

NIH AIDS Reagent Program

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DATA SHEET

Reagent: Lamivudine (3TC)

Catalog Number: 8146

Lot Number: NB11-29-3

Release Category:

Provided: 20 mg

Chemical Name: (2R,cis)-4-amino-1-(2-hydroxymethyl-1,3-oxathiolan-5yl)- (1H)-pyrimidin-2-one. Also

referred to as (-)2',3'-dideoxy, 3'-thiacytidine

Empirical C8H11N3O3S Formula:

Molecular Weight:

229.26

CAS Num: 134678-17-4

Purity: 100% (HPLC)

Solubility: Solubility in water is about 70 mg/ml, soluble in DMSO, slightly soluble in ethanol,

insoluble in ethyl acetate.

Mechanical Action:

Lamivudine is a nucleoside analogue. Intracellularly, lamivudine is phosphorylated to the

active 5'-triphosphate metabolite, lamivudine triphosphate. Lamivudine triphosphate inhibits the activity of HIV-1 reverse transcriptase by DNA chain termination after

incorporation of the nucleoside analogue into viral DNA.

Recommended

Storage:

Room temperature. Once resuspended, working aliquots can be stored at -20° 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.

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NOTE: Acknowledgment for publications should read "The following reagent was obtained

through the NIH AIDS Reagent Program, Division of AIDS, NIAID, NIH: Lamivudine from

NIAID, DAIDS (cat# 8146)."

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 (Lamivudine (3TC)) use is permitted only as a standard for in vitro and/or studies in animals for inhibition of HIV replication.

Last Updated August 27, 2019

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