# PRODUCT INFORMATION



COOCH<sub>3</sub>

## 2-hydroxy Tricosanoic Acid methyl ester

Item No. 24598

CAS Registry No.: 118745-41-8

Formal Name: 2-hydroxy-tricosanoic acid, methyl ester

Synonym: Methyl 2-hydroxytricosanoate

MF:  $C_{24}H_{48}O_3$ FW: 384.6 **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 Tricosanoic acid methyl ester is supplied as a solid. A stock solution may be made by dissolving the 2-hydroxy tricosanoic acid methyl ester in the solvent of choice, which should be purged with an inert gas. 2-hydroxy Tricosanoic acid methyl ester is soluble in organic solvents such as chloroform and ethyl ether.

#### Description

2-hydroxy Tricosanoic acid methyl ester is a hydroxylated fatty acid methyl ester that has been found in ripe and unripe strawberry homogenates, Pseudosuberites and S. massa sea sponges, sediment samples from the Harney River, and the aerial parts of A. pilosa. 1-4 It inhibits protein tyrosine phosphatase 1B (PTP1B) and  $\alpha$ -glucosidase with IC<sub>50</sub> values of 36.39 and 112.8  $\mu$ M, respectively.<sup>4</sup>

#### References

- 1. Gorst-Allman, C.P. and Spiteller, G. Investigation of lipoxygenase-like activity in strawberry homogenates. Z. Lebensm. Unters. Forsch. 187(4), 330-333 (1988).
- 2. Barnathan, G., Kornprobst, J.-M., Doumeng, 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).
- 3. Jaffé, R., Rushdi, A.I., Medeiros, P.M., et al. Natural product biomarkers as indicators of sources and transport of sedimentary organic matter in a subtropical river. Chemosphere 64(11), 1870-1884 (2006).
- 4. Na, B.R., Nguyen, P.-H., Zhao, B.-T., et al. Protein tyrosine phosphatase 1B (PTP1B) inhibitory activity and glucosidase inhibitory activity of compounds isolated from Agrimonia pilosa. Pharm. Biol. 54(3), 474-480 (2016).

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.

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