Zidovudine (AZT)

Catalog No. HRP-3485
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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.

Note: 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

Disclaimers:
you are authorized to use this product for research use only. It is not intended for human use.