

PRODUCT INFORMATION

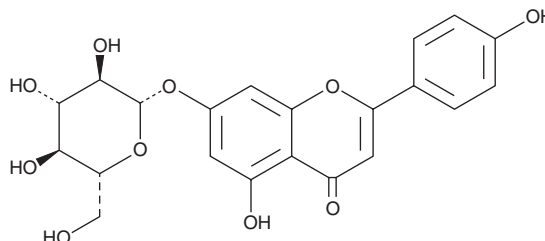


Apigenin 7-glucoside

Item No. 26813

CAS Registry No.: 578-74-5
Formal Name: 7-(β-D-glucopyranosyloxy)-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: 7-O-β-D-Glucopyranosylapigenin, Apigenin-7-O-β-D-glucoside, Apigetrin, Cosmosiin, NSC 407303

MF: C₂₁H₂₀O₁₀
FW: 432.4
Purity: ≥98%
UV/Vis.: λ_{max}: 269, 336 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/Sow thistle leaf



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

Laboratory Procedures

Apigenin 7-glucoside is supplied as a crystalline solid. A stock solution may be made by dissolving the apigenin 7-glucoside in the solvent of choice, which should be purged with an inert gas. Apigenin 7-glucoside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of apigenin 7-glucoside in these solvents is approximately 5 and 3 mg/ml, respectively.

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 apigenin 7-glucoside can be prepared by directly dissolving the crystalline solid in aqueous buffers. Apigenin 7-glucoside is partially soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Apigenin 7-glucoside is a flavonoid with anti-inflammatory and anxiolytic activities.^{1,2} It inhibits LPS-induced nitric oxide production in RAW 264.7 cells when used at concentrations ranging from 0.16 to 10 μM.¹ *In vivo*, apigenin 7-glucoside (10 mg/kg) reduces pulmonary edema and lung inflammation in a mouse model of LPS-induced acute lung injury. It also increases the number of entries and the time spent in the open arms of the elevated plus maze in rats, indicating anxiolytic activity.²

References

1. Li, K.C., Ho, Y.L., Hsieh, W.T., *et al.* Apigenin-7-glycoside prevents LPS-induced acute lung injury via downregulation of oxidative enzyme expression and protein activation through inhibition of MAPK phosphorylation. *Int. J. Mol. Sci.* **16(1)**, 1736-1754 (2015).
2. Kumar, D. and Bhat, Z.A. Apigenin 7-glucoside from *Stachys tibetica* Vatke and its anxiolytic effect in rats. *Phytomedicine* **21(7)**, 1010-1014 (2014).

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, 11/10/2022

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