

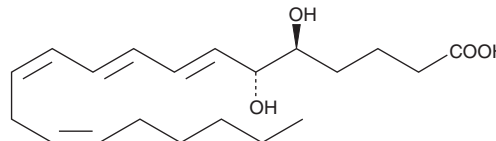
# Product Information



## 5(S),6(R)-DiHETE Lipid Maps MS Standard

Catalog No. 10007252

**CAS Registry No.:** 82948-88-7  
**Formal Name:** 7S,6R-dihydroxy-7E,9E,11Z,14Z-eicosatetraenoic acid  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>4</sub>  
**FW:** 336.5  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that 5(S),6(R)-DiHETE be stored as supplied at -20°C. It should be stable for at least one year.

5(S),6(R)-DiHETE is supplied as a solution in ethanol. To change the solvent, evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO or 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, evaporate the ethanol under a gentle stream of nitrogen and dissolve the neat oil in the buffer of choice. The solubility of 5(S),6(R)-DiHETE in PBS, pH 7.2, is approximately 1 mg/ml. Store aqueous solutions of 5(S),6(R)-DiHETE on ice and use within twelve hours.

5(S),6(R)-DiHETE is a dihydroxy polyunsaturated fatty acid and a nonenzymatic hydrolysis product of leukotriene A<sub>4</sub> (LTA<sub>4</sub>). Mouse liver cytosolic epoxide hydrolase catalyzes the conversion of LTA<sub>4</sub> to 5(S),6(R)-DiHETE.<sup>1</sup> 5(S),6(R)-DiHETE is a weak LTD<sub>4</sub> receptor agonist in guinea pig lung membranes.<sup>2</sup> It induces guinea pig ileum contraction with an ED<sub>50</sub> value of 1.3 μM.<sup>2</sup>

### 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**, 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**, 635-644 (1989).

### Related Products

5(S),6(R)-DiHETE - Cat. No. 35200 • 5(S),6(S)-DiHETE - Cat. No. 35210 • 5(S),6(R)-11-*trans* DiHETE - Cat. No. 10009628

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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