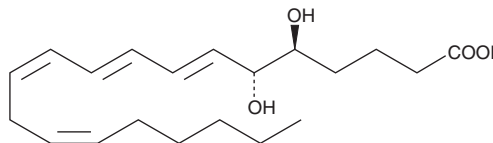


PRODUCT INFORMATION

5(S),6(R)-DiHETE

Item No. 35200

CAS Registry No.: 82948-88-7
Formal Name: 5S,6R-dihydroxy-7E,9E,11Z,14Z-eicosatetraenoic acid
MF: C₂₀H₃₂O₄
FW: 336.5
Purity: ≥98%
UV/Vis.: λ_{max}: 273 nm ε: 40,000
Supplied as: A 100 µg/ml solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

5(S),6(R)-DiHETE 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 5(S),6(R)-DiHETE 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 5(S),6(R)-DiHETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 5(S),6(R)-DiHETE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

5(S),6(R)-DiHETE is a dihydroxy polyunsaturated fatty acid and a nonenzymatic hydrolysis product of leukotriene A₄ (LTA₄). Mouse liver cytosolic epoxide hydrolase catalyzes the conversion of LTA₄ to 5(S),6(R)-DiHETE.¹ It is a weak LTD₄ receptor agonist in guinea pig lung membranes.² It induces guinea pig ileum contraction with an ED₅₀ value of 1.3 µM.²

References

1. Haeggström, J., Wetterholm, A., Hamberg, M., *et al.* Enzymatic formation of 5,6-dihydroxy-7,9,11,14-eicosatetraenoic acid: Kinetics of the reaction and stereochemistry of the product. *Biochim. Biophys. Acta.* **958**(3), 469-476 (1988).
2. Muller, A., Rechencq, E., Kugel, C., *et al.* Comparative biological activities of the four synthetic (5,6)-dihete isomers. *Prostaglandins* **38**(6), 635-644 (1989).

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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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