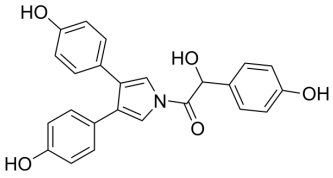
7-Hydroxyneolamellarin A

Cat. No.:	HY-N10330
CAS No.:	959662-26-1
Molecular Formula:	$C_{24}H_{19}NO_5$
Molecular Weight:	401.41
Target:	HIF/HIF Prolyl-Hydroxylase; VEGFR
Pathway:	Metabolic Enzyme/Protease; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

7-Hydroxyneolamellarin A is a natural product that could be derived from sponge Dendrilla nigra. 7-Hydroxyneolamellarin A is a potent hypoxia-inducible factor-1α (HIF-1α) inhibitor. 7-Hydroxyneolamellarin A attenuates the accumulation of hypoxia-inducible factor-1α (HIF-1α) protein and inhibits vascular epidermal growth factor (VEGF) transcriptional activity. 7-Hydroxyneolamellarin A can be used in research of cancer[1].

In Vitro

7-Hydroxyneolamellarin A (0-150 μM; 12 h; Hela cells, MCF-7 cells and 4T1 cells) inhibits HIF-1 signaling pathway with low cytotoxicity[1].
7-Hydroxyneolamellarin A (0-100 μM; 12 h) reduces the mRNA levels of VEGF dose-dependently in Hela cells[1].
7-hydroxyneolamellarin A (0-50 μM; 36 h) inhibits Hela cells migration, invasion and proliferation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	Hela cells, MCF-7 cells and 4T1 cells
Concentration:	0, 50, 100, and 150 μM
Incubation Time:	12 hours
Result:	Decreased the HIF-1α protein levels in a dose-dependent manner.

In Vivo

7-Hydroxyneolamellarin A (15 mg/kg; i.v.; BALB/c mice with 4T1 cells xenografts) inhibits tumor growth in vivo[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	BALB/c mice with 4T1 cells xenografts[1]
Dosage:	15 mg/kg
Administration:	Intravenous injection; every 2 days for 16 days
Result:	Inhibited tumor growth in vivo.

REFERENCES

[1]. Li G, et, al. Total synthesis and biological evaluation of 7-hydroxyneolamellarin A as hypoxia-inducible factor-1α inhibitor for cancer therapy. Bioorg Med Chem Lett. 2021 Oct 15;50:128338.

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