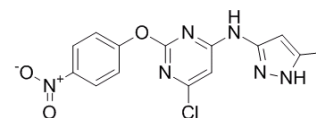


## Autophinib

Cat. No.:	HY-101920		
CAS No.:	1644443-47-9		
Molecular Formula:	C <sub>14</sub> H <sub>11</sub> ClN <sub>6</sub> O <sub>3</sub>		
Molecular Weight:	346.73		
Target:	Autophagy		
Pathway:	Autophagy		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 30 mg/mL (86.52 mM)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		2.8841 mL	14.4204 mL	28.8409 mL
	5 mM		0.5768 mL	2.8841 mL	5.7682 mL
	10 mM		0.2884 mL	1.4420 mL	2.8841 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**  
 Solubility: 0.5 mg/mL (1.44 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: **10% DMSO >> 90% corn oil**  
 Solubility: ≥ 0.5 mg/mL (1.44 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Autophinib is a potent **autophagy** inhibitor, which can inhibit autophagy induced by starvation or rapamycin by targeting the lipid kinase VPS34 with IC<sub>50</sub>s of 90, 40 and 19 nM, respectively.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 19 nM (VPS34), 40 nM (rapamycin-induced autophagy), 90 nM (starvation-induced autophagy)<sup>[1]</sup>

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## CUSTOMER VALIDATION

- Cell Death Dis. 2019 Jan 17;10(2):41.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Robke L, et al. Phenotypic Identification of a Novel Autophagy Inhibitor Chemotype Targeting Lipid Kinase VPS34. Angew Chem Int Ed Engl. 2017 Jul 3;56(28):8153-8157.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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