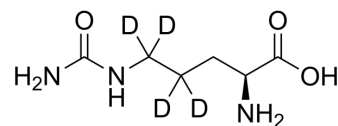


## L-Citrulline-d<sub>4</sub>

<b>Cat. No.:</b>	HY-N0391S4		
<b>CAS No.:</b>	1217474-00-4		
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>9</sub> D <sub>4</sub> N <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	179.21		
<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 : 50 mg/mL (279.00 mM; Need ultrasonic and warming)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	5.5800 mL	27.9002 mL	55.8005 mL
	5 mM	1.1160 mL	5.5800 mL	11.1601 mL
	10 mM	0.5580 mL	2.7900 mL	5.5800 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Citrulline-d<sub>4</sub> is the deuterium labeled L-Citrulline. 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.

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

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

### REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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