PRODUCT INFORMATION



Quercetin 3-O-sophoroside

Item No. 28592

CAS Registry No.: 18609-17-1

Formal Name: 2-(3,4-dihydroxyphenyl)-3-[(2-O-β-D-

> glucopyranosyl-β-D-glucopyranosyl)oxy]-5,7-dihydroxy-4H-1-benzopyran-4-one

Synonyms: Baimaside, Quercetin 3-sophoroside

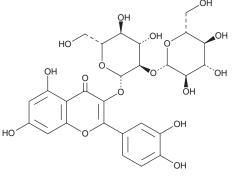
MF: $C_{27}H_{30}O_{17}$ FW: 626.5 **Purity:** ≥98%

λ_{max}: 207, 257, 355 nm UV/Vis.: Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Item Origin: Plant/A. venetum L.

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



Laboratory Procedures

Quercetin 3-O-sophoroside is supplied as a crystalline solid. A stock solution may be made by dissolving the quercetin 3-O-sophoroside in the solvent of choice, which should be purged with an inert gas. Quercetin 3-O-sophoroside is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of quercetin 3-O-sophoroside in these solvents is approximately 10 and 3 mg/ml, respectively. Quercetin 3-O-sophoroside is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, quercetin 3-O-sophoroside should first be dissolved in DMSO or DMF and then diluted with the aqueous buffer of choice. Quercetin 3-O-sophoroside has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) and approximately approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Quercetin 3-O-sophoroside is a flavonoid glycoside that has been found in B. napus (rapeseed) and has antioxidant activity.1-3 Quercetin 3-O-sophoroside has a relative antioxidant capacity of 1.45 compared to Trolox (Item No. 10011659) in an ABTS (Item No. 27317) assay.3 It also inhibits lipid peroxidation in a cellfree assay using phospholipid liposomes with an IC_{50} value of 9.2 μ M.

References

- 1. Ferreres, F., Taveira, M., Pereira, D.M., et al. Tomato (Lycopersicon esculentum) seeds: new flavonols and cytotoxic effect. J. Agric. Food Chem. 58(5), 2854-2861 (2010).
- Wang, Y., Meng, G., Chen, S., et al. Correlation analysis of phenolic contents and antioxidation in yellowand black-seeded Brassica napus. Molecules 23(7), e1815 (2018).
- Plumb, G.W., Price, K.R., Modes, M.J.C., et al. Antioxidant properties of the major polyphenolic compounds in broccoli. Free Radic. Res. 27(4), 429-435 (1997).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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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