

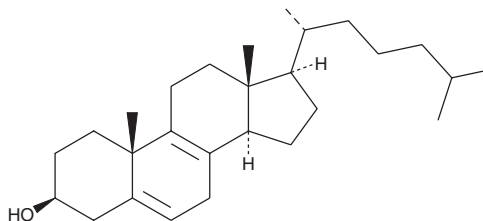
# PRODUCT INFORMATION



## 8-dehydro Cholesterol

Item No. 25970

CAS Registry No.: 70741-38-7  
Formal Name: cholesta-5,8-dien-3 $\beta$ -ol  
MF: C<sub>27</sub>H<sub>44</sub>O  
FW: 384.6  
Purity:  $\geq 90\%$   
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

8-dehydro Cholesterol is supplied as a solid. A stock solution may be made by dissolving the 8-dehydro cholesterol in the solvent of choice, which should be purged with an inert gas. 8-dehydro Cholesterol is slightly soluble in methanol and chloroform.

### Description

8-dehydro Cholesterol (8-DHC) is an isomer of the cholesterol precursor 7-DHC (Item No. 14612).<sup>1-3</sup> It accumulates in tissues and plasma in patients with Smith-Lemli-Opitz syndrome (SLOS), a disorder characterized by a mutation in *DHCR7*, the gene encoding 3 $\beta$ -hydroxysterol- $\Delta^7$ -reductase, and decreased cholesterol levels in bodily tissues and fluids, as well as microcephaly, intellectual disability, and distinctive dysmorphic features. 8-DHC levels are increased in serum in a rat model of SLOS induced by the *DHCR7* inhibitor AY 9944 (Item No. 14611).<sup>1</sup>

### References

1. Griffiths, W.J., Abdel-Khalik, J., Crick, P.J., *et al.* Sterols and oxysterols in plasma from Smith-Lemli-Opitz syndrome patients. *J. Steroid Biochem. Mol. Biol.* **169**, 77-87 (2017).
2. Wolf, C., Chevy, F., Pham, J., *et al.* Changes in serum sterols of rats treated with 7-dehydrocholesterol- $\Delta^7$ -reductase inhibitors: Comparison to levels in humans with Smith-Lemli-Opitz syndrome. *J. Lipid. Res.* **37**(6), 1325-1333 (1996).
3. Björkhem, I., Starck, L., Andersson, U., *et al.* Oxysterols in the circulation of patients with the Smith-Lemli-Opitz syndrome: Abnormal levels of 24S- and 27-hydroxycholesterol. *J. Lipid Res.* **42**(3), 366-371 (2001).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/08/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM