# PRODUCT INFORMATION



## Quercetin 3-O-β-D-xylopyranoside

Item No. 35141

CAS Registry No.: 549-32-6

Formal Name: 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-

3-(β-D-xylopyranosyloxy)-4H-1-

benzopyran-4-one

Synonyms: Reinutrin, Reynoutrin

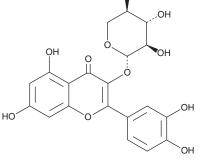
MF:  $C_{20}H_{18}O_{11}$ FW: 434.4 **Purity:** ≥98%

λ<sub>max</sub>: 258, 361 nm UV/Vis.:

Supplied as: A solid -20°C Storage: Stability: ≥4 years

Item Origin: Plant/Psidium guajava

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



#### **Laboratory Procedures**

Quercetin 3-O-β-D-xylopyranoside is supplied as a solid. A stock solution may be made by dissolving the Quercetin 3-O-β-D-xylopyranoside in the solvent of choice, which should be purged with an inert gas. Quercetin 3-O-β-D-xylopyranoside is soluble in DMSO.

#### Description

Quercetin 3-O-β-D-xylopyranoside is a flavonoid glycoside that has been found in N. candida and has diverse biological activities.<sup>1-3</sup> It reduces malondialdehyde (MDA) levels in isolated rat brain when used at a concentration of 10 μg/ml. Quercetin 3-O-β-D-xylopyranoside (10, 50, and 100 μg/ml) reduces LPS- and cerulein-induced increases in reactive oxygen species (ROS) production and levels of GRP78, a marker of endoplasmic reticulum stress, in an AR42J rat pancreatic acinar cell model of pancreatitis.<sup>2</sup> In vivo, quercetin 3-O- $\beta$ -D-xylopyranoside (12.5, 25, and 50 mg/kg) decreases serum TNF- $\alpha$  and IL-6 levels, myocardial MDA levels, and myocardial fibrosis, as well as improves cardiac function, in a rat model of ischemic heart failure.<sup>3</sup>

#### References

- 1. Liu, R.-N., Wang, W., Ding, Y., et al. A new flavonol glycoside and activity of compounds from the flower of Nymphaea candida. J. Asian Nat. Prod. Res. 9(3-5), 333-338 (2007).
- 2. Seo, J.Y., Pandey, R.P., Lee, J., et al. Quercetin 3-O-xyloside ameliorates acute pancreatitis in vitro via the reduction of ER stress and enhancement of apoptosis. Phytomedicine 55, 40-49 (2019).
- Yang, W., Tu, H., Tang, K., et al. Reynoutrin improves ischemic heart failure in rats via targeting S100A1. Front. Pharmacol. 12, 703962 (2021).

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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