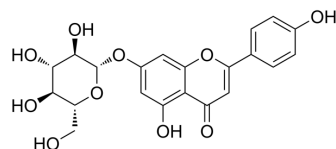


Apigenin 7-glucoside

Cat. No.:	HY-N0578
CAS No.:	578-74-5
Molecular Formula:	C ₂₁ H ₂₀ O ₁₀
Molecular Weight:	432.38
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, protect from light * In solvent : -80°C, 2 years; -20°C, 1 year (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (231.28 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3128 mL	11.5639 mL	23.1278 mL
	5 mM	0.4626 mL	2.3128 mL	4.6256 mL
	10 mM	0.2313 mL	1.1564 mL	2.3128 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (5.78 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Apigenin-7-glucoside (Apigenin-7-O-β-D-glucopyranoside) exhibits significant anti-proliferative and antioxidant activity and scavenges reactive oxygen species (ROS)^{[1][2]}.

In Vitro

Apigenin 7-glucoside exhibits significant anti-proliferative activity against B16F10 melanoma cells after 24 and 48 h of incubation. Apigenin-7-glucoside provokes an increase of subG0/G1, S and G2/M phase cell proportion with a significant decrease of cell proportion in G0/G1 phases. Apigenin-7-glucoside enhances melanogenesis synthesis and tyrosinase activity of B16F10 melanoma cells^[1].

Apigenin 7-glucoside specifically induces the differentiation of CD34⁺ cells towards the erythroid lineage and inhibited the myeloid differentiation. Apigenin 7-glucoside has strong antioxidant activity against reactive oxygen species (ROS) in vitro in a concentration-dependent manner^[2].

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

CUSTOMER VALIDATION

- Adv Sci (Weinh). 2024 Jan 6:e2305260.
- JOR Spine. 2024 Apr 17;7(2):e1325.
- Faculty of Biology. University of Belgrade. 2019 Jul.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Nasr Bouzaiene N et al. Effect of apigenin-7-glucoside, genkwanin and naringenin on tyrosinase activity and melanin synthesis in B16F10 melanoma cells. Life Sci. 2016 Jan 1;144:80-5.

[2]. Samet I et al. Olive leaf components apigenin 7-glucoside and luteolin 7-glucoside direct human hematopoietic stem cell differentiation towards erythroid lineage. Differentiation. 2015 Jun;89(5):146-55.

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