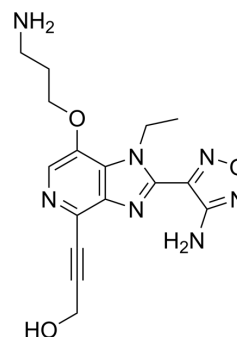


AKT Kinase Inhibitor

Cat. No.:	HY-10249A		
CAS No.:	842148-40-7		
Molecular Formula:	C ₁₆ H ₁₉ N ₇ O ₃		
Molecular Weight:	357.37		
Target:	Akt		
Pathway:	PI3K/Akt/mTOR		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 20 mg/mL (55.96 mM); ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	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.					
In Vivo	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

Description	AKT Kinase Inhibitor is an Akt kinase inhibitor with anti-tumor activity ^[1] .
In Vitro	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 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	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 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Stem Cell. 2023 Apr 6;30(4):450-459.e9.
- Small. 2023 Jan 12;e2207194.
- Pharmacol Res. 2024 May 18:107218.
- Int J Biol Sci. 2024 Apr 29;20(7):2748-2762.
- Cell Rep. 2023 May 23;42(6):112547.

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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.

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

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