# Data Sheet (Cat.No.T36410)



## 9(E),11(E),13(E)-Octadecatrienoic Acid

Ch	emi	ical	Pro	perti	es

### **Biological Description**

Description	9(E),11(E),13(E)-Octadecatrienoic acid ( $\beta$ -ESA) is a conjugated polyunsaturated fatty acid that is found in plant seed oils and in mixtures of conjugated linolenic acids synthesized by the alkaline isomerization of linolenic acid. It reduces growth of Caco-2 colon cancer cells in a dose-dependent and time-dependent manner.
In vitro	In vitro, β-ESA induces DNA fragmentation and upregulation of pro-apoptotic Bax mRNA. β-ESA decreases protein expression of the apoptosis suppression factor Bcl-2 and induces apoptosis in T24 bladder cancer cells via production of reactive oxygen species. It also inhibits bacterial fatty acid dioxygenase with a Ki value of 49 nM in vitro.

Solubility Information		
Solubility	DMSO: 10 mg/mL Ethanol: 20 mg/mL DMF: 30 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)	

#### Preparing Stock Solutions

	1mg	5mg	10mg	
1 mM	3.5914 mL	17.9572 mL	35.9144 mL	
5 mM	0.7183 mL	3.5914 mL	7.1829 mL	
10 mM	0.3591 mL	1.7957 mL	3.5914 mL	
50 mM	0.0718 mL	0.3591 mL	0.7183 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.

#### Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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