

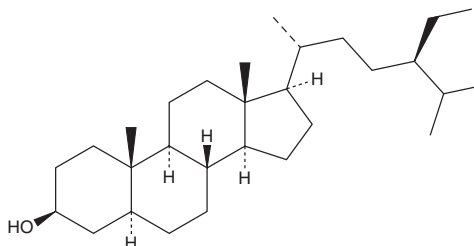
# PRODUCT INFORMATION



## Sitostanol

Item No. 26094

**CAS Registry No.:** 83-45-4  
**Formal Name:** (5 $\alpha$ )-stigmastan-3 $\beta$ -ol  
**Synonyms:** 24 $\alpha$ -ethyl Cholestanol, NSC 49081,  $\beta$ -Sitostanol, Stigmastanol  
**MF:** C<sub>29</sub>H<sub>52</sub>O  
**FW:** 416.7  
**Purity:**  $\geq$ 95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years



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

### Laboratory Procedures

Sitostanol is supplied as a solid. A stock solution may be made by dissolving the sitostanol in the solvent of choice, which should be purged with an inert gas. Sitostanol is slightly soluble in chloroform.

### Description

Sitostanol is a saturated sterol found in a variety of plants, including corn, wheat, and rice.<sup>1</sup> It reduces cholesterol uptake in isolated rat jejunal loops when used at a concentration of 0.3 mM in a micellar solution containing cholesterol.<sup>2</sup> Sitostanol decreases liver cholesterol levels and prevents abdominal aorta atheroma in rabbits when administered in a cholesterol-containing diet at 0.5%.<sup>3</sup>

### References

1. Anderson, R.J., Nabsnhauer, F.P., and Shriner, R.L. The distribution of dihydrositosterol in plant fats. *J. Biol. Chem.* **71**, 389-399 (1927).
2. Hassan, A.S. and Rampone, A.J. Effect of  $\beta$ -sitostanol (5  $\alpha$ -stigmastan-3  $\beta$ -ol) on cholesterol absorption from micellar solutions in jejunal loops in situ. *Steroids* **36(6)**, 731-741 (1980).
3. Ikeda, I., Kawasaki, A., Samezima, K., *et al.* Antihypercholesterolemic activity of  $\beta$ -sitostanol in rabbits. *J. Nutr. Sci. Vitaminol. (Tokyo)* **27(3)**, 243-251 (1981).

#### 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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