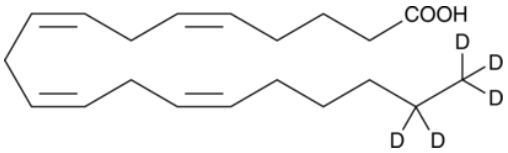
Product Data Sheet

Product Name: Arachidonic Acid-d5
Cat. No.: GC46872

Chemical Properties

Cas. No.	123167-26-0		
SMILES	[2H]C([2H])([2H])C([2H])([2H])CCC/C=C\C/C=C\C/C=C\C/C=C\CCCC(O)=O		
Formula	C20H27D5O2	M.Wt	309.5
Solubility	0.1 M Na2CO3: 1 mg/ml,DMF: 50 mg/ml,DMSO: 50 mg/ml,Ethanol: 50 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

Arachidonic acid-d_5 is intended for use as an internal standard for the quantification of arachidonic acid by GC- or LC-MS. Arachidonic acid is an essential fatty acid and a precursor for all prostaglandins, thromboxanes, and leukotrienes. Virtually all cellular arachidonic acid is esterified in membrane phospholipids where its presence is tightly regulated through multiple interconnected pathways.[1] Free arachidonic acid is a transient, critical substrate for the biosynthesis of eicosanoid second messengers. Receptor-stimulated release, metabolism, and re-uptake of free arachidonate are all important aspects of cell signaling and inflammation.[2]

1.Nixon, A.B., Greene, D.G., and Wykle, R.L.Comparison of acceptor and donor substrates in the CoA-independent transacylase reaction in human neutrophilsBiochim. Biophys. Acta.1300(3)187-196(1996) 2.Burgoyne, R.D., and Morgan, A.The control of free arachidonic acid levelsTrends Biochem. Sci.15(10)365-366(1990)

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