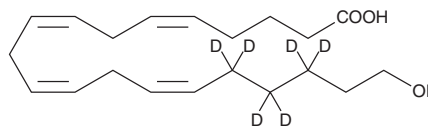


# PRODUCT INFORMATION



## 20-HETE-d<sub>6</sub> Item No. 390030

**CAS Registry No.:** 2548939-89-3  
**Formal Name:** 20-hydroxy-5Z,8Z,11Z,14Z-eicosatetraenoic-16,16,17,17,18,18-d<sub>6</sub> acid  
**Synonyms:** 20-Hydroxyeicosatetraenoic Acid-d<sub>6</sub>,  
20-hydroxy Arachidonic Acid-d<sub>6</sub>  
**MF:** C<sub>20</sub>H<sub>26</sub>D<sub>6</sub>O<sub>3</sub>  
**FW:** 326.5  
**Chemical Purity:** ≥95% (20-HETE)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>); ≤1% d<sub>0</sub>  
**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

20-HETE-d<sub>6</sub> is intended for use as an internal standard for the quantification of 20-HETE (Item No. 90030) 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).

20-HETE-d<sub>6</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. The solubility of 20-HETE-d<sub>6</sub> in these solvents is approximately 10 mg/ml.

### Description

20-HETE is a cytochrome P450 (CYP450) metabolite postulated to play an autacoid role in the renal and cerebral vasculature.<sup>1</sup> In rat cerebral microvessels, 20-HETE is a vasoconstrictor that mediates pressure-induced autoregulatory vasoconstriction.<sup>2</sup> 20-HETE is excreted mainly as the glucuronide conjugate. The concentration of free 20-HETE (20-40 pg/ml in human urine) is about 10-fold lower than the corresponding concentration of the 20-glucuronide.<sup>3</sup>

### References

1. McGiff, J.C. and Quilley, J. 20-HETE and the kidney: Resolution of old problems and new beginnings. *Am. J. Physiol.* **277**(3 Pt 2), R607-R623 (1999).
2. Gebremedhin, D., Lange, A.R., Lowry, T.F., *et al.* Production of 20-HETE and its role in autoregulation of cerebral blood flow. *Circ. Res.* **87**(1), 60-65 (2000).
3. Prakash, C., Zhang, J.Y., Falck, J.R., *et al.* 20-Hydroxyeicosatetraenoic acid is excreted as a glucuronide conjugate in human urine. *Biochem. Biophys. Res. Commun.* **185**(2), 728-733 (1992).

#### 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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