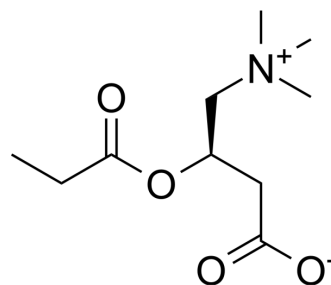


## Propionyl-L-carnitine

<b>Cat. No.:</b>	HY-121705		
<b>CAS No.:</b>	20064-19-1		
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>19</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	217.26		
<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	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 250 mg/mL (1150.70 mM)  
 \* "≥" means soluble, but saturation unknown.

	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
Preparing Stock Solutions	1 mM		4.6028 mL	23.0139 mL	46.0278 mL
	5 mM		0.9206 mL	4.6028 mL	9.2056 mL
	10 mM		0.4603 mL	2.3014 mL	4.6028 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Propionyl-L-carnitine is a carnitine derivative and has a high affinity for muscular carnitine transferase. Propionyl-L-carnitine increases cellular carnitine content, thereby allowing free fatty acid transport into the mitochondria. Propionyl-L-carnitine alleviates the symptoms of PAD through a metabolic pathway, thereby improving exercise performance<sup>[1]</sup>.

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

IC<sub>50</sub>: muscular carnitine transferase<sup>[1]</sup>

### REFERENCES

[1]. Victor Kamoen, et al. Propionyl-L-carnitine for intermittent claudication. Cochrane Database Syst Rev. 2021 Dec 26;12(12):CD010117.

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

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