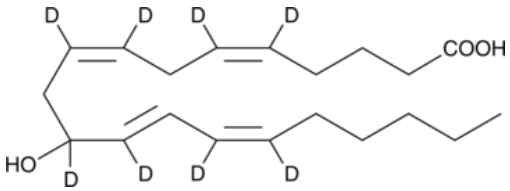
Product Data Sheet

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])\CCCC(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.		
Structure			

Background

(±)11-HETE-d_8 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 (CCl_4). 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 acidBiochim. Biophys. Acta1851(4)340-355(2014) 2.Derogis, P.B.M.C., Chaves-Filho,

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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)