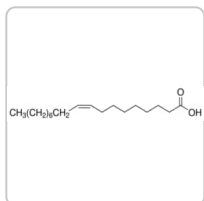


Saisir le nom du produit, le numéro de lot, etc.

[Toutes les photos \(2\)](#)

Documents

[FDS](#)[COO/COA](#)[Fiche des caractéristiques](#)[Plus de documents >>](#)**O1383** ▶ **Sigma-Aldrich.**

Oleic acid

★★★★★ (0)

suitable for cell culture, BioReagent

Synonyme(s):

cis-9-Octadecenoic acid, Elainic acid

Formule linéaire:

 $\text{CH}_3(\text{CH}_2)_7\text{CH}=\text{CH}(\text{CH}_2)_7\text{COOH}$ Numéro CAS: **112-80-1**

Beilstein: 1726542

Numéro MDL: **MFCD00064242**

NACRES: NA.75

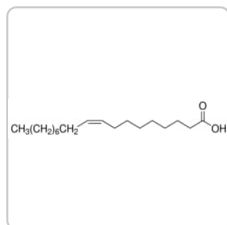
Poids moléculaire: 282.46

Numéro EC: **204-007-1**ID de substance PubChem: **24897941**

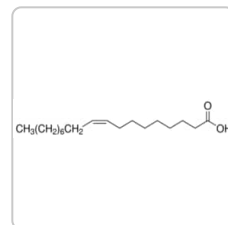
Référence	Conditionnement	Disponibilité	Prix	Quantité
O1383-1G	1 G	✓ Date d'expédition estimée le 10 octobre 2022 Détails...	67,10 €	- + 
O1383-5G	5 G	✓ Date d'expédition estimée le 10 octobre 2022 Détails...	260,00 €	- + 
O1383-25G	25 G	✓ Only 1 left in stock (more on the way) Détails...	756,00 €	- + 

[Demander une commande en gros](#)[Ajouter au panier](#)

PRODUITS RECOMMANDÉS



Sigma-Aldrich

O1008**Oleic acid** $\geq 99\%$ (GC)[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

O1257**Oleic Acid-Water Soluble**

powder, BioReagent, suitable for cell culture

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Source biologique	palm oil
Niveau de qualité	200
Pression de vapeur	1 mmHg (176 °C)
Gamme de produits	BioReagent
Essai/Dosage	$\geq 99\%$ (GC)
Forme	viscous liquid

technique(s)	cell culture mammalian: suitable
Indice de réfraction	<i>n</i> ₂₀ /D 1.459 (lit.)
Point de bulle	194-195 °C/1.2 mmHg (lit.)
Pf	13-14 °C (lit.)
Solubilité	ethanol: soluble
Densité	0.89 g/mL at 25 °C (lit.) 0.89 g/mL at 25 °C (lit.)
Temp. de stockage	−20°C
SMILES string	<chem>CCCCCCCC\C=C/CCCCCCCC(O)=O</chem>
InChI	1S/C18H34O2/c1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18(19)20/h9-10H,2-8,11-17H2,1H3, (H,19,20)/b10-9-
InChI key	ZQPPMHVWECSIRJ-KTKRTIGZSA-N
Gene Information	human ... SOAT1(6646) , SOAT2(8435)

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

Catégories apparentées

[Lipids for Therapeutics and Research](#)

DESCRIPTION

Description générale

Oleic acid is a mono-unsaturated omega-9 fatty acid created by dehydrogenation of stearic acid. It is then further dehydrogenated and elongated to create members of the n-9 family of fatty acids. Oleic acid is not an essential fatty acid (EFA); however, providing it to cells in culture reduces energy demand.

Oleic acid mediates complete oxidation of fatty acid in sirtuin1- proliferator-activated receptor γ coactivator-1 α (SIRT1-PGC-1 α) signalling pathway. Oleic acid shows anti-inflammatory properties related to atherosclerosis and insulin resistant state. Oleic acid inhibits permeability in gap junctions and promotes glucose uptake in astrocytes. Oleic acid aids in neural cell proliferation by increasing glucose uptake and by protein kinase C (PKC) activation. Oleic acid is essential for axonal growth and neuronal clustering.

Application

Oleic acid has been used:

- in fatty acid oxidation rate experiments in myotubes and in Sirt1 enzyme assay
- to determine quantitatively its effect on lipid droplets by optical diffraction tomography
- as a fatty acid source in the medium for primary hepatocyte culture

Conditionnement

1, 5, 25 g in ampule

Sealed ampule.

