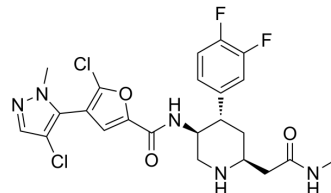


## AKT-IN-3

<b>Cat. No.:</b>	HY-126257		
<b>CAS No.:</b>	2374740-21-1		
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>23</sub> Cl <sub>2</sub> F <sub>2</sub> N <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	526.36		
<b>Target:</b>	Akt; Apoptosis		
<b>Pathway:</b>	PI3K/Akt/mTOR; Apoptosis		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (189.98 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		1.8998 mL	9.4992 mL	18.9984 mL
	5 mM		0.3800 mL	1.8998 mL	3.7997 mL
	10 mM		0.1900 mL	0.9499 mL	1.8998 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

AKT-IN-3 (compound E22) is a potent, orally active low hERG blocking Akt inhibitor, with 1.4 nM, 1.2 nM and 1.7 nM for Akt1, Akt2 and Akt3, respectively. AKT-IN-3 (compound E22) also exhibits good inhibitory activity against other AGC family kinases, such as PKA, PKC, ROCK1, RSK1, P70S6K, and SGK. AKT-IN-3 (compound E22) induces apoptosis and inhibits metastasis of cancer cells<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Akt1	Akt2	Akt3	PKA
1.4 nM (IC <sub>50</sub> )	1.2 nM (IC <sub>50</sub> )	1.7 nM (IC <sub>50</sub> )	0.3 nM (IC <sub>50</sub> )
P70S6K			
8.9 (IC <sub>50</sub> )			

### REFERENCES

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[1]. Dong X, et al. Discovery of 3,4,6-Trisubstituted Piperidine Derivatives as Orally Active, Low hERG Blocking Akt Inhibitors via Conformational Restriction and Structure-Based Design. J Med Chem. 2019 Aug 8;62(15):7264-7288.

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

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