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

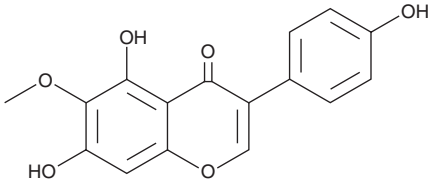
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Tectorigenin

Item No. 35860

CAS Registry No.:	548-77-6
Formal Name:	5,7-dihydroxy-3-(4-hydroxyphenyl)-6-methoxy-4H-1-benzopyran-4-one
Synonym:	Tectorigenine
MF:	$C_{16}H_{12}O_6$
FW:	300.3
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Belamcanda chinensis*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tectorigenin is supplied as a solid. A stock solution may be made by dissolving the tectorigenin in the solvent of choice, which should be purged with an inert gas. Tectorigenin is soluble in acetonitrile.

Description

Tectorigenin is an isoflavonoid that has been found in *B. chinensis* and has diverse biological activities and is an active metabolite of the flavonoid glycoside and phytoestrogen tectoridin (Item No. 33969).[1-5] It is formed from tectoridin by gut microbiota.[1] Tectorigenin scavenges hydroxyl and superoxide radicals in cell-free assays (IC_{50}s = 87 and 46.62 µg/ml, respectively) and inhibits the formation of thiobarbituric acid reactive substances (TBARS) in egg yolk (IC_{50} = 23 µg/ml).[3] It inhibits the production of prostaglandin E_2 (PGE_2; Item No. 14010) induced by the PKC activator 12-O-tetradecanoylphorbol 13-acetate (TPA; Item No. 10008014) or the sarcoplasmic/endoplasmic reticulum Ca^{2+}-ATPase (SERCA) and endoplasmic reticulum (ER) stress inducer thapsigargin (Item No. 10522) in isolated rat peritoneal macrophages when used at concentrations of 3, 10, or 30 µM.[3] Tectorigenin (10 µg/ml) reduces cell death induced by hydrogen peroxide (H_2O_2) and increases catalase levels and activity in V79-4 Chinese hamster lung fibroblasts.[4] *In vivo*, tectorigenin (100 mg/kg per day) prevents increases in hepatic levels of malondialdehyde (MDA) and blood levels of alanine transaminase (ALT) and aspartate aminotransferase (AST) and decreases in hepatic superoxide dismutase (SOD), catalase, and glutathione peroxidase (GPX) activities in a rat model of liver injury induced by carbon tetrachloride (CCl_4).[5]

References

1. Chen, Y., Song, W., Peng, Z.H., *et al.* Identification of metabolites of tectoridin in-vivo and in-vitro by liquid chromatography-tandem mass spectrometry. *J. Pharm. Pharmacol.* **60(6)**, 709-716 (2008).
2. Han, T., Cheng, G., Liu, Y., *et al. In vitro* evaluation of tectoridin, tectorigenin and tectorigenin sodium sulfonate on antioxidant properties. *Food Chem. Toxicol.* **50(2)**, 409-414 (2012).
3. Kim, Y.P., Yamada, M., Lim, S.S., *et al.* Inhibition by tectorigenin and tectoridin of prostaglandin E_2 production and cyclooxygenase-2 induction in rat peritoneal macrophages. *Biochim. Biophys. Acta* **1438(3)**, 399-407 (1999).
4. Zhang, R., Piao, M.J., Oh, M.C., *et al.* Protective effect of an isoflavone, tectorigenin, against oxidative stress-induced cell death via catalase activation. *J. Cancer Prev.* **21(4)**, 257-263 (2016).
5. Jung, S.H., Lee, Y.S., Lim, S.S., *et al.* Antioxidant activities of isoflavones from the rhizomes of *Belamcanda chinensis* on carbon tetrachloride-induced hepatic injury in rats. *Arch. Pharm. Res.* **27(2)**, 184-188 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM