

## **Product** Data Sheet

# L-Glutamine-<sup>13</sup>C<sub>5</sub>, <sup>15</sup>N<sub>2</sub>

Cat. No.: HY-N0390S6

CAS No.: 285978-14-5

Molecular Formula: 13C<sub>5</sub>H<sub>10</sub>15N<sub>2</sub>O<sub>3</sub>

Molecular Weight: 153.09

Target: mGluR; Ferroptosis; Endogenous Metabolite

Pathway: GPCR/G Protein; Neuronal Signaling; Apoptosis; Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 25 mg/mL (163.30 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	6.5321 mL	32.6605 mL	65.3211 mL
	5 mM	1.3064 mL	6.5321 mL	13.0642 mL
	10 mM	0.6532 mL	3.2661 mL	6.5321 mL

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

### **BIOLOGICAL ACTIVITY**

**Description** L-Glutamine-<sup>13</sup>C<sub>5</sub>, <sup>15</sup>N<sub>2</sub> is the <sup>13</sup>C- and <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 [1][2].

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  $\[1\]$ .

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.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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