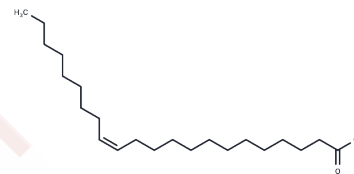


Erucic acid

Chemical Properties

CAS No. :	112-86-7
Formula:	C22H42O2
Molecular Weight:	338.57
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Increased levels of erucic acid (22:1n9) have been found in the red blood cell membranes of autistic subjects with developmental regression (PMID: 16581239). Erucic acid (13(Z)-Docosenoic Acid) is broken down long-chain acyl-coenzyme A (CoA) dehydrogenase, which is produced in the liver. This enzyme breaks this long chain fatty acid into shorter-chain fatty acids. human infants have relatively low amounts of this enzyme and because of this, babies should not be given foods high in erucic acid. Erucic acid is found to be associated with isovaleric acidemia, which is an inborn error of metabolism.
Targets(IC50)	Endogenous Metabolite,PI3K

Solubility Information

Solubility	DMSO: 247 mg/mL (729.54 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (14.77 mM),Sonication is recommended. <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	2.9536 mL	14.768 mL	29.536 mL
5 mM	0.5907 mL	2.9536 mL	5.9072 mL
10 mM	0.2954 mL	1.4768 mL	2.9536 mL
50 mM	0.0591 mL	0.2954 mL	0.5907 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

- Aubourg P , Adamsbaum C , Lavallardrousseau M C , et al. A two-year trial of oleic and erucic acids ("Lorenzo's oil") as treatment for adrenomyeloneuropathy.[J]. *New England Journal of Medicine*, 1993, 329(11):745.
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- Bu B , Ashwood P , Harvey D , et al. Fatty acid compositions of red blood cell phospholipids in children with autism [J]. *Prostaglandins Leukot Essent Fatty Acids*, 2006, 74(4):215-221.
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