

Zidovudine (AZT)

Catalog No. HRP-3485

This reagent is the property of the U.S. Government.

For research use only. Not for use in humans.

Contributor:

NIH HIV Reagent Program

Manufacturer:

TCI America, Inc.

Product Description:

Zidovudine (formerly known as Azidothymidine, AZT) is a nucleoside analog of the naturally occurring nucleoside, thymidine. Zidovudine is converted to zidovudine 5'-triphosphate by cellular enzymes. Zidovudine 5'-triphosphate inhibits the activity of the HIV-1 reverse transcriptase by competing with the utilization of natural substrate, deoxythymidine 5'-triphosphate, and by its incorporation into viral DNA. The lack of 3'-OH group in the incorporated nucleoside analog prevents the formation of the 5' to 3' phosphodiester linkage essential for DNA chain elongation. Zidovudine 5'-triphosphate is also a weak inhibitor of cellular DNA polymerase and mitochondrial polymerase.

Material Provided:

Each vial contains approximately 20.0 mg of Zidovudine.

<u>Note:</u> HRP-3485 is soluble in dimethylsulfoxide (DMSO). It is also soluble in water to about 20 mg/mL.

Packaging/Storage:

HRP-3485 was packaged in glass serum vials and is provided at room temperature. Once resuspended, working aliquots can be stored at -20° C. The vial should be centrifuged prior to opening.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH HIV Reagent Program, NIAID, NIH: Zidovudine, HRP-3485, contributed by the NIH HIV Reagent Program."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. <u>Biosafety in Microbiological and Biomedical Laboratories (BMBL)</u>. 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

NIH HIV Reagent Program

www.hivreagentprogram.org E-mail: contact@HIVReagentProgram.org Tel: 888-487-0727 | Fax: 703-365-2898 Use of this product is subject to the terms and conditions of the NIH HIV Reagent Program Material Transfer Agreement (MTA). The MTA is available on our Web site at www.hivreagentprogram.org.

While the NIH HIV Reagent Program uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC[®] nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC[®] nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC[®] and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC[®], their suppliers and contributors to the NIH HIV Reagent Program are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, noncommercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

ATCC[®] is a trademark of the American Type Culture Collection.

