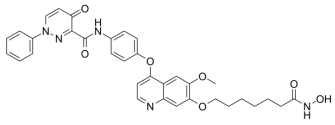
c-Met/HDAC-IN-2

Cat. No.:	HY-143462
CAS No.:	2740495-53-6
Molecular Formula:	$C_{34}H_{33}N_5O_7$
Molecular Weight:	623.66
Target:	HDAC; c-Met/HGFR; Apoptosis
Pathway:	Cell Cycle/DNA Damage; Epigenetics; Protein Tyrosine Kinase/RTK; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

c-Met/HDAC-IN-2 is a highly potent c-Met and HDAC dual inhibitor with IC_{50}s of 18.49 nM and 5.40 nM for HDAC1 and c-Met, respectively. c-Met/HDAC-IN-2 has antiproliferative activities against certain cancer cell lines. c-Met/HDAC-IN-2 can cause G2/M-phase arrest and induce apoptosis in HCT-116. c-Met/HDAC-IN-2 can be used for researching anti-cancer resistance[1].

IC_{50} & Target

HDAC1	c-Met
18.49 nM (IC_{50})	5.4 nM (IC_{50})

In Vitro

c-Met/HDAC-IN-2 (compound 14X) (0-20 μM; 72 hours) exhibits antiproliferative activities against HCT-116, MCF-7 and A549[1].

c-Met/HDAC-IN-2 (0.2-5 μM; 48 hours) induces of cancer cell apoptosis in a dose-dependent manner[1].

c-Met/HDAC-IN-2 (0.2-5 μM; 48 hours) significantly causes G2/M-phase arrest in HCT-116 cells in a dose dependent manner[1].

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

Cell Proliferation Assay

Cell Line:	HCT-116, MCF-7 and A549[1]
Concentration:	0-20 μM
Incubation Time:	72 hours
Result:	Exhibited antiproliferative activities against HCT-116, MCF-7 and A549 with IC_{50}s of 0.22 ± 0.09 μM, 1.59 ± 0.06 μM and 0.22 ± 0.04 μM, respectively.

Apoptosis Analysis

Cell Line:	HTC-116[1]
Concentration:	0.2, 1 and 5 μM
Incubation Time:	48 hours
Result:	The percentage of apoptotic cells was 4.19%, 11.53% and 21.48% at 0.2 μM, 1.0 μM and 5.0 μM, respectively.

Cell Cycle Analysis

Cell Line:	HTC-116[1]
Concentration:	0.2, 1 and 5 μM
Incubation Time:	48 hours
Result:	Significantly caused G2/M-phase arrest in HCT-116 cells in a dose dependent manner.

REFERENCES

[1]. Hu H, Chen F, Dong Y, et al. Discovery of Novel c-Mesenchymal-Epithelia transition factor and histone deacetylase dual inhibitors. Eur J Med Chem. 2020;204:112651.

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