

# PRODUCT INFORMATION



## (±)15-HETE-d<sub>8</sub>

Item No. 31746

CAS Registry No.: 2525175-31-7  
Formal Name: 15-hydroxy-5Z,8Z,11Z,13E-eicosatetraenoic-5,6,8,9,11,12,14,15-d<sub>8</sub> acid

Synonym: (±)15-Hydroxyeicosatetraenoic Acid-d<sub>8</sub>

MF: C<sub>20</sub>H<sub>24</sub>D<sub>8</sub>O<sub>3</sub>

FW: 328.5

Chemical Purity: ≥98% ((±)15-HETE)

Deuterium

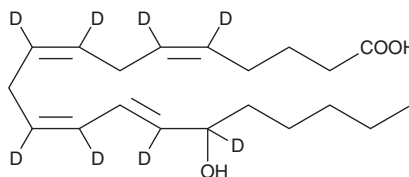
Incorporation: ≥99% deuterated forms (d<sub>1</sub>-d<sub>8</sub>); ≤1% d<sub>0</sub>

UV/Vis.: λ<sub>max</sub>: 236 nm

Supplied as: A 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-HETE-d<sub>8</sub> is intended for use as an internal standard for the quantification of 15-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).

(±)15-HETE-d<sub>8</sub> 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. (±)15-HETE-d<sub>8</sub> is miscible in these solvents.

### Description

(±)15-HETE and 15(S)-HETE are formed *via* non-enzymatic and 15-lipoxygenase-mediated oxidation of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607), respectively.<sup>1,2</sup> 15(R)-HETE is formed by aspirin-acetylated COX-2-mediated oxidation of arachidonic acid.<sup>3</sup>

### References

1. Powell, W.S. and Rokach, J. Biosynthesis, biological effects, and receptors of hydroxyeicosatetraenoic acids (HETEs) and oxoeicosatetraenoic acids (oxo-ETEs) derived from arachidonic acid. *Biochim. Biophys. Acta* **1851**(4), 340-355 (2014).
2. Derogis, P.B.M.C., Chaves-Filho, A.B., and Miyamoto, S. Characterization of hydroxy and hydroperoxy polyunsaturated fatty acids by mass spectrometry. *Bioactive lipids in health and disease*. Trostchansky, A. and Rubbo, H., editors, Springer (2019).
3. Lecomte, M., Laneuville, O., Ji, C., *et al.* Acetylation of human prostaglandin endoperoxide synthase-2 (cyclooxygenase-2) by aspirin. *J. Biol. Chem.* **269**(18), 13207-13215 (1994).

#### 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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