

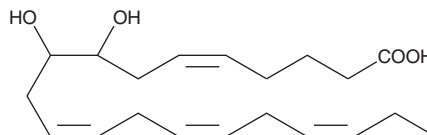
# PRODUCT INFORMATION



## (±)8(9)-DiHETE

Item No. 10473

**CAS Registry No.:** 867350-87-6  
**Formal Name:** 8,9-dihydroxy-5Z,11Z,14Z,17Z-eicosatetraenoic acid  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>4</sub>  
**FW:** 336.5  
**Purity:** ≥98%  
**Supplied as:** A 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

(±)8(9)-DiHETE is supplied as a solution in ethanol. To change the solvent, simply evaporate the (±)8(9)-DiHETE 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 (±)8(9)-DiHETE in these solvents is approximately 30 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 (±)8(9)-DiHETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)8(9)-DiHETE in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

(±)8(9)-DiHETE is a major metabolite of the 20:5 ω-3 fatty acid eicosapentaenoic acid (EPA; Item No. 90110).<sup>1</sup> It is produced in rat liver microsomes, but not renal microsomes, by the generation of the unstable intermediate 8,9-epoxy eicosatetraenoic acid from EPA by cytochrome P450 monooxygenases.<sup>1</sup> Dietary EPA supplementation in humans results in substantial urinary excretion of vicinal diols, including 8,9, 11,12, and 14,15 forms.<sup>2</sup>

### References

1. VanRollins, M., Frade, P.D., and Carretero, O.A. Oxidation of 5,8,11,14,17-eicosapentaenoic acid by hepatic and renal microsomes. *Biochimica et Biophysica Acta* **996**, 133-149 (1988).
2. Knapp, H.R., Miller, A.J., and Lawson, J.A. Urinary excretion of diols derived from eicosapentaenoic acid during N-3 fatty acid ingestion. *Prostaglandins* **42**, 47-53 (1991).

#### 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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