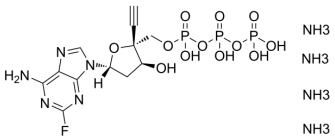
EFdA-TP tetraammonium

Cat. No.:	HY-138561A
Molecular Formula:	$C_{12}H_{27}FN_9O_{12}P_3$
Molecular Weight:	601.32
Target:	Reverse Transcriptase; DNA/RNA Synthesis; HIV
Pathway:	Anti-infection; Cell Cycle/DNA Damage
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



BIOLOGICAL ACTIVITY

Description	EFdA-TP tetraammonium is a potent nucleoside reverse transcriptase (RT) inhibitor. EFdA-TP tetraammonium inhibits RT-catalyzed DNA synthesis as an effective immediate or delayed chain terminator (ICT or DCT). EFdA-TP tetraammonium inhibits HIV-1 RT with multiple mechanisms[1]. EFdA-TP (tetraammonium) is a click chemistry reagent, itcontains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.
IC_{50} & Target	HIV-1
In Vitro	EFdA-TP tetraammonium (0.05-10 μM; for 15 min) inhibits RT-catalyzed DNA synthesis as an ICT or DCT[1]. EFdA-TP tetraammonium can block RT as a translocation-defective RT inhibitor that dramatically slows DNA synthesis, acting as a de facto immediate chain terminator. EFdA-TP tetraammonium 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]. 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.

[2]. 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.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA