



## **Tenofovir alafenamide fumarate**

**Catalog No: tcsc3367** 

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 379270-38-9
Formula: $ C_{25}^{H}{}_{33}^{N}{}_{6}^{O}{}_{9}^{P} $
Pathway: Anti-infection;Anti-infection
Target: Reverse Transcriptase;HIV
Purity / Grade: >98%
<b>Solubility:</b> H2O : ≥ 25 mg/mL (42.19 mM); DMSO : ≥ 36 mg/mL (60.76 mM)
Alternative Names: GS-7340 (fumarate)
Observed Molecular Weight: 592.54



## **Product Description**

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

IC50 & Target: HIV-1, NRTIs<sup>[1]</sup>

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  $\mu$ 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<sup>[2]</sup>.

*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)<sup>[1]</sup>.

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