Data Sheet (Cat.No.T71648)

TargetMol

CK37

Chemical Properties

CAS No. : 1001478-90-5

Formula: C20H22N4OS

Molecular Weight: 366.48

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	CK37 regulates the biological activity of Choline Kinase-α. CK37 is a small-molecule inhibitor primarily utilized for phosphorylation and dephosphorylation research applications. CK37 is relevant for studies involving phospholipid metabolism, kinase-associated signaling pathways, and membrane biosynthesis regulation.
Targets(IC50)	AChR
In vitro	CK37 (100 μM, 24 h) decreases NS5A expression detected by Western blot analysis and impaires PI4P accumulation in HCV-infected cells. [1] CK37 (100 μM, 24 h) inhibits the colocalization of NS5B with HA-PI4KIIIα and the colocalization of these proteins on the ER[1]. CK37 (3 μM, 48 h) downregulates MYC expression in Jurkat cells using immunofluorescence assay[2].
In vivo	CK37 (4 mg/kg per day; once daily; 8 days) remarkably retards tumor growth, suppressed Ras-AKT/ERK signaling and increases lysophosphatidylcholine levels in a T-lymphoma xenograft murine model mice[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7287 mL	13.6433 mL	27.2866 mL
5 mM	0.5457 mL	2.7287 mL	5.4573 mL
10 mM	0.2729 mL	1.3643 mL	2.7287 mL
50 mM	0.0546 mL	0.2729 mL	0.5457 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.

Reference

Wong MT, et al. Hepatitis C Virus Subverts Human Choline Kinase-α To Bridge Phosphatidylinositol-4-Kinase IIIα (PI4KIIIα) and NS5A and Upregulates PI4KIIIα Activation, Thereby Promoting the Translocation of the Ternary Complex to the Endoplasmic Reticulum for Viral Replication. J Virol. 2017 Jul 27;91(16):e00355-17.
Xiong J, er al. Dysregulated choline metabolism in T-cell lymphoma: role of choline kinase-α and therapeutic targeting. Blood Cancer J. 2015 Mar 13;5(3):287.

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