



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

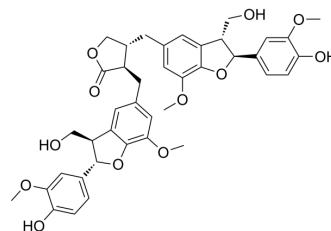
mail@szabo-scandic.com

www.szabo-scandic.com

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

Lappaol F

Cat. No.:	HY-N7223
CAS No.:	69394-17-8
Molecular Formula:	C ₄₀ H ₄₂ O ₁₂
Molecular Weight:	714.75
Target:	YAP; Apoptosis
Pathway:	Stem Cell/Wnt; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Lappaol F, a lignan, is an anticancer agent. Lappaol F inhibits YAP mRNA and protein level. Lappaol F inhibits tumor cell growth by inducing cell cycle arrest. Lappaol F induces cancer cell apoptosis, and inhibits tumor growth. Lappaol F can be isolated from <i>Arctium lappa</i> Linne (Asteraceae) ^[1] .																		
In Vitro	<p>Lappaol F (72 h) inhibits the proliferation of HeLa, MDA-MB-231, SW480 and PC3 cells, with IC₅₀ values of 41.5, 26.0, 45.3 and 42.9 μM, respectively. And induces cell apoptosis^[1].</p> <p>Lappaol F (50 μM, 12/24/36 h) lowers transcriptional levels of YAP and its target genes (such as BIRC5, GLI2, c-Myc, Bcl-2, Axin2 and AREG) in HeLa, MDA-MB-231, SW480 and PC3 cells^[1].</p> <p>Lappaol F (0-50 μM, 24-72 h) decreases the YAP protein levels, nuclear localisation and transcriptional activity in HeLa cells^[1].</p> <p>Lappaol F (50 μM, 24-72 h) induces G1 and G2 cell-cycle arrest in HeLa, MDA-MB-231, MCF-7 cells^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Immunofluorescence^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HeLa cells</td> </tr> <tr> <td>Concentration:</td> <td>50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Decreased the nuclear accumulation of YAP.</td> </tr> </table> <p>Western Blot Analysis^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HeLa MDA-MB-231 MCF-7 cells</td> </tr> <tr> <td>Concentration:</td> <td>50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24, 48, 72 h</td> </tr> <tr> <td>Result:</td> <td>Increased level of p21 and p27, and reduced level of CDK2, cyclin B1, and CDK1.</td> </tr> </table> <p>RT-PCR^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>HeLa, MDA-MB-231, SW480 and PC3 cells</td> </tr> </table>	Cell Line:	HeLa cells	Concentration:	50 μM	Incubation Time:	48 h	Result:	Decreased the nuclear accumulation of YAP.	Cell Line:	HeLa MDA-MB-231 MCF-7 cells	Concentration:	50 μM	Incubation Time:	24, 48, 72 h	Result:	Increased level of p21 and p27, and reduced level of CDK2, cyclin B1, and CDK1.	Cell Line:	HeLa, MDA-MB-231, SW480 and PC3 cells
Cell Line:	HeLa cells																		
Concentration:	50 μM																		
Incubation Time:	48 h																		
Result:	Decreased the nuclear accumulation of YAP.																		
Cell Line:	HeLa MDA-MB-231 MCF-7 cells																		
Concentration:	50 μM																		
Incubation Time:	24, 48, 72 h																		
Result:	Increased level of p21 and p27, and reduced level of CDK2, cyclin B1, and CDK1.																		
Cell Line:	HeLa, MDA-MB-231, SW480 and PC3 cells																		

	Concentration:	50 μ M
	Incubation Time:	12/24/36 h
	Result:	Lowered transcriptional levels of YAP and its target genes (such as BIRC5, GLI2, c-Myc, Bcl-2, Axin2 and AREG). Upregulated 14-3-3 σ mRNA level.
In Vivo	Lappaol F (10 and 20 mg/kg/d, i.v., 15 days) inhibits tumor growth in human colon cancer (SW480) xenografts in nude mice ^[1] .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Human colon cancer (SW480) xenografts in nude mice ^[1]
	Dosage:	10 and 20 mg/kg/d
	Administration:	i.v., 15 days
	Result:	Inhibited tumor size by 48% (10 mg/kg/d) and 55% (20 mg/kg/d) without affecting the body weight. Induced apoptosis in tumor tissues. Up-regulated the levels of 14-3-3 σ in tumor tissues and down-regulated the levels of YAP.

REFERENCES

- [1]. Li X, et al. Lappaol F, an anticancer agent, inhibits YAP via transcriptional and post-translational regulation. *Pharm Biol.* 2021 Dec;59(1):619-628.
- [2]. Sun Q, et al. Lappaol F, a novel anticancer agent isolated from plant arctium Lappa L. *Mol Cancer Ther.* 2014 Jan;13(1):49-59.

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