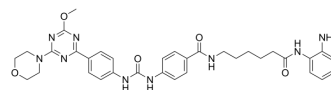


## PH14

Cat. No.:	HY-149669		
Molecular Formula:	C <sub>34</sub> H <sub>39</sub> N <sub>9</sub> O <sub>5</sub>		
Molecular Weight:	653.73		
Target:	PI3K; HDAC; Apoptosis		
Pathway:	PI3K/Akt/mTOR; Cell Cycle/DNA Damage; Epigenetics; Apoptosis		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 50 mg/mL (76.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.5297 mL	7.6484 mL	15.2968 mL
	5 mM	0.3059 mL	1.5297 mL	3.0594 mL
	10 mM	0.1530 mL	0.7648 mL	1.5297 mL

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

### BIOLOGICAL ACTIVITY

#### Description

PH14 is a dual PI3K/HDAC inhibitor with IC<sub>50</sub> values of 20.3 nM and 24.5 nM for PI3K $\alpha$  and HDAC3, respectively. PH14 has antiproliferative activity and also induces apoptosis in Jeko-1 cells. PH14 can be used in cancer research, such as lymphoma [1].

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

PI3K $\alpha$	HDAC3
20.3 nM (IC <sub>50</sub> )	24.5 nM (IC <sub>50</sub> )

### REFERENCES

[1]. Deng J, et al. Discovery of benzamide-based PI3K/HDAC dual inhibitors with marked pro-apoptosis activity in lymphoma cells. Eur J Med Chem. 2023 Nov 3;262:115915.

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

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