



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Tenofovir
Catalog Number:	10199
Lot Number:	040899
Release Category:	A
Provided:	20 mg
Chemical Name:	Phosphonic acid [[[1R)-2-(6-amino-9H-purin-9-yl)-1-methylethoxy]methyl]-monohydrate
Empirical Formula:	$C_9H_{14}N_5O_4P \cdot H_2O$
Molecular Weight:	305.2 for material containing 1 mol H ₂ O
CAS Num:	147127-20-6 (anhydrous form)
Purity:	99% (by HPLC)
Solubility:	Water; moderately soluble in methanol and ethanol; insoluble in ethyl acetate, acetone or methylene chloride.
Mechanical Action:	Tenofovir is a cyclic nucleoside phosphonate analogue of adenosine monophosphate. Tenofovir is phosphorylated by cellular enzymes and inhibits the activity of HIV reverse transcriptase by competing with deoxyadenosine 5'-triphosphate. Incorporation of nucleotide analogue causes DNA chain termination.
Recommended Storage:	Room temperature. Once resuspended, working aliquots can be stored at $-20^{\circ}C$.

ALL RECIPIENTS OF THIS MATERIAL MUST COMPLY WITH ALL APPLICABLE BIOLOGICAL, CHEMICAL, AND/OR RADIOCHEMICAL SAFETY STANDARDS INCLUDING SPECIAL PRACTICES, EQUIPMENT, FACILITIES, AND REGULATIONS. NOT FOR USE IN HUMANS.

Contributor: Division of AIDS, NIAID.

NOTE: Acknowledgment for publications should read "The following reagent was obtained through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Tenofovir."

This compound is restricted for "research purposes only" and is limited to 40 mg per requester per year. Not available for release to commercial organizations outside of the USA.

Recipient agrees that the reagent (Tenofovir) use is permitted only as a standard for in vitro and/or studies in animals for inhibition of HIV replication.

Last Updated July 24, 2018

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