Actions biochimiques/physiologiques

Activates protein kinase C in hepatocytes.

Uncouples oxidative phosphorylation. Inhibits 2,4-dinitrophenol-stimulated ATPase. Action reversed by adding serum albumin.

Attention

Unsaturated fatty acids are subject to oxidation and peroxidation. Consider complexed fatty acid supplements.

PRODUITS APPARENTÉS

Recommandé(E)(S)

O3008

Oleic Acid-Albumin from bovine serum, liquid, sterile-filtered, BioReagent, suitable for cell culture

[View Pricing](#)

L9655

Linoleic Acid-Oleic Acid-Albumin, 100x, liquid, sterile-filtered, BioReagent, suitable for cell culture

[View Pricing](#)

INFORMATIONS SUR LA SÉCURITÉ

**Code de la classe de
stockage**

WGK
WGK 1

Flash Point(F)
159.8 °F - closed cup

Point d'éclair C
71 °C - closed cup

10 - Combustible liquids

Équipement de protection individuelle

Eyeshields, Gloves, type
ABEK (EN14387) respirator
filter

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

Comment saisir un numéro de lot (COA)

Rechercher

Certificat d'origine

Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

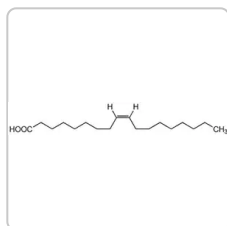
Comment saisir un numéro de lot (COO)

Rechercher

Plus De Documents

[FT-NMR Spectra](#)[Pressure-Temperature Nomograph](#)[Spectra - ATR-IR](#)[Spectra for FT-IR Raman](#)[Structure Search](#)[FDS](#)

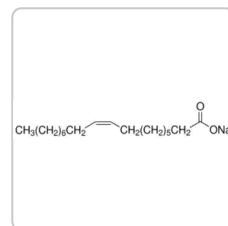
LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

4954

Oleic Acid - CAS 112-80-1 - Calbiochem

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

O7501

Sodium oleate

≥99%

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

The role of proliferator-activated receptor gamma coactivator-1alpha in the fatty-acid-dependent transcriptional control of interleukin-10 in hepatic cells of rodents

Morari J, et al.

Metabolism, Clinical and Experimental, 59(2), 215-223 (2010)

Oleic acid stimulates complete oxidation of fatty acids through protein kinase A-dependent activation of SIRT1-PGC1alpha complex

Lim JH, et al.

The Journal of Biological Chemistry, 288(10), 7117-7126 (2013)

Beneficial effect of fish oil on human brain (2009)

Three-dimensional label-free imaging and quantification of lipid droplets in live hepatocytes

Kim K, et al.

Scientific Reports, 6(10), 36815-36815 (2016)

Origin of the large dispersion of magnetic properties in nanostructured oxides: Fe(x)O/Fe₃O₄ nanoparticles as a case study.

Marta Estrader et al.

Nanoscale, 7(7), 3002-3015 (2015-01-21)

The intimate relationship between stoichiometry and physicochemical properties in transition-metal oxides makes them appealing as tunable materials. These features become exacerbated when dealing with nanostructures. However, due to the complexity of nanoscale materials, establishing a distinct relationship between structure-morphology and

[Afficher tous les articles scientifiques apparentés](#)

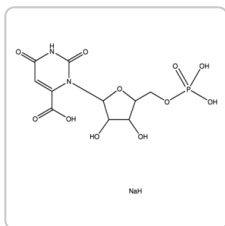
PROTOCOLES ET ARTICLES SCIENTIFIQUES

Articles

Lipid-induced Insulin Resistance

Lipid Induced Insulin Resistance

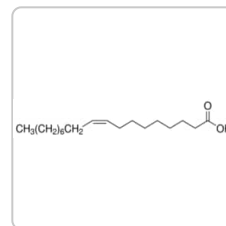
PRODUITS CONSULTÉS RÉCEMMENT



Sigma-Aldrich

O1376

Orotidine 5'-monophosphate trisodium salt
≥99% (HPLC), powder

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

O1257

Oleic Acid-Water Soluble
powder, BioReagent, suitable for cell culture

[Consulter le prix et la disponibilité](#)

Évaluations

[Soyez le premier à donner votre avis sur ce produit](#)

Questions

[Soyez le premier à poser une question](#)

SERVICE TECHNIQUE