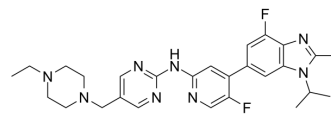


## CDK4/6-IN-2

<b>Cat. No.:</b>	HY-114339		
<b>CAS No.:</b>	1800506-48-2		
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>32</sub> F <sub>2</sub> N <sub>8</sub>		
<b>Molecular Weight:</b>	506.59		
<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	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 5.2 mg/mL (10.26 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	<b>Preparing Stock Solutions</b>		1 mg	5 mg	10 mg
		1 mM	1.9740 mL	9.8699 mL	19.7398 mL
5 mM		0.3948 mL	1.9740 mL	3.9480 mL	
	10 mM	0.1974 mL	0.9870 mL	1.9740 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 0.52 mg/mL (1.03 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.52 mg/mL (1.03 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 0.52 mg/mL (1.03 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	CDK4/6-IN-2 is a potent CDK4 and CDK6 inhibitor extracted from patent US20180000819A1, Compound 1, has IC <sub>50</sub> s of 2.7 and 16 nM for CDK4 and CDK6, respectively <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	CDK4 2.7 nM (IC <sub>50</sub> )	CDK6 16 nM (IC <sub>50</sub> )
<b>In Vitro</b>	CDK4/6-IN-2 inhibits H358, H441, PC3, MV-4-11, JeKo-1, SW780, and HGC-27 cells with IC <sub>50</sub> s of 290.9, 147.8, 260.5, 139, 36.98,	

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162.5, and 316.4 nM, respectively<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Frank Wu, et al. Kinase inhibitor and use thereof. US20180000819A1.

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

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