

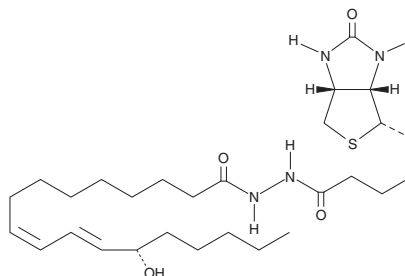
# PRODUCT INFORMATION



## 13(S)-HODE-biotin

Item No. 38612

**CAS Registry No.:** 1217458-58-6  
**Formal Name:** 13(S)-hydroxy-N'-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanoyl)octadeca-9Z,11E-dienehydrazide  
**MF:** C<sub>28</sub>H<sub>48</sub>N<sub>4</sub>O<sub>4</sub>S  
**FW:** 536.8  
**Purity:** ≥98% (may contain trace amounts of free biotin)  
**UV/Vis.:** λ<sub>max</sub>: 234 nm  
**Supplied as:** A 1 mg/ml solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

13(S)-HODE-biotin 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)-HODE-biotin in these solvents is approximately 10 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)-HODE-biotin is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 13(S)-HODE-biotin in PBS (pH 7.2) is approximately 100 µg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

13(S)-HODE is a lipoxygenase metabolite of linoleic acid. 13(S)-HODE modulates the platelet-activating factor, leukotriene B<sub>4</sub>, and formyl-Met-Leu-Phe-induced calcium influx in human polymorphonuclear leukocytes.<sup>1</sup> The mechanism by which 13(S)-HODE elicits its inhibitory effect is still unclear. The use of biotinylated 15(S)-HETE as a probe for detecting binding proteins and/or receptors that specifically bind 15(S)-HETE provides a basis for similar use of 13(S)-HODE-biotin.<sup>2</sup>

### References

1. van de Velde, M.J., Engels, F., Henricks, P.A.J., *et al.* 13-HODE inhibits the intracellular calcium increase of activated human polymorphonuclear cells. *J. Leukoc. Biol.* **56**, 200-202 (1994).
2. Kang, L.-T. and Vanderhoek, J.Y. Synthesis and use of a novel biotinylated probe for the chemiluminescent detection of proteins that bind 15-hydroxyeicosatetraenoic acid. *Anal. Biochem.* **250**, 119-122 (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.

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