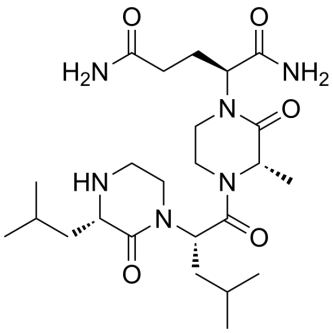
OHM1

Cat. No.:	HY-124722
CAS No.:	1450995-09-1
Molecular Formula:	$C_{24}H_{42}N_6O_5$
Molecular Weight:	494.63
Target:	HIF/HIF Prolyl-Hydroxylase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

OHM1 is an analog of HIF1α CTAD that inhibits its binding with p300/CBP. OHM1 targets CH1 domain with an affinity of 0.53 μM[1].

In Vitro

OHM1 (1-20 μM; 24 h) results in a dose-dependent reduction in the HIF promoter activity, and reduces the level of HIF1α transcriptional activity under hypoxia to that observed under normoxia at 20 μM in MDA-MB-231 cells[1].
OHM1 down-regulates hypoxia-inducible gene expression[1].
OHM1 (10 μM) down-regulates multiple genes implicated in angiogenesis, apoptosis, cell proliferation, and invasion, along with several cancer-specific markers in the A549 non-small-cell lung cancer cell line[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	A549
Concentration:	10 μM
Incubation Time:	24 h
Result:	Down-regulated the mRNA expression levels of the critical angiogenesis regulator vascular endothelial growth factor (VEGFA) by 80%. Decreased lysyl oxidase (LOX) and glucose transporter 1 (GLUT1) expression.

In Vivo

OHM1 (15 mg/kg; i.p.; every other day for 15 injections) reduces MDA-MB-231 tumor volume in mice[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	BALB/c mice, MDA-MB-231 xenograft model[1]
Dosage:	15 mg/kg
Administration:	Intraperitoneal injection, every other day for 15 injections
Result:	Reduced the median tumor volume by roughly 50% compared with the untreated group. Did not cause measurable changes in animal body weight or other signs of toxicity in tumor-bearing animals, nor increased the metastasis rate.

REFERENCES

[1]. Lao BB, et al. In vivo modulation of hypoxia-inducible signaling by topographical helix mimetics. Proc Natl Acad Sci U S A. 2014 May 27;111(21):7531-6.

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