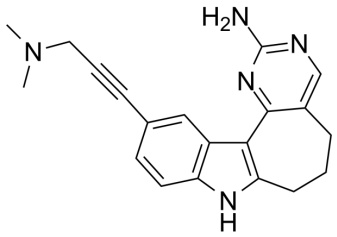
PIKfyve-IN-1

Cat. No.:	HY-151473
CAS No.:	2857982-26-2
Molecular Formula:	$C_{20}H_{21}N_5$
Molecular Weight:	331.41
Target:	PIKfyve
Pathway:	PI3K/Akt/mTOR
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	PIKfyve-IN-1 is a highly potent and cell-active chemical probe that inhibits phosphatidylinositol-3phosphate 5-kinase (PIKfyve) with IC_{50} value of 6.9 nM. PIKfyve-IN-1 can be used for the research of PIKfyve in virology[1].
IC_{50} & Target	IC50: 6.9 nM (PIKfyve)[1]
In Vitro	PIKfyve-IN-1 inhibits PIKfyve in PIKfyve enzymatic assay and PIKfyve NanoBRET assay with IC_{50} values of 6.9 nM and 4.01 nM, respectively[1]. PIKfyve-IN-1 (0-10 μM) disrupts multiple phases of the lifecycle of coronaviruses: viral replication and viral entry[1]. PIKfyve-IN-1 inhibits MHV replication and SARS-CoV-2 replication with IC_{50} values of 23.5 nM and 19.5 nM, respectively[1]. PIKfyve-IN-1 (5 μM) impacts lysosomal homeostasis[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Immunofluorescence[1]

Cell Line:	Calu-3 cells
Concentration:	1 μM
Incubation Time:	1 h
Result:	Inhibited the uptake of lentivirus pseudotyped with the SARS-CoV-2 spike glycoprotein.

REFERENCES

[1]. David H Drewry, et al. Identification and Utilization of a Chemical Probe to Interrogate the Roles of PIKfyve in the Lifecycle of β-Coronaviruses. J Med Chem

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

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