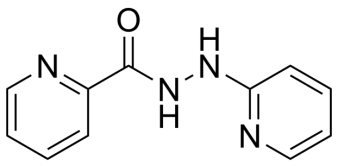
PFI-90

Cat. No.:	HY-139348
CAS No.:	53995-62-3
Molecular Formula:	$C_{11}H_{10}N_4O$
Molecular Weight:	214.22
Target:	Histone Demethylase; Apoptosis
Pathway:	Epigenetics; Apoptosis
Storage:	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 (466.81 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.6681 mL	23.3405 mL	46.6810 mL
	5 mM	0.9336 mL	4.6681 mL	9.3362 mL
	10 mM	0.4668 mL	2.3340 mL	4.6681 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (11.67 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (11.67 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PFI-90 is a selective inhibitor of histone demethylase (KDM3B) that inhibits PAX3-FOXO1 action. PFI-90 induces apoptosis and myogenic differentiation, resulting in the cell death increased. PFI-90 has the potential for the antitumor activity. (patent WO2021101929A1).

IC_{50} & Target

KDM3

In Vitro

PFI-90 shows dose response in RH4, RH30, OSA-CL and TC-32 cells, with IC_{50}s of 812, 3200, 1895 and 1113 nM, respectively[1].
?PFI-90 (3 μM; 24 hours) increases apoptosis in RH4 and SCMC cells[1].

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

Western Blot Analysis[1]

Cell Line:	RH4 and SCMC cells
Concentration:	3 μM
Incubation Time:	24 hours
Result:	Apoptosis increased in RH4 and SCMC cells.

REFERENCES

[1]. KHAN, Javed, et al. Inhibitors of histone demethylases (pfi-63 and pfi-90) for the treatment of cancer and for the inhibition of histone demethylase in cells. WO2021101929A1.

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