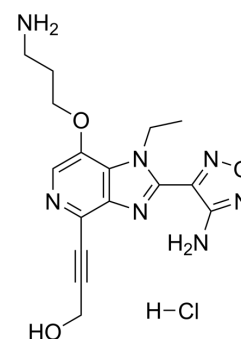


AKT Kinase Inhibitor hydrochloride

Cat. No.:	HY-10249D
Molecular Formula:	C ₁₆ H ₂₀ ClN ₇ O ₃
Molecular Weight:	393.83
Target:	Akt
Pathway:	PI3K/Akt/mTOR
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 20 mg/mL (50.78 mM; Need ultrasonic)
DMSO : 3.33 mg/mL (8.46 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	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.

BIOLOGICAL ACTIVITY

Description

AKT Kinase Inhibitor hydrochloride is an Akt kinase inhibitor with anti-tumor activity^[1]. AKT Kinase Inhibitor (hydrochloride) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.

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.
- 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

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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA