

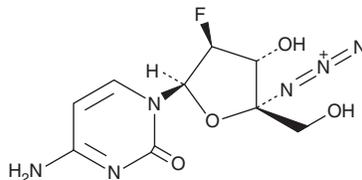
PRODUCT INFORMATION



Azvudine

Item No. 37669

CAS Registry No.: 1011529-10-4
Formal Name: 4-amino-1-(4-C-azido-2-deoxy-2-fluoro-β-D-arabinofuranosyl)-2(1H)-pyrimidinone
Synonyms: FNC, Ro0622
MF: C₉H₁₁FN₆O₄
FW: 286.2
Purity: ≥95%
UV/Vis.: λ_{max}: 242, 270 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Azvudine is supplied as a solid. A stock solution may be made by dissolving the azvudine in the solvent of choice, which should be purged with an inert gas. Azvudine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of azvudine in these solvents is approximately 30 mg/ml.

Description

Azvudine is a nucleoside reverse transcriptase inhibitor (NRTI).¹ It reduces viral infectivity in HIV-1-infected HEK293T cells (EC₅₀ = 0.063 nM) and reduces viral replication in 2209-23 cells stably transfected with hepatitis C virus (HCV) genotype 1b (EC₅₀ = 24 nM).^{1,2} *In vivo*, azvudine (0.7 mg/kg) reduces viral load and the number of lung ground-glass opacities observed *via* chest X-ray in a rhesus macaque model of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.³

References

1. Sun, L., Peng, Y., Yu, W., *et al.* Mechanistic insight into antiretroviral potency of 2'-deoxy-2'-β-fluoro-4'-azidocytidine (FNC) with a long-lasting effect on HIV-1 prevention. *J. Med. Chem.* **63(15)**, 8554-8566 (2020).
2. Smith, D.B., Kalayanov, G., Sund, C., *et al.* The design, synthesis, and antiviral activity of monofluoro and difluoro analogues of 4'-azidocytidine against hepatitis C virus replication: the discovery of 4'-azido-2'-deoxy-2'-fluorocytidine and 4'-azido-2'-dideoxy-2',2'-difluorocytidine. *J. Med. Chem.* **52(9)**, 2971-2978 (2009).
3. Zhang, J.-L., Li, Y.-H., Wang, L.-L., *et al.* Azvudine is a thymus-homing anti-SARS-CoV-2 drug effective in treating COVID-19 patients. *Signal Transduct. Target. Ther.* **6(1)**, 414 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/16/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM