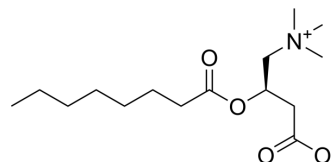


L-Octanoylcarnitine

Cat. No.:	HY-113161		
CAS No.:	25243-95-2		
Molecular Formula:	C ₁₅ H ₂₉ NO ₄		
Molecular Weight:	287.4		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (347.95 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	3.4795 mL	17.3974 mL	34.7947 mL
	5 mM	0.6959 mL	3.4795 mL	6.9589 mL
	10 mM	0.3479 mL	1.7397 mL	3.4795 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 0.5 mg/mL (1.74 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.5 mg/mL (1.74 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.5 mg/mL (1.74 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	L-Octanoylcarnitine is a plasma metabolite and a physiologically active form of octanoylcarnitine. L-Octanoylcarnitine can be used for the research of breast cancer ^{[1][2][3]} .
IC₅₀ & Target	Human Endogenous Metabolite
In Vitro	L-Octanoylcarnitine (0.2 mM) induces H ₂ O ₂ release of rat liver mitochondria (RLM) ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

L-Octanoylcarnitine decreases mucosal and detrusor force-flow respiration and respiratory conductance in male high fat diet (HFD) mice^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Hanna Kosnik, et al. CHRONIC HIGH FAT DIET IMPAIRS DETRUSOR MITOCHONDRIAL FATTY ACID OXIDATION IN MALE BUT NOT FEMALE MICE. *Journal of Urology/Bladder & Urethra: Anatomy, Physiology & Pharmacology I (MP11)* 1 Apr 2019.
- [2]. Schönfeld P, Reiser G. Inhibition of β -oxidation is not a valid therapeutic tool for reducing oxidative stress in conditions of neurodegeneration. *J Cereb Blood Flow Metab.* 2017 Mar;37(3):848-854.
- [3]. Kim M, et al. Association between arterial stiffness and serum L-octanoylcarnitine and lactosylceramide in overweight middle-aged subjects: 3-year follow-up study. *PLoS One.* 2015 Mar 17;10(3):e0119519.

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

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