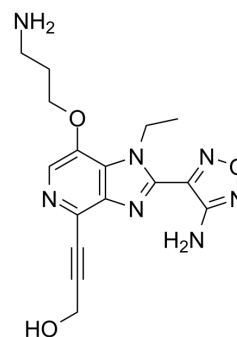


## AKT Kinase Inhibitor

<b>Cat. No.:</b>	HY-10249A		
<b>CAS No.:</b>	842148-40-7		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>19</sub> N <sub>7</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	357.37		
<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	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 20 mg/mL (55.96 mM); ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.7982 mL	13.9911 mL	27.9822 mL
		5 mM	0.5596 mL	2.7982 mL	5.5964 mL
10 mM		0.2798 mL	1.3991 mL	2.7982 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: ≥ 1.67 mg/mL (4.67 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	AKT Kinase Inhibitor is an Akt kinase inhibitor with anti-tumor activity <sup>[1]</sup> .
<b>In Vitro</b>	The effect of selective inhibition of Akt in proliferating cells expressing Trop-2 is studied. Akt inhibition, either by silencing or with specific drugs, induces a marked decrease in cell proliferation in cells expressing Trop-2, in a dose-dependent fashion <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Trop-2 expressing tumors subcutaneously injected in animal models show a striking reduction of growth following treatment with specific drugs that inhibit Akt activity. Therefore Akt has a central functional role in mediating the Trop-2-dependent growth stimulus <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 Stem Cell. 2023 Apr 6;30(4):450-459.e9.
- Small. 2023 Jan 12;e2207194.
- Cell Rep. 2023 May 23;42(6):112547.
- Cell Commun Signal. 2022 Mar 19;20(1):35.
- Phytother Res. 2022 Feb 17.

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

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## REFERENCES

[1]. Saverio Alberti, et al. Use of trop-2 as predictive marker of response to anti-tumor therapy based on inhibitors of cd9, akt and molecules of the tetraspanin signalling network. WO2013171777A2.

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

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