



# 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

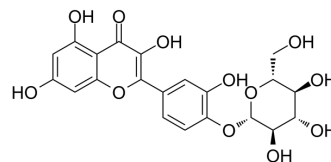
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

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

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

## Spiraeoside

<b>Cat. No.:</b>	HY-N8253
<b>CAS No.:</b>	20229-56-5
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>20</sub> O <sub>12</sub>
<b>Molecular Weight:</b>	464.38
<b>Target:</b>	Reactive Oxygen Species
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### BIOLOGICAL ACTIVITY

<b>Description</b>	Spiraeoside, an orally active natural compound, exerts antioxidant activity, inhibits reactive oxygen species (ROS) and malondialdehyde production. Spiraeoside possesses antiallergic, anti-inflammatory and antitumor activities <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Spiraeoside elevates HG stimulation-caused the decrease in the expression levels of p-Akt, nuclear Nrf2, and HO-1 in AC16 cells (the effects of Spiraeoside are reversed by LY294002)<sup>[1]</sup>.</p> <p>Spiraeoside protects AC16 cells against HG-induced oxidative stress, cell injury, and apoptosis<sup>[1]</sup>.</p> <p>Spiraeoside activates the PI3K/Akt/Nrf2 pathway in AC16 cells on exposure to HG<sup>[1]</sup>.</p> <p>Spiraeoside protects AC16 cells against HG-induced apoptosis through the PI3K/Akt/Nrf2 pathway<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>AC16 cells.</td> </tr> <tr> <td>Concentration:</td> <td>1, 5, 10, or 20 μM.</td> </tr> <tr> <td>Incubation Time:</td> <td>0, 24, or 48 hours.</td> </tr> <tr> <td>Result:</td> <td>Inhibited AC16 cells viability (20 μM).</td> </tr> </table>	Cell Line:	AC16 cells.	Concentration:	1, 5, 10, or 20 μM.	Incubation Time:	0, 24, or 48 hours.	Result:	Inhibited AC16 cells viability (20 μM).
Cell Line:	AC16 cells.								
Concentration:	1, 5, 10, or 20 μM.								
Incubation Time:	0, 24, or 48 hours.								
Result:	Inhibited AC16 cells viability (20 μM).								
<b>In Vivo</b>	<p>Spiraeoside (50 mg/kg, p.o.) shows ulcer preventive ability<sup>[2]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Animal Model:</td> <td>Male Wistar rats (6-8 weeks old)<sup>[2]</sup>.</td> </tr> <tr> <td>Dosage:</td> <td>50 mg/kg.</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage an hour before inducing the lesions.</td> </tr> <tr> <td>Result:</td> <td>Decreased severity of the formed lesions.</td> </tr> </table>	Animal Model:	Male Wistar rats (6-8 weeks old) <sup>[2]</sup> .	Dosage:	50 mg/kg.	Administration:	Oral gavage an hour before inducing the lesions.	Result:	Decreased severity of the formed lesions.
Animal Model:	Male Wistar rats (6-8 weeks old) <sup>[2]</sup> .								
Dosage:	50 mg/kg.								
Administration:	Oral gavage an hour before inducing the lesions.								
Result:	Decreased severity of the formed lesions.								

### REFERENCES

---

[1]. Hongyang Liu, et al. Spiraeoside protects human cardiomyocytes against high glucose-induced injury, oxidative stress, and apoptosis by activation of PI3K/Akt/Nrf2 pathway. *J Biochem Mol Toxicol*. 2020 Oct;34(10):e22548.

[2]. Stevan Samardžić, et al. Antioxidant, anti-inflammatory and gastroprotective activity of *Filipendula ulmaria* (L.) Maxim. and *Filipendula vulgaris* Moench. *J Ethnopharmacol*. 2018 Mar 1;213:132-137.

---

**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