



NIH AIDS Reagent Program

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DATA SHEET

Reagent:	Abacavir
Catalog Number:	4680
Lot Number:	01991
Release Category:	A
Provided:	20 mg
Chemical Name:	(1 <i>S</i> , <i>cis</i>)-4-[2 amino-6-(cyclopropylamino)-9H-purin-9-yl]- 2-cyclopentene-1-methanol
Empirical Formula:	C ₁₄ H ₁₈ N ₆ O
Molecular Weight:	286.33
CAS Num:	136470-78-5
Purity:	95.8%
Solubility:	Soluble in alcohol, DMSO; insoluble in water, ether.
Mechanical Action:	Abacavir is a carbocyclic nucleoside analogue. Intracellularly, abacavir is converted by cellular enzymes to carbovir triphosphate, an analogue of deoxyguanosine-5'-triphosphate. Carbovir triphosphate inhibits the activity of HIV-1 reverse transcriptase both by competing with natural substrate dGTP and by its incorporation into viral DNA. The lack of a 3'-OH group in the incorporated nucleoside analogue prevents the formation of the 5' to 3' phosphodiester linkage essential for DNA chain elongation.

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.

Recommended Storage: Room temperature. Once resuspended, working aliquots can be stored at -20°C .

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: Abacavir from NIAID, DAIDS (cat# 4680)."

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 (Abacavir) 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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