

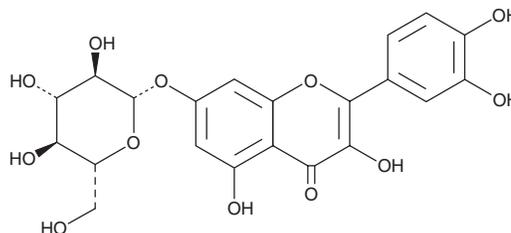
PRODUCT INFORMATION



Quercetin-7-O-β-D-Glucopyranoside

Item No. 27641

CAS Registry No.: 491-50-9
Formal Name: 2-(3,4-dihydroxyphenyl)-7-(β-D-glucopyranosyloxy)-3,5-dihydroxy-4H-1-benzopyran-4-one
Synonyms: Quercetin 7-Glucoside, Quercimeritrin, Quercimeritroside
MF: C₂₁H₂₀O₁₂
FW: 464.4
Purity: ≥98%
UV/Vis.: λ_{max}: 256, 372 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item origin: Plant/*Sophora japonica* L.



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

Laboratory Procedures

Quercetin-7-O-β-D-glucopyranoside is supplied as a crystalline solid. A stock solution may be made by dissolving the quercetin-7-O-β-D-glucopyranoside in the solvent of choice, which should be purged with an inert gas. Quercetin-7-O-β-D-glucopyranoside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of quercetin-7-O-β-D-glucopyranoside in these solvents is approximately 10 mg/ml.

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 quercetin-7-O-β-D-glucopyranoside can be prepared by directly dissolving the crystalline solid. The solubility of quercetin-7-O-β-D-glucopyranoside in PBS, pH 7.2, is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Quercetin-7-O-β-D-glucopyranoside is a flavonoid originally isolated from *G. hirsutum* that has diverse biological activities, including antioxidant, anti-inflammatory, and anti-angiogenic properties.¹ It has antioxidant activity in an oxygen radical absorbance capacity (ORAC) assay and decreases *tert*-butyl hydroperoxide-induced reactive oxygen species (ROS) production in L-929 cells when used at concentrations of 0.25 and 1 μg/ml.² Quercetin-7-O-β-D-glucopyranoside (15 and 30 μg/ml) reduces protein levels of inducible nitric oxide synthase (iNOS) and COX-2 in LPS-stimulated RAW 264.7 cells. It decreases angiogenesis in isolated rat aortic rings and proliferation of human umbilical vein endothelial cells (HUVECs) but has no effect on tube formation or chemotaxis of HUVECs when used at a concentration of 100 μM.³

References

1. Tebayashi, S.-I., Matsuyama, S., Suzuki, T., et al. *J. Pest. Scien.* **20**(3), 299-305 (1995).
2. Legault, J., Perron, T., Mshvildadze, V., et al. *J. Med. Food* **14**(10), 1127-1134 (2011).
3. Lin, C., Wu, M., and Dong, J. *Lett. Drug. Des. Discov.* **(1)4**, 329-333 (2012).

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.

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