

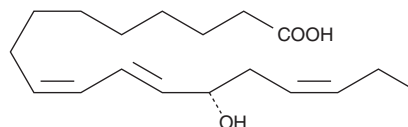
# PRODUCT INFORMATION



## 13(S)-HOTrE

Item No. 39620

**CAS Registry No:** 87984-82-5  
**Formal Name:** 13S-hydroxy-9Z,11E,15Z-octadecatrienoic acid  
**MF:** C<sub>18</sub>H<sub>30</sub>O<sub>3</sub>  
**FW:** 294.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 234 nm  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Special Conditions:** Oxygen and light sensitive



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

### Laboratory Procedures

13(S)-HOTrE is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 13(S)-HOTrE in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 13(S)-HOTrE is needed, the ethanol can be evaporated under a stream of nitrogen and the neat oil dissolved in the buffer of choice. The solubility of 13(S)-HOTrE in PBS (pH 7.2) is approximately 1 mg/ml. More concentrated aqueous solutions of 13(S)-HOTrE can be prepared using concentrated basic buffers (pH > 8.0 and ionic strength ≥ 0.1 M). Add 400 μl of cold buffer (0°C) per mg of 13(S)-HOTrE and vortex vigorously until completely dissolved. Store aqueous solutions of 13(S)-HOTrE on ice and use within twelve hours. We do not recommend storing the aqueous solution for more than one day.

### Description

13(S)-HOTrE is the 15-lipoxygenase (15-LO) product of linolenic acid. It has been detected in cell membranes and as the cholesteryl ester associated with the lesions of atherosclerosis, and in the biomembranes of soybeans exposed to 15-LO.<sup>1,2</sup>

### References

1. Belkner, J., Wiesner, R., Kühn, H., *et al.* The oxygenation of cholesterol esters by the reticulocyte lipoxygenase. *FEBS Lett.* **279**, 110-114 (1991).
2. Maccarrone, M., van Aarle, P.G.M., Veldink, G.A., *et al.* In vitro oxygenation of soybean biomembranes by lipoxygenase-2. *Biochim. Biophys. Acta* **1190**, 164-169 (1994).

#### 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