Data Sheet (Cat.No.T36077)

TargetMol

cis-Parinaric Acid

Chemical Properties

CAS No. :	593-38-4
Formula:	C18H28O2
Molecular Weight:	276.41
Storage:	Keep away from direct sunlight 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	cis-Parinaric acid is a naturally occurring polyunsaturated fatty acid containing an unusual conjugated (Z,E,E,Z) tetraene. This chromophore provides for a natural fluorescence at 432 nm with an excitation wavelength at 320 nm. cis-Parinaric acid occurs naturally in the seeds of the Makita tree, a tropical rainforest tree indigenous to Fiji. Makita seeds are inedible, and this toxicity may be due at least in part to the unstable conjugated fatty acids, including cis-parinaric acid, contained within the seed. cis-Parinaric acid has been used for the measurement of phospholipase activity, lipase activity, and as an indicator of lipid peroxidation.[1][2][3][4]
Targets(IC50)	Others

Solubility Information

Solubility	Ether: 15.00 mg/mL (54.27 mM),Sonication is recommended. Benzene: 15.00 mg/mL (54.27 mM),Sonication is recommended. Hexane: 10.00 mg/mL (36.18 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6178 mL	18.0891 mL	36.1781 mL
5 mM	0.7236 mL	3.6178 mL	7.2356 mL
10 mM	0.3618 mL	1.8089 mL	3.6178 mL
50 mM	0.0724 mL	0.3618 mL	0.7236 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

Wolf, C., Sagaert, L., and Bereziat, G. A sensitive assay of phospholipase using the fluorescent probe 2-parinaroyllecithin. Biochemical and Biophysical Research Communications 99, 275-283 (1981).
Beisson, F., Ferté, N., Nari, J., et al. Use of naturally fluorescent triacylglycerols from Parinari glaberrimum to detect low lipase activities from Arabidopsis thaliana seedlings. Journal of Lipid Research 40, 2313-2321 (1999).
McGuire, S.O., James-Kracke, M.R., Sun, G.Y., et al. An esterification protocol for cis-parinaric acid-determined lipid peroxidation in immune cells. Lipids 32, 219-226 (1997).
de Hingh, Y.C.M., Meyer, J., Fischer, J.C., et al. Direct measurement of lipid peroxidation in submitochondrial particles. Biochemistry 34, 12755-12760 (1995).