

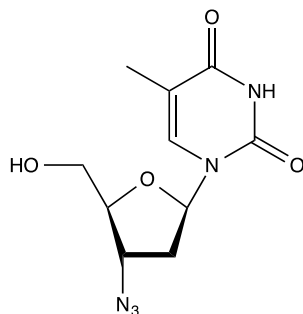
Catalog # 10-4615

Zidovudine

CAS# 30516-87-1

Azidothymidine; AZT

Lot # FBA4177



Zidovudine was the first clinically useful antiretroviral medicine.^{1,2} Newer antiretroviral medications have replaced it in the clinic. It selectively inhibits reverse transcriptase acting via the triphosphate metabolite. Zidovudine has recently been found to enhance CRISPR-mediated homology-directed repair (HDR) efficiency.³

- 1) Yarchoan *et al.* (1989), *Clinical Pharmacology of 3-Azido-2',3'-Dideoxythymidine (Zidovudine) and Related Dideoxynucleosides*; N.Engl.J.Med. **321** 726
- 2) D'Andrea *et al.* (2008), *AZT: an old drug with new perspectives*; Curr.Clin.Pharmacol. **3** 20
- 3) Yu *et al.* (2015), *Small molecules enhance CRISPR genome editing in pluripotent stem cells*; Cell Stem Cell. **16** 142

PHYSICAL DATA

Molecular Weight:	267.24
Molecular Formula:	C ₁₀ H ₁₃ N ₅ O ₄
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>40 mg/mL) and water (>25 mg/mL with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or water may be stored at -20°C for up to 3 months.

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