

PIKfyve-IN-1

Chemical Properties

CAS No. :

Formula: C₂₀H₂₁N₅

Molecular Weight: 331.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.

Biological Description

Description	PIKfyve-IN-1 is a cell-active and highly potent chemical probe that can be used for the PIKfyve research in virology. PIKfyve-IN-1 inhibits phosphatidylinositol-3phosphate 5-kinase (PIKfyve) (IC 50 = 6.9 nM)[1].
Targets(IC50)	Others,PI3K
In vitro	PIKfyve-IN-1 effectively inhibits the PIKfyve enzyme, as evidenced by its performance in both PIKfyve enzymatic and NanoBRET assays, where it achieves IC 50 values of 6.9 nM and 4.01 nM, respectively [1]. Furthermore, it disrupts coronaviruses' lifecycle by impairing viral replication and entry at concentrations ranging from 0 to 10 µM [1]. Specifically, PIKfyve-IN-1 suppresses MHV and SARS-CoV-2 replication with IC 50 values of 23.5 nM and 19.5 nM, respectively [1]. At a 5 µM concentration, the compound also affects lysosomal homeostasis [1]. In Calu-3 cells, a 1 µM concentration of PIKfyve-IN-1, following a 1-hour incubation, impeded the uptake of a lentivirus pseudotyped with the SARS-CoV-2 spike glycoprotein, as demonstrated through immunofluorescence [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0174 mL	15.0871 mL	30.1741 mL
5 mM	0.6035 mL	3.0174 mL	6.0348 mL
10 mM	0.3017 mL	1.5087 mL	3.0174 mL
50 mM	0.0603 mL	0.3017 mL	0.6035 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481