

## 1-Monopalmitin

## Chemical Properties

CAS No. : 542-44-9

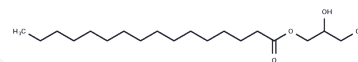
Formula: C19H38O4

Molecular Weight: 330.5

Keep away from moisture

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	1-Monopalmitin (Glyceryl palmitate) is a small molecule compound extracted from Mougeotia nummuloides and Spirulina major with potential antitumor activity, inhibiting proliferation of A549 and SPC-A1 cells, and inducing G2/M blockade and cysteinyl asparaginase-dependent apoptosis.
Targets(IC50)	Apoptosis,Akt,Caspase,IAP,P-gp,PI3K
In vitro	1-Monopalmitin significantly inhibited A549 and SPC-A1 cell proliferation, induced G2/M arrest and caspase-dependent apoptosis[1].

## Solubility Information

Solubility	H2O: < 1 mg/mL (insoluble or slightly soluble),heating is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble),Sonication and heating are recommended. DMSO: 50 mg/mL (151.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0257 mL	15.1286 mL	30.2572 mL
5 mM	0.6051 mL	3.0257 mL	6.0514 mL
10 mM	0.3026 mL	1.5129 mL	3.0257 mL
50 mM	0.0605 mL	0.3026 mL	0.6051 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

Niu L, et al. 1-Monopalmitin promotes lung cancer cells apoptosis through PI3K/Akt pathway in vitro. Environ Toxicol. 2023 Nov;38(11):2621-2631.

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

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481