

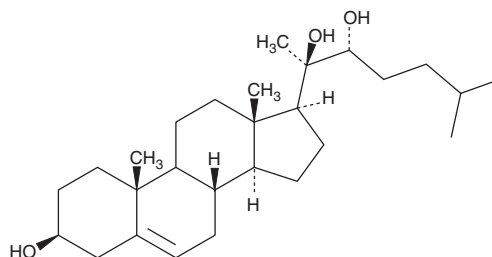
PRODUCT INFORMATION



Oxy-16

Item No. 9000395

CAS Registry No.: 596-94-1
Formal Name: cholest-5-ene-3b,20,22R-triol
Synonym: 20(R),22(R)-dihydroxy Cholesterol
MF: C₂₇H₄₆O₃
FW: 418.7
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Oxy-16 is supplied as a crystalline solid. A stock solution may be made by dissolving the Oxy-16 in the solvent of choice, which should be purged with an inert gas. Oxy-16 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of Oxy-16 in these solvents is approximately 10, 2, and 1.5 mg/ml, respectively.

Description

Naturally occurring oxysterols are products of cholesterol oxidation that can stimulate the hedgehog (Hh) signaling pathway in target cells associated with cardiovascular disease and with bone formation.¹ Depending on the target cell, activation of Hh signaling can modulate inflammatory responses to additional atherogenic factors such as lesion-producing macrophages or enable osteoblast differentiation.^{2,3} Oxy-16 is a synthetic oxysterol compound that may function as an antagonist of hedgehog activity. Published data regarding its efficacy remains forthcoming.

References

1. Dwyer, J.R., Sever, N., Carlson, M., *et al.* Oxysterols are novel activators of the hedgehog signaling pathway in pluripotent mesenchymal cells. *J. Biol. Chem.* **282**(12), 8959-8968 (2007).
2. Björkhem, I. and Diczfalusy, U. Oxysterols: Friends, foes, or just fellow passengers? *Arterioscler. Thromb. Vasc. Biol.* **22**(5), 734-742 (2002).
3. Amantea, C.M., Kim, W.K., Meliton, V., *et al.* Oxysterol-induced osteogenic differentiation of marrow stromal cells is regulated by Dkk-1 inhibitable and PI3-kinase mediated signaling. *J. Cell. Biochem.* **105**(2), 424-436 (2008).

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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