Clarithromycin-d₃

MedChemExpress

Cat. No.:	HY-17508S1	O L
CAS No.:	959119-22-3	
Molecular Formula:	C ₃₈ H ₆₆ D ₃ NO ₁₃	
Molecular Weight:	750.97	H H H H H H H H H H H H H H H H H H H
Target:	Isotope-Labeled Compounds	
Pathway:	Others	ι μ _H
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	O H

BIOLOGICAL ACTIVITY		
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Description	Clarithromycin-d ₃ is the deuterium labeledClarithromycin(HY-17508) ^[1] . Clarithromycin has a broad spectrum of antimicrobial activity. Clarithromycin inhibits the CYP3A4-catalyzed triazolam alpha-hydroxylation with the IC ₅₀ (K _i) value of 56 (43) μM ^[3] . Clarithromycin significantly inhibits the HERG potassium current ^[4] .Clarithromycin affects the autophagic flux by impairing the signaling pathway linking hERG1 and PI3K ^[5] .	
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 Feb;53(2):211-216.

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

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Product Data Sheet

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