

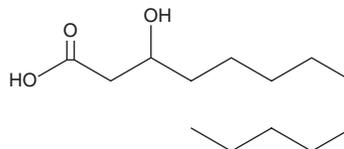
# PRODUCT INFORMATION



## 3-hydroxy Tridecanoic Acid

Item No. 22689

**CAS Registry No.:** 32602-69-0  
**Synonyms:** FA 13:0;O,  $\beta$ -hydroxy Tridecanoic Acid  
**MF:**  $C_{13}H_{26}O_3$   
**FW:** 230.3  
**Purity:**  $\geq 95\%$   
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

3-hydroxy Tridecanoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 3-hydroxy tridecanoic acid in the solvent of choice, which should be purged with an inert gas. 3-hydroxy Tridecanoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 3-hydroxy tridecanoic acid in ethanol is approximately 2.5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

3-hydroxy Tridecanoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 3-hydroxy tridecanoic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 3-hydroxy Tridecanoic acid has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

3-hydroxy Tridecanoic acid is a 13-carbon saturated fatty acid found in bacterial lipopolysaccharides (LPS).<sup>1,2</sup> It can be used as an internal standard to detect markers of microorganisms in complex samples, including 3-hydroxy fatty acids found in LPS-containing bacteria and muramic acid found in bacterial cell wall peptidoglycan.<sup>3</sup>

### References

1. Uhlig, S., Negård, M., Heldal, K.K., *et al.* Profiling of 3-hydroxy fatty acids as environmental markers of endotoxin using liquid chromatography coupled to tandem mass spectrometry. *J. Chromatogr. A.* **1434**, 119-236 (2016).
2. Bishop, D.G., Hewett, M.J., and Knox, K.W. Occurrence of 3-hydroxytridecanoic and 3-hydroxypentadecanoic acids in the lipopolysaccharides of *Veillonella*. *Biochim Biophys. Acta.* **231(2)**, 274-276 (1971).
3. Larsson, L. and Saraf, A. Use of gas chromatography-ion trap tandem mass spectrometry for the detection and characterization of microorganisms in complex samples. *Mol. Biotechnol.* **7(3)**, (1997).

#### 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

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#### 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