

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

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# Data Sheet (Cat.No.T4P2931)



#### Linoleic acid

Chemical Proper	ties	
CAS No. :	60-33-3	
Formula:	C18H32O2	ОН
Molecular Weight:	280.45	
Appearance:	no data available	
Storage:	keep away from direct sunlight Powder: -20°C for 3 years   In solvent: -80°C for 1 year	CH <sub>3</sub>

Biological Descripti	on	
Description	Linoleic acid (9,12-octadecadienoic acid) is a naturally occurring polyunsaturated fatty acid found in animal and vegetable oils. Linoleic acid is an essential fatty acid that is part of membrane phospholipids.	
Targets(IC50)	Others,Endogenous Metabolite	
In vitro	<ul> <li>METHODS: Bovine satellite cell BSCs were treated with Linoleic acid (10-250 μM) for 24-48 h. Cell viability was measured by MTT assay.</li> <li>RESULTS: At 24 h of treatment with Linoleic acid, cell proliferation increased at doses of 10-100 μM and decreased at 250 μM as compared to untreated control. 100 μM Linoleic acid at 48 h had no significant effect on cell proliferation. [1]</li> <li>METHODS: Human ovarian cancer cells SKOV-3 were treated with Linoleic acid (16 μM) for 24 h. Cell migration was detected by wound-healing assay.</li> <li>RESULTS: The average migration in the Linoleic acid treated group increased by about 20% on average compared to control untreated cells. [2]</li> </ul>	
In vivo	<ul> <li>METHODS: To study the effects on endocannabinoid (EC) biology, four groups of C57BL/6 mice were fed diets containing 1% or 8% Linoleic acid (with or without G (LAG)) for eight weeks.</li> <li>RESULTS: Increasing dietary Linoleic acid from 1% to 8% significantly increased circulatory, small intestinal, and hepatic ECS. 1% LAG-fed mice had the lowest feed efficiencies, and hepatic levels of only two ECs were reduced by the addition of G. [3]</li> </ul>	

Solubility Information	
Solubility	DMSO: 55 mg/mL (196.11 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

## A DRUG SCREENING EXPERT

#### Preparing Stock Solutions

	1mg	5mg	10mg	
1 mM	3.5657 mL	17.8285 mL	35.657 mL	
5 mM	0.7131 mL	3.5657 mL	7.1314 mL	
10 mM	0.3566 mL	1.7828 mL	3.5657 mL	
50 mM	0.0713 mL	0.3566 mL	0.7131 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.

#### Reference

Belal SA, et al. Modulatory effect of linoleic and oleic acid on cell proliferation and lipid metabolism gene expressions in primary bovine satellite cells. Anim Cells Syst (Seoul). 2018 Sep 9;22(5):324-333.

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