# Data Sheet (Cat.No.T21992)



#### Vacuolin-1

## **Chemical Properties**

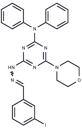
CAS No.: 351986-85-1

Formula: C26H24IN7O

Molecular Weight: 577.42

Appearance: no data available

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



## **Biological Description**

Description	Vacuolin-1 is a cell-permeable inhibitor of Ca2+ dependent fusion of lysosomes to the cell membrane. It acts by inhibiting release of lysosomal content.vacuolin-1 is a potent and selective PIKfyve inhibitor and inhibits late-stage autophagy by impairing lysosomal maturation	
Targets(IC50)	PI3K,Autophagy	
In vivo	vacuolin-1 potently and reversibly inhibited the fusion between autophagosomes and ysosomes in mammalian cells, thereby inducing the accumulation of autophagosomes[1].	

## **Solubility Information**

Solubility	DMSO: 5.77 mg/mL (10 mM),
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.7318 mL	8.6592 mL	17.3184 mL
5 mM	0.3464 mL	1.7318 mL	3.4637 mL
10 mM	0.1732 mL	0.8659 mL	1.7318 mL
50 mM	0.0346 mL	0.1732 mL	0.3464 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

Yan R, Zhang P, Shen S, et al. Carnosine regulation of intracellular pH homeostasis promotes lysosome-dependent tumor immunoevasion. Nature Immunology. 2024: 1-13.

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