**NIH AIDS Reagent Program**
20301 Century Boulevard
Building 6, Suite 200
Germantown, MD 20874
USA

Phone: 240 686 4740
Fax: 301 515 4015
aidsreagent.org

# DATA SHEET

| | |
|---|---|
| **Reagent:** | Abacavir |
| **Catalog Number:** | 4680 |
| **Lot Number:** | ND21-134-4 |
| **Release Category:** | A |
| **Provided:** | 20 mg |
| **Chemical Name:** | (1S,*cis*)-4-[2 amino-6-(cyclopropylamino)-9H-purin-9-yl]- 2-cyclopentene-1-methanol |
| **Empirical Formula:** | $C_{14}H_{18}N_6O$ |
| **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. |

| | |
|---|---|
| **Special Characteristics:** | Click here for the SDS |
| **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)."<br><br>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** | November 25, 2019 |