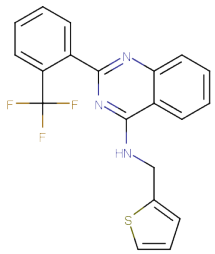
Data Sheet (Cat.No.T3556)

TargetMol
A DRUG SCREENING EXPERT

NIH-12848

Chemical Properties



CAS No. : 959551-10-1

Formula: C20H14F3N3S

Molecular Weight: 385.41

Appearance: no data available

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

Biological Description

Description	NIH-12848 is a putative inhibitor of phosphatidylinositol 5-phosphate 4-kinase γ (PI5P4Kγ) with an IC50 of 1 μM.
Targets(IC50)	PI3K
In vitro	NIH-12848 inhibits the translocation of Na+/ K+-ATPase to the plasma membrane that occurs when mpkCCD cells grow to confluence and also prevents reversibly their forming of 'domes' on the culture dish. NIH-12848 inhibits PI5P4Kγ with an IC50 of approximately 1 μM but does not inhibit the α and β PI5P4K isoforms at concentrations up to 100 μM. Both these NIH-12848-induced effects are mimicked by specific RNAi knockdown of PI5P4Kγ, but not that of PI5P4Ks α or β. NIH-12848 could be a potentially powerful tool for exploring the cell physiology of PI5P4Ks.

Solubility Information

Solubility	DMSO: 28 mg/mL, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5946 mL	12.9732 mL	25.9464 mL
5 mM	0.5189 mL	2.5946 mL	5.1893 mL
10 mM	0.2595 mL	1.2973 mL	2.5946 mL
50 mM	0.0519 mL	0.2595 mL	0.5189 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

Clarke, J., Giudici, M., Burke, J., Williams, R., Maloney, D., Marugan, J., & Irvine, R. (2015). The function of phosphatidylinositol 5-phosphate 4-kinase γ (PI5P4Kγ) explored using a specific inhibitor that targets the PI5P-