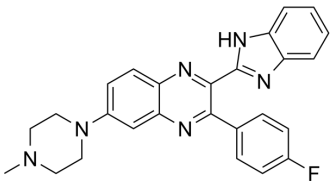
Antitumor agent-75

Cat. No.:	HY-151295
CAS No.:	2827065-29-0
Molecular Formula:	$C_{26}H_{23}FN_6$
Molecular Weight:	438.5
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antitumor agent-75 is a novel potent antitumor agent. Antitumor agent-75 has cytotoxic effects on cancer and normal human cell lines. Antitumor agent-75 shows a highly selective cytotoxic effect against human lung adenocarcinoma (cell line A549) when combined with Antitumor agent-74 (HY-151292), the IC_{50} value of 2.8 μM. Antitumor agent-75 can be used for the research of cancer[1].
IC_{50} & Target	IC50: 2.8 μM (A549 cells)[1]

In Vitro

Antitumor agent-75 (14da) shows a highly selective cytotoxic effect (combined with 13da, mrBIQ 13da/14da) against human lung adenocarcinoma (cell line A549) with an IC_{50} value of 2.8 μM[1].

Antitumor agent-75 (1, 5, 25, 50, 100μM; 0-48 h) (mriBIQ 13da/14da) has the cytotoxic effect in A549 cells[1].

Antitumor agent-75 (1, 2.5, and 5 μM; 12 h) (mriBIQ 13da/14da) has the mechanism of the cytotoxic effect on A549 cells may be associated with the stopping of the cell cycle in phase S and inhibition of DNA synthesis as well as with the induction of mithochondrial apoptosis[1].

Antitumor agent-75 (1, 2.5 and 5 μM) increases the production of reactive oxygen species (ROS) and induces mitochondrial apoptosis in A549 cells.

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

Cell Cytotoxicity Assay[1]

Cell Line:	seven cancer cell lines and WI38 (the Normal Human Fetal Lung Fibroblast line)
Concentration:	1-100 μM
Incubation Time:	
Result:	Exhibited greater activity against most of the cancer lines and normal human cell lines.

Cell Proliferation Assay[1]

Cell Line:	A549 Cell
Concentration:	1, 5, 25, 50, 100 μM
Incubation Time:	0-48 h
Result:	Lead to a sharp decrease the presence of mriBIQ 13da/14da at concentrations close to the

	IC_{50} values in the rate of cell division.

Cell Cycle Analysis[1]

Cell Line:	A549 cells
Concentration:	1, 2.5, and 5 μM
Incubation Time:	12 h
Result:	Increased the number of cells in the S-phase with mnBIQ 13da/14da at concentrations of 1, 2.5, and 5 μM at 49.0%, 66.3%, and 68.0%, respectively.

Apoptosis Analysis[1]

Cell Line:	A549 cells
Concentration:	1, 2.5 and 5 μM
Incubation Time:	
Result:	(mrBIQ 13da/14da) Induced mitochondrial apoptosis in A549 cells.

REFERENCES

[1]. Vakhid A. Mamedov, et al. Synthesis of Morpholine‐, Piperidine‐, and N‐Substituted Piperazine-Coupled 2‐(Benzimidazol-2-yl)-3-arylquinoxalines as

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