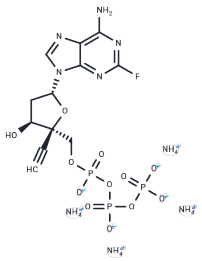
Data Sheet (Cat.No.T35649)

TargetMol

EFdA-TP tetraammonium

Chemical Properties



CAS No. :

Formula: C12H27N9O12P3

Molecular Weight: 601.31

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	EFdA-TP tetraammonium is an influential nucleoside reverse transcriptase (RT) inhibitor that effectively prevents RT-mediated DNA synthesis by acting as an immediate or delayed chain terminator (ICT or DCT). Additionally, EFdA-TP tetraammonium exhibits multiple mechanisms of inhibiting HIV-1 RT[1].
Targets(IC50)	Others,HIV Protease,Reverse Transcriptase,DNA/RNA Synthesis
In vitro	EFdA-TP tetraammonium, at concentrations ranging from 0.05 to 10 μM and applied for 15 minutes, serves as an effective inhibitor of reverse transcriptase (RT)-catalyzed DNA synthesis, functioning through immediate or delayed chain termination mechanisms[1]. It acts as a translocation-defective RT inhibitor, significantly reducing the pace of DNA synthesis and essentially serving as an immediate chain terminator. Additionally, EFdA-TP tetraammonium has the capability to operate as a delayed chain terminator, permitting the incorporation of one more dNTP prior to halting DNA synthesis[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.663 mL	8.3152 mL	16.6304 mL
5 mM	0.3326 mL	1.663 mL	3.3261 mL
10 mM	0.1663 mL	0.8315 mL	1.663 mL
50 mM	0.0333 mL	0.1663 mL	0.3326 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.
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:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481