Menin-MLL inhibitor-25

Cat. No.: HY-157814

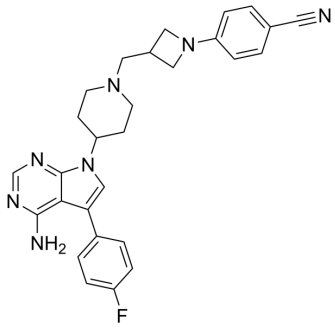
Molecular Formula: $C_{28}H_{28}FN_7$

Molecular Weight: 481.57

Target: Apoptosis; Epigenetic Reader Domain

Pathway: Apoptosis; Epigenetics

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Menin-MLL inhibitor-25 (compound A6) is a potent Menin-MLL interaction inhibitor with an IC_{50} value of 0.38 μM. Menin-MLL inhibitor-25 shows anti-proliferative activity. Menin-MLL inhibitor-25 induces apoptosis and cell cycle arrest at G0/G1 phase. Menin-MLL inhibitor-25 reverses the differentiation arrest[1].

In Vitro

Menin-MLL inhibitor-25 (compound A6) (0-10 μM) shows anti-proliferation activity with IC_{50}s of 1.07, >10, 6.7 μM for MV4-11, HL-60, SU-DHL-6 cells, respectively.[1].

Menin-MLL inhibitor-25 (0.1, 1, 10 μM; 24 h) induces apoptosis and cell cycle arrest at G0/G1 phase in MV4-11 cells[1].

Menin-MLL inhibitor-25 (0.1, 0.5 μM; 24, 48 h) decreases the HOXA9 and MEIS1 gene expression in a time and dose dependent manner[1].

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

Cell Viability Assay[1]

Cell Line:	MV4-11, HL-60, SU-DHL-6 cells
Concentration:	0-10 μM
Incubation Time:	
Result:	Showed anti-proliferation activity with IC_{50}s of 1.07, >10, 6.7 μM for MV4-11, HL-60, SU-DHL-6 cells, respectively.

Apoptosis Analysis[1]

Cell Line:	MV4-11 cells
Concentration:	0.1, 1, 10 μM
Incubation Time:	24 h
Result:	Induced apoptosis with the apoptosis rates of 6.09 %, 8.86 % and 43.08 % at 0.1, 1 and 10 μM.

Cell Cycle Analysis[1]

Cell Line:	MV4-11 cells

Concentration:	0.01, 0.1, 1 μM
Incubation Time:	24 h
Result:	Induced cell cycle arrest at G0/G1 phase in a dose-dependent manner.

RT-PCR[1]

Cell Line:	MV4-11 cells
Concentration:	0.1, 0.5 μM
Incubation Time:	24, 48 h
Result:	Decreasesd the gene expression of HOXA9 and MEIS1 in a time and dose dependent manner.

REFERENCES

[1]. Bai H, et al. Discovery of novel pyrrolo[2,3-d]pyrimidines as potent menin-mixed lineage leukemia interaction inhibitors. Eur J Med Chem. 2024 Feb 8;268:116226.

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