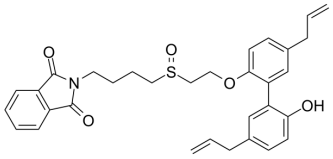
Anticancer agent 76

Cat. No.:	HY-150571
CAS No.:	2448091-11-8
Molecular Formula:	$C_{32}H_{33}NO_5S$
Molecular Weight:	543.67
Target:	Topoisomerase; c-Myc; Apoptosis; ROS Kinase
Pathway:	Cell Cycle/DNA Damage; Apoptosis; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Anticancer agent 76 (Compound CT2-3) is an anticancer agent. Anticancer agent 76 significantly inhibits the proliferation of human NSCLC cells, induces cell cycle arrest, causes ROS generation and induces cell apoptosis[1].

In Vitro

Anticancer agent 76 (Compound CT2-3) (0-80 μM, 24 h) inhibits the proliferation of human NSCLC cells[1].
Anticancer agent 76 (40 μM, 24 h) arrests cell cycle at G1 phase, induces apoptosis and ROS, suppresses the expression of c-Myc and topoisomerases in NSCLC cells [1].

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

Cell Proliferation Assay[1]

Cell Line:	A549 and H460
Concentration:	0, 10, 20, 40, 60 and 80 μM
Incubation Time:	24 h
Result:	Inhibited the proliferation with IC_{50} values of 41.63 μM and 38.03 μM against A549 and H460 cells, respectively.

Cell Cycle Analysis[1]

Cell Line:	H460
Concentration:	40 μM
Incubation Time:	24 h
Result:	Resulted in increasing cell populations at the G1 phase, down-regulated CDK4, CDK6 and cyclin D1.

Apoptosis Analysis[1]

Cell Line:	A549 and H460
Concentration:	20 μM and 40 μM
Incubation Time:	24 h

Result:	Induced apoptosis.

Western Blot Analysis[1]

Cell Line:	H460 cell
Concentration:	40 μM
Incubation Time:	24 h
Result:	Down-regulated mRNA of TOP2B, TOP3B and c-Myc.

REFERENCES

[1]. Chen J, et al. CT2-3, a novel magnolol analogue suppresses NSCLC cells through triggering cell cycle arrest and apoptosis. Bioorg Med Chem. 2020 Mar 15;28(6):115352.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA