**PRODUCT INFORMATION**

5(S)-HETE-d₈  
*Item No. 334230*

**CAS Registry No.:** 330796-62-8  
**Formal Name:** 5S-hydroxy-6E,8Z,11Z,14Z-eicosatetraenoic-5,6,8,9,11,12,14,15-d₈ acid  
**Synonym:** 5(S)-Hydroxyeicosatetraenoic Acid-d₈  
**MF:** C₂₀H₂₄D₈O₃  
**FW:** 328.5  
**Chemical Purity:** ≥98% (5-HETE)  
**Deuterium Incorporation:** ≥99% deuterated forms (d₁-d₈); ≤1% d₀  
**UV/Vis.:** λₘₐₓ: 236 nm  
**Supplied as:** A solution in acetonitrile  
**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)-HETE-d₈ is intended for use as an internal standard for the quantification of 5-HETE by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

5(S)-HETE-d₈ is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile 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. 5(S)-HETE-d₈ is miscible in these solvents. The solubility of 5(S)-HETE-d₈ in 0.1 M Na₂CO₃ is approximately 2 mg/ml.

**Description**

(±)5-HETE is formed via non-enzymatic oxidation of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).¹ 5(S)- and 5(R)-HETE are formed by lipoxygenase-mediated oxidation of arachidonic acid.²,³

**References**