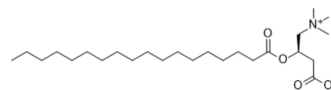


## Stearoylcarnitine

<b>Cat. No.:</b>	HY-113202		
<b>CAS No.:</b>	25597-09-5		
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>49</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	427.66		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 7.14 mg/mL (16.70 mM; ultrasonic and warming and heat to 60°C)  
 H<sub>2</sub>O : < 0.1 mg/mL (ultrasonic) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3383 mL	11.6915 mL	23.3831 mL
	5 mM	0.4677 mL	2.3383 mL	4.6766 mL
	10 mM	0.2338 mL	1.1692 mL	2.3383 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 50 mg/mL (116.92 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Stearoylcarnitine, a fatty ester lipid molecule, is a human endogenous metabolite. Stearoylcarnitine acts as a metabolomics biomarker for early-onset-preeclampsia and late-onset-preeclampsia<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

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## CUSTOMER VALIDATION

- SSRN. 2023 Dec 20.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Maria P H Koster, et al. First-Trimester Serum Acylcarnitine Levels to Predict Preeclampsia: A Metabolomics Approach. Dis Markers. 2015;2015:857108.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA