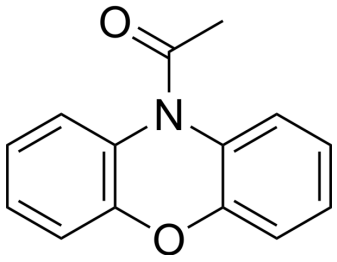
HJ-PI01

Cat. No.:	HY-129163
CAS No.:	6192-43-4
Molecular Formula:	$C_{14}H_{11}NO_2$
Molecular Weight:	225.24
Target:	Pim
Pathway:	JAK/STAT Signaling
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (221.99 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.4397 mL	22.1985 mL	44.3971 mL
	5 mM	0.8879 mL	4.4397 mL	8.8794 mL
	10 mM	0.4440 mL	2.2199 mL	4.4397 mL

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

BIOLOGICAL ACTIVITY

Description

HJ-PI01 (10-Acetylphenoxazine) is an orally active Pim-2 inhibitor. HJ-PI01 induces apoptosis and autophagic cell death of cancer cells. HJ-PI01 inhibits tumor growth in MDA-MB-231 xenograft mice. HJ-PI01 can be used for cancer research[1].

In Vitro

HJ-PI01 (0-3200 nmol/L; 48 hours) dose-dependently inhibits MDA-MB-231 cell growth and shows a substantial improvement compared with chlorpromazine and PI003[1].
HJ-PI01 (100-400 nmol/L; 24 hours) shows weak toxicity to normal non-cancer cells[1].
HJ-PI01 (300 nmol/L; 24 hours) induces autophagic cell death of MDA-MB-231 cells[1].
HJ-PI01 (300 nmol/L; 24 hours) induces apoptotic cell death in MDA-MB-231 cells[1].
HJ-PI01 (300 and 460 nmol/L; 12-48 hours) affects the expression levels of autophagy and apoptosis-related proteins[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	MDA-MB-231 cell line
Concentration:	300 and 460 nmol/L

Incubation Time:	12, 24, 36 and 48 hours
Result:	Time-dependently increased LC3-II and Beclin-1 and induced p62 degradation in MDA-MB-231 cells. Increased the level of Bax. Decreased the level of Bcl-2, and Pim-2 and Pim-2 phosphorylation. Activated caspase-9 and caspase-3.

In Vivo

HJ-PI01 (40 mg/kg; oral administration, once daily for 10 days) inhibits tumor growth in MDA-MB-231 xenograft mice[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	BALB/c female nude mice with MDA-MB-231 cells injection[1]
Dosage:	40 mg/kg
Administration:	Oral administration; 40 mg/kg, once daily for 10 days
Result:	Significantly inhibited tumor growth with an obvious decreasing of the body, liver, spleen and kidney weights of the mice.

REFERENCES

[1]. Zhao YQ, et al. Characterization of HJ-PI01 as a novel Pim-2 inhibitor that induces apoptosis and autophagic cell death in triple-negative human breast cancer. Acta Pharmacol Sin. 2016 Sep;37(9):1237-50.

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