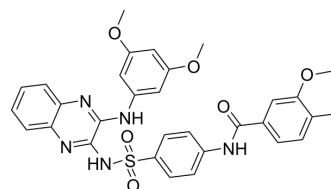


## PI3K-IN-1

<b>Cat. No.:</b>	HY-12068		
<b>CAS No.:</b>	1349796-36-6		
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>29</sub> N <sub>5</sub> O <sub>6</sub> S		
<b>Molecular Weight:</b>	599.66		
<b>Target:</b>	PI3K		
<b>Pathway:</b>	PI3K/Akt/mTOR		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 27.5 mg/mL (45.86 mM; Need ultrasonic and warming)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.6676 mL	8.3381 mL	16.6761 mL
	5 mM	0.3335 mL	1.6676 mL	3.3352 mL
	10 mM	0.1668 mL	0.8338 mL	1.6676 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 (4.17 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: 2.5 mg/mL (4.17 mM); Suspended solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

PI3K-IN-1 (XL-147 derivative 1) is a potent inhibitor of PI3K. PI3K-IN-1 (25 μM) blocks PI3K/Akt signaling pathways<sup>[1]</sup>.

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

PI3K

#### In Vitro

PI3K-IN-1 (25 μM) blocks PI3K/Akt signaling pathways. By using the PI3K inhibitor PI3K-IN-1, TGF-β1 induced transformation into myofibroblast is also inhibited, with relatively reduced expressions of α-SMA, Col-1 and Timp-1<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Cell Death Dis. 2021 Jul 9;12(7):691.
- Br J Pharmacol. 2022 Jan;179(1):159-178.
- Front Bioeng Biotechnol. 2020 May 8;8:392.
- Bioengineered. 2022 Mar;13(3):6866-6879.
- J Tissue Eng Regen Med. 2021 Sep 20.

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

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## REFERENCES

[1]. Mingyu Hao, et al. Exploring the Role of SRC in Extraocular Muscle Fibrosis of the Graves' Ophthalmopathy. Front Bioeng Biotechnol. 2020 May 8;8:392.

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

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