# Data Sheet (Cat.No.T38727)



## Azvudine hydrochloride

Chemical Propert	ties	
CAS No. :	1333126-31-0	№  \ ОН №
Formula:	C9H12ClFN6O4	N OH
Molecular Weight:	322.68 С нсі	
Appearance:	no data available	
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year	H <sub>2</sub> N

#### **Biological Description**

Description	Azvudine hydrochloride (RO-0622) is a potent nucleoside reverse transcriptase inhibitor (NRTI) that exhibits strong antiviral effects against HIV, HBV, and HCV. It demonstrates highly potent inhibition of HIV-1 (EC 50 ranging from 0.03 to 6.92 nM) and HIV-2 (EC 50 ranging from 0.018 to 0.025 nM). Additionally, Azvudine hydrochloride effectively inhibits NRTI-resistant viral strains.
In vitro	Azvudine (RO-0622) hydrochloride effectively inhibits both the wild-type HIV-1 IIIB and HIV-1 RF strains, with EC50 values ranging between 30 to 110 pM. It also demonstrates potent activity against various other HIV-1 strains, including KM018, TC-1, and WAN T69N, with respective EC50 values of 6.92, 0.34, and 0.45 nM. Importantly, Azvudine is active against strains resistant to nucleoside reverse transcriptase inhibitors (NRTIS), such as HIV-1 74V, protease inhibitors (PIs) including HIV-1 L10R/M46I/L63P/V82T/I84V and HIV-1 RF V82F/184V, and fusion inhibitors (FIS), specifically the strain pNL4-3 gp41 (36G) V38A/N42T. Against these resistant strains, Azvudine hydrochloride shows EC50 values of 0.11, 0.14, 0.37, and 0.36 nM, respectively[1].

### Preparing Stock Solutions

20	1mg	5mg	10mg
1 mM	3.099 mL	15.4952 mL	30.9905 mL
5 mM	0.6198 mL	3.099 mL	6.1981 mL
10 mM	0.3099 mL	1.5495 mL	3.099 mL
50 mM	0.062 mL	0.3099 mL	0.6198 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

Wang RR, et al. Azvudine, a novel nucleoside reverse transcriptase inhibitor showed good drug combination features and better inhibition on drug-resistant strains than lamivudine in vitro. PLoS One. 2014 Aug 21;9(8):

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