

## **Product** Data Sheet

# Tenofovir diphosphate triethylamine

 Cat. No.:
 HY-136548A

 CAS No.:
 2122333-63-3

 Molecular Formula:
  $C_{15}H_{31}N_6O_{10}P_3$ 

Molecular Weight: 548.36

Target: Reverse Transcriptase

Pathway: Anti-infection

Storage: -20°C, protect from light, stored under nitrogen

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

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H <sub>2</sub> N	N=J	i	ОН	ОН	OH OH

### **BIOLOGICAL ACTIVITY**

**Description**Tenofovir diphosphate triethylamine (TFV-DP triethylamine) is a competitive DNA polymerases inhibitor (with respect to dATP) and a substrate of HIV type 1 (HIV-1) reverse transcriptase (RT)<sup>[1]</sup>.

In Vitro Tenofovir diphosphate acts as an inhibitor of DNA pol. Tenofovir-diphosphate is a weak inhibitor of DNA polymerases (pol)

 $\alpha$ ,  $\delta$ , and  $\epsilon$ , with values for the  $K_i$  for PMPApp (PMPApp $K_i$ ) relative to the  $K_m$  for dATP (dATP $K_m$ ) of 10.2, 10.2, and 15.6,

respectively<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **CUSTOMER VALIDATION**

• Hepatol Commun. 25 August 2021.

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#### **REFERENCES**

[1]. Gabriel Birkus, et al. Tenofovir Diphosphate Is a Poor Substrate and a Weak Inhibitor of Rat DNA Polymerases Alpha, Delta, and epsilon. Antimicrob Agents Chemother. 2002 May;46(5):1610-3.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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