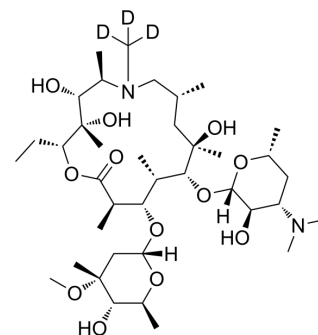


Azithromycin-d₃

Cat. No.:	HY-17506S		
CAS No.:	163921-65-1		
Molecular Formula:	C ₃₈ H ₆₉ D ₃ N ₂ O ₁₂		
Molecular Weight:	752		
Target:	Bacterial; Autophagy; Antibiotic		
Pathway:	Anti-infection; Autophagy		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Azithromycin-d ₃ is the deuterium labeled Azithromycin. Azithromycin (CP-62993) is a macrolide antibiotic useful for the treatment of a number of bacterial infections[1][2].
IC₅₀ & Target	Macrolide
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]. Menzel M, et al. Azithromycin augments rhinovirus-induced IFN β via cytosolic MDA5 in experimental models of asthma exacerbation. *Oncotarget.* 2017 Mar 18.
- [3]. Vandooren J, et al. Differential inhibition of activity, activation and gene expression of MMP-9 in THP-1 cells by azithromycin and minocycline versus bortezomib: A comparative study. *PLoS One.* 2017 Apr 3;12(4):e0174853.

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

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