



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

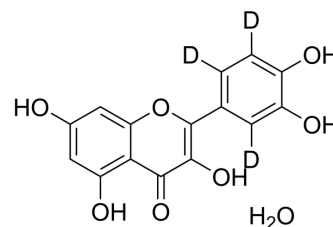
mail@szabo-scandic.com

www.szabo-scandic.com

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

Quercetin-d₃ hydrate

Cat. No.:	HY-18085AS
Molecular Formula:	C ₁₅ H ₉ D ₃ O ₈
Molecular Weight:	323.27
Target:	PI3K; Autophagy; Mitophagy; Apoptosis; Reactive Oxygen Species
Pathway:	PI3K/Akt/mTOR; Autophagy; Apoptosis; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 30 mg/mL (92.80 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.0934 mL	15.4669 mL	30.9339 mL
	5 mM		0.6187 mL	3.0934 mL	6.1868 mL
	10 mM		0.3093 mL	1.5467 mL	3.0934 mL

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

BIOLOGICAL ACTIVITY

Description

Quercetin-d₃ hydrate is a deuterium labeled Quercetin hydrate (HY-18085A), a flavonoid which can stimulate recombinant SIRT1 and also a PI3K inhibitor with IC₅₀s of 2.4 μM, 3.0 μM and 5.4 μM for PI3K γ, PI3K δ and PI3K β, respectively^[1].

IC₅₀ & Target

IC₅₀: 2.4±0.6 μM (PI3K γ), 3.0±0.0 μM (PI3K δ), 5.4±0.3 μM (PI3K β)^[1]

In Vitro

Quercetin hydrate is a type of plant-based chemical, or phytochemical, used as an ingredient in supplements, beverages or foods. In several studies, it may have anti-inflammatory and antioxidant properties, and it is being investigated for a wide range of potential health benefits. Quercetin hydrate is a PI3K inhibitor with IC₅₀ of 2.4-5.4 μM. Quercetin hydrate strongly abrogates PI3K and Src kinases, mildly inhibits Akt1/2, and slightly affected PKC, p38 and ERK1/2^[1]. Quercetin hydrate inhibits TNF-induced LDH% release, EC-dependent neutrophils adhesion to bovine pulmonary artery endothelial cells (BPAEC), and BPAEC DNA synthesis and proliferation^[2].

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

In Vivo

Combination of Quercetin hydrate (75 mg/kg) and 2-Methoxyestradiol enhances inhibition of human prostate cancer LNCaP and PC-3 cells xenograft tumor growth^[3].

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

REFERENCES

- [1]. Leyre Navarro-Núñez, et al. Effect of quercetin on platelet spreading on collagen and fibrinogen and on multiple platelet kinases. *Fitoterapia*. 2010 Mar;81(2):75-80.
- [2]. Yu XB, et al. Inhibitory effects of protein kinase C inhibitors on tumor necrosis factor induced bovine pulmonary artery endothelial cell injuries. *Yao Xue Xue Bao*. 1996;31(3):176-81.
- [3]. Yang F, et al. Combination of Quercetin and 2-Methoxyestradiol Enhances Inhibition of Human Prostate Cancer LNCaP and PC-3 Cells Xenograft Tumor Growth. *PLoS One*. 2015 May 26;10(5):e0128277.
- [4]. Tao Liu, et al. Quercetin alleviates kidney fibrosis by reducing renal tubular epithelial cell senescence through the SIRT1/PINK1/mitophagy axis. *Life Sci*. 2020 Jul 20;118116.
-

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

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA