# **PRODUCT** INFORMATION



**13(R)-HODE** 

Item No. 38605

CAS Registry No.: Formal Name:	10219-69-9 13R-hydroxy-9Z,11E-octadecadienoic acid	
MF:	C <sub>18</sub> H <sub>32</sub> O <sub>3</sub>	$\sim$
FW:	296.5	
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 34 nm ε: 23,000	$\sim$
Supplied as:	A solution in ethanol	
Storage:	-20°C	
Stability:	≥2 years	

COOH

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

# Laboratory Procedures

13(R)-HODE 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 13(R)-HODE 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(R)-HODE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 13(R)-HODE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

13(R)-HODE is the opposite enantiomer of the 13(S)-HODE produced when linoleic acid is incubated with soybean lipoxygenase. The presence of 13(R)-HODE in the supernatants and membranes of cultured bovine endothelial cells has been attributed to COX metabolism.<sup>1</sup> 13(R)-HODE is a weak (IC<sub>50</sub> = 2.7  $\mu$ M) inhibitor of U-46619-induced platelet aggregation.<sup>2</sup>

# References

- 1. Baer, A.N., Costello, P.B., and Green, F.A. Stereospecificity of the hydroxyeicosatetraenoic and hydroxyoctadecadienoic acids produced by cultured bovine endothelial cells. Biochim. Biophys. Acta 1085(1), 45-52 (1991).
- 2. Lagarde, M., Boutillon, M.M., Guichardant, M., et al. Further studies on the anti-thromboxane A<sub>2</sub> activity of monohydroxylated fatty acids. Biochem. Pharmacol. 38(11), 1863-1864 (1989).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFFTY 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

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/17/2024

# 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