

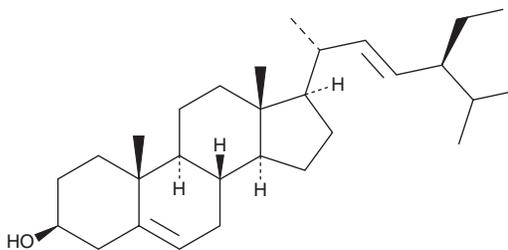
PRODUCT INFORMATION



Stigmasterol

Item No. 18079

CAS Registry No.: 83-48-7
Formal Name: stigmasta-5,22E-dien-3 β -ol
Synonym: NSC 8095
MF: C₂₉H₄₈O
FW: 412.7
Purity: \geq 90%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Stigmasterol is supplied as a crystalline solid. A stock solution may be made by dissolving the stigmasterol in the solvent of choice. Stigmasterol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of stigmasterol in these solvents is approximately 20, 0.1, and 2 mg/ml, respectively.

Stigmasterol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, stigmasterol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Stigmasterol has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Stigmasterol is a natural plant sterol that can be isolated from certain seed oils and herbs, including those used for therapeutic purposes.^{1,2} Dietary consumption of phytosterols, including stigmasterol, may have beneficial health effects in adults, particularly against cancer and ulceration.³⁻⁵ Alternatively, phytosterols may contribute to inflammation and intestinal failure-associated liver disease in young individuals.⁶

References

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3. Awad, A.B. and Fink, C.S. Phytosterols as anticancer dietary components: Evidence and mechanism of action. *J. Nutr.* **130**, 2127-2130 (2000).
4. Ali, H., Dixit, S., Ali, D., *et al.* Isolation and evaluation of anticancer efficacy of stigmasterol in a mouse model of DMBA-induced skin carcinoma. *Drug. Des. Devel. Ther.* **9**, 2793-2800 (2015).
5. Tovey, F.I. Role of dietary phospholipids and phytosterols in protection against peptic ulceration as shown by experiments on rats. *World J. Gastroenterol.* **21**(5), 1377-1384 (2015).
6. Mutanen, A., Nissinen, M.J., Lohi, J., *et al.* Serum plant sterols, cholestanol, and cholesterol precursors associate with histological liver injury in pediatric onset intestinal failure. *Am. J. Clin. Nutr.* **100**(4), 1085-1094 (2014).

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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