# PRODUCT INFORMATION



# 3-hydroxy Undecanoic Acid

Item No. 24640

CAS Registry No.: 40165-88-6

Formal Name: 3-hydroxy-undecanoic acid Synonyms: FA 11:0;O, β-hydroxy

Undecanoic Acid

MF:  $C_{11}H_{22}O_3$ 202.3 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 vears

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

## **Laboratory Procedures**

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

## Description

3-hydroxy Undecanoic acid is a hydroxylated fatty acid that has been found in S. algae, LPS extracted from clinical isolates of B. catarrhalis, and methyl-branched poly(3-hydroxyalkanoate) (PHA) polymers produced by P. flava isolated from oil-contaminated soil.<sup>1-3</sup> It inhibits sodium current in axons dissected from mantles of giant squid (D. bleekeri) with an ED<sub>50</sub> value of 0.46 mM.<sup>4</sup>

#### References

- 1. He, M., Guo, Q.-Y., Song, W., et al. Inhibitory effects of chitosan combined with nisin on Shewanella spp. isolated from Pseudosciaena crocea. Food Control 79, 349-355 (2017).
- 2. Fomsgaard, J.S., Fomsgaard, A., Høiby, N., et al. Comparative immunochemistry of lipopolysaccharides from Branhamella catarrhalis strains. Infect. Immun. 59(9), 3346-3349 (1991).
- 3. Lin, H., Shi, W., Wu, Q., et al. Biosynthesis pathway related production of medium chain length polyhydroxyalkanoates. Tsinghua Sci. Technol. 6(3), 222-224 (2001).
- Takenaka, T., Horie, H., and Hori, H. Effects of fatty acids on membrane currents in the squid giant axon. J. Membr. Biol. 95(2), 113-120 (1987).

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 Buyer agrees to purchase the m can be found on our website.

Copyright Cayman Chemical Company, 02/27/2024

## **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