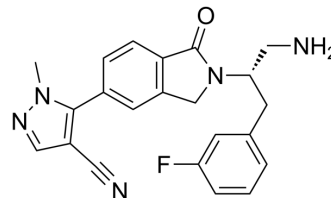


## AKT-IN-6

<b>Cat. No.:</b>	HY-19982		
<b>CAS No.:</b>	1430056-54-4		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>20</sub> FN <sub>5</sub> O		
<b>Molecular Weight:</b>	389.43		
<b>Target:</b>	Akt		
<b>Pathway:</b>	PI3K/Akt/mTOR		
<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 : 125 mg/mL (320.98 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		2.5679 mL	12.8393 mL	25.6786 mL
		5 mM		0.5136 mL	2.5679 mL	5.1357 mL
10 mM			0.2568 mL	1.2839 mL	2.5679 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: ≥ 2.08 mg/mL (5.34 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.34 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (5.34 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	AKT-IN-6 (Example 13) is a potent Akt inhibitor. AKT-IN-6 inhibits Akt1, Akt2 and Akt3 with IC <sub>50</sub> s < 500nM, respectively. (patent WO2013056015A1).		
<b>IC<sub>50</sub> &amp; Target</b>	Akt1	Akt2	Akt3
<b>In Vitro</b>	Akt is a central node in cell signaling downstream of growth factors, cytokines, and other cellular stimuli. Aberrant loss or gain of Akt activation underlies the pathophysiological properties of a variety of complex diseases, including type-2 diabetes		

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and cancer<sup>[2]</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]. Taisheng Huang; et al. Isoindolinone and pyrrolopyridinone derivatives as akt inhibitors. WO2013056015A1.

[2]. Manning BD, et al. AKT/PKB signaling: navigating downstream. Cell. 2007;129(7):1261-1274.

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

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