

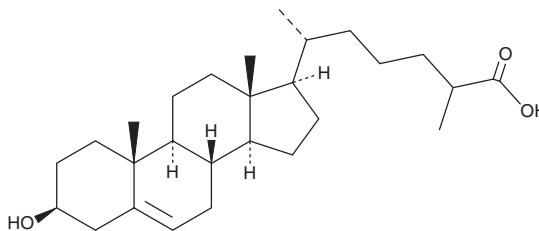
# PRODUCT INFORMATION



## 3 $\beta$ -hydroxy-5-Cholestenic Acid

Item No. 21859

**CAS Registry No.:** 6561-58-6  
**Formal Name:** (3 $\beta$ )-3-hydroxy-cholest-5-en-26-oic acid  
**Synonyms:** 3 $\beta$ -hydroxy-5-CA, Cholesterol-26-carboxylic Acid  
**MF:** C<sub>27</sub>H<sub>44</sub>O<sub>3</sub>  
**FW:** 416.6  
**Purity:**  $\geq$ 95%  
**Supplied as:** A 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

3 $\beta$ -hydroxy-5-Cholestenic acid is supplied as a solid. A stock solution may be made by dissolving the 3 $\beta$ -hydroxy-5-cholestenic acid in the solvent of choice, which should be purged with an inert gas. 3 $\beta$ -hydroxy-5-Cholestenic acid is soluble in DMSO.

### Description

3 $\beta$ -hydroxy-5-Cholestenic acid is an active metabolite of cholesterol formed when cholesterol is metabolized by the cytochrome P450 (CYP) isomer CYP27A1.<sup>1</sup> 3 $\beta$ -hydroxy-5-Cholestenic acid is a modulator of  $\gamma$ -secretase that decreases amyloid  $\beta$  (1-42) peptide (A $\beta$ 42; EC<sub>50</sub> = 250 nM) and increases A $\beta$ 38 levels with no effect on total A $\beta$  in CHO2B7 cells. It decreases endogenous murine A $\beta$ 42 production by 60 and 75% in mouse postnatal neuron-glia cultures at concentrations of 3 and 10  $\mu$ M, respectively.

### Reference

1. Jung, J.I., Price, A.R., Ladd, T.B., *et al.* Cholestenic acid, an endogenous cholesterol metabolite, is a potent  $\gamma$ -secretase modulator. *Mol. Neurodegener.* **10(29)**, (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.

**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, 12/02/2022

### 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