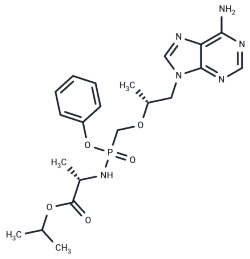
# Data Sheet (Cat.No.T2409)

TargetMol
YOUR TARGET MOLECULES

## Tenofovir alafenamide

### Chemical Properties



CAS No. : 379270-37-8

Formula: C21H29N6O5P

Molecular Weight: 476.47

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

### Biological Description

| | |
|---|---|
| Description | Tenofovir alafenamide (GS-7340) is a nucleotide reverse transcriptase inhibitor (NRTI) and a novel ester prodrug of the antiretroviral tenofovir. |
| Targets(IC50) | HIV Protease,Reverse Transcriptase |
| In vitro | GS-7340 has a potent anti-HIV activity with IC50 of 0.005 μM. [1] GS 7340 has a half-life of 90 min in human plasma and a half-life of 28.3 min in an MT-2 cell extract at 37°C. [2] the hepatic uptake of GS-7340 isfacilitated by OATP1B1 and OATP1B3, respectively. GS-7340 inhibits HBV reverse transcriptase after being converted to the pharmacologically active form, TFV-DP. [3] |
| In vivo | In male beagle dogs, GS 7340 (10 mg/kg, p.o.) results in an enhanced distribution to lymphatic tissue. [2] |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 55 mg/mL (115.43 mM),<br/>H2O: < 1 mg/mL (insoluble or slightly soluble),<br/>Ethanol: 88 mg/mL (184.7 mM),<br/>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.0988 mL | 10.4938 mL | 20.9877 mL |
| 5 mM | 0.4198 mL | 2.0988 mL | 4.1975 mL |
| 10 mM | 0.2099 mL | 1.0494 mL | 2.0988 mL |
| 50 mM | 0.042 mL | 0.2099 mL | 0.4198 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.

Reference

Fical L, Khalikova M, Kočová Vlčková H, et al. Determination of Antiviral Drugs and Their Metabolites Using Micro-Solid Phase Extraction and UHPLC-MS/MS in Reversed-Phase and Hydrophilic Interaction Chromatography Modes.



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