



# 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

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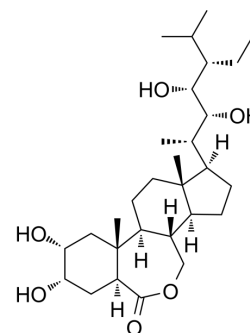
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## 28-Homobrassinolide

<b>Cat. No.:</b>	HY-N9435		
<b>CAS No.:</b>	82373-95-3		
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>50</sub> O <sub>6</sub>		
<b>Molecular Weight:</b>	494.7		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20 mg/mL (40.43 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.0214 mL	10.1071 mL	20.2143 mL
	5 mM	0.4043 mL	2.0214 mL	4.0429 mL
	10 mM	0.2021 mL	1.0107 mL	2.0214 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

28-Homobrassinolide is a phytosteroid. 28-Homobrassinolide can be used for the research of cholesterol and glucose homeostasis<sup>[1]</sup>.

#### In Vitro

28-Homobrassinolide (5-20 μM) indicates a 2-fold increase in glucose utilization and ABCA1 and SREBP2 protein expression in HepG2 cells<sup>[1]</sup>.

28-Homobrassinolide decreases tissue glucose and cholesterol levels, increases cholesterol level and tissue hexokinase activity<sup>[1]</sup>.

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

Cell Cytotoxicity Assay<sup>[1]</sup>

Cell Line:	HepG2 cells
Concentration:	1 μM, 5 μM, 10 μM, 20 μM, 30 μM, 40 μM, and 80 μM
Incubation Time:	24 h

	<table border="1"> <tr> <td>Result:</td> <td>The IC<sub>50</sub> value of 40.57µM obtained by the MTT assay.</td> </tr> <tr> <td colspan="2">Western Blot Analysis<sup>[1]</sup></td> </tr> <tr> <td>Cell Line:</td> <td>HepG2 cells</td> </tr> <tr> <td>Concentration:</td> <td>5, 10, and 20 µM</td> </tr> <tr> <td>Incubation Time:</td> <td>12 h</td> </tr> <tr> <td>Result:</td> <td>Exhibited an increase in both ABCA1 and SREBP2 markers.</td> </tr> </table>	Result:	The IC <sub>50</sub> value of 40.57µM obtained by the MTT assay.	Western Blot Analysis <sup>[1]</sup>		Cell Line:	HepG2 cells	Concentration:	5, 10, and 20 µM	Incubation Time:	12 h	Result:	Exhibited an increase in both ABCA1 and SREBP2 markers.
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Concentration:	5, 10, and 20 µM												
Incubation Time:	12 h												
Result:	Exhibited an increase in both ABCA1 and SREBP2 markers.												
<b>In Vivo</b>	<p>28-HB (1-20 µg/day; for 6 weeks) exhibits a marked decrease in aortic fat deposit and serum marker levels in high-fat diet-fed C57BL/6 mice<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>High-fat diet-fed C57BL/6 mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>1-20 µg/day</td> </tr> <tr> <td>Administration:</td> <td>For 6 weeks</td> </tr> <tr> <td>Result:</td> <td>Observed a significant decrease in lipid deposition.</td> </tr> </table>	Animal Model:	High-fat diet-fed C57BL/6 mice <sup>[1]</sup>	Dosage:	1-20 µg/day	Administration:	For 6 weeks	Result:	Observed a significant decrease in lipid deposition.				
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## REFERENCES

[1]. Victor Mukherjee, et al. Phytosteroid 28-homobrassinolide targets cholesterol and glucose homeostasis implicating ABCA1 and SREBP role in regulation. Steroids. 2021 Jan;165:108756.

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

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