

## **Antiproliferative agent-43**

Cat. No.: HY-155413 Molecular Formula:  $C_{45}H_{57}NO_6S_2$ Molecular Weight: 772.07

Target: **Apoptosis** Pathway: **Apoptosis** 

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

Analysis.

## **BIOLOGICAL ACTIVITY**

In Vitro

Description Antiproliferative agent-43 (Compound e4) has notable cytotoxic effects against cancer cell lines and causes apoptosis by stopping the cell cycle at G1 phase<sup>[1]</sup>.

Antiproliferative agent-43 (0, 1.23, 2.45, 2.90  $\mu$ M, 48 h) induces G1 phase cell cycle arrest in K562 cells, accompanied by abnormal nuclear morphology [1].

Antiproliferative agent-43 (0, 1.23, 2.45, 2.90 µM, 48 h) apoptosis induces by mitochondrial pathway in K562 cells [1].

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

Cell Cycle Analysis<sup>[1]</sup>

Cell Line:	K562
Concentration:	0, 1.23, 2.45 , 2.90 μΜ
Incubation Time:	48h
Result:	Induced G1 phase cell cycle arrest in the K562 cell line.
Anontosis Analysis <sup>[1]</sup>	

Cell Line:	K562
Concentration:	0, 1.23, 2.45 , 2.90 μΜ
Incubation Time:	48h
Result:	The apoptotic cells induced by antiproliferative agent-43 increased from 6.35% in the negative control to 13.36, 37.99, and 64.94%, with a concentration-dependent manner.

## **REFERENCES**

[1]. Gao X, et al. Discovery of sinomenine/8-Bis(benzylthio)octanoic acid hybrids as potential anti-leukemia drug candidate via mitochondrial pathway. Bioorg Med Chem Lett. 2023 Nov 7;97:129545.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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