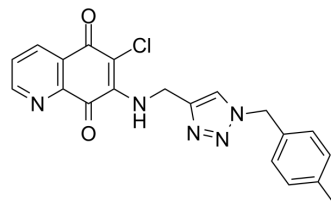


## M2N12

<b>Cat. No.:</b>	HY-128769		
<b>CAS No.:</b>	2376577-06-7		
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>16</sub> ClN <sub>5</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	393.83		
<b>Target:</b>	CDK		
<b>Pathway:</b>	Cell Cycle/DNA Damage		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 11.11 mg/mL (28.21 mM; ultrasonic and warming and heat to 67°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.5392 mL	12.6958 mL	25.3917 mL
		5 mM	0.5078 mL	2.5392 mL	5.0783 mL
10 mM		0.2539 mL	1.2696 mL	2.5392 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 1.11 mg/mL (2.82 mM); Suspended solution; Need ultrasonic				

### BIOLOGICAL ACTIVITY

<b>Description</b>	M2N12 is a potent and highly selective cell division cycle 25C protein phosphatase (Cdc25C) inhibitor with an IC <sub>50</sub> value of 0.09 μM. M2N12 also has promising activity against Cdc25A and Cdc25B with IC <sub>50</sub> values of 0.53 μM and 1.39 μM, respectively. M2N12 has anti-tumor activity and can be used for cancer research <sup>[1]</sup> .
<b>In Vitro</b>	M2N12 (0-20 μM; 72 hours) has cytotoxic activity against five tumor cell lines and a normal cell line including A-549, MDA-MB-231, KB, KB-VIN, MCF-7 and HBE (IC <sub>50</sub> =3.92 μM, 4.63 μM, 5.05 μM, 6.81 μM, 4.71 μM and 6.00 μM, respectively) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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[1]. Jing L, et al. Identification of highly potent and selective Cdc25 protein phosphatases inhibitors from miniaturization click-chemistry-based combinatorial libraries. Eur J Med Chem. 2019 Sep 14;183:111696.

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

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