Product Data Sheet

Product Name: Lignoceric acid-d9
Cat. No.: GC69377

Chemical Properties

Cas. No.	2415226-90-1		
Formula	$C_{24}H_{39}D_9O_2$	M.Wt	377.69
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Lignoceric acid-d9		

Background

Lignoceric acid-d_9 is the deuterium labeled Lignoceric acid. Lignoceric acid (Tetracosanoic acid) is a 24-carbon saturated (24:0) fatty acid, which is synthesized in the developing brain. Lignoceric acid is also a by-product of lignin production. Lignoceric acid can be used for Zellweger cerebro-hepato-renal syndrome and adrenoleukodystrop research[1][2].

Stable heavy isotopes of drogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
[2]. Anna Petroni, et al. Thermogenic flux induced by lignoceric acid in peroxisomes isolated from HepG2 cells and from X-adrenoleukodystrop and control fibroblasts. J Cell Psiol. 2019 Aug;234(10):18344-18348.
[3]. J M Bourre, et al. Lignoceric acid biosynthesis in the developing brain. Activities of mitochondrial acetyl-CoA-dependent synthesis and microsomal malonyl-CoA chain-

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elongating system in relation to myelination. Comparison between normal mouse and dysmyeli

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