Product Data Sheet

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Zidovudine O- β -D-glucuronide-d₃ sodium

Cat. No.: Molecular Formula: Molecular Weight: Target: Pathway:	HY-137522S C ₁₆ H ₁₇ D ₃ N ₅ NaO ₁₀ 468.37 Isotope-Labeled Compounds Others	
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	

BIOLOGICAL ACTIVITY			
Description	Zidovudine O-β-D-glucuronide-d ₃ (sodium) (3'-Azido-3'-deoxythymidine β-D-glucuronide-d ₃ (sodium)) is a deuterium labeled Zidovudine O-β-D-glucuronide (sodium) (HY-137522). Zidovudine O-β-D-glucuronide (3'-Azido-3'-deoxythymidine β- D-glucuronide) sodium is the major metabolite of Zidovudine. Zidovudine is a nucleoside reverse transcriptase inhibitor (NRTI), widely used to treat HIV infection ^{[1][2][3]} .		
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]. Bélanger AS, et, al. Glucuronidation of the antiretroviral drug efavirenz by UGT2B7 and an in vitro investigation of drug-drug interaction with zidovudine. Drug Metab Dispos. 2009 Sep;37(9):1793-6.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-246.

[3]. Fayz S, et, al. Zidovudine azido-reductase in human liver microsomes: activation by ethacrynic acid, dipyridamole, and indomethacin and inhibition by human immunodeficiency virus protease inhibitors. Antimicrob Agents Chemother. 1998 Jul;42(7):1654-8.

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

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