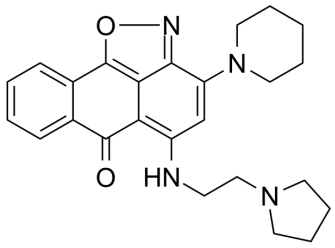
CPUY074020

Cat. No.:	HY-100757
CAS No.:	902279-44-1
Molecular Formula:	$C_{25}H_{28}N_4O_2$
Molecular Weight:	416.52
Target:	Histone Methyltransferase
Pathway:	Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CPUY074020 is a potent and oral bioavailable inhibitor of histone methyltransferase G9a, with an IC_{50} of 2.18 μM. CPUY074020 possesses anti-proliferative activity[1].
IC_{50} & Target	IC50: 2.18 μM (G9a)[1]

In Vitro

CPUY074020 (2-8μM; 24 hours) induces cell death through apoptosis[1].
CPUY074020 (2.5-10μM ; 48 hours) dose-dependently de-regulates H3K9 trimethylation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Apoptosis Analysis[1]

Cell Line:	MCF-7 cells
Concentration:	2 μM, 4 μM, 8 μM
Incubation Time:	24 hours
Result:	Induced MCF-7 cells apoptosis.

Western Blot Analysis[1]

Cell Line:	MCF-7 cells
Concentration:	2.5 μM, 5 μM, 10 μM
Incubation Time:	48 hours
Result:	Dose-dependently de-regulated H3K9 trimethylation.

In Vivo

CPUY074020 exhibits reasonable PK properties, with an oral bioavailability of 55.5% and a $T_{1/2}$ value of 4.0 hours at an oral dose of 10 mg/kg[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Mice

Dosage:	10 mg/kg
Administration:	Oral administration
Result:	$t_{1/2}$=4.0 hours

REFERENCES

[1]. Chen WL, et al. Discovery, design and synthesis of 6H-anthra[1,9-cd]isoxazol-6-one scaffold as G9a inhibitor through a combination of shape-based virtual screening and structure-based molecular. Bioorg Med Chem. 2016 Nov 15;24(22):6102-6108.

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