

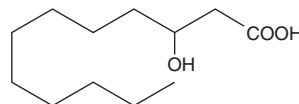
# PRODUCT INFORMATION



## 3-hydroxy Lauric Acid

Item No. 24642

**CAS Registry No.:** 1883-13-2  
**Formal Name:** 3-hydroxy-dodecanoic acid  
**Synonyms:** (±)-3-hydroxy Dodecanoic Acid, (±)-β-hydroxy Dodecanoic Acid, FA 12:0;O, (±)-β-hydroxy Lauric Acid



**MF:** C<sub>12</sub>H<sub>24</sub>O<sub>3</sub>  
**FW:** 216.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 212 nm  
**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

3-hydroxy Lauric acid is supplied as a solid. A stock solution may be made by dissolving the 3-hydroxy lauric acid in the solvent of choice. 3-hydroxy Lauric acid is soluble in organic solvents such as methanol and ethanol, which should be purged with an inert gas.

### Description

3-hydroxy Lauric acid is a hydroxylated fatty acid that is found in bacteria as well as *Pseudosuberites* and *D. calyx* sea sponges.<sup>1-4</sup> It has antifungal activity against a panel of seven fungi (MICs = 10-50 μg/ml).<sup>3</sup> 3-hydroxy Lauric acid acts as a partial agonist of GPR84 receptors *in vitro* (EC<sub>50</sub> = 5.24 μM).<sup>5</sup>

### References

1. Kim, M.C., Pak, S.H., Rim, S.G., *et al.* *Luteolibacter arcticus* sp. nov., isolated from high Arctic tundra soil, and emended description of the genus *Luteolibacter*. *Int. J. Syst. Evol. Microbiol.* **65**(Pt. 6), 1922-1928 (2015).
2. Panda, S., Bandyopadhyay, P.K., and Chatterjee, S.N. Characterization of *Pseudomonas aeruginosa* PB112 (JN996498) isolated from infected *Labeo bata* (Hamilton) by 16S rRNA gene sequence analysis and fatty acid methyl ester (FAME) analysis. *African J. Biotechnol.* **12**(4), 400-405 (2013).
3. He, R., Wakimoto, T., Egami, Y., *et al.* Heterologously expressed β-hydroxyl fatty acids from a metagenomic library of a marine sponge. *Bioorg. Med. Chem. Lett.* **22**(24), 7322-7325 (2012).
4. Barnathan, G., Kornprobst, J.-M., Doumenq, P., *et al.* Sponge fatty acids, 5. Characterization of complete series of 2-hydroxy long-chain fatty acids in phospholipids of two Senegalese marine sponges from the family suberitidae: *Pseudosuberites* sp. and *Suberites massa*. *J. Nat. Prod.* **56**(12), 2104-2113 (2004).
5. 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).

#### 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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