

Product Data Sheet

Anticancer agent 54

Cat. No.: HY-146063 CAS No.: 2933882-99-4

Molecular Formula: $C_{33}H_{36}N_{6}$ Molecular Weight: 516.68 Target: **Apoptosis** Pathway: **Apoptosis**

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

Analysis.

BIOLOGICAL ACTIVITY

Description

Anticancer agent 54 is a potent anticancer agent. Anticancer agent 54 shows antiproliferative activity. Anticancer agent 54 induces apoptosis and cell cycle arrest at G0/G1 phases. Anticancer agent 54 shows anticancer activity depends on DNA intercalation and ROS generation^[1].

In Vitro

Anticancer agent 54 (compound L) (0-25 μ M; 72 h) shows antiproliferative activity with IC₅₀s of 0.04, 0.44, 0.27, 0.14, 0.75, 20.83 μM for MCF-7, PANC-1, HCT116, U-251, A549, NHDF (normal human fifibroblast) clls, respectively^[1].

Anticancer agent 54 (1, 2.5, 5 μM; 24 h) induces cell cycle arrest at G0/G1 phases and apoptosis in a concentration-dependent manner^[1].

Anticancer agent 54 (1 μ M; 24 h) increases the reactive oxygen species (ROS) level^[1].

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

Cell Cycle Analysis^[1]

Cell Line:	MCF-7 cells	
Concentration:	1, 2.5, 5 μΜ	
Incubation Time:	24 h	
Result:	Induced cell cycle arrest at G0/G1 phases in a concentration-dependent manner.	

Apoptosis Analysis^[1]

Cell Line:	MCF-7 cells
Concentration:	1, 2.5, 5 μΜ
Incubation Time:	24 h
Result:	The level of the apoptotic cells increased from 7.62% to 29.33% and the population of living cells decreased from 92.01% to 55.27% at 5 $\mu\text{M}.$

REFERENCES

1]. Malarz K,et al.Anticancer activity of 4'-phenyl-2,2':6',2"-terpyridines - behind the metal complexation. Eur J Med Chem. 2020 Mar 1;189:112039.				
	Caution: Product has not been fully validated for medic			
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