

Product Data Sheet

Product Name: (±)11-HETE-d8

Cat. No.: GC46254

Chemical Properties

Cas. No. 2750534-80-4

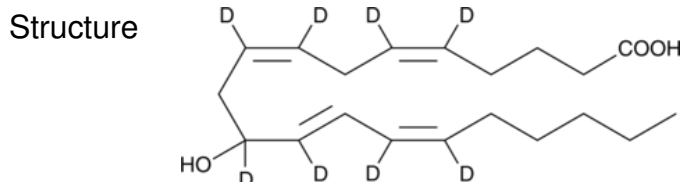
SMILES OC/C([2H])=C/C([2H])=C([2H])\CCCCC([2H])C/C([2H])=C([2H])\C/C([2H])=C([2H])\CC
CC(O)=O

Formula C₂₀H₂₄D₈O₃ M.Wt 328.5

Solubility DMF: 20 mg/ml, DMSO: 20 mg/ml, Ethanol: 50 mg/ml, PBS (pH 7.2): 0.5 mg/ml
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.



Background

(±)11-HETE-d₈ is intended for use as an internal standard for the quantification of (±)11-HETE by GC- or LC-MS. (±)11-HETE is an oxylipin formed non-enzymatically from arachidonic acid.^{1,2} Levels of (±)11-HETE are increased in an *in vitro* model of lipid peroxidation induced by ferrous ammonium sulfate (FAS) in rat brain homogenates.³ Levels are also increased in rat liver in an *in vivo* model of lipid peroxidation induced by carbon tetrachloride (CCl₄). It has been found in skin extracts from individuals with psoriasis and in atherosclerotic plaques.^{4,5}

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,

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

A.B., and Miyamoto, S.Characterization of hydroxy and hydroperoxy polyunsaturated fatty acids by mass spectrometryBioactive lipids in health and disease21-38(2019) 3.Guido, D.M., McKenna, R., and Mathews, W.R.Quantitation of hydroperoxy-eicosatetraenoic acids and hydroxy-eicosatetraenoic acids as indicators of lipid peroxidation using gas chromatography-mass spectrometryAnal. Biochem.209(1)123-129(1993) 4.Camp, R.D.R., Mallet, A.I., Woollard, P.M., et al.The identification of hydroxy fatty acids in psoriatic skinProstaglandins26(3)431-447(1983) 5.Waddington, E., Sienuarine, K., Puddey, I., et al.Identification and quantitation of unique fatty acid oxidation products in human atherosclerotic plaque using high-performance liquid chromatographyAnal. Biochem.292(2)234-244(2001)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA