

# PRODUCT INFORMATION



**GS-7340**

Item No. 26214

**CAS Registry No.:** 379270-37-8

**Formal Name:** N-[(S)-[[(1R)-2-(6-amino-9H-purin-9-yl)-1-methylethoxy)methyl]phenoxyphosphiny]-L-alanine, 1-methylethyl ester

**Synonyms:** TAF, Tenofovir Alafenamide

**MF:** C<sub>21</sub>H<sub>29</sub>N<sub>6</sub>O<sub>5</sub>P

**FW:** 476.5

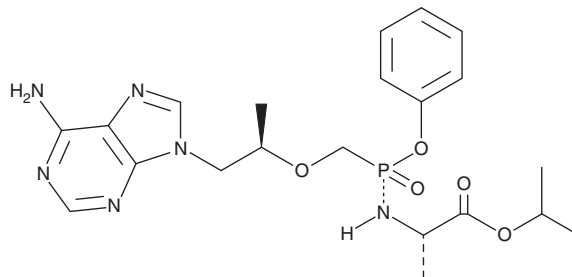
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 262, 320 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

GS-7340 is supplied as a crystalline solid. A stock solution may be made by dissolving the GS-7340 in the solvent of choice, which should be purged with an inert gas. GS-7340 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of GS-7340 in these solvents is approximately 15, 20, and 25 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of GS-7340 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of GS-7340 in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

GS-7340 is a prodrug form of the antiviral adenosine analog tenofovir (Item No. 13874).<sup>1</sup> It reduces HIV-1 viral replication in MT-2 cells with an EC<sub>50</sub> value of 5 nM.

## Reference

1. Lee, W.A., He, G.X., Eisenberg, E., *et al.* Selective intracellular activation of a novel prodrug of the human immunodeficiency virus reverse transcriptase inhibitor tenofovir leads to preferential distribution and accumulation in lymphatic tissue. *Antimicrob. Agents Chemother.* **49**(5), 1898-1906 (2005).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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