# PRODUCT INFORMATION

## Apigenin 7-glucoside

*Item No. 26813*

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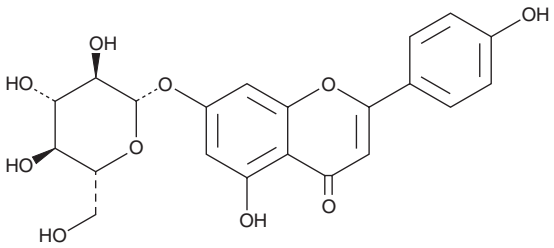
|---|---|
| **CAS Registry No.:** | 578-74-5 |
| **Formal Name:** | 7-(β-D-glucopyranosyloxy)-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one |
| **Synonyms:** | 7-O-β-D-Glucopyranosylapigenin, Apigenin-7-O-β-D-glucoside, Apigetrin, Cosmosiin, NSC 407303 |
| **MF:** | $C_{21}H_{20}O_{10}$ |
| **FW:** | 432.4 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 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).





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