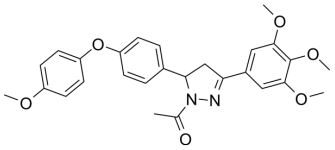
VEGFR-IN-3

Cat. No.:	HY-143293
CAS No.:	2874264-13-6
Molecular Formula:	$C_{27}H_{28}N_2O_6$
Molecular Weight:	476.52
Target:	VEGFR; Apoptosis
Pathway:	Protein Tyrosine Kinase/RTK; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	VEGFR-IN-3 (compound 3f) is a VEGFR inhibitor. VEGFR-IN-3 inhibits OVCAR-4 and MDA-MB-468 cancer cells growth with IC_{50}s of 0.29 and 0.35 μM, respectively. VEGFR-IN-3 can be used for the research of cancer[1].
IC_{50} & Target	IC50: 0.29 μM (OVCAR-4), 0.35 μM (MDA-MB-468), 25.9 μM (MCF-10A)[1]

In Vitro

VEGFR-IN-3 (10 μM; 60 min) inhibits a variety of cancer cell lines growth[1].
VEGFR-IN-3 (0-100 μM; 72 h) shows cytotoxic activities against MDA-MB-468 and OVCAR-4 cancer cell lines[1].
VEGFR-IN-3 (0.29-0.35 μM; 2.5 h) decreases the concentration of VEGF in OVCAR-4 and MDA-MB-468 cell lines[1].
VEGFR-IN-3 (0.29 μM; 48 h) increases levels of ERK1 and ERK2, activates ERK1 and ERK2 phosphorylation[1].
VEGFR-IN-3 (0.29 μM; 24 h) affects cell cycle and induces apoptosis of OVCAR-4 cancer cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Leukemia, non-small cell lung cancer, colon cancer, CNS cancer, Melanoma, ovarian cancer, renal cancer, prostate cancer and breast cancer cell lines
Concentration:	10 μM
Incubation Time:	60 min
Result:	Showed significantly antiproliferative activities against Leukemia, non-small cell lung cancer, colon cancer, CNS cancer, Melanoma, ovarian cancer, renal cancer, prostate cancer and breast cancer cell lines with GI% ranging from 49.1% to 98.46%.

Cell Cytotoxicity Assay[1]

Cell Line:	MDA-MB-468 and OVCAR-4 cancer cell lines, MCF-10A normal breast cancer cell line
Concentration:	0-100 μM
Incubation Time:	72 hours
Result:	Inhibited MDA-MB-468, OVCAR-4 and MCF-10A cells growth with IC_{50} values of 0.35, 0.29 and 25.9 μM, respectively.

Apoptosis Analysis[1]

Cell Line:	OVCAR-4 cell line
Concentration:	0.29 μM
Incubation Time:	24 hours
Result:	Induced OVCAR-4 cells apoptosis by increasing the number of early and late apoptosis cells.

Cell Cycle Analysis[1]

Cell Line:	OVCAR-4 cell line
Concentration:	0.29 μM
Incubation Time:	24 hours
Result:	Arrested cell cycle in the S phase and increased the number of OVCAR-4 cells in pre-G1 phase.

REFERENCES

[1]. Hassan RA, et al. Design, synthesis and evaluation of anticancer activity of new pyrazoline derivatives by down-regulation of VEGF: Molecular docking and apoptosis inducing activity. Bioorg Chem. 2022 Jan;118:105487.

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