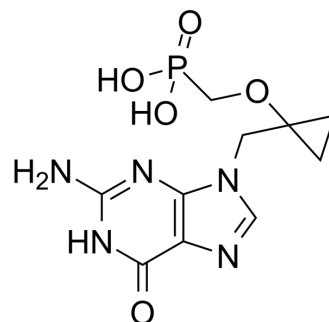


LB80317

Cat. No.:	HY-106235
CAS No.:	441785-24-6
Molecular Formula:	C ₁₀ H ₁₄ N ₅ O ₅ P
Molecular Weight:	315.22
Target:	HBV; DNA/RNA Synthesis
Pathway:	Anti-infection; Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	LB80317 is an active metabolite of LB80380 and suppresses the DNA synthesis of HBV with an EC ₅₀ of 0.5 μM. LB80317 has antiviral effect and has the potential for chronic hepatitis B treatment ^{[1][2]} .
IC₅₀ & Target	EC ₅₀ : 0.5 μM (DNA synthesis of HBV) ^[2]
In Vitro	After phosphorylation to di- and triphosphate forms, LB80317 is incorporated into the viral DNA inside the nucleocapsid, which inhibits further DNA synthesis. In in vitro studies using cell line models, the drug concentrations causing 50% reduction in HBV DNA produced (EC ₅₀) is 0.5 μM for LB80317 ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Forty percent of the amount of LB80331/LB80317 in the mouse liver is detected as the phosphorylated form. LB80380 is rapidly absorbed and converted to LB80331. LB80317 has a long half-life at steady-state (T _{1/2} =8.3-9.9 hours) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Man-Fung Yuen, et al. Pharmacokinetics of LB80331 and LB80317 Following Oral Administration of LB80380, a New Antiviral Agent for Chronic Hepatitis B (CHB), in Healthy Adult Subjects, CHB Patients, and Mice. *Antimicrob Agents Chemother.* 2009 May;53(5):1779-85.

[2]. Lung-Yi Mak, et al. Pharmacokinetic Evaluation of Besifovir for the Treatment of HBV Infection. *Expert Opin Drug Metab Toxicol.* 2018 Jan;14(1):101-106.

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

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