

# PRODUCT INFORMATION



## 15(S)-HETE-d<sub>8</sub> ethyl ester

Item No. 30578

**Formal Name:** 15(S)-hydroxy-5Z,8Z,11Z,13E-eicosatetraenoic-5,6,8,9,11,12,14,15-d<sub>8</sub> acid, ethyl ester

**Synonym:** 15(S)-Hydroxyeicosatetraenoic Acid-d<sub>8</sub> ethyl ester

**MF:** C<sub>22</sub>H<sub>28</sub>D<sub>8</sub>O<sub>3</sub>  
**FW:** 356.6

**Chemical Purity:** ≥95% (15(S)-HETE ethyl ester)

**Deuterium**

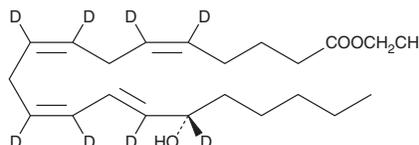
**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>8</sub>); ≤1% d<sub>0</sub>

**UV/Vis.:** λ<sub>max</sub>: 235 nm

**Supplied as:** A 100 µg/ml solution in acetonitrile

**Storage:** -20°C

**Stability:** ≥2 years



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

### Laboratory Procedures

15(S)-HETE-d<sub>8</sub> ethyl ester is intended for use as an internal standard for the quantification of 15-HETE ethyl ester 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).

### Description

15(S)-HETE ethyl ester is an esterified form of 15(S)-HETE (Item No. 34720), a major metabolite of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) via the 15-lipoxygenase pathway.<sup>1</sup> 15(R)-HETE is produced by aspirin-acetylated COX-2 from arachidonic acid, the cytochrome P450 (CYP) isoform CYP2C9, or COX-1 in stimulated human mast cells.<sup>2-5</sup> (±)15-HETE is produced by the non-enzymatic oxidation of arachidonic acid.<sup>6,7</sup>

### References

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2. Lecomte, M., Laneuville, O., Ji, C., et al. *J. Biol. Chem.* **269**(18), 13207-13215 (1994).
3. Capdevila, J.H., Morrow, J.D., Belosludtsev, Y.Y., et al. *Biochemistry* **34**, 3325-3337 (1995).
4. Schneider, C. and Brash, A.R. *J. Biol. Chem.* **275**, 4743-4746 (2000).
5. Bylund, J., Ericsson, J., and Oliiv, E.H. *Anal. Biochem.* **265**(1), 55-68 (1998).
6. Waddington, E.I., Croft, K.D., Sienuarine, K., et al. *Atherosclerosis* **167**(1), 111-120 (2003).
7. Catalá, A. *Biochem. Biophys. Res. Commun.* **399**(3), 318-323 (2010).

#### 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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