



# 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

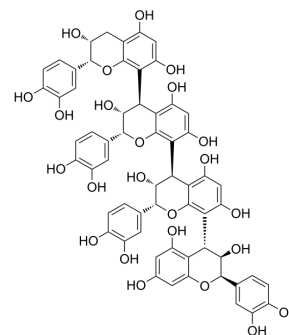
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

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

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

## Cinnamtannin A2

|                           |   |
|---------------------------|---|
| <b>Cat. No.:</b>          | HY-N9536  |
| <b>CAS No.:</b>           | 86631-38-1  |
| <b>Molecular Formula:</b> | C <sub>60</sub> H <sub>50</sub> O <sub>24</sub>   |
| <b>Molecular Weight:</b>  | 1155.02   |
| <b>Target:</b>            | GLP Receptor  |
| <b>Pathway:</b>           | GPCR/G Protein  |
| <b>Storage:</b>           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|                        |   |                      |  |                |          |                        |                  |                |  |
|------------------------|---|----------------------|--|----------------|----------|------------------------|------------------|----------------|--|
| <b>Description</b>     | Cinnamtannin A2, a tetrameric procyanidin, can increase GLP-1 and insulin secretion in mice. Cinnamtannin A2 could upregulate the expression of corticotrophin releasing hormone. Cinnamtannin A2 exhibits antioxidant, anti-diabetic and nephroprotective effect <sup>[1][2]</sup> .   |                      |  |                |          |                        |                  |                |  |
| <b>In Vitro</b>        | Cinnamtannin A2 (0.125-2.0 µg/mL) inhibits LDL oxidation induced by copper ions or MeO-AMVN <sup>[3]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only.   |                      |  |                |          |                        |                  |                |  |
| <b>In Vivo</b>         | <p>Cinnamtannin A2 (10 mg/kg; i.p. for 30 days) ameliorates the level of KIM1 and NAGL in 5/6 nephrectomized rats by regulating Nrf2-Keap1 pathway<sup>[2]</sup>.</p> <p>Cinnamtannin A2 (10 µg/kg; p.o.) increases the secretion of insulin and glucagon-like peptide-1 (GLP-1) in plasma of mice<sup>[1]</sup>.</p> <p>Cinnamtannin A2 (10 µg/kg; p.o.) significantly promotes phosphorylation of both IRB and IRS-1 in 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><b>Animal Model:</b></td> <td>Male Sprague-Dawley rats (250-300 g) were induced chronic renal failure (CRF) by removing the kidneys<sup>[2]</sup></td> </tr> <tr> <td><b>Dosage:</b></td> <td>10 mg/kg</td> </tr> <tr> <td><b>Administration:</b></td> <td>i.p. for 30 days</td> </tr> <tr> <td><b>Result:</b></td> <td>           Ameliorated the altered level of creatinine, blood urea nitrogen, Neutrophil gelatinase-associated lipocalin, Kidney Injury Molecule-1 and cytokines in the serum and microalbuminuria.<br/>           Reduced the oxidative stress level.<br/>           Attenuated the altered expression of proteins involved in Nrf2-Keap1 pathway in the kidney tissue.<br/>           Reduced the tubular injury score in the kidney tissue.         </td> </tr> </table> | <b>Animal Model:</b> | Male Sprague-Dawley rats (250-300 g) were induced chronic renal failure (CRF) by removing the kidneys <sup>[2]</sup> | <b>Dosage:</b> | 10 mg/kg | <b>Administration:</b> | i.p. for 30 days | <b>Result:</b> | Ameliorated the altered level of creatinine, blood urea nitrogen, Neutrophil gelatinase-associated lipocalin, Kidney Injury Molecule-1 and cytokines in the serum and microalbuminuria.<br>Reduced the oxidative stress level.<br>Attenuated the altered expression of proteins involved in Nrf2-Keap1 pathway in the kidney tissue.<br>Reduced the tubular injury score in the kidney tissue. |
| <b>Animal Model:</b>   | Male Sprague-Dawley rats (250-300 g) were induced chronic renal failure (CRF) by removing the kidneys <sup>[2]</sup>  |                      |  |                |          |                        |                  |                |  |
| <b>Dosage:</b>         | 10 mg/kg  |                      |  |                |          |                        |                  |                |  |
| <b>Administration:</b> | i.p. for 30 days  |                      |  |                |          |                        |                  |                |  |
| <b>Result:</b>         | Ameliorated the altered level of creatinine, blood urea nitrogen, Neutrophil gelatinase-associated lipocalin, Kidney Injury Molecule-1 and cytokines in the serum and microalbuminuria.<br>Reduced the oxidative stress level.<br>Attenuated the altered expression of proteins involved in Nrf2-Keap1 pathway in the kidney tissue.<br>Reduced the tubular injury score in the kidney tissue.  |                      |  |                |          |                        |                  |                |  |

### REFERENCES

[1]. Yamashita Y, et, al. Cinnamtannin A2, a tetrameric procyanidin, increases GLP-1 and insulin secretion in mice. *Biosci Biotechnol Biochem.* 2013;77(4):888-91.

---

[2]. Li N, et, al. Cinnamtannin A2 protects the renal injury by attenuates the altered expression of kidney injury molecule 1 (KIM-1) and neutrophil gelatinase-associated lipocalin (NGAL) expression in 5/6 nephrectomized rat model. *AMB Express*. 2020 May 8;10(1):87.

[3]. Osakabe N, et, al. Catechins and their oligomers linked by C4 --> C8 bonds are major cacao polyphenols and protect low-density lipoprotein from oxidation in vitro. *Exp Biol Med (Maywood)*. 2002 Jan;227(1):51-6.

---

**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