



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) 

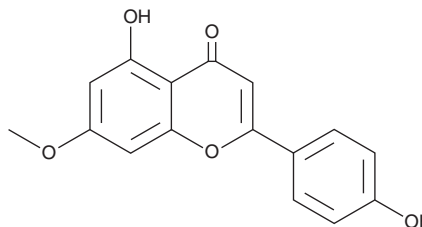
PRODUCT INFORMATION



Genkwanin

Item No. 35229

CAS Registry No.: 437-64-9
Formal Name: 5-hydroxy-2-(4-hydroxyphenyl)-7-methoxy-4H-1-benzopyran-4-one
Synonyms: Apigenin 7-methyl ether, 7-Methylapigenin, Puddumetin
MF: C₁₆H₁₂O₅
FW: 284.3
Purity: ≥98%
UV/Vis.: λ_{max}: 268, 337 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Daphne genkwa*



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

Laboratory Procedures

Genkwanin is supplied as a solid. A stock solution may be made by dissolving the genkwanin in the solvent of choice, which should be purged with an inert gas. Genkwanin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of genkwanin in these solvents is approximately 12 and 14 mg/ml, respectively. Genkwanin is also slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of genkwanin can be prepared by directly dissolving the solid in aqueous buffers. The solubility of genkwanin in PBS (pH 7.2) is approximately 0.30 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Genkwanin is a flavonoid that has been found in *T. kirilowii* and has diverse biological activities.^{1,2} It inhibits proliferation of MDA-MB-231 and MCF-7 breast cancer, Eca-109 esophageal carcinoma, and A549 lung adenocarcinoma cells (IC₅₀s = 58.54, 101.4, 98.2, and 120.77 μM, respectively).¹ It decreases the levels of PI3Kγ, as well as the levels of phosphorylated Akt, mTOR, p70 ribosomal S6 kinase (p70S6K) and ULK, and induces apoptosis and cell cycle arrest at the G₂/M phase in MDA-MB-231 cells. Genkwanin (20-40 μM) reverses increases in apoptosis, lactate dehydrogenase (LDH) release, and reactive oxygen species (ROS) production induced by 1-methyl-4-phenylpyridinium (MPP⁺) in an *in vitro* model of Parkinson's disease inflammation using SH-SY5Y cells.² It also reduces protein levels of toll-like receptor 4 (TLR4), MyD88, NOD-like receptor protein 3 (NLRP3), and caspase-1 in SH-SY5Y cells.

References

- Zhang, H.-W., Hu, J.-J., Fu, R.-Q., *et al.* Flavonoids inhibit cell proliferation and induce apoptosis and autophagy through downregulation of PI3Kγ mediated PI3K/AKT/mTOR/p70S6K/ULK signaling pathway in human breast cancer cells. *Sci. Rep.* **8**(1), 11255 (2018).
- Li, Q., Zhang, P., and Cai, Y. Genkwanin suppresses MPP⁺-induced cytotoxicity by inhibiting TLR4/MyD88/NLRP3 inflammasome pathway in a cellular model of Parkinson's disease. *Neurotoxicology* **87**, 62-69 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/16/2022

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