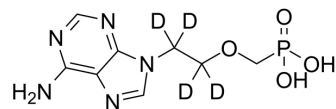


Adefovir-d4

Cat. No.:	HY-B1826S2
CAS No.:	1190021-70-5
Molecular Formula:	C ₈ H ₈ D ₄ N ₅ O ₄ P
Molecular Weight:	277.21
Target:	HBV; Reverse Transcriptase
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Adefovir-d4 (GS-0393-d4) is the deuterium labeled Adefovir. Adefovir (GS-0393) is an adenosine monophosphate analog antiviral agent that after intracellular conversion to Adefovir diphosphate inhibits HBV DNA polymerase. Adefovir has an IC ₅₀ of 0.7 μM against HBV in the HepG2.2.15 cell line. Adefovir has good antiviral activity against several viruses, including HBV and herpesviruses ^{[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

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- [2]. X.-X.Zhou, et al. 7.11 - Deoxyribonucleic Acid Viruses: Antivirals for Herpesviruses and Hepatitis B Virus. *Comprehensive Medicinal Chemistry II. Volume 7, 2007, Pages 295-327.*
- [3]. Marcellin P, et al. Adefovir dipivoxil for the treatment of hepatitis B e antigen-positive chronic hepatitis B. *N Engl J Med.* 2003 Feb 27;348(9):808-16.
- [4]. Leah A.Burke, et al. 155 - Drugs to Treat Viral Hepatitis. *Infectious Diseases. Volume 2, 2017, Pages 1327-1332.*

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

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