

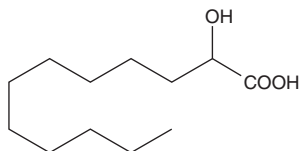
# PRODUCT INFORMATION



## 2-hydroxy Lauric Acid

Item No. 24586

**CAS Registry No.:** 2984-55-6  
**Formal Name:** 2-hydroxy-dodecanoic acid  
**Synonyms:** (±)-2-hydroxy Dodecanoic acid,  
(±)-α-hydroxy Dodecanoic Acid,  
FA 12:0;O (±)-α-hydroxy Lauric Acid,  
NSC 39025  
**MF:** C<sub>12</sub>H<sub>24</sub>O<sub>3</sub>  
**FW:** 216.3  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

2-hydroxy Lauric acid is supplied as a solid. A stock solution may be made by dissolving the 2-hydroxy lauric acid in the solvent of choice. 2-hydroxy Lauric acid is soluble in organic solvents such as methanol and chloroform, which should be purged with an inert gas.

### Description

2-hydroxy Lauric acid is a naturally occurring hydroxylated fatty acid that is found in *Acinetobacter* species.<sup>1</sup> It acts as a partial agonist of free fatty acid receptor 1 (FFAR1/GPR40) and GPR84 receptors *in vitro* (EC<sub>50</sub>s = 6.7 and 12.8 μM, respectively).<sup>2</sup> 2-hydroxy Lauric acid also inhibits bovine hepatic ligase (K<sub>i</sub> = 4.4 μM) and mouse kidney mitochondrial medium-chain acyl-CoA synthetase by 48% at a concentration of 40 μM.<sup>3</sup>

### References

1. Moss, C.W., Wallace, P.L., Hollis, D.G., *et al.* Cultural and chemical characterization of CDC groups EO-2, M-5, and M-6, *Moraxella* (*Moraxella*) species, *Oligella urethralis*, *Acinetobacter* species, and *Psychrobacter immobilis*. *J. Clin. Microbiol.* **26**(3), 484-492 (1988).
2. Kaspersen, M.H., Jenkins, L., Dunlop, J., *et al.* Succinct synthesis of saturated hydroxy fatty acids and *in vitro* evaluation of all hydroxylauric acids on FFA1, FFA4, and GPR84. *Med. Chem. Commun.* **8**(6), 1360-1365 (2017).
3. Barrientos, L., Marin-Esteban, V., de Chaisemartin, L., *et al.* An improved strategy to recover large fragments of functional human neutrophil extracellular traps. *Front. Immunol.* **4**(166), 1-10 (2013).

#### 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, 02/23/2024

#### 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](http://WWW.CAYMANCHEM.COM)