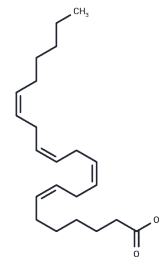


Adrenic Acid

Chemical Properties

CAS No. :	28874-58-0
Formula:	C ₂₂ H ₃₆ O ₂
Molecular Weight:	332.52
Storage:	Store at low temperature, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Adrenic Acid (cis-7,10,13,16-Docosatetraenoic acid) is a very-long-chain fatty acid present in blood and human myelin tissue.
Targets(IC50)	Endogenous Metabolite
In vitro	The hepatic level of free Adrenic Acid (22:4n6) is markedly higher in the CDAHFD-fed db/db mice than in the SD-fed db/db mice. In plasma, the difference in the adrenic acid level reaches statistical significance ($p < 0.001$). The hepatic and plasma levels of Adrenic Acid exhibit greater differences between the CDAHFD-fed db/db mice and the SD-fed db/db mice (8.6-fold higher vs. 1.6-fold higher in liver tissue, 5.3-fold higher vs. 2.2-fold higher in plasma) than those of well-known proinflammatory PUFA, such as Arachidonic Acid.

Solubility Information

Solubility	DMSO: 260 mg/mL (781.91 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+ 90% PBS: ≥ 0.3 mg/mL 10% DMSO+ 90% Corn oil: ≥ 0.3 mg/mL <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0073 mL	15.0367 mL	30.0734 mL
5 mM	0.6015 mL	3.0073 mL	6.0147 mL
10 mM	0.3007 mL	1.5037 mL	3.0073 mL
50 mM	0.0601 mL	0.3007 mL	0.6015 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

SautHoras H Nababan, et al. Adrenic acid as an inflammation enhancer in non-alcoholic fatty liver disease. Arch Biochem Biophys. 2017 Jun 1;623-624:64-75.

Geng H, Chen P, Zhang Y, et al. Spatiotemporally Resolved Approach for Profiling Ferroptosis-Associated Metabolic Vulnerabilities in Tumors Using Mass Spectrometry Imaging and Stable Isotope Tracing. Analytical Chemistry. 2024

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