# Data Sheet (Cat.No.T12459)



# PI3K/mTOR Inhibitor-2

# **Chemical Properties**

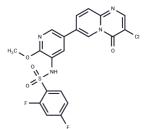
CAS No.: 1848242-58-9

Formula: C20H13ClF2N4O4S

Molecular Weight: 478.86

Appearance: no data available

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



# **Biological Description**

Description	PI3K/mTOR Inhibitor-2 is a potent pan inhibitor of PI3K and mTOR with IC50s of 3.4, 34, 16.1, and 4.7 nM for PI3K $\alpha$ , PI3K $\beta$ , PI3K $\delta$ , PI3K $\gamma$ , and mTOR, respectively. PI3K/mTOR Inhibitor-2 demonstrates antitumor activity.
Targets(IC50)	mTOR,PI3K
In vitro	PI3K/mTOR Inhibitor-2 exhibited high enzyme activity against PI3K and mTOR, potent suppression of Akt and p70s6k phosphorylation with IC50s of 11.6 and 89.2 nM in cell assays, and good pharmacokinetic profile[1].
In vivo	PI3K/mTOR Inhibitor-2 demonstrated in vivo efficacy in a PC-3M tumor xenograft model [1].

## **Solubility Information**

Solubility	DMSO: 55 mg/mL (114.86 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.0883 mL	10.4415 mL	20.8829 mL
5 mM	0.4177 mL	2.0883 mL	4.1766 mL
10 mM	0.2088 mL	1.0441 mL	2.0883 mL
50 mM	0.0418 mL	0.2088 mL	0.4177 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

Yu T, et al. Discovery of Pyridopyrimidinones as Potent and Orally Active Dual Inhibitors of PI3K/mTOR. ACS Med Chem Lett. 2018 Feb 27;9(3):256-261.

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