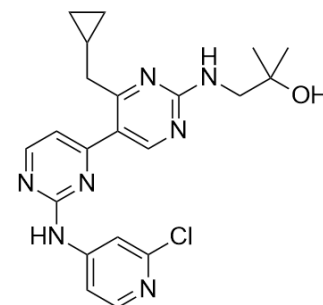


## Vps34-IN-1

Cat. No.:	HY-12795		
CAS No.:	1383716-33-3		
Molecular Formula:	C <sub>21</sub> H <sub>24</sub> ClN <sub>7</sub> O		
Molecular Weight:	425.91		
Target:	PI3K; Autophagy		
Pathway:	PI3K/Akt/mTOR; 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 : ≥ 31 mg/mL (72.79 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3479 mL	11.7396 mL	23.4791 mL
5 mM	0.4696 mL	2.3479 mL	4.6958 mL	
10 mM	0.2348 mL	1.1740 mL	2.3479 mL	

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (5.87 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (5.87 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (5.87 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Vps34-IN-1 is an inhibitor of Vps34 extracted from patent WO2012085815A1, compound example 16a, with an IC<sub>50</sub> of 4 nM. Vps34-IN-1 modulates autophagy<sup>[1][2]</sup>.

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

Vps34  
4 nM (IC<sub>50</sub>)

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## CUSTOMER VALIDATION

- J Exp Clin Cancer Res. 2018 Jun 25;37(1):122.
- Oncotarget. 2016 Aug 16;7(33):53515-53525.

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

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## REFERENCES

- [1]. Ivan Cornella Taracido, et al. Bi-heteroaryl compounds as vps34 inhibitors. WO2012085815A1.
- [2]. Limpert AS, et al. Autophagy in Cancer: Regulation by Small Molecules. Trends Pharmacol Sci. 2018 Dec;39(12):1021-1032
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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