiotic; Isotope-Labeled Compounds												
Pathway:	Anti-infection; Others												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (27.37 mM; Need ultrasonic)

H₂O : ≥ 5 mg/mL (13.68 mM)

* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7369 mL	13.6844 mL	27.3688 mL
	5 mM	0.5474 mL	2.7369 mL	5.4738 mL
	10 mM	0.2737 mL	1.3684 mL	2.7369 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Levofloxacin-¹³C,₃D₃ is the ¹³C- and deuterium labeled Levofloxacin.

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^[83].

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):211-223.

[2]. 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.

[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]. 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.

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

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