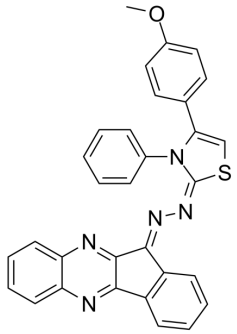
Apoptotic agent-3

Cat. No.:	HY-147929
CAS No.:	2482310-23-4
Molecular Formula:	$C_{31}H_{21}N_5OS$
Molecular Weight:	511.6
Target:	Apoptosis; Caspase; Bcl-2 Family
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Apoptotic agent-3 (compound 15f) promotes apoptosis through the potential mitochondria-mediated Bcl-2/Bax pathway and activation of the Caspase 3 pathway. Apoptotic agent-3 exhibits anti-proliferative activities and can be used for cancer research[1].

IC_{50} & Target	Caspase 3	Bcl-2	Bax

In Vitro

Apoptotic agent-3 (compound 15f) (24 hours) has selective anti-proliferative activities against HCT-116, HepG-2 MCF-7 and WI-38 cells (normal human cells) with IC_{50} values of 1.62, 1.46, 2.04 and 117.9 μM, respectively[1].

.Apoptotic agent-3 (compound 15f) (24 hours) (1.46 μM; 24 hours; HepG-2 cells) induces cell apoptosis, which increases the levels of active Caspase-3 and BAX by 11.53 folds and 10 folds, respectively, and decreases the level of Bcl-2 by 3.8 folds[1].

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

Cell Cycle Analysis[1]

Cell Line:	HepG-2 cells
Concentration:	1.46 μM
Incubation Time:	24 hours
Result:	The percentage of cells in the G2-M phase increased while the percentage of cells in G1 phase and S phase decreased.

Apoptosis Analysis[1]

Cell Line:	HepG-2 cells
Concentration:	1.46 μM
Incubation Time:	24 hours
Result:	Increased the early apoptosis ratio from 0.69% to 8.25% and increased the late apoptosis ratio from 0.32% to 13.05%.

REFERENCES

[1]. Fayed EA, et al. In vitro cytotoxic activity of thiazole-indenoquinoxaline hybrids as apoptotic agents, design, synthesis, physicochemical and pharmacokinetic studies. Bioorg Chem. 2020 Jul;100:103951.

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