# PRODUCT INFORMATION



## **Steryl Glucosides**

Item No. 27205

Formal Name: (2R,3R,4S,5S,6R)-2-

> (((3S,8S,9S,10R,13R,14S,17R)-17-((2R,5R)-5ethyl-6-methylheptan-2-yl)-10,13-dimethyl-2,3,4,7,8,9,10,11,12,13,14,15,16,17-tetradecahydro-1H-cyclopenta[a]phenanthren-3-yl)oxy)-6-(hydroxymethyl)tetrahydro-2H-

pyran-3,4,5-triol

 $C_{35}H_{60}O_6$  (for  $\beta$ -sitosteryl glucoside) MF:

FW: 576.9 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥2 years

HΩ HO HO

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

### **Laboratory Procedures**

Steryl glucosides is supplied as a solid. A stock solution may be made by dissolving the steryl glucosides in the solvent of choice. Steryl glucosides is soluble in a 2:1:0.1 (warm) solution of chloroform:methanol:water.

#### Description

Steryl glucosides are neutral glycolipids commonly found in plant cell membranes and vegetable oils that contain a glucose moiety conjugated to a sterol lipid. They function as glucose donors in the biosynthesis of glucocerebrosides (Item No. 25850) in plant microsomes and are metabolic precursors to acylated/esterified steryl glucosides. 1,2 Steryl glucosides are the major component of filter- and engine-damaging precipitates formed during biodiesel production from transesterification of vegetable oils.<sup>3</sup> This product contains a mixture of steryl glucosides.

#### References

- 1. Elbein, A.D. and Forsee, W.T. Biosynthesis and structure of glycosyl diglycerides, steryl glucosides, and acylated steryl glucosides. Lipids 10(7), 427-436 (1975).
- Lynch, D.V., Criss, A.K., Lehoczky, J.L., et al. Ceramide glucosylation in bean hypocotyl microsomes: Evidence that steryl glucoside serves as glucose donor. Arch. Biochem. Biophys. 340(2), 311-316 (1997).
- 3. Peiru, S., Aguirre, A., Eberhardt, F., et al. An industrial scale process for the enzymatic removal of steryl glucosides from biodiesel. Biotechnol. Biofuels 8:223, (2015).

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

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