# Data Sheet (Cat.No.T5338)



# mTOR inhibitor-1

Chemical Propert	
CAS No. :	468747-17-3
Formula:	C16H15BrN2O3
Molecular Weight:	363.21 O
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year

## **Biological Description**

Description	C-4 is a potential ATP-competitive inhibitor of mTOR. C-4 could inhibit cell growth and proliferation.
Targets(IC50)	mTOR,Autophagy
In vitro	The addition of C-4 (mTOR inhibitor-1, 0~12.8 µg/ml) directly decreases the level of activated mTOR (p-mTORser2448) which is phosphorylated at Ser2448. The proliferation of A549 cells is strongly inhibited by C-4, and the inhibitory effect is time- and dose314 dependent. The IC50 of C-4 at 24 h is calculated as 3.176 µM.

Solubility Information			
Solubility	DMSO: 70 mg/mL (192.72 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)		

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7532 mL	13.7661 mL	27.5323 mL
5 mM	0.5506 mL	2.7532 mL	5.5065 mL
10 mM	0.2753 mL	1.3766 mL	2.7532 mL
50 mM	0.0551 mL	0.2753 mL	0.5506 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

Liu J, et al. In Silico Discovery of a Small Molecule Suppressing Lung Carcinoma A549 Cells Proliferation and Inducing Autophagy via mTOR Pathway Inhibition. Mol Pharm. 2018 Nov 5;15(11):5427-5436.

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