



LKT Laboratories, Inc.

3'-Azido-3'-deoxythymidine

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Product Information

Product ID A3212

CAS No. 30516-87-1

Chemical Name 1-[4-azido-5-(hydroxymethyl)oxolan-2-yl]-5-methyl-pyrimidine-2,4-dione

Synonym AZT, Azidothymidine, Zidovudine, ZDV, ZVD

Formula C₁₀H₁₃N₅O₄

Formula Wt. 267.24

Melting Point 118-126°C

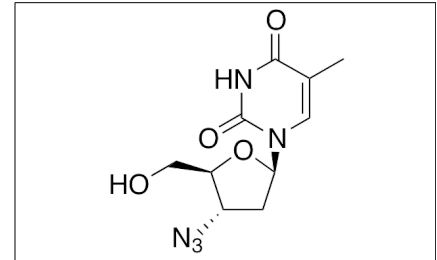
Purity ≥98%

Solubility Soluble in water
(50mg/mL).

Store Temp 4°C

Ship Temp Ambient

Description AZT is a thymidine nucleoside analog that inhibits reverse transcriptase and is clinically used to treat HIV/AIDS. AZT inhibits viral DNA synthesis, preventing viral replication; at high doses, it may inhibit DNA polymerase. Use of AZT is often limited by hepatotoxicity and steatosis.



Bulk quantities available upon request

Product ID	Size
A3212	25 mg
A3212	100 mg
A3212	250 mg
A3212	1 g

References Banerjee A, Abdelmegeed MA, Jang S, et al. Zidovudine (AZT) and hepatic lipid accumulation: implication of inflammation, oxidative and endoplasmic reticulum stress mediators. *PLoS One*. 2013 Oct 11;8(10):e76850. PMID: 24146933.

Parker WB, White EL, Shaddix SC, et al. Mechanism of inhibition of human immunodeficiency virus type 1 reverse transcriptase and human DNA polymerases alpha, beta, and gamma by the 5'-triphosphates of carbovir, 3'-azido-3'-deoxythymidine, 2',3'-dideoxyguanosine and 3'-deoxythymidine. A novel RNA template for the evaluation of antiretroviral drugs. *J Biol Chem*. 1991 Jan 25;266(3):1754-62. PMID: 1703154.

Furman PA, Fyfe JA, St Clair MH, et al. Phosphorylation of 3'-azido-3'-deoxythymidine and selective interaction of the 5'-triphosphate with human immunodeficiency virus reverse transcriptase. *Proc Natl Acad Sci U S A*. 1986 Nov;83(21):8333-7. PMID: 2430286.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.