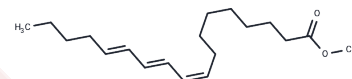


## Methyl alpha-eleostearate

## Chemical Properties

CAS No. :	4175-47-7
Formula:	C19H32O2
Molecular Weight:	292.463
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	Methyl alpha-eleostearate ( $\alpha$ -ESA) is a conjugated polyunsaturated fatty acid commonly found in plant seed oil. This fatty acid accounts for about 60% of the total fatty acid composition of bitter melon seed oil and about 70% in tung oil. $\alpha$ -ESA is metabolized and converted to conjugated linoleic acid (9Z,11E-CLA) in rats. It has shown potential as a tumor growth suppressor. In colon cancer Caco-2 cells, $\alpha$ -ESA induced apoptosis through up-regulation of GADD45, p53, and PPAR $\gamma$ . In DLD-1 cells supplemented with $\alpha$ -ESA, apoptosis was induced via lipid peroxidation with an EC50 of 20 $\mu$ M. It also inhibits DNA polymerases and topoisomerases with IC50s ranging from ~5-20 $\mu$ M for different isoforms of the enzymes. $\alpha$ -ESA methyl ester is a neutral, more lipid soluble form of the free acid.
Targets(IC50)	Others

## Solubility Information

Solubility	DMSO: 30 mg/mL (102.58 mM),Sonication is recommended. Ethanol: 100 mg/mL (341.92 mM),Sonication is recommended. DMF: 30 mg/mL (102.58 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.4193 mL	17.0964 mL	34.1927 mL
5 mM	0.6839 mL	3.4193 mL	6.8385 mL
10 mM	0.3419 mL	1.7096 mL	3.4193 mL
50 mM	0.0684 mL	0.3419 mL	0.6839 mL

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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.

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