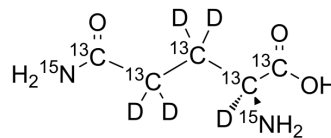


L-Glutamine-¹³C₅, ¹⁵N₂, d₅

Cat. No.:	HY-N0390S3
CAS No.:	2123439-02-9
Molecular Formula:	¹³ C ₅ H ₅ D ₅ ¹⁵ N ₂ O ₃
Molecular Weight:	158.13
Target:	mGluR; Ferroptosis; Endogenous Metabolite
Pathway:	GPCR/G Protein; Neuronal Signaling; Apoptosis; Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 25 mg/mL (158.10 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	6.3239 mL	31.6196 mL	63.2391 mL	
5 mM	1.2648 mL	6.3239 mL	12.6478 mL	
10 mM	0.6324 mL	3.1620 mL	6.3239 mL	

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

BIOLOGICAL ACTIVITY

Description

L-Glutamine-¹³C₅, ¹⁵N₂, d₅ is the deuterium, ¹³C-, and ¹⁵N-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.

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

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