

**Centre for AIDS Reagents**  
**Data Sheet**

<b>Reagent:</b>	Lamivudine (3TC)
<b>Catalogue:</b>	100396
<b>Lot Number:</b>	13 NB11-29-3
<b>Provided:</b>	20 mg
<b>Chemical Name:</b>	(2R,cis)-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 re- suspended, working aliquots can be stored at -20°C.
<b>Contributor:</b>	Division of AIDS, NIAID.
<b>NOTE:</b>	<p>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.</p> <p>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.</p>
<b>Acknowledgements:</b>	Publications should acknowledge the contributor and the Centre for AIDS Reagents. Acknowledgments should read: "The <i>Name of Reagent (Repository Number)</i> was obtained from the Centre for AIDS Reagents, NIBSC, UK, supported by EURIPRED (EC FP7 INFRASTRUCTURES-2012 - INFRA-2012-1.1.5.: Grant Number 31266). <a href="http://www.euripred.eu/">www.euripred.eu/</a>