BioVision 07/16

PRODUCT: Azidothymidine

ALTERNATE NAME: 3'-Azido-3'-deoxythymidine; AZT; Zidovudine

CATALOG #: B1113-10, 50

AMOUNT: 10 mg, 50 mg

STRUCTURE:

HOON

MOLECULAR FORMULA: C₁₀H₁₃N₅O₄

MOLECULAR WEIGHT: 267.24

CAS NUMBER: 30516-87-1

APPEARANCE: White solid

HANDLING:

SOLUBILITY: DMSO (>25 mg/ml) or H_2O (>10 mg/ml)

PURITY: ≥98% by HPLC

STORAGE: Store at -20°C. Protect from air and light.

DESCRIPTION: Azidothymidine is a nucleoside reverse transcriptase inhibitor

that, following triphosphorylation by thymidine kinase, potently blocks replication of HIV (EC $_{50}$ = 3 nM) with low cytotoxicity (CC $_{50}$ > 5 μ M). Displays 100-fold selectivity for HIV reverse transcriptase over DNA polymerase α . Suppresses HIV-1 replication and enhances cell viability in HIV-1 infected T cells. Antiretroviral agent. Also decreases CRISPR-mediated homology directed repair (HDR) efficiency. AZT is a

nomology directed repair (HDR) efficiency. AZT is a nucleoside analog HIV reverse transcriptase inhibitor that

failed to inhibit SARS-CoV-2 replication in vitro.

the product! Avoid contact by all modes of exposure.

REFERENCES: Yu, C., et al. (2015). Cell Stem Cell **16**, 142-147.

RELATED PRODUCTS:

Acyclovir (Cat. No. 2200-50, 250) 5-Azacytidine (Cat. No. 1854-50, 250) 6-Azauridine (Cat. No. B1024-100, 500)

(-)-6-Azauridine 2', 3',5'-triacetate (Cat. No. B1025-50, 250)

Clemizole (Cat. No. 2481-10,50) GSK1349572 (Cat. No. 2288-5, 25) Ribavirin (Cat. No. 2199-10, 50) T-705 (Favipiravir) (Cat. No. 2778-5,25)

Valacyclovir hydrochloride (Cat. No. 2201-10, 50)

Do not take internally. Wear gloves and mask when handling **USAGE:**

FOR RESEARCH CH USE ONLY! Not to be used in humans