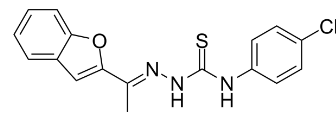
MedChemExpress

Product Data Sheet

Inhibitors • Screening Libraries • Proteins

PI3K/VEGFR2-IN-1

Cat. No.:	HY-151635
CAS No.:	2851067-08-6
Molecular Formula:	$C_{17}H_{14}ClN_3OS$
Molecular Weight:	343.83
Target:	PI3K; VEGFR; Apoptosis
Pathway:	PI3K/Akt/mTOR; Protein Tyrosine Kinase/RTK; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

PI3K/VEGFR2-IN-1 is a potent dual PI3K/VEGFR2 inhibitor with IC_{50} values of 2.21 and 68 µM for PI3K and VEGFR2, respectively. PI3K/VEGFR2-IN-1 induces apoptosis. PI3K/VEGFR2-IN-1 can be used in research of cancer[1].

IC_{50} & Target

PI3K	VEGFR2
2.21 µM (IC_{50})	68 µM (IC_{50})

In Vitro

PI3K/VEGFR2-IN-1 (compound 8; 1.56-100 µM; 24 h; HePG2, MCF-7, Hela, and PC3 cells) inhibits cell proliferative in a dose-dependent manner[1].

PI3K/VEGFR2-IN-1 (10 mg/mL; 24 h; MCF-7 and Hela cells) arrests cell cycle at G1/S phase and induces apoptosis[1].

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

Cell Viability Assay[1]

Cell Line:	HePG2, MCF-7, Hela, and PC3 cells
Concentration:	1.56-100 µM
Incubation Time:	24 hours
Result:	Had antitumor activity with IC_{50} values of 7.94, 9.73 , 11.58, and 17.49 µM for Hela, HePG2, MCF-7 and PC3 cells, respectively.

Cell Cycle Analysis[1]

Cell Line:	MCF-7 cells
Concentration:	10 mg/mL
Incubation Time:	24 hours
Result:	Arrested cell cycle in G1/S phase at 24 h by 51.23%.

Cell Cycle Analysis[1]

Cell Line:	MCF-7 and Hela cells

Concentration:	10 mg/mL
Incubation Time:	24 hours
Result:	Enhanced late apoptotic induction with 14.11% at Hela cells.

REFERENCES

[1]. El-Khouly OA, et, al. Design, synthesis and computational study of new benzofuran hybrids as dual PI3K/VEGFR2 inhibitors targeting cancer. Sci Rep. 2022 Oct 12;12(1):17104.

Caution: Product has not been fully validated for medical applications. For research use only.

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