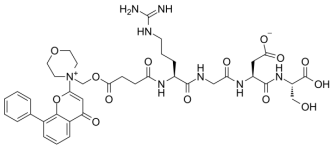
SF1126

Cat. No.:	HY-10220
CAS No.:	936487-67-1
Molecular Formula:	$C_{39}H_{48}N_8O_{14}$
Molecular Weight:	852.84
Target:	PI3K; Apoptosis
Pathway:	PI3K/Akt/mTOR; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	SF1126 is a relevant pan and dual first-in-class PI3K/BRD4 inhibitor, has antitumor and anti-angiogenic activity. SF1126 is an RGDS-conjugated LY294002 proagent, which is designed to exhibit increased solubility and bind to specific integrins within the tumor compartment. SF1126 induces cell apoptosis[1].
IC_{50} & Target	PI3K/BRD4[1]

In Vitro

SF1126 (0-6 μM; 48 hours) inhibits Hep3B, HepG2, SK-Hep1, and Huh7 cells proliferation with IC_{50}s of 5.05, 6.89, 3.14, and 2.14 μM, respectively[1].

SF1126 (1-10 μM; 24 hours) results in cell-cycle arrest with a proportional increase in G0-G1 and a decrease in the number of cells in the S-phase in Hep 3B, Hep G2, SK-Hep1, and Huh7 cells[1].

SF1126 (0.5-2.5 μM; pre-30 minutes) and sorafenib suggests that combined treatment of SF1126 and sorafenib blocks multiple key enzymes in PI3K/AKT/mTOR and Ras/Raf/MAPK pathway[1].

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

Cell Viability Assay[1]

Cell Line:	Hep3B, HepG2, SK-Hep1, and Huh7 cells
Concentration:	0 μM; 1 μM; 2 μM; 3 μM; 4 μM; 5 μM; 6 μM
Incubation Time:	48 hours
Result:	Resulted in an increased inhibition of HCC proliferation.

Cell Cycle Analysis[1]

Cell Line:	Hep3B, HepG2, SK-Hep1, and Huh7 cells
Concentration:	1 μM; 5 μM; 10 μM
Incubation Time:	24 hours
Result:	Induced cell-cycle arrest.

Western Blot Analysis[1]

Cell Line:	Hep3B, HepG2, SK-Hep1, and Huh7 cells
Concentration:	0.5 μM and 2.5 μM
Incubation Time:	Pre-30 mins
Result:	Suppressed phosphorylation of AKT, p70S6K, 4EBP1, and ERK in all the cell lines together with sorafenib.

REFERENCES

[1]. Garlich JR, et al. A vascular targeted pan phosphoinositide 3-kinase inhibitor prodrug, SF1126, with antitumor and antiangiogenic activity. Cancer Res. 2008 Jan 1;68(1):206-15.

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