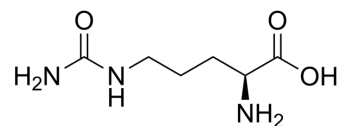


## L-Citrulline

<b>Cat. No.:</b>	HY-N0391		
<b>CAS No.:</b>	372-75-8		
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>13</sub> N <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	175.19		
<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

H<sub>2</sub>O : ≥ 50 mg/mL (285.40 mM)  
 \* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	5.7081 mL	28.5404 mL	57.0809 mL
	5 mM	1.1416 mL	5.7081 mL	11.4162 mL
	10 mM	0.5708 mL	2.8540 mL	5.7081 mL

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

#### In Vivo

1. Add each solvent one by one: PBS  
 Solubility: 100 mg/mL (570.81 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

L-Citrulline is an amino acid derived from ornithine in the catabolism of proline or glutamine and glutamate, or from L-arginine via arginine-citrulline pathway.

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

Human Endogenous Metabolite

#### In Vitro

L-Citrulline is an amino acid derived from ornithine in the catabolism of proline or glutamine and glutamate, or from L-arginine via arginine-citrulline pathway. L-Citrulline is also obtained during the degradation of asymmetric dimethylarginine (ADMA), the process catalyzed by dimethylarginine dimethylaminohydrolase (DDAH), yielding dimethylamine (DMA) as a coproduct<sup>[1]</sup>.

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

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## CUSTOMER VALIDATION

- Front Immunol. 05 August 2022.
- Exp Ther Med. August 22, 2022.
- bioRxiv. 2023 Jun 3.

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

## REFERENCES

[1]. Fleszar MG, et al. Quantitative Analysis of L-Arginine, Dimethylated Arginine Derivatives, L-Citrulline, and Dimethylamine in Human Serum Using Liquid Chromatography-Mass Spectrometric Method. Chromatographia. 2018;81(6):911-921.

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

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