Methyl tetracosanoate

Cat. No.: HY-N8438

CAS No.: 2442-49-1

Molecular Formula: $C_{25}H_{50}O_2$

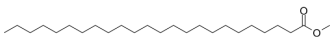
Molecular Weight: 382.66

Target: Others

Pathway: Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 3.7 mg/mL (9.67 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6133 mL	13.0664 mL	26.1329 mL
	5 mM	0.5227 mL	2.6133 mL	5.2266 mL
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Methyl tetracosanoate (Methyl lignocerate) is a fatty acid methyl ester with anti-diabetic activity[1].

In Vitro

Methyl tetracosanoate (1 ng/mL-10 μg/mL; 24 h) increases glucose uptake on differentiated 3T3-L1 adipocytes[1].
Methyl tetracosanoate (1 ng/mL; 18 h) elevates the GLUT4 mRNA expression[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	3T3-L1 adipocytes
Concentration:	1 ng/mL
Incubation Time:	24 h
Result:	Showed phosphorylation of IRβ and PI3K on par with positive control insulin.

REFERENCES

[1]. Shilpa K, et al. Probing key targets in insulin signaling and adipogenesis using a methanolic extract of Costus pictus and its bioactive molecule, methyl tetracosanoate. Biotechnol Lett. 2009 Dec;31(12):1837-41.

Caution: Product has not been fully validated for medical applications. For research use only.

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