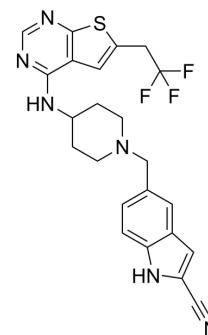


MI-136

Cat. No.:	HY-19319		
CAS No.:	1628316-74-4		
Molecular Formula:	C ₂₃ H ₂₁ F ₃ N ₆ S		
Molecular Weight:	470.51		
Target:	Androgen Receptor; Apoptosis; Epigenetic Reader Domain		
Pathway:	Vitamin D Related/Nuclear Receptor; Apoptosis; Epigenetics		
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 : 110 mg/mL (233.79 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.1254 mL	10.6268 mL	21.2535 mL
		5 mM		0.4251 mL	2.1254 mL	4.2507 mL
10 mM			0.2125 mL	1.0627 mL	2.1254 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.75 mg/mL (5.84 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.75 mg/mL (5.84 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.75 mg/mL (5.84 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	MI-136 is an inhibitor of the menin-MLL protein-protein interaction (PPI), with an IC ₅₀ of 31 nM and a K _d of 23.6 nM. MI-136 shows to block AR signaling and has the potential for the study in castration-resistant tumors ^{[1][2]} .
In Vitro	MI-136 (0-20) exhibits IC ₅₀ values of 5.59 μM, 7.15 μM, 5.37 μM and 19.76 μM in LNCaP, VCaP, 22rv1 and PNT2 cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay ^[2]

	Cell Line:	AR positive cell lines such as VCaP, LNCaP and 22RV1.
	Concentration:	0-20 μ M.
	Incubation Time:	24 h.
	Result:	Inhibited cell proliferation.
In Vivo	MI-136 exhibits $T_{1/2}$ of 3.1 h after po administration ^[1] .	
	MI-136 (40 mg/kg, ip) leads to a significant decrease in the growth of castration-resistant VCaP tumors ^[2] .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	VCaP xenografts ^[2] .
	Dosage:	40 mg/kg.
	Administration:	Intraperitoneal injection, 5 days a week.
	Result:	Led to a significant decrease in the growth of castration-resistant VCaP tumors compared to vehicle controls.

REFERENCES

[1]. Dmitry Borkin, et al. Property Focused Structure-Based Optimization of Small Molecule Inhibitors of the Protein-Protein Interaction between Menin and Mixed Lineage Leukemia (MLL). J Med Chem. 2016 Feb 11;59(3):892-913.

[2]. Rohit Malik, et al. Targeting the MLL complex in castration-resistant prostate cancer. Nat Med. 2015 Apr;21(4):344-52.

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