

# 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)-5-ethyl-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

**MF:** C<sub>35</sub>H<sub>60</sub>O<sub>6</sub> (for β-sitosteryl glucoside)

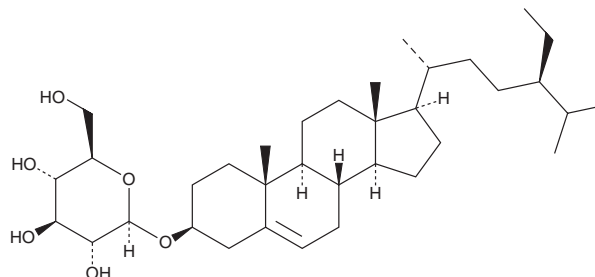
**FW:** 576.9

**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

Steryl glucosides is supplied as a solid. A stock solution may be made by dissolving the sterol 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.<sup>1</sup> They function as glucose donors in the biosynthesis of glucocerebrosides (Item No. 25850) in plant microsomes and are metabolic precursors to acylated/esterified sterol glucosides.<sup>1,2</sup> 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 sterol glucosides.

### References

1. Elbein, A.D. and Forsee, W.T. Biosynthesis and structure of glycosyl diglycerides, sterol glucosides, and acylated sterol glucosides. *Lipids* **10**(7), 427-436 (1975).
2. Lynch, D.V., Criss, A.K., Lehoczy, J.L., et al. Ceramide glucosylation in bean hypocotyl microsomes: Evidence that sterol 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 sterol glucosides from biodiesel. *Biotechnol. Biofuels* **8**:223, (2015).

#### 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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