

Centre for AIDS Reagents

Data Sheet

REPOSITORY REFERENCE:	ARP952
NAME:	Zidovudine (AZT)
DESCRIPTION:	Zidovudine is a nucleoside analogue 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 utilization of natural substrate, deoxythymidine 5'-triphosphate and by its incorporation into viral DNA. The lack of 3'-OH group in the incorporated nucleoside analogue 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.
CHEMICAL NAME:	3'-azido-3'-deoxythymidine
EMPIRICAL FORMULA:	C ₁₀ H ₁₃ N ₅ O ₄
MOLECULAR WEIGHT:	267
PURITY:	> 90%
SOLUBILITY:	DMSO; also soluble in water to about 20 mg/ml.
PROVIDED:	20 mg
ACKNOWLEDGEMENTS:	Publications should acknowledge the donor of the reagent and the Centre for AIDS Reagents. Suggested wording can be found on our website in the "Acknowledgement" section at:-

www.nibsc.ac.uk/spotlight/centre_for_aids_reagents.aspx

Please also ensure that you send us a copy of any papers resulting from work using reagents acquired through CFAR, this can be by e-mail or printed copy.