



Tenofovir alafenamide

Catalog No: tcsc3366

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 379270-37-8
Formula: $ {\rm C_{21}^{\rm H}}_{29}^{\rm N}_{6}^{\rm O}_{5}^{\rm P} $
Pathway: Anti-infection;Anti-infection
Target: Reverse Transcriptase;HIV
Purity / Grade: >98%
Solubility: DMSO : \geq 31 mg/mL (65.06 mM); H2O : 6.67 mg/mL (14.00 mM; Need ultrasonic)
Alternative Names: GS-7340
Observed Molecular Weight: 476.47



Product Description

Tenofovir alafenamide (GS-7340) is an investigational oral prodrug of Tenofovir. Tenofovir is a **HIV-1** nucleotide reverse transcriptase inhibitor.

IC50 & Target: HIV-1, NRTIs^[1]

In Vitro: Tenofovir alafenamide antiviral activities are similar across all cell types, ranging from 5 to 7 nM, while the CC_{50} varies from 4.7 to 42 μ M for MT-4 and MT-2 cells, respectively. The antiviral activity of TAF is evaluated against a panel of HIV-1 and HIV-2 isolates, including HIV-1 group M subtypes A to G, as well as group N and O isolates. Overall, for the 29 primary HIV-1 isolates tested in PBMCs, TAF EC_{50} s range from 0.1 to 12 nM, with a mean EC_{50} of 3.5 nM compared to a mean EC_{50} of 11.8 nM for AZT, which is used as an internal control. For the HIV-2 isolates, the mean EC_{50} s are 1.8 nM for TAF and 6.4 nM for AZT^[2].

In Vivo: Tenofovir alafenamide hemifumarate is an amidate prodrug of Tenofovir with good oral bioavailability and increases plasma stability compared to Tenofovir disoproxil fumarate (TDF)^[1].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!