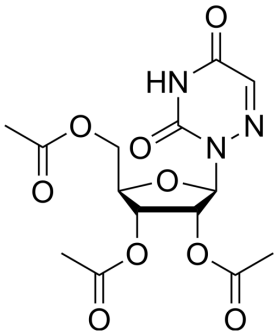
Azaribine

Cat. No.:	HY-B1537
CAS No.:	2169-64-4
Molecular Formula:	$C_{14}H_{17}N_3O_9$
Molecular Weight:	371.3
Target:	Influenza Virus; Virus Protease
Pathway:	Anti-infection
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



BIOLOGICAL ACTIVITY

Description

Azaribine (2',3',5'-Tri-O-acetyl-6-azauridine) is a potent orotidine monophosphate decarboxylase (OMPD) inhibitor. Azaribine is an antiviral inhibitor of several RNA viruses and inhibits viral genome replication and gene transcription. Azaribine shows broad-spectrum antiviral activity (EC_{50}=3.80 nM-1.73 μM against influenza A and B viruses; EC_{50}=1.62 μM against ZIKV Paraiba). Azaribine, a triacetate salt of Azauridine, has the potential for psoriasis research[1][2].

In Vitro

Azaribine (2',3',5'-Tri-O-acetyl-6-azauridine; 0-2 μM; 48 h) has cytotoxicity on MDCK cells (MTT: CC_{50}=19.66 μM)[1].
Azaribine shows a potent inhibitory effect on BIRFLU multiplication (MDCK cells: EC_{50}=0.29 μM; A549 cells: EC_{50}=0.55 μM)[1].
Azaribine shows against seasonal H1N1 and H3N2 IAVs and IBV during posttreatment in MDCK cells with EC_{50} of 0.60 μM, 0.77 μM, 0.80 μM[1].
Azaribine is against NC H1N1 during posttreatment in 16HBE cells (EC_{50}=1.58 μM)[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay[1]

Cell Line:	MDCK cells
Concentration:	0-2 μM
Incubation Time:	48 h
Result:	Had cytotoxicity on MDCK cells (CC_{50}=19.66 μM).

REFERENCES

[1]. Jun-Gyu Park, et al. Identification and Characterization of Novel Compounds with Broad-Spectrum Antiviral Activity against Influenza A and B Viruses. J Virol. 2020 Mar 17;94(7):e02149-19.

[2]. Desarey Morales Vasquez, et al. Identification of Inhibitors of ZIKV Replication. Viruses. 2020 Sep 18;12(9):1041.

Caution: Product has not been fully validated for medical applications. For research use only.

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