PRODUCT INFORMAT



Esterified Steryl Glucosides

Item No. 27204

Acylated Steryl Glucosides, Synonyms:

Acylated Steryl β-Glucosides

 $C_{51}H_{90}O_7$ (for β -sitosteryl MF:

glucoside palmitate)

FW: 815.3 **Purity:** ≥98% Supplied as: A 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

Esterified steryl glucosides is supplied as a solid. A stock solution may be made by dissolving the esterified steryl glucosides in the solvent of choice, which should be purged with an inert gas. Esterified steryl glucosides is soluble in chloroform and ethyl ether.

Description

Esterified steryl glucosides are sterol derivatives that have been found in vegetables, vegetable oils, fruits, cereals, legumes, fungi, and algae. 1-3 They have also been found as bioactive lipids in pre-germinated brown rice.⁴ The level of esterified steryl glucosides decreases in microsomal membranes from the pericarp of tomatoes stored at a low temperature (2°C) and increases in mature-green tomatoes when stored at $38^{\circ}C.^{5}$ Esterified Steryl Glucosides is a mixture of β -sitosteryl glucoside, β -campesteryl glucoside, and β-stigmasteryl glucoside.

References

- 1. Sugawara, T. and Miyazawa, T. Separation and determination of glycolipids from edible plant sources by high-performance liquid chromatography and evaporative light-scattering detection. Lipids 34(11), (1999).
- 2. Lacoste, F., Dejean, F., Griffon, H., et al. Quantification of free and esterified steryl glucosides in vegetable oils and biodiesel. Eur. J. Lipid Sci. Technol. 111(8), 822-828 (2009).
- Grille, S., Zaslawski, A., Thiele, S., et al. The functions of steryl glycosides come to those who wait: Recent advances in plants, fungi, bacteria and animals. Prog. Lipid Res. 49(3), 262-288 (2010).
- Usuki, S., Ariga, T., Dasgupta, S., et al. Structural analysis of novel bioactive acylated steryl glucosides in pre-germinated brown rice bran. J. Lipid Res. 49(10), 2188-2196 (2008).
- 5. Moreau, R.A., Whitaker, B.D., and Hicks, K.B. Phytosterols, phytostanols, and their conjugates in foods: Structural diversity, quantitative analysis, and health-promoting uses. Prog. Lipid Res. 41(6), 457-500 (2002).

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/20/2022

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