



Certificate of Analysis for HRP-3485

Zidovudine (AZT)

Catalog No. HRP-3485

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

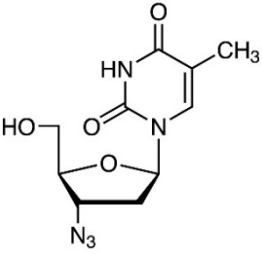
Product Description:

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.

Lot: 70053030

Manufacturing Date: 25MAY2022

All information below was provided on 20JUN2022 by TCI America, Inc. for the bulk material (TCI America, Inc. lot R6XTJ).

Chemical Name	3'-azido-3'-deoxythymidine
Structure	
Formula	C ₁₀ H ₁₃ N ₅ O ₄
Molecular Weight	267.25
CAS Number	30516-87-1
Content per Vial	20.0 mg ± 0.3 mg
Appearance	Very pale yellow powder
Purity (Neutralization titration)	99.2%
Melting Point	123.0°C
Specific Rotation [α] _{20/D}	47.6 degrees

/Ken Crawford/
Ken Crawford
Lead Technical Writer, ATCC Federal Solutions

10 MAY 2023

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