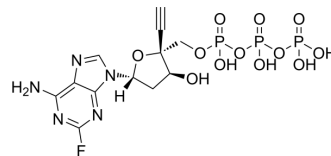


EFdA-TP

Cat. No.:	HY-138561
CAS No.:	950913-56-1
Molecular Formula:	C ₁₂ H ₁₅ FN ₅ O ₁₂ P ₃
Molecular Weight:	533.19
Target:	Reverse Transcriptase; DNA/RNA Synthesis; HIV
Pathway:	Anti-infection; Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	EFdA-TP is a potent nucleoside reverse transcriptase (RT) inhibitor. EFdA-TP inhibits RT-catalyzed DNA synthesis as an effective immediate or delayed chain terminator (ICT or DCT). EFdA-TP inhibits HIV-1 RT with multiple mechanisms ^[1] .
IC₅₀ & Target	HIV-1
In Vitro	EFdA-TP (0.05-10 μM; for 15 min) inhibits RT-catalyzed DNA synthesis as an ICT or DCT ^[1] . EFdA-TP can block RT as a translocation-defective RT inhibitor that dramatically slows DNA synthesis, acting as a de facto immediate chain terminator. EFdA-TP can function as a delayed chain terminator, allowing incorporation of an additional dNTP before blocking DNA synthesis ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Eleftherios Michailidis, et al. 4'-Ethynyl-2'-fluoro-2'-deoxyadenosine (EFdA) inhibits HIV-1 reverse transcriptase with multiple mechanisms. *J Biol Chem.* 2014 Aug 29;289(35):24533-48.
- [2]. Martin Markowitz, et al. 4'-Ethynyl-2'-fluoro-2'-deoxyadenosine, MK-8591: a novel HIV-1 reverse transcriptase translocation inhibitor. *Curr Opin HIV AIDS.* 2018 Jul;13(4):294-299.

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

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