



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

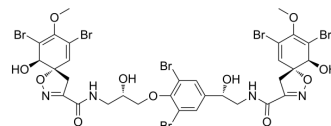
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## Isofistularin-3

<b>Cat. No.:</b>	HY-19826
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>30</sub> Br <sub>6</sub> N <sub>4</sub> O <sub>11</sub>
<b>Molecular Weight:</b>	1114.01
<b>Target:</b>	DNA Methyltransferase; Autophagy; Apoptosis; ADC Cytotoxin
<b>Pathway:</b>	Epigenetics; Autophagy; Apoptosis; Antibody-drug Conjugate/ADC Related
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Isofistularin-3 is a direct, DNA-competitive DNMT1 inhibitor, with an IC <sub>50</sub> of 13.5 μM. Isofistularin-3, as a DNA demethylating agent, induces cell cycle arrest and sensitization to TRAIL in cancer cells. Isofistularin-3 can be used as an ADC cytotoxin <sup>[1]</sup> .																	
<b>IC<sub>50</sub> &amp; Target</b>	DNMT1 13.5 μM (IC <sub>50</sub> )	Traditional Cytotoxic Agents																
<b>In Vitro</b>	<p>Isofistularin-3 (1-50 μM; 24-72 hours) shows a marked reduction of cell proliferation<sup>[1]</sup>.            Isofistularin-3 (5-50 μM; 24 hours) increases arrests cancer cells in G0/G1 cell cycle phase<sup>[1]</sup>.            Isofistularin-3 (25 μM; 72 hours) increases AHR expression<sup>[1]</sup>. Isofistularin-3 induces AHR promoter demethylation.            Isofistularin-3 (72 hours) inhibits a broader panel of cancer cell lines proliferation, with the GI<sub>50</sub>s ranging from 7.3-14.8 μM.            Isofistularin-3 induces morphological changes and autophagy in RAJI cells. Isofistularin-3 induces caspase-dependent and -independent cell death. Isofistularin-3 sensitizes lymphoma cells to TRAIL-induced apoptosis<sup>[1]</sup>.            MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Proliferation Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>RAJI and U-937 lymphoma cells</td> </tr> <tr> <td>Concentration:</td> <td>1, 5, 15, 25, 50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 and 72 hours</td> </tr> <tr> <td>Result:</td> <td>A marked reduction of cell proliferation.</td> </tr> </table> <p>Cell Cycle Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>RAJI and U-937 cells</td> </tr> <tr> <td>Concentration:</td> <td>5, 50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>An arrest in the G0/G1 phase of the cell cycle for both cell lines.</td> </tr> </table> <p>RT-PCR<sup>[1]</sup></p>		Cell Line:	RAJI and U-937 lymphoma cells	Concentration:	1, 5, 15, 25, 50 μM	Incubation Time:	24 and 72 hours	Result:	A marked reduction of cell proliferation.	Cell Line:	RAJI and U-937 cells	Concentration:	5, 50 μM	Incubation Time:	24 hours	Result:	An arrest in the G0/G1 phase of the cell cycle for both cell lines.
Cell Line:	RAJI and U-937 lymphoma cells																	
Concentration:	1, 5, 15, 25, 50 μM																	
Incubation Time:	24 and 72 hours																	
Result:	A marked reduction of cell proliferation.																	
Cell Line:	RAJI and U-937 cells																	
Concentration:	5, 50 μM																	
Incubation Time:	24 hours																	
Result:	An arrest in the G0/G1 phase of the cell cycle for both cell lines.																	

---

Cell Line:	RAJI cells
Concentration:	25 $\mu$ M
Incubation Time:	72 h
Result:	AHR mRNA expression level was 5.1 times higher.

---

## REFERENCES

---

[1]. Florean C, et al. Discovery and characterization of Isofistularin-3, a marine brominated alkaloid, as a new DNA demethylating agent inducing cell cycle arrest and sensitization to TRAIL in cancer cells. *Oncotarget*. 2016 Apr 26;7(17):24027-49.

---

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA