## PRODUCT INFORMATION



(±)-α-CMBHC

Item No. 10008652

CAS Registry No.: 7083-09-2

Formal Name: 3,4-dihydro-6-hydroxy- $\alpha,2,5,7,8$ -

pentamethyl-2H-1-benzopyran-2-

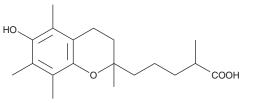
pentanoic acid

MF: C<sub>19</sub>H<sub>28</sub>O<sub>4</sub> FW: 320.4 ≥98% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 210, 292 nm A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

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



## **Laboratory Procedures**

(±)-α-CMBHC is supplied as a crystalline solid. A stock solution may be made by dissolving the ( $\pm$ )- $\alpha$ -CMBHC in the solvent of choice, which should be purged with an inert gas. ( $\pm$ )- $\alpha$ -CMBHC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of  $(\pm)$ - $\alpha$ -CMBHC in these solvents is approximately 20 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of  $(\pm)$ - $\alpha$ -CMBHC can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of  $(\pm)$ - $\alpha$ -CMBHC in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

(±)- $\alpha$ -CMBHC is a metabolite of (±)- $\alpha$ -tocopherol (Item No. 25985).<sup>1,2</sup>

## References

- 1. Birringer, M., Drogan, D., and Brigelius-Flohé, R. Tocopherols are metabolized in HepG2 cells by side chain  $\omega$ -oxidation and consecutive  $\beta$ -oxidation. Free Radic. Biol. Med. 31(2), 226-232 (2001).
- Pope, S.A.S., Burtin, G.E., Clayton, P.T., et al. New synthesis of (±)-α-CMBHC and its confirmation as a metabolite of α-Tocopherol (vitamin E). Bioorg. Med. Chem. 9(5), 1337-1343 (2001).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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, 01/22/2024

**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