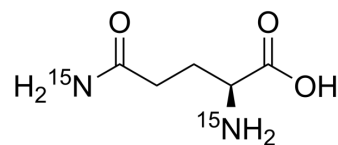


## L-Glutamine-<sup>15</sup>N<sub>2</sub>

<b>Cat. No.:</b>	HY-N0390S8		
<b>CAS No.:</b>	204451-48-9		
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>10</sub> <sup>15</sup> N <sub>2</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	148.13		
<b>Target:</b>	mGluR; Ferroptosis; Endogenous Metabolite		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Apoptosis; 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 : 10 mg/mL (67.51 mM; ultrasonic and warming and heat to 60°C)  
 DMSO : 3.85 mg/mL (25.99 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		6.7508 mL	33.7541 mL	67.5083 mL
	5 mM		1.3502 mL	6.7508 mL	13.5017 mL
	10 mM		0.6751 mL	3.3754 mL	6.7508 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Glutamine-<sup>15</sup>N<sub>2</sub> is the <sup>15</sup>N-labeled L-Glutamine. L-Glutamine (L-Glutamic acid 5-amide) is a non-essential amino acid present abundantly throughout the body and involved in many metabolic processes. L-Glutamine provides a source of carbons for oxidation in some cells<sup>[1][2]</sup>.

#### 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.**

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