

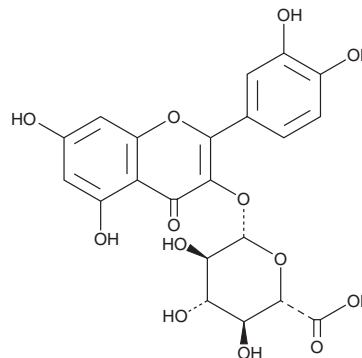
PRODUCT INFORMATION



Quercetin 3-O-glucuronide

Item No. 21289

CAS Registry No.: 22688-79-5
Formal Name: 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-4-oxo-4H-1-benzopyran-3-ylβ-D-glucopyranosiduronic acid
Synonyms: Miquelianin, Quercetin 3-O-β-D-glucuronide
MF: C₂₁H₁₈O₁₃
FW: 478.4
Purity: ≥98%
UV/Vis.: λ_{max}: 258, 363 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Quercetin 3-O-glucuronide is supplied as a crystalline solid. A stock solution may be made by dissolving the quercetin 3-O-glucuronide in the solvent of choice. Quercetin 3-O-glucuronide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of quercetin 3-O-glucuronide in these solvents is approximately 10, 20, and 30 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 quercetin 3-O-glucuronide can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of quercetin 3-O-glucuronide in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Quercetin 3-O-glucuronide is a pharmacologically active flavonol glucuronide isolated from *H. perforatum* (St. John's wort) that inhibits the α_{2c} adrenergic receptor (K_i = 4,060 nM in hα_{2c} preparations).¹⁻³ Quercetin 3-O-glucuronide (0.6 mg/kg) reduced the time rats spent immobile in the forced swim test, suggesting antidepressant-like properties, when given either acutely or chronically.⁴ It also reduced open field stress-induced hyperthermia in mice (at 1.2 mg/kg).⁵

References

1. Nahrstedt, A. and Butterweck, V. *Pharmacopsychiatry* **30(Suppl 2)**, 129-134 (1997).
2. Nahrstedt, A. and Butterweck, V. *J. Nat. Prod.* **73(5)**, 1015-1021 (2010).
3. Butterweck, V., Nahrstedt, A., Evans, J., et al. *Psychopharmacology* **162(2)**, 193-202 (2002).
4. Butterweck, V., Jürgenliemk, G., Narstedt, A., et al. *Planta Med.* **66(1)**, 3-6 (2000).
5. Grundmann, O., Kelber, O., and Butterweck, V. *Planta Med.* **72(15)**, 1366-1371 (2006).

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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