



## NIH AIDS Reagent Program

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### DATA SHEET

<b>Reagent:</b>	Lamivudine (3TC)
<b>Catalog Number:</b>	8146
<b>Lot Number:</b>	030512
<b>Release Category:</b>	A
<b>Provided:</b>	20 mg
<b>Chemical Name:</b>	(2R, <i>cis</i> )-4-amino-1-(2-hydroxymethyl-1,3-oxathiolan-5yl)- (1H)-pyrimidin-2-one. Also referred to as (-)2',3'-dideoxy, 3'-thiacytidine
<b>Empirical Formula:</b>	C <sub>8</sub> H <sub>11</sub> N <sub>3</sub> O <sub>3</sub> S
<b>Molecular Weight:</b>	229.26
<b>CAS Num:</b>	134678-17-4
<b>Purity:</b>	100% (HPLC)
<b>Solubility:</b>	Solubility in water is about 70 mg/ml, soluble in DMSO, slightly soluble in ethanol, insoluble in ethyl acetate.
<b>Mechanical Action:</b>	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.
<b>Recommended Storage:</b>	Room temperature. Once resuspended, working aliquots can be stored at -20°C.

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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:** NIAID, DAIDS

**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** July 19, 2018

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